

# webMethods ActiveTransfer 9.8 Readme

April 2015

This file contains important information you must read before using webMethods ActiveTransfer 9.8. You can find user documentation on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find the suite-related information listed below.

*webMethods Product Suite Release Notes*

*webMethods and Intelligent Business Operations System Requirements*

*webMethods System Cache Specifications*

*Using the Software AG Installer*

*Installing webMethods and Intelligent Business Operations Products*

*Using the Software AG Update Manager (fixes)*

*Upgrading webMethods and Intelligent Business Operations Products*

Security and globalization information

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

### ***ActiveTransfer Server***

- MAT-2444

ActiveTransfer Server by default uses ssh-dss as the preferred public key algorithm when it communicates with a SFTP server. There should be a way to change the preferred public key algorithm based on the configuration in the remote SFTP server.

There is currently no workaround for this issue.

- MAT-2623

The ActiveTransfer Event Log entries for event actions that fail due to network issues should contain the actual reason for the failure instead of the entry "Action failed : Broken pipe".

ActiveTransfer logs "Action failed : Broken pipe". These log entries do not convey the reason for the failure and hence are not useful in troubleshooting event failures.

There is currently no workaround for this issue.

- MAT-2706

In ActiveTransfer Server, when you configure event actions with a VFS which points to a remote location and if a request to the remote location receives no response, an incorrect error, is logged in the activity log.

There is currently no workaround for this issue.

- MAT-2738

ActiveTransfer does not recover gracefully from a database outage since it still uses some old connections in the database pool. This issue occurs when the minimum pool size is a non-zero number. As a result, the data displayed in ActiveTransfer configuration screens might not be current.

There is currently no workaround for this issue.

- MAT-2887

The ActiveTransfer log shows information that is not necessary to be logged for event actions that are configured using a remote file path.

There is currently no workaround for this issue.

- MAT-2673  
In ActiveTransfer Server, concurrency issues were observed while logging in to the server in a high load environment which affects the overall performance of the server.  
There is currently no workaround for this issue.
- MAT-2412  
ActiveTransfer Server specifies some details that should not be displayed in the ActiveTransfer.log file in clear text when log entries are created for event actions where the URL points to a remote server. The details in the URL which are not required to be displayed should always be masked.  
There is currently no workaround for this issue.
- MAT-2523  
In ActiveTransfer Server, a copy/move action involving FTP protocol in the source URL or SFTP protocol in the destination URL takes time to complete when there is an error because the FTP/SFTP connections to the remote servers are not released. This results in the task taking more time to complete.  
There is currently no workaround for this issue.
- MAT-2536  
In an ActiveTransfer Server event action, if you use wild card characters in the Source Filter, the action fails for a file name that has a character used for pattern matching (such as +, &, [ ]). For example, if you have a source filter, \*[filename] defined in an action where you specify the file name R3+My\_File.zip.OK, the filter does not match any file name. This might cause the processing of incorrect files and the action might fail.  
There is currently no workaround for this issue.
- MAT-2585  
The ActiveTransfer Server Event Log does not provide sufficient details on the event transaction errors. Some errors are logged with descriptions like "null", "broken pipe", and "connection reset" which are not helpful in troubleshooting the issue.  
There is currently no workaround for this issue.
- MAT-2605  
The Integration Server startup log in TRACE mode for WmMFT package shows entries for a user group called MFT Users which does not exist. Each time the WmMFT package is refreshed in Integration Server, it tries to register an incorrect user group called MFT Users in order to add the Administrator account to the system repository. As the MFT Users group does not exist, multiple messages are logged in the stack trace.  
There is currently no workaround for this issue.
- MAT-2609  
ActiveTransfer Server sometimes bans its own IP address based on repeated requests from the IP address. This error is however not passed on to the error variable, task\_error. The result is that this error is not logged.  
There is currently no workaround for this issue.

- MAT-2651

In an ActiveTransfer Server scheduled event, when a rename action which is part of a series of actions configured in an event fails with a null value, the error action in the event is not triggered. As a result, the Event Log does not show that an error occurred in the event. There is currently no workaround for this issue.
- MAT-2671

In ActiveTransfer Server, if an event is configured without providing values for mandatory field, the action fails with null error. For example, when a copy action is configured without giving Destination URL value, the action fails with null error. This issue is observed in Zip, Move, Encrypt, and Delete tasks when the required input is not provided. There is currently no workaround for this issue.
- MAT-2702

ActiveTransfer Server changes the name of the file it is processing in a find action if the file name contains "{url}". This issue is specifically observed when the file is processed by calling an Integration Server service. The URL details substituted contain additional information that is not required to be displayed. There is currently no workaround for this issue.
- MAT-2705

In ActiveTransfer Server, if a Filename filter is configured for a find action and if the source location is a remote FTP server, the filter is not taken into consideration when listing files. This impacts the performance of the event. There is currently no workaround for this issue.
- MAT-2676

Using the wm.mft.admin:changeLogLevel service sometimes does not change the logging level in ActiveTransfer. There is currently no workaround for this issue.
- MAT-2708

In ActiveTransfer Server, a Filename filter configured for a find action which is not the first action in the event is not considered for listing. This impacts the performance of the event. There is currently no workaround for this issue.
- MAT-2321

In ActiveTransfer Server, if you have a VFS pointing to remote SFTP server, the performance of the file transactions related to the remote server slow down if there is a high number of requests. There is currently no workaround for this issue.
- MAT-2755

In ActiveTransfer Event Log, duplicate content is seen with different page numbers when the Event Log page is loading the results of your search. Sometimes, you might not see pagination information until the page loads the complete search result. There is currently no workaround for this issue.

- MAT-2337  
The ActiveTransfer Server management page does not provide adequate information on the status of the ActiveTransfer port that you create. The information provided in the server status section can sometimes lead to confusion with respect to the status of the port in the ActiveTransfer Server group.  
There is currently no workaround for this issue.
- MAT-1198  
In ActiveTransfer Server, if you delete an event, the event activities logged for the deleted event are listed in the Monitoring > Integration > Managed File Transfer > Event Log page in My webMethods without the Event Name.  
There is currently no workaround for this issue.
- MAT-684  
When you upgrade to ActiveTransfer 9.8 from an earlier version such as 8.2.2, 9.0.1, 9.5.1, 9.6, or 9.7, the properties.cnf file in the Integration Server\_directory\instances\instance\_name\packages\WmMFT\config directory of the 9.8 installation is replaced with the file from the old installation. As a result entries for new properties in the properties.cnf file that were introduced in later versions are lost.  
The workaround is to manually add the new properties in the properties.cnf file after the upgrade process is complete.

### 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

In Integration Server versions 9.10 and later, non-default Integration Server instances support ActiveTransfer. In Integration Server version 9.10 however, before creating the non-default Integration Server instance, rename the file WmMFT.properties located in *<Integration Server\_directory>\features* using the format WmMFT\_<new name>.properties. For example, WmMFT\_1.properties.

### 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

#### ***ActiveTransfer Server***

##### *Release 9.8*

- MAT\_8.2\_SP2\_MWS\_Fix3

- MAT\_8.2\_SP2\_Server\_Fix3
- MAT\_9.0\_SP1\_MWS\_Fix6
- MAT\_9.0\_SP1\_Server\_Fix6
- MAT\_9.5\_SP1\_MWS\_Fix7
- MAT\_9.5\_SP1\_Server\_Fix7
- MAT\_9.6\_MWS\_Fix9
- MAT\_9.6\_Server\_Fix9
- MAT\_9.7\_MWS\_Fix3
- MAT\_9.7\_Server\_Fix3

#### *Release 9.7*

- MAT\_8.2\_SP2\_MWS\_Fix2
- MAT\_8.2\_SP2\_Server\_Fix2
- MAT\_9.0\_SP1\_MWS\_Fix4
- MAT\_9.0\_SP1\_Server\_Fix4
- MAT\_9.5\_SP1\_MWS\_Fix5
- MAT\_9.5\_SP1\_Server\_Fix5
- MAT\_9.6\_MWS\_Fix4
- MAT\_9.6\_Server\_Fix4

#### *Release 9.6*

- MAT\_8.2\_SP2\_MWS\_Fix1
- MAT\_8.2\_SP2\_Server\_Fix1
- MAT\_9.0\_SP1\_MWS\_Fix2
- MAT\_9.0\_SP1\_Server\_Fix2

- MAT\_9.5\_SP1\_MWS\_Fix2
- MAT\_9.5\_SP1\_Server\_Fix2

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***ActiveTransfer Server***

#### *Release 9.8*

- MAT-1209  
ActiveTransfer Server encodes any special characters used in filenames as a result of which these file names are shown with encoded characters in the My webMethods > Monitoring > Integration > Managed File Transfer > Event Log page. For example, the space character in a file name is replaced with "%2520".  
This issue is resolved.
- MAT-1052  
In ActiveTransfer Server, a recursive directory browsing issue is observed when you access a VFS using HTTP or HTTPS ports and if the VFS name is the same as the name of a subfolder in that VFS.  
This issue is resolved.
- MAT-1200  
ActiveTransfer Server sometimes logs the status, Success for an event although one or more actions in the event are not successful. This issue occurs only in cases where ActiveTransfer Server is accessing files in a remote location using HTTP/HTTPS, and the user configured for the remote location does not have sufficient access privileges to the remote folder(s).  
This issue is resolved.
- MAT-1256  
In the ActiveTransfer Server Users page in My webMethods, if you select server ports to be included in the Send Email option for an existing ActiveTransfer user, the email received by the user does not contain the server port details selected.  
This issue is resolved.
- MAT-1248  
In an ActiveTransfer Server event, if you configure more than one Execute Integration Server Service action, ActiveTransfer might not display the Extract Service Output variables that you configure, correctly in the ActiveTransfer Event Management page in My webMethods.  
This issue is resolved.

- MAT-1291

In the ActiveTransfer Server Event Management page in My webMethods, when you try to verify destination paths configured for any file action using the Test Connection button, the result of the test is not displayed.

This issue is resolved.

### *Release 9.6*

- MAT-381

A "move" file operation does not delete files from the source server.

When you configure a "move" file operation as an action in ActiveTransfer post-processing and scheduled events to transfer files from one server to another, ActiveTransfer copies the files to the destination server but does not delete the files from the source server.

This issue is resolved.

- MAT-393

Encrypted content is missing from a file that is uploaded to a remote virtual file system.

If file-based encryption is activated for an ActiveTransfer Server and files are uploaded to a remote VFS, the files are not encrypted correctly on the target VFS. These files contain headers but no content.

This issue is resolved.

- MAT-418 (MAT\_8.2\_SP2\_Server\_Fix1, MAT\_9.0\_SP1\_Server\_Fix1, MAT\_9.5\_SP1\_Server\_Fix1)

A "class not found" exception occurs at ActiveTransfer Server startup.

When ActiveTransfer Server starts up, the following error message is written to the Integration Server log file: java.lang.ClassNotFoundException: crushftp.db.StatTools.

This issue is resolved.

- MAT-420 (MAT\_8.2\_SP2\_Server\_Fix1, MAT\_9.0\_SP1\_Server\_Fix1, MAT\_9.5\_SP1\_Server\_Fix1)

ActiveTransfer Server does not execute configured error actions when some tasks fail.

ActiveTransfer Server does not execute the error action configured for a post-processing event when the following tasks fail: execute Integration Server service, execute Trading Networks service, send Broker notification, and send email.

This issue is resolved.

- MAT-425 (MAT\_8.2\_SP2\_Server\_Fix1, MAT\_9.0\_SP1\_Server\_Fix1)

ActiveTransfer Server does not execute some tasks configured for a scheduled event.

ActiveTransfer Server does not execute the following tasks configured for a scheduled event: execute Integration Server service, execute Trading Networks service, send Broker notification, and send email.

This issue is resolved.



- MAT-431 (MAT\_8.2\_SP2\_Server\_Fix1, MAT\_9.0\_SP1\_Server\_Fix1, MAT\_9.5\_SP1\_Server\_Fix1)  
Attempts to access a remote virtual folder fail when using SSL-based protocols.  
Accessing a remote virtual folder using an SSL-based protocol such as HTTPS or WebDAVs results in a NoClassDefFoundError error.  
This issue is resolved. You can now access virtual folders using SSL-based protocols like HTTPS and WebDAVs.
- MAT-453 (MAT\_9.0\_SP1\_Server\_Fix2, MAT\_9.5\_SP1\_Server\_Fix2)  
The webMethods ActiveTransfer File Transactions page does not display failed file transfers.  
The transactions data displayed in webMethods ActiveTransfer File Transactions page does not include failed file transfers.  
This issue is resolved. ActiveTransfer File Transactions page now lists successful as well as failed transactions.
- MAT-469 (MAT\_9.0\_SP1\_Server\_Fix2, MAT\_9.5\_SP1\_Server\_Fix2)  
webMethods ActiveTransfer ignores the Source Filter defined for post-processing and scheduled events that contain Execute Integration Server Service actions.  
ActiveTransfer triggers the Execute Integration Server Service action for all the files irrespective of the Source Filter that you have specified when defining the post-processing or scheduled events.  
This issue is resolved.
- MAT-571 (MAT\_9.0\_SP1\_Server\_Fix2, MAT\_9.5\_SP1\_Server\_Fix2)  
My webMethods does not display a new user that you create in ActiveTransfer Administration > Integration > Managed File Transfer > Virtual Folder Management page.  
When you create a new user in My webMethods ActiveTransfer Administration > Integration > Managed File Transfer > Virtual Folder Management page, the user is not displayed when you refresh the page. The webMethods log shows an entry "User already exists". To add the user to ActiveTransfer, you need to search for the user in the existing user list and then add the user in ActiveTransfer.  
This issue is resolved.
- MAT-594  
An error occurs in My webMethods when you try to edit the configuration of a VFS to link it to a physical folder.  
In My webMethods, when you try to edit the configuration of an existing VFS to link it to a physical folder, the following error is thrown in the ActiveTransfer Virtual Folder Management page:  
[POP.016.0056] Invalid session token detected. Please reload the page.  
This issue is resolved.
- MAT-598 (MAT\_9.0\_SP1\_Server\_Fix2, MAT\_9.5\_SP1\_Server\_Fix2)  
webMethods ActiveTransfer does not execute an action when you set the "Execute asynchronously" option. ActiveTransfer does not execute a post-processing or scheduled action when you set the "Execute asynchronously" option. A ClassNotFound exception is displayed and the action fails.  
This issue is resolved.

- MAT-601

A Soap Message Coder warning is logged in the Integration Server log.  
The following warning is logged in the Integration Server log when ActiveTransfer calls the `wm.mft.portal.queries: doQuery` service: Soap Message Coder warning; unregistered coder for variable fields, using String... This log entry is not because of an issue with the service. These warning messages should not be logged as they clutter the Integration Server log and may indicate that there is a problem with the service when there is none.  
This issue is resolved. The Soap Message Coder warnings are no longer logged in the Integration Server logs.
- MAT-602

The browse button in the SSL options section of the ActiveTransfer Server Management page does not work.  
In My webMethods, the browse button for the Keystore Location field of the SSL options in the Advanced tab of the Administration > Integration > Managed File Transfer > Server Management page does not work.  
This issue is resolved.
- MAT-609 (MAT\_9.5\_SP1\_Server\_Fix2)

webMethods ActiveTransfer does not display the Server and User logs in My webMethods.  
The Administration > Integration > Managed File Transfer > Logs page in My webMethods is empty and does not display the ActiveTransfer Server and User logs.  
This issue is resolved.
- MAT-624

webMethods ActiveTransfer does not retain the change made to the default value in the scheduled event criteria, Fixed Interval.  
When you configure a scheduled event based on the Fixed Interval criteria and change the default value, ActiveTransfer resets the Fixed Interval back to the default value (1 second) when you save the scheduled event.  
This issue is resolved.
- MAT-630

In webMethods ActiveTransfer Server, user details are missing when you add an external LDAP user to an ActiveTransfer Server user profile.  
When you add an external LDAP user to an ActiveTransfer Server profile, user information such as User Name, First Name, Last Name are missing in the user profile which in turn causes an error in My webMethods when you save the ActiveTransfer user configuration.  
This issue is resolved.

## Release 9.5

- MAT-120 (MWS\_8.2\_SP1\_Fix14, MWS\_9.0\_SP1\_Fix1)  
ActiveTransfer pages appear with cluttered controls.  
When users working with ActiveTransfer pages in My webMethods navigate to a non-ActiveTransfer page and then return to the same ActiveTransfer page, the page may not display properly.  
This issue is resolved.
- MAT-215  
Deleted users are still shown on the Virtual Folder Management page.  
When a user is deleted on the Users page, that user's ActiveTransfer profile is removed but the user's association with the VFS is not corrected on the Virtual Folder Management page.  
This issue is resolved.
- MAT-223  
“No Partner” node is shown more than once in the VFS tree.  
On the Virtual Folder Management page, adding a new virtual folder without a physical location, and then adding a virtual folder with a physical location to the predefined VFS, causes extra "No Partner" nodes to appear in the folder tree.  
This issue is resolved.
- MAT-241  
Searching for virtual folders does not work unless the entire VFS tree is expanded.  
Searching for folders on the Virtual Folder Management page does not give the expected results. ActiveTransfer Server searches only the expanded tree nodes and ignores any unexpanded tree nodes.  
This issue is resolved.
- MAT-246  
The elapsed time shown in the file transaction details is incorrect.  
File transaction details show the wrong elapsed time. This behavior occurs due to differences in calculating the elapsed time and the timezone used.  
This issue is resolved.
- MAT-376  
The webMethods ActiveTransfer File Transactions page in My webMethods does not display the details for the transactions listed on the page.  
Transaction details are not displayed on the File Transactions Page until you run a search to retrieve the details.  
This issue is resolved. Transaction details are shown for each file transaction listed.

- MAT-387

webMethods ActiveTransfer displays the following error message in My webMethods when retrieving user details or user templates:

9999: An internal error has occurred while executing the service. Contact your System Administrator. ActiveTransfer fails to retrieve user or template information and displays an error message on the Users and Templates tabs of the User Management page in My webMethods. This issue occurs with DB2 or SQL Server databases when you delete all active time window records for a user or template in the Active Time Window section of the Restrictions tab on the Server Management page.

This issue is resolved.
- MAT-401 (MWS\_8.2\_SP1\_Fix14)

ActiveTransfer pages do not display properly in My webMethods.

The My webMethods user interface may not display properly after you install Japanese or Simplified Chinese Language Packs for ActiveTransfer.

This issue is resolved.
- MAT-406

ActiveTransfer Server does not execute configured error actions when a "find file" operation fails. If a "find file" operation defined for a post-processing or scheduled event fails, and an error action is configured for the event, the error action is ignored. ActiveTransfer Server does not execute the error action even if the action is not intended to perform another file operation.

This issue is resolved. If a "find file" operation defined in a post-processing or scheduled event fails, ActiveTransfer Server now performs the following tasks if these tasks are configured as error actions: execute Integration Server service, execute Trading Networks service, send Broker notification, and write file content to database.
- MAT-417

The File Transactions page shows inconsistent information when a transaction is selected in the results list.

When a file transaction filter is applied to populate the results list on the File Transactions page in My webMethods (Monitoring > Integration > Managed File Transfer > File Transactions), and a transaction is selected in the results list, ActiveTransfer Server shows inconsistent information. For example, the Transaction Details section on the Detail tab might be blank even when a transaction is selected, or the number in the "x selected" indicator above the list might not match the number of transactions actually selected.

This issue is resolved.

## **ActiveTransfer Gateway**

### *Release 9.5*

- MAT-207  
FileNotFoundException occurs when a keystore is configured for FTPS or HTTPS on ActiveTransfer Gateway.  
When ports for an ActiveTransfer Gateway instance are configured on the Server Management page and the browse button is selected to configure a keystore file, the browse function retrieves the keystore file path from the associated ActiveTransfer Server instance. This file path may not be valid on the Gateway. As a result, a FileNotFoundException occurs.  
This issue is resolved. The browse button has been removed from the Advanced tab of the Server Management port configuration page when a Gateway's port is being configured. When users specify the location of keystore files or SSH server host keys for a port, they are instructed to specify the file path in a text box.

## **6.0 Documentation Changes**

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **ActiveTransfer Server**

#### *Release 9.7*

In the PDF publication *Managing File Transfers with webMethods ActiveTransfer*, the contents of Appendix A, Built-In Services, and Chapter 14, Using the Web Client, were moved to separate PDF publications. The new PDF publications are as follows:

- The *webMethods ActiveTransfer Built-In Services Reference* PDF publication contains the public APIs that were available in the 9.6 release, as well as the new asset management APIs and the document types referred to by these new APIs.
- The *webMethods ActiveTransfer Web Client User's Guide* PDF publication contains information to assist end users in using the ActiveTransfer web client.

#### *Release 9.6*

Conceptual information has been added to *Managing File Transfers with webMethods ActiveTransfer* for the following topics:

- Failover Support for File Transfer Operations
- Session Replication

- ActiveTransfer License File

The following procedural information has been added to *Managing File Transfers with webMethods ActiveTransfer*:

- Configuring Session Replication in ActiveTransfer Servers
- Jumping to a Designated Action
- Excluding Files from an Action
- SSL client certificate support: Configuring ActiveTransfer Server for SSL Communication with Remote Servers
- Changing the ActiveTransfer License File
- Searching for Keywords in ActiveTransfer Server Logged Data
- Filtering ActiveTransfer Server Logged Data for Keywords

The new property, `mft.event.sleep.time` is documented in Appendix B Server Configuration Parameters and Variables of the *Managing File Transfers with webMethods ActiveTransfer*.

A new appendix, "Working with Jump Conditions," is added to *Managing File Transfers with webMethods ActiveTransfer* to describe the use of jump conditions in Jump actions.

Additional updates have been included in *Managing File Transfers with webMethods ActiveTransfer* for the following:

- New fields added in the Find action configuration: Folder Depth and Maximum Items
- New fields added in the configuration page of the Copy and Move Actions: ASCII Transfer, Simple Mode, and Convert Line Endings options
- VFS browsing capability in the following actions:
  - Copying or Moving Files
  - Finding Files
  - Unzipping Files
  - Zipping Files
- Test connection button provided to check the connection to a remote location before making it available to the user.

## Release 9.5

- A new chapter, “Preparing to Manage and Monitor ActiveTransfer Server in My webMethods,” was added to *Managing File Transfers with webMethods ActiveTransfer* to describe how to select server instances to work with and display and manage search results.
- A new chapter, “Migrating Assets,” was added to *Managing File Transfers with webMethods ActiveTransfer* to describe the ActiveTransfer assets you can export and import and the method for doing so.
- A new appendix, “Scheduled Event Options,” was added to *Managing File Transfers with webMethods ActiveTransfer* to describe the calendar and processing options that are available when you specify conditions for a scheduled event.
- A new appendix, “ActiveTransfer Access Points,” was added to *Managing File Transfers with webMethods ActiveTransfer* to summarize the ports and host names or IP addresses that ActiveTransfer uses, the products to which ActiveTransfer Server and ActiveTransfer Gateway connect, the file paths used for virtual folders and file operations, and where to go for details about configuring these items.

## ActiveTransfer Gateway

### Release 9.6

Conceptual information has been added to *Managing File Transfers with webMethods ActiveTransfer* for the following topics:

- Failover Support for File Transfer Operations: Multiple ActiveTransfer Servers can connect to one ActiveTransfer Gateway
- ActiveTransfer License File

The following procedural information has been added to *Managing File Transfers with webMethods ActiveTransfer*:

- Changing the ActiveTransfer License File

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### ***ActiveTransfer Server***

*Release 9.7*

Added Item	Description
mft.never.ban.list	Use this property to specify a list of IP addresses that should be excluded from the hammering settings that you configure in ActiveTransfer.

### ***ActiveTransfer Gateway***

*Release 9.7*

Added Item	Description
mft.gateway.is.external.port	Use this property to specify the external port configured for the Enterprise Gateway Server.
mft.gateway.ping.interval	Use this property to specify the interval (in seconds) at which the ActiveTransfer Gateway will ping the Server to check if the server is running.
mft.gateway.ping.retry.count	Use this property to specify the number of failed pings after which the Gateway ports are disabled. Set this property to 0 if you want the ports to be disabled on first failure.

## 9.0 Added, Removed, Deprecated, or Changed Built-In Services

A release is listed in this section only if changes occurred in that release.

### ***ActiveTransfer Server***

*Release 9.8*

Deprecated Service	Replacement, if any
wm.mft.admin:property	wm.mft.admin:manageProperties



## Release 9.7

Added Service	Description
wm.mft.assets.partner:add	Adds a new partner in the ActiveTransfer Server.
wm.mft.assets.partner:delete	Deletes an existing partner from ActiveTransfer Server.
wm.mft.assets.partner:list	Retrieves basic information for all the partners in ActiveTransfer Server.
wm.mft.assets.partner:update	Sets an existing partner in ActiveTransfer Server to the enterprise.
wm.mft.assets.partner:view	Retrieves complete information from ActiveTransfer Server for a specified partner.
wm.mft.assets.port:add	Creates a new port in ActiveTransfer Server or ActiveTransfer Gateway.
wm.mft.assets.port:delete	Deletes an existing port in the ActiveTransfer Server or ActiveTransfer Gateway.
wm.mft.assets.port:list	Retrieves basic information for all the ports configured in ActiveTransfer Server or ActiveTransfer Gateway.
wm.mft.assets.port:start	Starts the specified ActiveTransfer Server or ActiveTransfer Gateway port.
wm.mft.assets.port:stop	Stops or restarts the specified ActiveTransfer Server or ActiveTransfer Gateway port
wm.mft.assets.port:update	Updates the ActiveTransfer Server or ActiveTransfer Gateway port information.
wm.mft.assets.port:view	Retrieves complete information for a specified ActiveTransfer Server or ActiveTransfer Gateway port.
wm.mft.assets.postProcessEvent:add	Creates a new post-processing event in ActiveTransfer Server.
wm.mft.assets.postProcessEvent:delete	Deletes an existing post-processing event in ActiveTransfer Server
wm.mft.assets.postProcessEvent:list	Retrieves basic information for all post-processing events configured in ActiveTransfer Server.
wm.mft.assets.postProcessEvent:update	Updates a post-processing event in ActiveTransfer Server.

Added Service	Description
wm.mft.assets.postProcessEvent:view	Retrieves complete information of a specified post-processing event in ActiveTransfer Server.
wm.mft.assets.scheduledEvent:add	Creates a new scheduled event in ActiveTransfer Server.
wm.mft.assets.scheduledEvent:delete	Deletes an existing scheduled event in ActiveTransfer Server.
wm.mft.assets.scheduledEvent:list	Retrieves basic information for all the scheduled events in ActiveTransfer Server.
wm.mft.assets.scheduledEvent:update	Updates an existing scheduled event in ActiveTransfer Server.
wm.mft.assets.scheduledEvent:view	Retrieves complete details for a specified scheduled event in ActiveTransfer Server.
wm.mft.assets.template:add	Creates a new user template in ActiveTransfer Server.
wm.mft.assets.template:delete	Deletes an existing user template from ActiveTransfer Server.
wm.mft.assets.template:list	Retrieves basic information for all the user templates in ActiveTransfer Server.
wm.mft.assets.template:update	Updates an existing user template in ActiveTransfer Server.
wm.mft.assets.template:view	Retrieves complete information for a specified user template in ActiveTransfer Server.
wm.mft.assets.user:add	Creates a new user in ActiveTransfer Server.
wm.mft.assets.user:delete	Deletes an existing user in ActiveTransfer Server.
wm.mft.assets.user:list	Retrieves basic information for all the users in ActiveTransfer Server.
wm.mft.assets.user:update	Updates the ActiveTransfer Server user information.
wm.mft.assets.user:view	Retrieves complete information for a specified ActiveTransfer Server user.
wm.mft.assets.vfs:add	Creates a new virtual folder in the ActiveTransfer Server Virtual File System (VFS).

Added Service	Description
wm.mft.assets.vfs:changeParent	Use this service to change the parent virtual folder of a folder and link it to another parent folder, or to change a subfolder to a root folder in the ActiveTransfer Server Virtual File System (VFS).
wm.mft.assets.vfs:delete	Deletes an existing virtual folder from the ActiveTransfer Server VFS.
wm.mft.assets.vfs:list	Retrieves basic information for all virtual folders in the ActiveTransfer Server VFS.
wm.mft.assets.vfs:update	Updates the details of the ActiveTransfer Server VFS.
wm.mft.assets.vfs:view	Retrieves complete information for a specified virtual folder in ActiveTransfer Server.

Changed Service	Description
wm.mft.schedule:executeEvent	<p>The following new parameters have been added to this service:</p> <p><i>eventParams</i> - Contains the details of the parameterized scheduled event action settings.</p> <p><i>allowEmptyValueForParam</i> - Specifies if the parameterized scheduled event action settings can be empty.</p>

### Release 9.5

Added Service	Description
wm.mft.admin:exportData	Exports ActiveTransfer assets to an XML file.
wm.mft.admin:importData	Imports ActiveTransfer assets from an XML export file.

## 10.0 Added, Removed, Deprecated, or Changed Parameters

A release is listed in this section only if changes occurred in that release.

## 11.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

## 12.0 Copyright Information

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ACTR-RM-98- 20161018

# webMethods API Gateway 9.12 Readme

**October 2016**

This file contains important information you must read before using webMethods API Gateway 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- YAI-1380  
Unable to automatically synchronize the API Gateway port.  
The API Gateway port configuration is not automatically synchronized across the nodes of an API Gateway cluster.  
The workaround of this issue is to manually configure the ports configuration on each cluster node.
- YAI-1414  
Unable to invoke the deployed service after reconnecting the node.  
When a node (node 1) gets disconnected in a clustered environment and if another node (node 2) publishes a service, the disconnected node (node 1) is unable to execute the service after reconnecting.  
The workaround of this issue is to restart IS running the API Gateway that was disconnected.
- YAI-1556  
Reverse invoke does not work for REST API in paired gateway deployment.  
Invocation of REST API in paired gateway deployment returned with status code 404 instead of 200.  
There is no workaround for this issue.
- YAI-1521  
Require HTTP Basic Authentication returns response when authorization headers are not passed.  
When a REST API with HTTP Basic Authentication policy is executed without Authorization header, the request is processed successfully.  
There is no workaround for this issue.
- YAI-1540  
Monitoring event is not generated for SLA Policy for fault count.  
When SLA policy configured for an API is breached, monitoring event is not generated if the SLA is set for fault count.  
There is no workaround for this issue.
- YAI-1511  
\${sys:resource\_path} is not replaced in the endpoint URI during reverse invoke.  
Resource path alias \${sys:resource\_path} is not replaced in the routing endpoint with the resource path from incoming endpoint URI. Due to this, 405 Method Not Found is returned in response.  
There is no workaround for this issue.

- YAI-1465  
Bad certificate error is returned while invoking a native service over SSL.  
API Gateway doesn't send the certificates configured for SSL in calling native service. As a result a bad certificate error is returned in response.  
There is no workaround for this issue.
- YAI-1019  
Login session expired is not renewing after providing credentials.  
New session is not created after session expiry and authentication credentials are provided.  
There is no workaround for this issue.
- YAI-1664  
OAuth tokens are not synchronized across cluster nodes.  
There is no workaround for this issue.
- YAI-1665  
Unhealthy Elasticsearch cluster.  
The Elasticsearch cluster used by API Gateway can become unhealthy because of communication problems between the cluster nodes.  
The workaround for this issue is to restart the IS on which the API Gateway with the missing node is running. A restart forces the Elasticsearch instance to rejoin the cluster.

### 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- YAI-1286  
Activate of API, with big WSDL, from Gateway UI throws StackOverFlowError.  
When you see a StackOverFlowError while activating an API, increase the thread stack size in `IS_Installed_Folder\profiles\IS_default\configurations\wrapper.conf` in IS using the command:  
`wrapper.java.additional.7=-Xss2048k`
- YAI-1430  
SOAP API with same name as a WSD cannot be activated.  
An error occurs while activating a SOAP API when the API name is same as a WSD in Integration Server.
- Before using API Gateway, consider the following points:
  - API Gateway package in Integration Server, cannot co-exist with the WmMediator or WmCloudStreams packages. WmMediator and WmCloudStreams packages must be disabled for API Gateway to function properly.
  - webMethods API Gateway combines current webMethods Enterprise Gateway and webMethods Mediator capabilities in a single product. API Gateway offers the same capabilities within a simplified architecture. It also removes the dependency on CentraSite

for API definition and policy definition.

- API Gateway can be used in DMZ as well as on premise. API Gateway comes in two editions. The Standard edition allows users to define threat protection policies, administrate the gateway, and analytics for threat protection use cases. Full edition supports all use cases of Standard edition, supports managing APIs, consumer applications, API level policies, and managing API packages and plans.
- By default, API Gateway connects to 5555 port of Integration server. If this port is not active, an active port must be configured for `apigw.is.base.url` property in `<SAG_Root>/profiles/IS_<IS_Instance_Name>/apigateway/config/uiconfiguration.properties` file. For more information, see API Gateway Configuration guide.
- API Gateway uses EventDatastore ( Elasticsearch ) as its persistent store. If the EventDatastore is already running as a service or started separately, API Gateway does not work properly unless ports configurations are changed. For more information, see the “API Gateway Package Configuration Properties” section in API Gateway Configuration guide.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

The following artifacts have been introduced for API Gateway 9.12:

- webMethods API Gateway Online Help
- webMethods API Gateway User Guide: This guide describes how you can use API Gateway and other API Gateway components to effectively manage APIs for services that you want to expose to consumers, whether inside your organization or outside to partners and third parties.



- **webMethods API Gateway Configuration Guide:** This guide describes how you can configure API Gateway and other API Gateway components to effectively manage APIs for services that you want to expose to consumers, whether inside your organization or outside to partners and third parties.

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists features, functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

Added Item	Description
API CRUD	Both REST and SOAP APIs can be imported. Swagger and RAML are supported formats for REST and WSDL for SOAP. REST APIs can be created from scratch as well.
Policies & Aliases CRUD	Both threat protection and API specific policies based in selected edition. Please refer documentation for supported policies. Create and manage Aliases which improve the reuse and maintenance.
Consumer Applications CRUD	Manage consumer applications and associations with APIs.
Packages & Plans	Organizations can group APIs and define enforcements on the same as a single unit which can be subscribed by developers.
API Portal Integration	APIs can be published to API Portal from API Gateway for developers reach.
Analytics	Dashboards for greater insights on various topics like Summary, Trends, Consumer applications, and Threat protection.

## 9.0 Added, Removed, Deprecated, or Changed Built-In Services

A release is listed in this section only if changes occurred in that release.

## 10.0 Added, Removed, Deprecated, or Changed Parameters

A release is listed in this section only if changes occurred in that release.

## 11.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

## 12.0 Copyright Information

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YAI-RM-912-20161018

# webMethods API Portal 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods API Portal 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- webMethods API Portal 9.12 can either import APIs directly or have API published by CentraSite (In case APIs are published from CentraSite, webMethods API Portal 9.12 requires CentraSite 9.7 or higher).

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### **Release 9.10**

- YAP\_9.10\_Fix2

### **Release 9.9**

- YAP\_9.9\_Fix6

### **Release 9.8**

- YAP\_9.8\_Fix3

### **Release 9.7**

- YAP\_9.7\_Fix2

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

- YAP-1389  
Scheduled reports - back navigation  
When editing or creating a scheduled report, on clicking Back the modifications are lost.  
This issue is now resolved.
- YAP-2280  
API Runtime metrics published from Mediator to API Portal creates Active sessions in UMC.  
For every runtime metric published from Mediator to API Portal, an active session is created which is valid for 1 hour. If more data is published from Mediator to API Portal multiple active sessions will be created and this results in the unavailability of UMC.  
This issue is now resolved.

## **Release 9.8**

- YAP-605  
Access token page does not refresh after deleting or renewing an API.  
You have to refresh the page manually to clear the display of the deleted access token.  
This issue is now resolved.
- YAP-595  
Links for downloading API documents always provides a HTTPS link irrespective of whether we access the portal using HTTP/HTTPS.  
By default the load balancer is configured to run using both HTTP and HTTPS ports. In such a case, ARIS Document store always provides a HTTPS link. So even when you login to API Portal using http port, the link to download documents for an API, will always be HTTPS.  
This issue is now resolved.
- YAP-576  
Expired API key is set only in the request header though the new API key is set in the key setting dialog.  
The proxy configuration in the browser can cause undesirable effects while trying out an API from API Tryout page. Whenever a particular API is tested multiple times from the API Tryout page the request is cached in the proxy server. So every time when the request reaches the proxy server, instead of hitting the origin server to get the requested object the proxy server serves the request from the cache.  
This issue is now resolved.
- YAP-540  
An exception occurs on testing an API for API Key enabled REST API.  
The proxy configuration in the browser can cause undesirable effects while trying out an API from API Tryout page. Whenever a particular API is tested multiple times from the API Tryout page the request is cached in the proxy server. So every time when the request reaches the proxy server, instead of hitting the origin server to get the requested object the proxy server serves the request from the cache.  
This issue is now resolved.
- YAP-578  
Miscellaneous issues with Collaboration and the API Comment Stream section.  
The following issues occur in the API Comment Stream section in API Portal Collaboration:
  - API Comment Stream does not support file attachments.
  - Guest users cannot see the API Comment Stream section.
  - After clicking Add Tag, the placeholder to enter the tags does not appear correctly.This issue is now resolved.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

- For information on API Portal Extension points in API Portal, see *webMethods API Portal Administrator's Guide*.

### **Release 9.10**

- For information on configuring the High Availability functionality in API Portal, see *webMethods API Portal Administrator's Guide*.

### **Release 9.9**

- For information about customizing the API Portal, see the API Portal Customization Guide and online help. Note that the help is role-based, with the help set displayed based on the user's credentials and role: configuration and administration (ca), provider (pv), consumer (ct).

### **Release 9.8**

- For information about customizing the API Portal, see the online help. Note that the help is role-based, with the help set displayed based on the user's credentials and role: configuration and administration (ca), provider (pv), consumer (ct).

### **Release 9.7**

- For information about hardware requirements, installing, and uninstalling webMethods API Portal, see *Installing webMethods and Intelligent Business Operations Products*.
- For information about how to configure API Portal for use with CentraSite and webMethods Mediator, how to manage API Portal and its users, and how to manage APIs published to API Portal, see *webMethods API Portal Administrator's Guide*.
- For information about using the API Portal, see the online help. Note that the help is role-based, with the help set displayed based on the user's credentials and role: configuration and administration (ca), provider (pv), consumer (ct).

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed.

### **Release 9.12**

Added Item	Description
API Portal Extension Points for Standalone Deployments	API Portal is configurable to work as a standalone component and can be integrated into any third-party API Management systems, which may not necessarily have Mediator or CentraSite present. You can configure API Portal to work with different key management systems for access token retrieval functions for the APIs deployed in the third-party environments.
API Plans and Subscriptions	Plans are offered as tiered offerings with varying availability guarantees, SLAs or cost structures associated to it. An API Package can be associated with multiple plans at a time. This helps the API Providers in providing tiered access to their APIs to allow for different service levels and pricing plans.
HTTP PATCH support	The HTTP PATCH support is available in API Portal 9.12 onwards. You can use this method in API testing.
Dashboards Enhancement	API Portal dashboards have been enhanced to bring better visualizations and capabilities.  A new dashboard called API trends dashboard has been added. The API Trends Dashboard is used to learn more about the API invocation trend as per response time, success and failure rate.



## **Release 9.10**

<b>Added Item</b>	<b>Description</b>
API Runtime Events Dashboard	API Runtime Events Dashboard is used to know more about the API's invocations and its performance during runtime. You can filter the data as required, configure the dashboard to display the required data, and view the required data by highlighting the KPI.
Adoption of ECP Enhancements for Collaboration in API Portal	Authenticated users have the ability to: <ul style="list-style-type: none"><li>▪ view the list of notifications for the followed items</li><li>▪ mark a notification as read or unread delete a notification</li><li>▪ configure the notification destination settings</li></ul>

### **9.0 Added, Removed, Deprecated, or Changed Built-In Services**

A release is listed in this section only if changes occurred in that release.

### **10.0 Added, Removed, Deprecated, or Changed Parameters**

A release is listed in this section only if changes occurred in that release.

### **11.0 Added, Removed, Deprecated, or Changed APIs**

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YAP-RM-912-20161018

# webMethods Application Platform 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods Application Platform 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

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- 1.0 **Critical Information**.....2
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## 1.0 Critical Information

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## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

The following issues are resolved in Application Platform 9.12 Fix 1:

- PLD-279  
The Service Browser view does not load icons and labels for certain nodes.  
When you use the Service Browser to view the OSGi service details from the connected runtime and you expand some of the displayed nodes, you see the following error message:  
Unable to create resource FileImageDescriptor.  
There is currently no workaround for this issue.
- PLD-282  
The IS Service Wizard in Application Platform does not generate valid request and response POJO classes for Integration Server flow services that are defined with a service specification reference.  
There is currently no workaround for this issue.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.10***

- PLS\_9.10\_IS\_Fix2
- PLS\_9.10\_SPM\_Fix1
- PLS\_9.10\_Core\_Fix2
- PLD\_9.10\_IS\_Fix1

- PLD\_9.10\_Core\_Fix1

## **Release 9.8**

- PLS\_9.8\_IS\_Fix2
- PLS\_9.8\_Core\_Fix1
- PLD\_9.8\_IS\_Fix1
- PLD\_9.8\_Core\_Fix1

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

## **6.0 Documentation Changes**

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 9.10**

- A new webhelp, named *webMethods Application Platform Webhelp*, is available on the Software AG Documentation website. The *webMethods Application Platform Webhelp* includes information about how to configure Application Platform, how to develop projects in Application Platform, how to deploy your Application Platform projects, how to diagnose and troubleshoot Application Platform issues, and how to use the Application Platform API.
- The *webMethods Application Platform Help* in Designer now features native content. It no longer redirects the user to the Application Platform guides on the Documentation website.
- The *webMethods Application Platform Tutorial* is no longer available on the Documentation website. The *webMethods Application Platform Tutorial*, together with code samples, can be downloaded from the Software AG TECHcommunity website.

### **Release 9.9**

The following guides will be available on the Empower website:

- *webMethods Application Platform Tutorial*
- *webMethods Application Platform User's Guide*

- *webMethods Application Platform API Guide*

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists features, functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

Changed Item	Description
Application Platform product icons in Designer	The Application Platform product icons in the Application Platform perspective, views, Welcome page, and About page in Designer are updated to reflect changes in the Software AG corporate branding.

### **Release 9.9**

Added Item	Description
Create Bnd template menu option in the App Platform context menu	Generates a Bnd configuration file, <code>bnd.bnd</code> , in the <code>src/main/resources/OSGI-OPT</code> directory under the project root folder. If you customize the Bnd template, the contents of the project bundle manifest file are updated dynamically when you create a project bundle in Designer, or when you deploy your project to the runtime container.

Removed Item	Replacement, if any
Create Project Manifest menu option in the App Platform context menu	The Create Bnd template menu option, which generates a Bnd configuration file that allows you to update the contents of the project bundle manifest file dynamically.

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## 10.0 Support

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Visit the [Software AG Developer Community](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

PLD-RM-912-20161018

# webMethods ApplinX 9.12 Readme

October 2016

This file contains important information you must read before using webMethods ApplinX 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).



## 2.0 Known Issues

- APX-9278  
After upgrading ApplinX from 5.2, Web services were not redirected to the new WSS/Axis 2 endpoint.
- APX-6104  
Performance Monitoring: When using the Performance Monitor, all sessions are always traced and it is not possible to trace a specific session. The Framework Configuration Editor doesn't save the "Trace Specific Session" field contents and always reverts to "Trace all session" after saving.
- APX-8522  
In the Mapper, when linking a value from nested arrays, the mapped attribute does not have the parent array's source index. To map from nested arrays, use the "Value Of" expression that will provide a source index for each level.
- APX-9686  
When generating a JSP page from a screen group, the class name and the file name are not the same. In Java, the class name and file name have to be the same for the class to pass compilation.
- APX-8411  
In Hitachi, host key actions within Path Procedures do not work.
- APX-3605  
The ApplinX HTTP session in Eclipse's internal browser does not support popup windows.
- APX-7737  
When the ApplinX server is deployed on Tomcat as a J2EE application, when connecting to the server from within Eclipse, the message box which is displayed, indicating that changes made in the Designer are not saved, should not be displayed and is incorrect.
- APX-10853  
When pasting an expression from one procedure (Flow path etc.) to another, if there were references to other entities, the references are copied regardless whether the actual entities exist or not in the target location. No error or warning will appear when saving the procedure. It is the responsibility of the developer to check if the expression is valid or not, otherwise such a copy may result in failures at runtime.
- APX-5715  
Blinking fields in generated pages is currently not supported.
- APX-7238  
When using the hotfix distribution to install a hotfix, the ApplinX Designer is also upgraded. However the uninstall of the hotfix does not rollback the Designer to its previous version.
- APX-5288  
When canceling the installation in critical points (for example, while installing the ApplinX plug-in) the installation folder is left in an unusable form.

- APX-8014  
When attempting to download the same Natural Data Transfer file twice, the Save File dialog box is not opened.
- When a screen is identified as a window, the window title is not displayed in the Session View.
- When in a pop-up window, and you switch from application to application, when switching back to the pop-up window, the cursor is not focused on an input field.
- When upgrading a web application, if in the original web application, folders or files were removed, the upgrade process will fail.
- APX-5295  
In Fujitsu, the foreground color display is not as the user may expect.
- APX-4036  
Backward compatibility for macros: Due to changes in the framework infrastructure, macros from version 8.0 and below cannot be run and your users will have to record macros again.
- APX-5956  
Applinx Web application blinking caret functionality is only supported in IE.
- To run Applinx under webLogic Application server, you are required to follow these steps: Unpack the WAR file with the WebLogic JAR utility. To deploy the application, in the webLogic Administrator, set the upload directory name the Upload Directory Name attribute to the root directory of the exploded application (instead of the location of the WAR file).
- In Web applications, when users log out from the session, the HTTP session is not always released.
- When applying a Path procedure Screen Mapper node on a numeric multiple field, if there are some empty values, an exception error may occur. To avoid this from happening, change the multiple field type from numeric to alphanumeric.
- APX-8088  
When importing or exporting a screen group without its referring entities, the reference to the entities is not saved.
- The method setLoadAsWindow(true) in the GXChangeNextForm event doesn't work.
- APX-5312  
When using the Application Manager, on IIS7/IIS7.5, you need to configure the default application pool and ensure that the Managed Pipeline Mode is set to "Classic" (In the IIS manager, in the Application Pools node, edit the default application pool). When using the Application Manager on IIS7.5, you need to convert your application from a virtual directory to a web application (in the IIS manager, right-click on your application and select Convert to Application).
- In Procedures, when an output attribute is empty, the output element is not displayed in the console.

- APX-5009  
In right-to-left applications, the string in fields in Screen Group is reversed when there are two field mappings to the same place. This can be solved by using only single mappings.
- When working in Visual Studio 2010 with a console application, when adding a dll to the application, the selected target framework is by default .NET Framework 4 Client Profile and should be changed to .NET Framework 4 (Project Properties, Application tab, Target Framework).

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

### ***Third-party Products***

Some of the third-party products shipped with this version of ApplinX may contain security vulnerabilities. These third-party products are not updated when you apply a fix between releases, so you need to update the third-party products yourself as appropriate.

### ***Frameworks API***

- In order to work with the .NET Framework on 64-bit machines, enable 32-bit applications in the application pool.
- Keyboard mapping node in the Framework configuration editor has been moved to the Application properties in the ApplinX Designer. Configuring this via the framework is still possible, by directly editing the XML configuration file (gx\_keyboardMappings.xml).
- Visual Studio 2003 is no longer supported. You must first convert your ApplinX VS.NET project to VS 2008 (by opening it in VS 2008) in order to upgrade your ApplinX .NET project. It is recommended to convert from .NET project type "Web Project" to "Web Site", as from the current version ApplinX generates .NET Web pages based on the "Web Site" format and file structure.
- Serialization of the ApplinX API table class (GXTable) to XML is no longer supported (typically used when exporting tables to Excel). A new solution can be found in the Composite demo Web Application.
- In order to work with the .NET Framework on IIS 6 and above, configure the application pool.
- ApplinX Java API/JSP Framework must be run under Java 1.8 or higher.

### ***ApplinX Designer***

- ApplinX HTTP console is no longer available for testing web services. Web Services can be tested in any development environment which supports Web Services.

- Integrated Windows Authentication (formerly known as NT Authentication) is not supported in the Software AG Designer.
- Screen group generation from .NET is not available.

### ***Batch Files***

- Using a batch file to reload an application is no longer required and this functionality is supported by configuring the archive interval parameter in the ApplinX Server Properties.
- Using a batch file to manage databases is currently not supported.

## **4.0 Fixes Included in Each Release**

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

## **6.0 Documentation Changes**

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### ***Release 9.8***

- Software AG documentation is no longer available on the Software AG installer. You can access all Software AG documentation on the [Documentation website](#).

## **7.0 Terminology Changes**

A release is listed in this section only if changes occurred in that release.

## Release 9.8

Old Term	New Term
Read-only repository	Locked repository

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release. Release 9.12

Added Item	Description
Start/stop connection pools from Designer	You can now start and stop connection pools from the context menu of a selected pool in the Software AG Designer.
Usability	Usability has been enhanced throughout the product and a troubleshooting guide has been added.

Removed Item	Description
Automatically attempt to reconnect	The "Automatically attempt to reconnect" check box in the Host connectivity property panel is redundant. The same action can be preform using a connection pool.

Deprecated Item	Description
Print applet	Applet technology will soon be deprecated or no longer supported in new browser versions. An alternative for host printing is provided using Java Web Start technology.

## Release 9.10

Added Item	Description
Platform Certifications	<p>ApplinX now supports the following:</p> <ul style="list-style-type: none"><li>• <b>Java 8</b> The ApplinX code now compiles with Java 8, which means that customers can use Java 8 syntax in their ApplinX web applications.</li><li>• <b>Windows 10</b> The Windows 10 platform is now supported.</li><li>• <b>Eclipse 4.5</b> The ApplinX Designer Eclipse is now version 4.5.</li><li>• <b>Microsoft Edge</b> Microsoft's Edge browser is now supported.</li></ul>
Updating to CentraSite	<p>You can now update an ApplinX application to CentraSite; this updates the assets that were changed since last registration/update. (Functionality available with fix-in-hand after GA.)</p>

Deprecated Item	Description
Automatically attempt to reconnect	<p>The feature <b>Automatically attempt to reconnect</b>, in the <b>Host Configuration &gt; Connectivity</b> options is deprecated and will be removed in the next version. We suggest you use ApplinX Connection Pool functionality instead. A connection pool allows you to reconnect a session based on the pool's policy.</p>

Deprecated Item	Description
ActiveX technology	<p>Internet Explorer version 11 (which ApplinX currently supports) is the last IE version that can use Microsoft's ActiveX technology. At some point in the future this legacy technology will no longer be supported.</p> <p>For ApplinX, this will affect the following features:</p> <ul style="list-style-type: none"> <li>• Type Ahead</li> <li>• Natural Data Transfer using ActiveX: <ul style="list-style-type: none"> <li>○ silent download and upload</li> <li>○ downloading files to any folder on the client machine</li> <li>○ Activating a Natural Command</li> </ul> </li> <li>• Opening Multiple Web Sessions</li> </ul> <p>Note:</p> <p>Natural Data Transfer without the use of ActiveX will continue to be supported.</p>

Changed Item	Description
Font Size	<p>The following changes have been made to font size handling in this version:</p> <ul style="list-style-type: none"> <li>• Default font size for web application is 'Dynamic by resolution' instead of 13px.</li> <li>• In the fontSize combo box in the Configuration and Emulation windows, you can select font size from 10-24px (10, 12, 14, 16... 24px). See The HTML Emulation Toolbar.</li> <li>• In the fontSize combo box in the Emulation window, the new option 'Default' allows you to use the font size defined in Configuration. This is the default value in the Emulation window.</li> </ul>
Rebranding	<p>ApplinX product and documentation have been updated to match the new Software AG look-and-feel.</p>

Changed Item	Description
DocType	<p>Parameter <code>DocType</code> is no longer applicable for Framework Configuration - all pages now have the HTML5 doctype.</p> <p>However, the option was retained in the configuration window for reasons of backward compatibility. You can remove this obsolete option if you prefer: Update file <i>z_editConfig.htm</i> (.NET application) or <i>z_editConfig.jsp</i> (Java application) and remove the following code:</p> <pre>&lt;tr&gt;   &lt;td&gt;&lt;gx:gxcheckbox runat="server" id="appConfig_AddDocTypeToFrameset"     onclick="flipDisable('appConfig_DocTypeStr');"/&gt;&lt;/td&gt;   &lt;td&gt;&lt;a href="#" class="help1"     onclick="showHelp('framework/GXWebAppConfig.html#setAddDocTypeToFrameset(boolean)')"&gt;Set     doc type attribute:&lt;/a&gt;&lt;/td&gt;   &lt;td&gt;&lt;input runat="server" id="appConfig_DocTypeStr" size="50"/&gt;&lt;/td&gt; &lt;/tr&gt;</pre>

## Release 9.9

Added Item	Description
Comparing ApplinX applications	With the function Compare Application you can compare two ApplinX applications, typically two versions of the same application. In terms of application lifecycle management, being able to compare two different versions means you can perform impact analysis before deploying a new application version.
Invoking a procedure, using REST	In addition to SOAP, ApplinX web services can now be invoked using REST. From the Procedure Group Entity Editor, select a procedure and choose the new option Copy REST URL to clipboard.
Upgrade to Tomcat Server 8.0	The ApplinX internal Tomcat server is now version 8.0.
Enter key recognition	A distinction is now made between the two Enter keys (on numeric keypad and the main keyboard). Applies only to the following browsers: Firefox 29 and above; Chrome; Internet Explorer 11.

Changed Item	Description
Improved performance for large send sections	Performance for large send sections (for example Natural Data Transfer upload or the AS/400 save state feature) has been improved.



Changed Item	Description
Improved usability in flow mappers	Links now show source / target index expressions (if any exist). Double clicking anywhere on a link opens the link properties dialog (if the link can have properties). If a target index exists, "Append" is now off by default.

## **Release 9.8**

Added Item	Description
Usability improvements	You no longer need to define a repository, because the application now uses an internal one instead.
Session filtering	In the ApplinX Administrator you can now filter your sessions by Session ID, Application, Device Name, Duration, State, Connection Pool and Type.
Mobile browser support	ApplinX now supports mobile browsers, for example the Safari Browser. The look and feel of the new ApplinX Web applications has been enhanced, in particular for applications specifically designed for easier use on mobile devices.
Property <code>isUsingactivex()</code>	When downloading Natural file, detects whether process is using ActiveX and changes the logic accordingly.

Removed Item	Replacement, if any
Storing ApplinX entities in an external repository is no longer supported.	Use instead the recommended internal repository that is already provided.

Changed Item	Description
New look and feel for the web applications.	

## **Release 9.7**

Deprecated Item	Replacement, if any
Storing ApplinX entities in an external repository will no longer be supported in a future version.	Use instead the recommended internal repository that is already provided.

Changed Item	Description
The license key handling has changed.	The license key format from version 9.6 and earlier is no longer supported. If you are logged on to Empower you can request a new license key from Software AG Logistic Service Center (LSC) under <a href="#">Order Products/Licenses</a> . See <i>License Key Concept</i> in the ApplinX User Guide.

## 9.0 Added, Removed, Deprecated, or Changed Built-In Services

A release is listed in this section only if changes occurred in that release.

## 10.0 Added, Removed, Deprecated, or Changed Parameters

A release is listed in this section only if changes occurred in that release.

## 11.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

### **Release 9.8**

Added API	Description
Property <code>isUsingactivex()</code>	When downloading Natural file, detects whether process is using ActiveX and changes the logic accordingly.

### **Release 9.6**

Added API	Description
<code>gx_getNdtDefaultDownloadFileName</code>	Use this user exit to manipulate/modify the name of a downloaded Natural file.

## 12.0 Copyright Information

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## 13.0 Support

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APX-RM-912-20161018

# webMethods Broker 9.6 Readme

## October 2016

This file contains important information you must read before using webMethods Broker 9.6. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- PIF-10972  
Cannot reuse the old Broker storage if you want to upgrade webMethods Broker 8.2 or 9.0 to 9.6 on an IBM System z machine that is running SUSE Linux Enterprise Server or Red Hat Enterprise Linux.  
You will need to create new storage, and then migrate Broker Server configuration information from the old storage to the new storage using the webMethods Broker export/import utilities. For instructions, see *Administering webMethods Broker 9.6*.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- webMethods Broker 9.6 C APIs support the following compilers:

<b>System</b>	<b>Compiler</b>
AIX for POWER	XLC/C++ (v10)
HP-UX for IA64	aCC (HP C/aC++ A.06.25.02)
SUSE Linux Enterprise Server for x86_64/ IBM System z	GCC (4.1.2)
Red Hat Enterprise Linux Server for x86_64/ IBM System z	GCC (4.1.2)
Solaris for x86_64/SPARC	Studio (12)
Windows 32 and 64 bit	Microsoft Visual Studio 2008

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.6***

- BR\_8.2\_SP3\_CSharp\_API\_Fix1
- BR\_8.2\_SP3\_Core\_Fix6
- BR\_8.2\_SP3\_Deployment\_API\_Fix1
- BR\_8.2\_SP3\_JMS\_API\_Fix3
- BR\_8.2\_SP3\_Portal\_Fix3
- BR\_9.0\_SP1\_Core\_Fix2

### ***Release 9.5***

- BR\_7.1.2\_Core\_Fix18
- BR\_8.0\_SP2\_Core\_Fix7
- BR\_8.0\_SP2\_JMS\_API\_Fix9
- BR\_8.2\_SP2\_Deployment\_API\_Fix2
- BR\_8.2\_SP3\_Core\_Fix4
- BR\_8.2\_SP3\_Java\_API\_Fix1
- BR\_8.2\_SP3\_JMS\_API\_Fix2
- BR\_8.2\_SP3\_Portal\_Fix3
- BR\_9.0\_SP1\_Core\_Fix1
- BR\_9.0\_SP1\_Portal\_Fix1

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### **Release 9.6**

- PIF-11157 (BR\_8.2\_SP3\_Portal\_Fix4, BR\_9.0\_SP1\_Portal\_Fix2, BR\_9.5\_SP1\_Portal\_Fix1)  
The filter conditions for client subscriptions are not refreshed when you navigate to the Client Details page from the Messaging > Broker Servers > Document Types page in My webMethods.  
This issue is resolved.
- PIF-11417 (BR\_9.5\_SP1\_CommandLine\_Fix1, BR\_9.0\_SP1\_CommandLine\_Fix1, BR\_8.2\_SP3\_CommandLine\_Fix2)  
The server\_conf\_backup command-line utility fails to correctly backup a log file if the file size is more than or equal to 2 GB.  
If the log file size is  $\geq$  2 GB, the size of the backup log file generated by the server\_conf\_backup command-line utility is only 512 bytes. This issue occurs because of the implicit conversion or promotion rules for the int and long data types inherent in the Java language.  
This issue is resolved.

### **Release 9.5**

- PIF-10764 (BR\_9.0\_SP1\_CommandLine\_Fix1)  
The server\_config command line utility on Windows does not display in Japanese even though JLP (Japanese Language Pack) is used.  
This issue occurs because server\_config.exe does not properly locate the localized message library.  
This issue is resolved.

## 6.0 Documentation Changes

Using Command Central to Manage Broker section is moved from the Command Central help to the Administering webMethods Broker guide; the new section provides information about managing Broker using Command Central.

### **Release 9.5**

- *webMethods Messaging Programmer's Guide* is renamed as *webMethods Broker Messaging Programmer's Guide*.

## 7.0 Added, Removed, Deprecated, or Changed Items

This section lists product functionality that has been added, removed, deprecated, or changed since the last full release of the product. Deprecated Built-In services and APIs are listed in the relevant sections that follow this one. A release is listed in this section only if changes occurred in that release.

### Release 9.6

Added Item	Description
monitor-allowed-client-ipaddress-list configuration parameter	Added this new configuration parameter to the Broker Monitor's configuration file (awbrokermon.cfg). Use this parameter to restrict the list of clients who can access Broker Monitor and administer the corresponding Broker Servers.
auditlog-writeInterval configuration parameter	Added this new configuration parameter to the Broker Server's configuration file (awbroker.cfg). Use this parameter to configure the time interval for flushing the audit records from the cache to the audit file.
stop-queue-scan-on-pubid configuration parameter	Added this new configuration parameter to the Broker Server's configuration file (awbroker.cfg). Use this parameter to improve the messaging performance while scanning large queues. The default value of the stop-queue-scan-on-pubid configuration parameter changes the product behavior. For more information, see <i>Administering webMethods Broker</i> .

  

Changed Item	Description
The default sizes of the log file and the storage file created when you install a Broker Server or when you create a Broker Server using the server_config utility has changed.	New file sizes for the Broker Server storage: <ul style="list-style-type: none"><li>• Small (64MB log file, 1GB storage file)</li><li>• Medium (256MB log file, 4GB storage file)</li><li>• Large (512MB log file, 8GB storage file)</li></ul>
loglevel configuration parameter	The default value of the loglevel parameter in the basic authentication configuration file (basicauth.cfg) is changed from 0 (no logging) to 1 (minimum logging). The value of the loglevel parameter ranges from 0 (zero) for no logging to 6 (six) for maximum logging.



Changed Item	Description
Audit logging configuration	Audit logging of Broker Server configuration is now enabled by default. For information about configuring audit logging for a Broker Server, see <i>Administering webMethods Broker</i> .

## 8.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

### Release 9.6

Added API	Description
<p>Added these APIs to the WmJMSConfig class for configuring asynchronous acknowledgements:</p> <ul style="list-style-type: none"> <li>WmJMSConfig.getAutoAckBatchSizeRetry()</li> <li>WmJMSConfig.setAutoAckBatchSizeRetry(int autoAckBatchSizeRetry)</li> <li>WmJMSConfig.getAutoAckBatchSize()</li> <li>WmJMSConfig.setAutoAckBatchSize(int autoAckBatchSize)</li> <li>WmJMSConfig.getAutoAckServicePollInterval()</li> <li>WmJMSConfig.setAutoAckServicePollInterval(int autoAckServicePollInterval)</li> </ul>	<p>Use these APIs to configure asynchronous acknowledgements when using Auto Acknowledgement in JMS API. For more information, see the descriptions of the WmJMSConfig class in the Javadoc.</p>

Deprecated API	Replacement
<p>void com.webmethods.jms.WmJMSConfig.setSoTimeout(int socketTimeout)</p>	<p>There is no replacement. The JMS standard does not mention the usage of socket connection timeout.</p>
<p>int com.webmethods.jms.WmJMSConfig.getSoTimeout()</p>	<p>There is no replacement. The JMS standard does not mention the usage of socket connection timeout.</p>

## 9.0 Copyright Information

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BR-RM-96-20161018

# webMethods Business Console 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods Business Console 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

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## 1.0 Critical Information

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## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.12***

- SBP\_9.10\_Portal\_Fix3
- SBP\_9.10\_Runtime\_Fix3

### ***Release 9.10***

- SBP\_9.9\_Portal\_Fix5
- SBP\_9.9\_Runtime\_Fix5

### ***Release 9.9***

- SBP\_9.8\_Runtime\_Fix5
- SBP\_9.8\_Portal\_Fix5

### ***Release 9.8***

- SBP\_9.7\_Runtime\_Fix3

- SBP\_9.7\_Portal\_Fix3

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

- SBP-1816  
Task details page modal should have inline scrolling.  
This issue is now resolved.
- SBP-1808  
To-do list people picker not launching for the second and subsequent items in the to-do list.  
This issue is now resolved.
- SBP-1564  
Certain issues with Action menu in Task Inbox gadget.  
This issue is now resolved.
- SBP-1510  
Unable to endorse users from Task Details page in Work Stream (within an AppSpace).  
This issue is now resolved.
- SBP-1509  
Configure columns not working in Work Stream (within an AppSpace).  
This issue is now resolved.
- SBP-1502  
Certain issues with Activity Stream comments in the Process Details page.  
This issue is now resolved.
- SBP-1483  
A loading image does not appear when reloading process list, but it appears when loading task list.  
This issue is now resolved.
- SBP-1471  
Task list management pagination has dependency on process list management pagination.  
This issue is now resolved.

## **Release 9.10**

- SBP-1648  
Expert endorsements are not saved accurately in My webMethods Server with Microsoft SQL Server database.  
If you endorse an expert with a rating in floating point value, the endorsement is not saved accurately in SQL Server database.  
For example, a rating of 4.5 might be saved as 4.  
This issue is now resolved.
- SBP-1359  
URL to retrieve task business data is not accessible.  
This issue is now resolved.
- SBP-1166  
Clicking “Reset to default” for color theme returns incorrect selected theme in the REST URL.  
This issue is now resolved.
- SBP-1116  
Business Console does not display details of process instances belonging to version 9.5 or earlier.  
Even after you migrate older process models that contain task steps to version 9.9, Business Console does not display these migrated processes.  
To work around this issue, build and upload the 9.5 or earlier versions of process models in Software AG Designer, so that Business Console displays details of older processes that contain tasks.  
This issue is now resolved.
- SBP-1109  
Delegation of a task to multiple users for the first time is not working.  
This issue is now resolved.
- SBP-1096  
Task panels display in Work Stream toggles with "to-do -list" drop-down option.  
This issue is now resolved.

## **Release 9.9**

- SBP-1110  
Task Inbox contains duplicate filters.  
This issue is now resolved.
- SBP-916  
Parent task node takes a long time to display the child tasks if the number of child tasks is large.  
This issue is resolved by disabling the expand option on the parent node if the parent task has more than 200 child tasks. You can view the child tasks in the task details page.

- SBP-380  
Keyword search text box disabled in Select Principals dialog.  
This issue is now resolved.

## **Release 9.8**

- SBP-734  
Business Console does not display the business data of a task, if the task type name contains "." character.  
This issue is resolved.
- SBP-654  
Business Console does not update the task contributor list when the task is accepted in the Task Detail tab.  
This issue is resolved.

## **6.0 Documentation Changes**

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

- Included information about case management in the *Working with Business Console* guide.

### **Release 9.10**

- Updated the *Working with Business Console* guide to include description for scheduling tasks, using My Calendar, using gadgets for creating dashboards, and using gadgets for customizing process details and task details.

### **Release 9.9**

- Included permission reference for Business Console users in the *Working with Business Console* guide.

### **Release 9.8**

- Added context-sensitive online help.
- Updated the *Working with Business Console* guide to include description for using group tasks, saved searches, and the user interface customization options.

## ***Release 9.7***

- Documented Business Console features in the new *Working with Business Console* guide.

## **7.0 Terminology Changes**

A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

<b>Old Term</b>	<b>New Term</b>
Dashboard	AppSpace

### ***Release 9.10***

<b>Old Term</b>	<b>New Term</b>
Collaboration task or child task	Instant task

### ***Release 9.9***

<b>Old Term</b>	<b>New Term</b>
Process Stream	Work Stream
Group Task	To-Do List
Inbox	Task Inbox

## **8.0 Added, Removed, Deprecated, or Changed Items**

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

<b>Added Item</b>	<b>Description</b>
AppSpace permissions	Enables you to provide AppSpace permissions in Business Console.



Added Item	Description
Gadget enhancements	Ability to do the following: <ul style="list-style-type: none"> <li>• Group and share AppSpaces.</li> <li>• Create custom AppSpace layouts.</li> <li>• Expand and collapse gadgets in an AppSpace.</li> <li>• Search for gadgets in the Add New Gadgets dialog box.</li> <li>• Access AppSpaces independently using a URL outside of Business Console.</li> <li>• Show/hide case types, process types, and task types in Work Stream.</li> <li>• Generate to-do lists sequentially.</li> <li>• Customize gadget panels to use custom icons/actions.</li> </ul>
Scheduled child task	Enables you to create a scheduled child task.
Case management	Enables you to manage AgileApps cases in Work Stream.

## ***Release 9.10***

Added Item	Description
Gadgets	Enables you to: <ul style="list-style-type: none"> <li>• Create UI components by using HTML, CSS, and JavaScript.</li> <li>• Use built-in gadgets and user-created gadgets for customizing dashboards.</li> </ul>
Dashboards tab	Enables you to: <ul style="list-style-type: none"> <li>• Create new dashboards using gadgets.</li> <li>• Edit dashboards and configure the gadgets used in the dashboard.</li> <li>• Use a customized dashboard instead of the default What's Happening Now page.</li> </ul>

Added Item	Description
My Calendar panel on What's Happening Now tab	<p>Enables you to:</p> <ul style="list-style-type: none"> <li>• View the days when you have scheduled tasks.</li> <li>• View which tasks are scheduled to start on a date.</li> <li>• Identify the days when more task are scheduled. Darker shade of blue indicates that there are more tasks scheduled on that day.</li> <li>• View, reschedule, or edit a scheduled task.</li> </ul>
Task Schedule Date and Time fields in Start Task dialog	Enables you to specify the date and time when the task instance should start.
Work Stream Settings in Administration page	Enables you to specify whether to display project name along with process type name and task type name on Work Stream.
Gadgets option in Customize Business Console page	Enables you to specify colors for gadget components.
Callable Process Instances	Enables you to view the callable processes or reference processes of parent processes in a process list in Work Stream.

## **Release 9.9**

Added Item	Description
Process instance details page	<p>Enables you to:</p> <ul style="list-style-type: none"> <li>• View process instance details, process diagram, task instances related to the process, process duration, and the consolidated list of attachments and comments of the process tasks.</li> <li>• Attach files or add comments to process tasks.</li> <li>• Navigate to the task instance details page of task instances related to the process.</li> </ul>
Process instance search	Enables you to search for process instances based on one or more search criteria.
Process list column configuration	Enables you to configure the columns to be displayed in the process list.
Child Instances panel in task detail page	Enables you to view the child instances, if any.

Added Item	Description
Hide/Show toggle buttons for panels in instance detail page	Enables you show or hide panels in the instance detail page of a process or task.
Mandatory task	Enables you to specify mandatory child tasks.
Task type setting	Enables you to specify whether to display the task ID, custom ID or name of task types in task lists and task detail pages.
Tab label customization	Enables you to customize the labels of the tabs in the process detail and task detail pages.

### **Release 9.8**

Added Item	Description
Group task	Ability to create and manage grouped tasks.
User interface customization	Ability to customize the logo, title, color theme, masthead, and the landing page.
Saved searches	Ability to create and re-use the saved searches for tasks.
“Do Not Show Endorsements” option	Specifies whether to display or hide endorsements in the Task Detail tab and the Task Experts panel.
Processes tab	Ability to view the process analytics dashboard.

## **9.0 Added, Removed, Deprecated, or Changed Built-In Services**

A release is listed in this section only if changes occurred in that release.

### **Release 9.7**

Added Service	Description
getTaskExpertList	Returns a list of recommended task experts identified by the specified tags, with the most recommended expert at the top of the list.
listSkillsByUser	Returns all the endorsements of a specified user.
endorseUser	Endorses a user for the specified task tags.
endorseUserBasedOnTask	Endorses a user for task expertise.
deleteEndorsementForUser	Removes all the endorsements from a specified user.

## 10.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

### **Release 9.9**

Added API	Description
GET Access Privileges	This REST request retrieves the access privileges of the user.
GET Functional Privileges	This REST request retrieves the functional privileges assigned to user for a task type.
GET Process Instances	This REST request retrieves the process instances of a specified process type.
GET Process Instance Status Summary	This REST request retrieves the summarized status of all the process instances belonging to all versions of the specified process type.
GET Task Types	This REST request retrieves the list of all task types.
GET Task List	This REST request retrieves paginated list of tasks specified by the search criteria.
GET Task Details	This REST request retrieves the details of a specified task.
PUT Task Detail	This REST request updates the parameters of a specified task.
GET Task Attachment Count	This REST request retrieves the number of attachments of a specified task.
GET Task Attachments	This REST request retrieves a paginated list of attachments of a specified task.
POST Task Attachment	This REST request adds an attachment to a specified task.
DELETE Task Attachment	This REST request deletes a specified attachment.
GET Task Comments	This REST request retrieves the task comments of a task.
GET Task Comments for a Task Type	This REST request retrieves the list of comments of a task type.
POST Task Comment	This REST request adds a comment to the specified task.

Added API	Description
DELETE Task Comment	This REST request removes a comment from a specified task.
GET All Task Tags	This REST request retrieves all the task tags.
POST Task Tags	This REST request adds a new tag for tasks.
DELETE Task Tags	This REST request removes the specified tags.
POST Child Task	This REST request creates a child task for the specified parent task.
PUT Delegate Task	This REST request delegates a task to the specified user.
DELETE Task Delegation	This REST request removes delegation of the specified task from a user.
GET Task Audit Information	This REST request retrieves the paginated audit information of a specified task.
GET Task Inbox Names	This REST request retrieves all the custom and default task inbox names.
GET Task Expert Count	This REST request retrieves the number of experts identified for a task type.
GET Task Expert List By Task Type	This REST request retrieves a paginated list of experts for the specified task type.
POST Default Endorsement	This REST adds the default endorsement rating to the user for a task.
POST Endorsement Rating	This REST request adds endorsement rating for users for a specified tag.
GET Group Task Template	This REST request retrieves a to-do list template.
GET All Group Task Template	This REST request retrieves all to-do list templates.
POST Group Task Template	This REST request adds a to-do list template.
PUT Group Task Template	This REST request updates a to-do list template.
DELETE Group Task Template	This REST request deletes a to-do list template.
POST Group Task Using Template	This REST request adds a to-do list by using a template.
POST Group Task Without Template	This REST request adds a to-do list without using a template.
DELETE Group Task	This REST request deletes a to-do list.

Added API	Description
GET Saved Search	This REST request retrieves the saved searches for one the following as specified in the request input: <ul style="list-style-type: none"> <li>• All task lists</li> <li>• Task list specific to a task type</li> <li>• My Inbox</li> <li>• Custom Inbox</li> </ul>
POST Saved Search	This REST request adds a new saved search.
PUT Saved Search	This REST request modifies a saved search.
DELETE Saved Search	This REST request removes a saved search.

## 11.0 Copyright Information

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BC-RM-912-20161018

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## 1.0 Critical Information

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## 2.0 Known Issues

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### ***Business Process Development***

#### *Process Development*

- WMDPD-357  
The input/output of a web service connector defined for a step results in an unknown data type if the input/output contains a record structure.  
If a web service connector with a record structure in its input/output definition is defined for a step, the resulting input/output for the step is defined as an unknown data type.  
Workaround: Manually map the inputs/outputs of elements of the record structure.
- WMDPD-662  
webMethods Monitor cannot distinguish between models after a process model is exported from one project and imported into another project in Process Development.  
This can occur when a process model is exported from Designer into a source control system, then checked out of the source control system and subsequently imported into another project in Process Development. This causes the two models to be indistinguishable in webMethods Monitor.  
Workaround: To avoid this situation, export projects along with their corresponding .process files for storage into a source control system. See WMDPD-5659 below for additional check-in/check-out information.
- WMDPD-1555  
Annotations cannot be attached to steps that are not located in the same pool as the annotation. A step and its annotations must be located in the same pool in order to be connected.  
Workaround: Ensure that each annotation is located inside the same pool as the step it annotates.
- WMDPD-1898  
Pools may not be dragged directly vertically within a process canvas if the drop location overlaps the current pool location.  
Dragging a pool does not allow the drop to occur unless the pool has been moved totally beneath the current location or slightly to one side.  
Workaround: Either drag the pool slightly horizontally or use the keyboard arrow keys to move the pool. Note that the keyboard arrow keys are enabled by pressing “.” after the item is selected.



- WMDPD-2328

Renaming Integration Server (IS) documents or services in the Package Navigator view does not update references to those documents or services in any processes, and may result in errors during build and upload.

Errors in building and uploading processes occur because Designer attempts to access documents or services using their original names, which no longer exist.

Workaround: Manually update all references to IS documents and services after modifying them.
- WMDPD-5035

When deploying e-forms, connection properties for JCR and Content Service Provider settings cannot be configured in offline mode.

Workaround: When deploying e-forms, you must manually configure the JCR and Content Service Provider in the target environment.
- WMDPD-5081

Post-deployment verification of BPM assets fails.

When BPM assets are deployed through a repository type project and then deployed using the target server as the run-time source in another project, that other project does not retain the required process dependencies as the BPM process that was deployed using the repository.

There is currently no workaround for this issue.
- WMDPD-5231

Master build scripts fail to generate ACDL and composites for BPM assets named with double-byte characters.

BPM assets named with double-byte characters fail to generate ACDL and Composites when deploying with master build scripts. This can cause Deployer to not work properly.

Workaround: Do not use double-byte characters when naming processes.
- WMDPD-5245

Designer limits the number of boundary events displayed on an activity.

Designer displays a maximum of six (6) boundary events on an activity. Additional events are "hidden," though they exist in the model.

There is currently no workaround for this issue.
- WMDPD-5659

The Solutions view does not display assets checked out from SVN.

If you create solutions and process projects in a non-default location, care must be taken when multiple users are checking out the associated assets from SVN. Due to the way Eclipse stores metadata associated with its resources, checking out from SVN requires the use of Designer's import capability (rather than the use of the SVN plug-in's checkout capability). When you check into SVN a solution defined in a non-default location, Eclipse maintains additional metadata about that non-default location (a workspace-specific path to get there). This additional metadata should not be checked into SVN. First, the metadata is different for each workspace. Second, it is internal to the Eclipse framework and can change when Eclipse versions change.

Workaround: Perform check-in/check-out steps as follows:

  - To check in an asset from a single workspace (Workspace A), use the SVN plug-in in the

Navigator view in the Process Developer perspective. Right-click the solution containing the asset. Click Team > Share Project, then select SVN and follow the wizard. The .process file and its supporting assets/resources (the .project, build.xml, and .solution files) are checked into SVN. As you make changes to your process and Eclipse makes changes to the associated assets, use the SVN plug-in in the Navigator view to check in these changes.

- To check out an asset into a different workspace (Workspace B), do not use the SVN plug-in in the Navigator view. Instead, check out the solution from SVN outside of Designer, using your file system. Create a solution in Workspace B, and then import the .process file into it. During the import, you can define a new process project (in either a default or non-default location) for the imported .process file. Any supporting assets and resources, such as Integration Server packages, that contain necessary documents and/or services also need to be made available to Workspace B. Be sure to check in/out supporting assets as necessary.

- WMDPD-6863  
Models containing Event Types in logged fields are not generated properly with the command line generation tool.  
There is currently no workaround for this issue.
- WMDPD-7381  
Concurrent deployment to a cluster hangs the PRT service.  
Choosing the concurrent deployment option in Deployer causes a hang in the PRT service that is called to enable/disable the process model after deployment.  
There is currently no workaround for this issue.
- WMDPD-7899  
Process models may fail to generate using the command-line generation tool.  
Process models may fail to generate using the command-line generation tool with the message “Unsupported Action: Create Queue”. This occurs when the PE\_NONTRANSACTIONAL\_ALIAS setting for “Manage Destinations” is set to “No” in the Integration Server Administration Messaging page under JMS Settings.  
Workaround: Set the “Manage Destinations” setting to “Yes” for the PE\_NONTRANSACTIONAL\_ALIAS.
- WMDPD-8667  
SoftwareAG Installer cannot install Designer->Business Processes into a subfolder of Program Files  
When using the SAG Installer to install into a subfolder of Program Files, selecting the Designer->Business Processes install tree node will display an error dialog showing missing dependencies.  
Workaround: Select the install tree node Designer->Business Processes->Process Development 9.12

## *ARIS Integration*

- WMDPD-4518  
Process models that contain gateway steps and that are exported into XPDL display transition lines incorrectly when imported back to Designer from ARIS.

If a process model containing gateway steps is exported as XPDL to ARIS and then imported back to Designer from ARIS, the imported model displays transition lines incorrectly.

Workaround: Use the “Arrange > Layout” operation to correctly draw the lines.

- WMDPD-5422  
Designer does not import ARIS processes that refer to a WSDL that has no operations defined. During import of a process that contains service requests that specify a WSDL with no operations, exceptions appear in the Designer wizard.  
Workaround: Ensure that all services that are referenced in ARIS have operations defined.
- WMDPD-5754  
WSDL files that do not contain bindings used in abstract operations are rejected in the XPDL Import Wizard.  
Importing a WSDL file that does not contain bindings from ARIS using “Share with IT” causes the XPDL Import Wizard to reject the import.  
There is currently no workaround for this issue.
- WMDPD-7654  
Models that contain CentraSite predefined web services cannot be used in a round-trip operation between ARIS and Designer.  
A CentraSite installation contains a set of web services. Process models that include a predefined CentraSite web service cannot be used in a round-trip operation between ARIS and Designer. If used, the services may not be recognizable by ARIS. The list of predefined CentraSite services includes:  
UDDI Publish API Services  
UDDI Inquiry Services  
UDDI Custody and Ownership Transfer API  
UDDI Security Service  
LifecycleManagementService  
ImportXPDLService  
SearchService  
ApprovalService  
RegistrationService  
ImportWsdService  
ImportXsdService  
There is currently no workaround for this issue.

## ***Process Engine***

- WPE-1551  
A process with an invalid SOAP address in the web service descriptor executes successfully. If a process containing an invalid SOAP address in a web service descriptor is executed by the Process Engine, the process executes successfully and no error is displayed in webMethods Monitor.  
Workaround: The error shows in the Integration Server log as a “service cannot be found” error.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- Business Process configuration advice for CLARC use cases:
  - PPM uses the end time of a process step when displaying business data for that step. Depending on where the business data occurs in the events, the timestamp used in the KPIs in Optimize may be different from the timestamp in the PPM charts. In order to get the closest representation of the data from Optimize and PPM, it is recommended to configure the business process to send the business data at the end of a step.
  - PPM merges multiple PSIC events for one process step to one function and this results in the use of only the last attribute value. When multiple events for a process step contain business data with the same event type, or one PSIC event contains the same business data event type multiple times, data may be lost due to PPM using only the last attribute value. To get the closest representation of the business data from both Optimize and PPM, when configuring the business process it is recommended that only one copy of the business data is sent. Additionally, that business data must also be sent at the end of the process step.
  - Converting an EDA event type to an Integration Server document type causes the elements in the Integration Server document type to appear with a namespace identifier prefix, for example “p:Order”. This may lead to inappropriate content in the businessData elements of the corresponding EDA events. It is recommended to edit the Integration Server document type and remove the prefix from all elements, for example, the element name will then be “Order”.

### ***Business Process Development***

- When a send task step is used in a process invoked as a referenced subprocess:
  - If an IS document is configured both as a Send Document and a Return Document for the parent process, the document is not published to the messaging provider.
  - If an IS document is configured as a Send Document, but not as a Return Document for the parent process, the document is published to the messaging provider.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Business Process Development***

#### *Release 9.12*

- DES\_9.6\_Process\_Fix7
- DES\_9.8\_Process\_Fix2
- DES\_9.9\_Process\_Fix3
- DES\_9.10\_Process\_Fix2

#### *Release 9.10*

- DES\_8.2\_SP2\_Deployer\_Fix5
- DES\_9.8\_Process\_Fix2
- DES\_9.9\_Process\_Fix2

#### *Release 9.9*

- DES\_8.2\_SP2\_Process\_Fix33
- DES\_9.6\_Process\_Fix6
- DES\_9.7\_Process\_Fix5
- DES\_9.7\_Deployer\_Fix1

#### *Release 9.8*

- DES\_9.6\_Process\_Fix4
- DES\_9.7\_Process\_Fix1

#### *Release 9.7*

- DES\_8.2\_SP2\_Deployer\_Fix4
- DES\_8.2\_SP2\_Process\_Fix32

- DES\_9.0\_SP1\_Process\_Fix9
- DES\_9.5\_SP1\_Process\_Fix8
- DES\_9.6\_Process\_Fix3

### ***Release 9.6***

- DES\_8.2\_SP2\_Process\_Fix26
- DES\_9.0\_SP1\_Process\_Fix8
- DES\_9.5\_SP1\_Deployer\_Fix1
- DES\_9.5\_SP1\_Process\_Fix1

### ***Release 9.5***

- DES\_8.2\_SP1\_Deployer\_Fix2
- DES\_8.2\_SP2\_Process\_Fix17 through DES\_8.2\_SP2\_Process\_Fix22
- DES\_9.0\_SP1\_Process\_Fix1 through DES\_9.0\_SP1\_Process\_Fix4

## ***Process Engine***

### ***Release 9.12***

- PRT\_9.7\_Fix11
- PRT\_9.8\_Fix10

### ***Release 9.10***

- PRT\_9.6\_Fix9
- PRT\_9.9\_Fix1

### ***Release 9.9***

- PRT\_8.2\_SP2\_Fix20
- PRT\_9.7\_Fix6
- PRT\_9.8\_Fix1

### *Release 9.8*

- PRT\_8.2\_SP2\_Fix19
- PRT\_9.0\_SP1\_Fix6
- PRT\_9.7\_Fix1

### *Release 9.7*

- PRT\_8.2\_SP2\_Fix15
- DC\_8.2\_SP2\_DBS\_Fix10
- PRT\_9.0\_SP1\_Fix3
- DC\_9.5\_SP1\_DBS\_Fix3
- PRT\_9.5\_SP1\_Fix6
- DC\_9.6\_DBS\_Fix1
- PRT\_9.6\_Fix3

### *Release 9.6*

- PRT\_8.2\_SP1\_Fix11
- PRT\_9.5\_SP1\_Fix2

### *Release 9.5*

- PRT\_8.2\_SP2\_Fix9
- PRT\_9.0\_SP1\_Fix1

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Business Process Development***

#### *Release 9.12*

- WMDPD-8406  
Models created with EDA as receive protocol do not generate.

If a model is defined with receive protocol as EDA, the model will fail to generate in Designer. This is because the EventBus JMS Connection Alias is not defined on the Integration Server which is connected to the Designer instance.

This issue is now resolved.

### *Release 9.10*

- WMDPD-8265  
Resubmitting a process instance in a distributed logical server configuration results in an exception. If a process instance is resubmitted in a configuration where multiple logical servers are defined in a distributed multi-node environment, a null pointer exception may be raised and the resubmission will fail.  
The issue is resolved.

### *Release 9.8*

- BZA-296  
When you include a decision tree in a rule, you get an exception in My webMethods when you try to view the decision tree in the RMA.  
This issue has now been resolved.
- WMDPD-7979  
On XPDL export/re-import, the Receive document may get lost.  
This issue is now resolved.
- WMDPD-7943  
The `pub.monitor.process.instance:generateInstanceImage` may report incorrect coordinates.  
This issue is now resolved.
- WMDPD-7627 (DES\_9.6\_Process\_Fix1 )  
If a process was exported using XPDL and later was changed to upper/lowercase, the re-import may fail silently.  
This issue is now resolved. A warning should be displayed.
- WMDPD-7951  
Subscription document property on Start Message Event and Receive Task is not set. Selecting subscription document using the Browse button does not allow the document type to be set. However, drag and drop the document type onto the canvas or receive task sets the document type properly.  
This issue is now resolved.
- WMDPD-7937  
The initial minimum log level setting in Designer is not uploaded on first generation of the process. The first time a process is generated during build and upload, the minimum log level setting is not included. Instead, the minimum log level setting reverts to "5 - Process and all events and activities and looped activities" upon first build and upload of the process. In subsequent build and upload actions, the minimum log level setting is captured as expected.



This issue is now resolved.

- WMDPD-7913  
XPDL import does not set all references to IS Documents.  
The XPDL import may ignore references to IS Documents for "Start Events", "End Events" and "Task" Output". Only the documents referenced as "Task" input are correct referenced.  
This issue is now resolved.
- WMDPD-7931  
Receive task with no subscription document does not produce an error on build and upload.  
When a process contains a receive task that has no subscription document defined for it, the process can be successfully built and uploaded. The expected behavior is that an error message should occur that prevents the process from being built and uploaded successfully.  
This issue is now resolved.
- WMDPD-7908  
There may be reduced performance on certain type of JMS models.  
This could be caused due to the Max Prefetch property was defaulted to 10.  
This issue should now be resolved. The Max Prefetch will default to 1.

## *Release 9.7*

- WMDPD-7622  
Process instance remains in started or waiting state.  
When using unsynchronized OR joins with cascaded joins, process instances may remain in started/waiting state unless the "Generate dead paths for Unsynchronized OR joins" check box was checked prior to building and uploading the process model.  
This issue is now resolved. The "Generate dead paths for Unsynchronized OR joins" check box has been removed from the Run Time tab of the process properties. This behavior is now always enabled for process models built after installing 9.7.
- WMDPD-7839 (DES\_9.5\_SP1\_Process\_Fix8)  
It may be possible to make a connection from a step inside a subprocess to a step inside another subprocess. This may also cause the Designer to stop responding.  
This issue is now resolved. It is no longer possible to make a connection across steps belonging to different subprocesses.
- WMDPD-7827 (DES\_8.2\_SP2\_Process\_Fix32)  
Certain process files exported as XPDL may fail to be re-imported.  
This can occur for process files that need to be UTF encoded.  
This issue is now resolved. The files must be re-exported as XPDL after installing 9.7
- WMDPD-7812 (DES\_9.6\_Process\_Fix2)  
End message event receive protocols are not updated.  
When switching from the JMS to the EDA protocol for end message event, the connection alias does not change automatically from "PE\_NONTRANSACTIONAL\_ALIAS" to "EventBus" as it does for the other message types.

This issue is now resolved.

- WMDPD-7662 (DES\_9.0\_SP1\_Process\_Fix9)  
The Integration Server Asset Browser dialog box does not have scrollbars.  
If the Eclipse dialog font size is too large (> 24pt), the IS Asset Browser dialog box may not display the scrollbars.  
This issue is now resolved. The dialog box allows resizing in such cases.
- WMDPD-7686 (DES\_9.5\_SP1\_Process\_Fix5)  
An error occurs during build and upload of a JMS process model using a Nirvana environment.  
This situation occurs when executing a build and upload on a process model with a JMS start step, when working in a Nirvana environment. The following error is generated:  
com.pcbsys.nirvana.nAdminAPI.nAdminSecurityException: Request not supported on Server.  
This issue is now resolved by updating the Nirvana libraries.
- WMDPD-7630 (DES\_9.5\_SP1\_Process\_Fix4)  
Stepping into any type of call activity step while debugging causes the process debugger to stop responding.  
This occurs when the BPMN callable process or webMethods referenced process step is located in an internal pool.  
This issue is now resolved.
- WMDPD-7145 (DES\_8.2\_SP2\_Deployer\_Fix4)  
When database errors (such as constraint exceptions in a cluster) occur during an attempt to deploy a repository-based process model using Asset Build Environment, further attempts to deploy also fail.  
This issue can occur if the database connection is invalid (such as after a database restart), or in constraint errors in multiple node environments using concurrent deployment mode.  
This issue is now resolved. The database connection is refreshed and constraint errors are ignored.
- WMDPD-7785  
A process model may stop responding or report an unexpected unsatisfied join.  
This condition can occur when there are cascaded joins in a process model, for example, an unsynchronized OR join followed by an AND join. In this case, if the first join fails, the process model may leave the downstream join in a permanent waiting state, or report that the downstream join is unsatisfied, even though it was the first join that failed.  
This issue is now resolved. The downstream join will no longer receive a failure notification from an upstream join. To implement this behavior, you must re-build and upload the process model after applying this fix. In addition, this change contains optimization to the dead path generation algorithm to provide reduced generation time for large process models containing long step sequences/forward paths.

## **Release 9.6**

- WMDPD-6601 (DES\_8.2\_SP2\_Deployer\_Fix1)  
If you have 2 versions of a process model on the Deployer source server, and both models are selected for deployment, the proper version may not be enabled on the target.

This occurs because the WmDesigner package does not check the version enabled on the source.  
This issue is now resolved.

## **Release 9.5**

- WMDPD-7101 (DES\_8.2\_SP2\_Process\_Fix18)  
When you create a task step with a business data output, the business data is mapped, but the TaskCompletion is not.  
This is caused by a missed mapping after applying a fix for special characters (WMDPD-6888).  
This issue is now resolved. Note: You must delete a previously generated OutputMapService for the new mappings to be created.
  
- WMDPD-7153 (DES\_8.2\_SP2\_Process\_Fix18)  
Republishing a process model to CentraSite (such as while round-tripping in ARIS) may cause a null METException error.  
This can occur due to deleted process element classifications.  
This issue is now resolved.
  
- WMDPD-7112 (DES\_8.2\_SP2\_Process\_Fix17)  
In a Designer process, an Integration Server (IS) service that contains an array of a known document type may incorrectly display the data type as a Unknown list on the Input/Outputs page in the Properties view.  
This is due to the document type not being properly parsed for lists.  
This issue is now resolved.
  
- WMDPD-6380 (DES\_8.2\_SP2\_Deployer\_Fix1)  
When you deploy a process model named with non-English characters, the process name may appear on the target My webMethods Server as questions marks.  
This occurs because encoding is not present in WmDesigner services.  
This issue is now resolved.
  
- WMDPD-7082 (DES\_8.2\_SP2\_Process\_Fix18)  
On large re-zoom attempts, some transition labels may be relocated to the bottom of the canvas.  
This is caused by a downward shift in the viewpoint that occurs in a re-zoom.  
This issue is now resolved.
  
- WMDPD-6263 (DES\_8.2\_SP1\_Deployer\_Fix2)  
When database errors (such as constraint exceptions in a cluster) occur during an attempt to deploy a process model, further attempts to deploy also fail.  
This issue can occur if the database connection is invalid (such as after a database restart), or in constraint errors in multiple node environments using concurrent deployment mode.  
This issue is now resolved. The database connection is refreshed and constraint errors are ignored.

- WMDPD-7124 (DES\_8.2\_SP2\_Process\_Fix18)  
 When creating a Web Service Descriptor (WSD) from a generated service in a process model, you may see the error ISC.0081.9176 "cannot have a String Table".  
 This can occur for generated services even if they do not use string tables.  
 This issue is now resolved.
- WMDPD-7325 (DES\_8.2\_SP2\_Process\_Fix22)  
 Build & upload of some process models may take a long time.  
 This is a performance issue that can be caused by the evaluation of dead path logic for excessively large number of gateways.  
 This issue can be resolved by skipping the evaluation of dead paths. You must add the following line to the eclipse.ini file:  
 -DGenerateDeadpath=false  
 Restart Designer before you rebuild any models. Note that you must add join timeouts when skipping dead path evaluation, as dead path information will no longer be supplied to the Process Engine.
- WMDPD-7284 (DES\_9.0\_SP1\_Process\_Fix4)  
 If a process name contains a special character (such as underscore), attempting to build a parent process containing that child process can fail with the error "The BPMN Callable Process step should have one none start event."  
 This can occur if the child process ID is encoded and the metadata lookup fails.  
 This issue is now resolved.
- WMDPD-7295 (DES\_8.2\_SP2\_Process\_Fix22)  
 Invalid conditions do not result in a failed process build and upload.  
 Invalid transition conditions and subprocess loop conditions may be reported as warnings in the build report, but do not cause the build to fail.  
 This issue is now resolved. The build is marked failed for transition and loop errors, such as not specifying a operator when joining multiple condition expressions.
- WMDPD-7243 (DES\_8.2\_SP2\_Process\_Fix22)  
 Invalid transition conditions and subprocess loop conditions are not reported in the build report during Build & Upload.  
 This issue is now resolved
- WMDPD-7131 (DES\_8.2\_SP2\_Process\_Fix17)  
 Building and uploading a process model may result in a blank Build Report and a NullPointerException in the Eclipse log.  
 This can be caused by missing transition references in the process model.  
 This issue is now resolved.
- WMDPD-7256 (DES\_8.2\_SP2\_Process\_Fix21)  
 A transition trigger is generated when only a single step exists.

When there is a single step on a particular logical server, a transitionTrigger with an empty condition is generated. It is not possible to modify such a transitionTrigger, and it remains disabled. A transition trigger is unnecessary in this scenario.

This issue is now resolved for newly generated models. However, if an invalid transition trigger was generated previously for an existing process model, it must be manually deleted.

- WMDPD-7015  
Models containing swimlanes created in Designer 7 and updated in Designer 8 may not render correctly when the model is upgraded using Designer 9.  
This issue is now resolved.

## ***Process Engine***

### ***Release 9.8***

- WPE-3278  
In some situations, user task step iterations may complete out of order.  
When a user task step is executed multiple times to have several iterations in a process instance and one of the iteration is completed, it would appear Process Engine completed another iteration of the same step.  
This issue is now resolved.
- WPE-3266  
In some situations, activity log may not be logged properly.  
When `pub.prt.log:logActivityMessages` is invoked from an outbound mapping service of a user task step, it does not come up in Process Instance Details view.  
This issue is now resolved.
- WPE-3280  
In some situations, a migrated process model instance may fail.  
When the migrated process model has a boundary timer event step, but no timeout value is set for the timer, the instances may fail.  
This issue is now resolved.
- WPE-3251  
In some situations, a Task Engine callback may result in a process instance restart.  
Upon receiving a callback from Task Engine for a completed process instance, Process Engine attempts to restart the user task step, which results in process failure.  
This issue is now resolved. Process Engine will check the status of the process instance before attempting to restart the user task step. If the instance was not running, the callback will be ignored.
- WPE-3274  
In some situations, a completed process instance may fail.  
A parent process that completes before any of its child instances complete is erroneously logged as failed when the child instance rejoins the parent.

This issue is now resolved.

## Release 9.7

- WPE-3068 (PRT\_9.6\_Fix3)  
In some situations, Process Engine fails to create JMS topics.  
When webMethods Broker is configured with basic authentication and SSL encryption is also enabled, the following error is seen when the WmPRT package is loaded:  
Error creating PE internal JMS topic: [BRM.10.4042] JMS: Broker protocol error: 537  
Error updating client group permissions: [BRM.10.4042] JMS: Broker protocol error: 537  
This issue is now resolved.
  
- WPE-2989 (DC\_9.5\_SP1\_DBS\_Fix3)  
A join timeout may not work as expected.  
This situation can occur in systems with an IBM DB2 database. Join timeouts may fire at times other than the configured join expiration.  
This issue is now resolved. The PRTTIMEENTRY table DATE column type is changed to TIMESTAMP.
  
- WPE-2895 (DC\_8.2\_SP2\_DBS\_Fix10, DC\_9.5\_SP1\_DBS\_Fix3)  
Process Engine performance decreases in heavy load conditions.  
When using an Oracle database under heavy load conditions, the PRTSTEPQUEUE table in the Process Engine schema can cause reductions in performance.  
This issue is now resolved with database schema enhancements. Redundant indexes have been dropped and Oracle-specific recommendations for improved handling of LOB data have been incorporated.
  
- WPE-2818 (PRT\_9.0\_SP1\_Fix3)  
In some situations, a call activity step may result in an unexpected pipeline structure.  
When a process contains a user task inside a parallel branch and it is invoked as a BPMN call activity step, the invoking process receives the pipeline that has the actual input nested inside body/data.  
This issue is now resolved.
  
- WPE-3145 (PRT\_9.5\_SP1\_Fix6)  
Referenced document named "body" causes an error.  
A native webMethods document containing a reference to a document named "body" causes the following error: [ISS.0098.0049C] Exception:com.wm.app.b2b.server.ServiceException: [PRT.0101.9125] Service wm.prt.dispatch:handlePublishedInput failed while executing trigger. Rejecting Document for TriggerStore:Tele2LOMProcess.Tele2LOMProcess.Default:subscriptionTrigger.  
This issue is now resolved.
  
- WPE-3124 (PRT\_8.2\_SP2\_Fix15)  
Pipeline data is lost when a referenced process completes.  
After resubmitting a step in a referenced child process triggered by a native Broker document, the

pipeline is mistakenly interpreted as a JMS pipeline. This behavior makes it appear as if the pipeline data is lost.

This issue has been resolved.

- WPE-3087 (PRT\_9.5\_SP1\_Fix5)

In some situations, process instance step records may not be logged.

When the "Generate Service" option is disabled for a receive step, instances of such a process model may not have step records logged in the Process Audit table.

This issue is now resolved.

- WPE-3083 (PRT\_9.5\_SP1\_Fix5)

A parent process does not fail when callable process fails.

When a call activity step is invoked from within a subprocess in the parent process and the callable process fails, the parent process does invoke the process-wide Error Handler step. However, the status of the parent process remains as 'Started'.

This issue is now resolved.

- WPE-2929 (PRT\_8.2\_SP2\_Fix14)

In some situations, timeouts may not fire as expected.

In a clustered Process Engine environment, timeouts are incorrectly removed from the cache. This causes the timeouts to not fire as expected.

This issue is now resolved.

- WPE-3024 (PRT\_9.5\_SP1\_Fix5)

In some situations, a null pointer exception may occur in Process Engine.

When a process model invokes a subprocess as a webMethods referenced process, the following null pointer exception may occur:

```
java.lang.NullPointerException at com.wm.app.prt.storage.Storage.isDebugEnabled(Storage.java:932)
```

This issue is now resolved.

- WPE-3057 (DC\_9.6\_DBS\_Fix1)

Archiving or deleting process audit log data using partitions is supported only for Oracle databases.

Process Engine supports data archiving and deletion using partitions only for Oracle databases. The more efficient method of using database partitioning is not supported for MS SQL and IBM DB2 databases.

This issue is now resolved. Archiving with database partitions is now supported for MS SQL and DB2 databases, assuming your database license includes partitioning. Sample scripts are available in this folder: <webM\_install\_dir>/common/db/scripts/<db>/processaudit/72/partition\_support. For more information about implementing archiving database partitions, see the readme.txt file in the above folder.

- WPE-3037 (PRT\_9.5\_SP1\_Fix5)

Errors generated with a process model using the JMS protocol.

The internal service `wm.prt.performance:analyzeCollection` generates the exception

"[PRT.0101.9125] Service wm.server.triggers:getProperties failed." for any model that uses the JMS protocol.

This issue is now resolved.

- WPE-3012 (PRT\_8.2\_SP2\_Fix14)

Under certain uncommon circumstances, completed task information may be lost by the Process Engine.

In particular, if there are insufficient JDBC connections configured and the Integration Server is restarted while the Process Engine is handling completed task requests from the Task Engine, it is possible to lose information, requiring the Task Engine re-submit the completed tasks.

This issue is now resolved.

- WPE-2990 (PRT\_9.5\_SP1\_Fix4)

JMS message subscription mappings fail to function as expected.

In this case, when a JMS message contains a document with the specific name "header", the document is overwritten with an internal "header" structure after being published to the Process Engine, thus changing the message structure, causing the mappings to fail.

This issue is now resolved.

- WPE-2985 (PRT\_8.2\_SP2\_Fix13)

A step downstream from a user task fails to resubmit.

This situation occurs when a user task completes and a step downstream in the process model fails.

Information for re-submission is dropped in the communication from Task Engine to Process Engine, making it impossible for the resubmit to succeed on this downstream step.

This issue is now resolved.

- WPE-2851 (DC\_9.5\_SP1\_DBS\_Fix3, PRT\_9.5\_SP1\_Fix4)

In some situations, Process Engine performance may be reduced.

This situation can occur when the data partitioning solution is applied to archiving. Initially, the WMPROCESS\_ATREST\_MAINT trigger was added to maintain the WMPROCESSATREST table of the ProcessAudit schema. In certain situations, this trigger can cause a reduction in Process Engine throughput where the number of processes stored per second is reduced.

This issue is now resolved. The WMPROCESS\_ATREST\_MAINT trigger is removed, and a new public service `pub.prt.audit.truncateProcessAtRest` is added. This service truncates the Process Audit table WMPROCESSATREST. You can schedule this service to run on an interval of your choosing using the Integration Server Scheduler. For more information, see the topic "Scheduling Services" in the PDF publication *webMethods Integration Server Administrator's Guide*.

This service is relevant only for users who are implementing the optional database partitioning scripts for Process Audit data archiving. In that case, the WMPROCESSATREST table contains an entry for every completed process instance which, at some point, must be cleaned up. Use this service for that purpose only.

Also, to enable Process Engine to log ATRESTTIMESTAMP columns of ProcessAudit tables, you must add the following line to the file `..\IntegrationServer\packages\WmPRT\config\prt.cnf`:  
`watt.prt.auditLogProcessAtRest=true`

- WPE-2907 (PRT\_9.0\_SP1\_Fix3)



Correlation to running process model instances fails after updating a process model. This situation can occur when a process model version is updated and the newer version is enabled. In this case, correlation to running instances of the older (disabled) version of the process fails. This issue is now resolved. An instance created from a particular version of a process model completes on that same version, even if that version is no longer enabled.

- WPE-2909 (PRT\_8.2\_SP2\_Fix12)  
A step fails to resubmit when a user task fails.  
This situation occurs when a user task fails and the corresponding step in the process model has a join expression associated with it. Information for re-submission is dropped in the communication from Task Engine to Process Engine, making it impossible for the resubmit to succeed.  
This issue is now resolved.
- WPE-2856 (PRT\_9.5\_SP1\_Fix3)  
A JMS reply message is incorrectly formatted after a step resubmittal.  
This situation occurs with JMS transition messaging using Nirvana as the JMS provider. After a process instance step resubmittal, the data structure of the message does not correspond to the data structure definition, resulting in an inability to process the message.  
This issue is now resolved.

## ***Release 9.6***

- WPE-2607 (PRT\_8.2\_SP1\_Fix10)  
A timeout handler may execute unexpectedly in clustered environment. In a clustered Process Engine environment, a timeout handle may be executed more than once.  
This issue is now resolved.
- WPE-2741 (PRT\_8.2\_SP1\_Fix11)  
In some situations, Integration Server threads may stop responding.  
This situation occurs after applying WPE-2583, which is included in these fix packages:  
PRT\_8.0\_SP2\_Fix13 and later  
PRT\_8.2\_SP1\_Fix1 and later  
PRT\_8.2\_SP2\_Fix7 and later  
In a clustered Process Engine environment, Integration Server threads may wait for a JDBC connection from the Process Engine pool. This may cause slowness and possibly the server may stop responding.  
This issue is now resolved.
- WPE-2753 (PRT\_9.5\_SP1\_Fix2)  
In some situations, a Rosetta Net process model may fail with an exception.  
The following exception may be seen in the log:  
[BPM.0102.0036E] nnn exception getting model identifier:  
[PRT.0101.10302] Process instance nnn:1 could not be found  
This issue is now resolved.
- WPE-2930  
When migrating the Process Audit database to 9.6 from an earlier version, some data may not be

migrated.

If there is data associated with processes in the WMERROR and WMSERVICEACTIVITYLOG tables in the IS Core Audit database, that data does not get migrated to the 9.6 Process Audit database.

This issue is now resolved, but migration of data from IS Core Audit to Process Audit is only supported if the tables are in the same schema.

## Release 9.5

- WPE-2615 (PRT\_8.2\_SP2\_Fix9)  
Null customID value causes pub.prt.log:logCustomId to throw a database exception.  
When pub.prt.log:logCustomId is invoked without supplying a value for "customID", the following exception appears in the logs:  
[SoftwareAG][Oracle JDBC Driver][Oracle]ORA-01400: cannot insert NULL into ("WM\_20\_QS"."WMPROCESSASSOC"."EXTERNALID")  
This issue is now resolved. The service will still throw an exception when the value is missing.
- WPE-2608 (PRT\_9.0\_SP1\_Fix1)  
Duplicate activity log messages are being displayed in the Monitor user interface in My webMethods.  
After running a process and opening My webMethods to: Process Instances > Process Instance Detail > Activity Messages, duplicate log messages are displayed.  
This issue is now resolved.
- WPE-2574 (PRT\_9.0\_SP1\_Fix1)  
In some situations, Process Engine may encounter a database deadlock exception.  
Under heavy load conditions, the following exception may be seen in the server log:  
"[PRT.0101.0512E] Database Storage problem. Exception: [sag-cjdbc42-0011] [SQLServer JDBC Driver][SQLServer]Transaction (Process ID nnn) was deadlocked on lock resources with another process and has been chosen as the deadlock victim. Rerun the transaction."  
This issue is now resolved. Process Engine will re-run the database transaction using a new connection.
- WPE-2593 (PRT\_9.0\_SP1\_Fix1)  
In some situations, the WmPRT package throws an exception during package loading.  
When the WmPRT package tries to connect to a Broker instance that is configured with basic authentication, the following errors are written to the server log:  
[PRT.0101.0832I] Error updating client group permissions: [BRM.10.5000] JMS: No permissions for current operation.  
[PRT.0101.0831I] Error creating JMS internal topic: [BRM.10.5000] JMS: No permissions for current operation.  
This issue is now resolved.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### ***Business Process Development***

#### *Release 9.5*

- New Milestones and Stages chapter in webMethods BPM Process Development Help

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

### ***Process Engine***

#### *Release 9.5*

Old Term	New Term
Nirvana	Universal Messaging

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### ***Business Process Development***

#### *Release 9.5*

Deprecated Item	Replacement, if any
webMethods Referenced Process	BPMN Callable Process
webMethods Subprocess	BPMN Subprocess

Changed Item	Description
Default Deployment Properties in Properties view	Renamed Default Deployment Values  Emit Predefined Process Engine EDA Intrinsic Events settings moved to the Run Time page

## **Process Engine**

### *Release 9.6*

Removed Item	Replacement, if any
Audit Logging Dashboard Status in Home Page	The previous Integration Server Audit Logging mechanism has been replaced with an internal mechanism.
Loggers Environment Information in Home Page	The previous Integration Server Audit Loggers have been replaced with an internal mechanism.

## **9.0 Copyright Information**

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BP-RM-912-20161018

# webMethods Business Rules 9.12 Readme

October 2016

This file contains important information you must read before using webMethods Business Rules 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any critical issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

### ***Rules Management Console***

- WOK-10663  
In effect information for decision trees is lost when a rule project is imported from the Rules Management Console to Software AG Designer.  
This problem occurs with decision trees that have in effect information assigned at top level and/or at result node level. In effect information is assigned in the Rules Management Console. If a rule project containing decision trees with in effect information is imported to Software AG Designer, and the decision trees are modified, the in effect information is lost. If the rule project is exported back to the My webMethods Server repository and opened in the Rules Management Console, the in effect information must be reentered at top or result node level.  
There is currently no workaround for this issue.
- WOK-10662  
Decision tree changes are lost when using direct edit mode (inline editor).  
Changes made to a decision tree element using direct edit mode are lost when other changes are made with the modification dialog afterwards.  
As a workaround, modify decision trees only with the modification dialog.
- WOK-10657  
Marking a decision table column as principal and adding a data provider service leads to an exception.  
When a decision table column is marked as principal and a data provider service is configured in Software AG Designer, editing a cell in this column leads to an `IndexOutOfBoundsException` in the Rules Management Console.  
As a workaround, either mark a column as principal or configure a data provider service for this column.
- WOK-10614  
Default values on condition nodes are not validated.  
In decision trees, the data type of a default value for a condition node is not validated. It is possible to save an invalid default value which can result in a runtime error.  
There is currently no workaround for this issue.
- WOK-10485  
Decision trees with date conditions and results can show the wrong date or time.  
Date/time editing can save wrong date/time information in a decision tree. This can happen when the browser time zone is different from the user preferred time zone on My webMethods Server.  
There is currently no workaround for this issue.

## ***Rules Development***

- WOK-10663

In effect information for decision trees is lost when a rule project is imported from the Rules Management Console to Software AG Designer.

This problem occurs with decision trees that have in effect information assigned at top level and/or at result node level. In effect information is assigned in the Rules Management Console. If a rule project containing decision trees with in effect information is imported to Software AG Designer, and the decision trees are modified, the in effect information is lost. If the rule project is exported back to the My webMethods Server repository and opened in the Rules Management Console, the in effect information must be reentered at top or result node level.

There is currently no workaround for this issue.

## **3.0 Usage Notes**

This section provides any additional information you need to work with the current release of this product.

### ***Rules Engine***

- It is possible to design rules that evaluate in an infinite loop at runtime. webMethods Rules Engine has no validation logic to identify possible infinite loops at design time. With the help of the Run As... option, the rule designer can execute rules locally in webMethods Rules Engine to test and verify rule behavior. This local rule execution might expose loops at design time.

### ***Rules Development***

- It is possible to design rules that evaluate in an infinite loop at runtime. webMethods Rules Development has no validation logic to identify possible infinite loops at design time. With the help of the Run As... option, the rule designer can execute rules locally in webMethods Rules Development to test and verify rule behavior. This local rule execution might expose loops at design time.

### ***Rules Management Console***

- If you upgrade a rule project in the Rules Management Console from a version prior to 9.10, you must assign access rights to users who are supposed to see the new navigation tree item Decision Trees.



## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### **Rules Engine**

#### *Release 9.12*

- WOK\_9.7\_RuleEngine\_Fix5
- WOK\_9.10\_RuleEngine\_Fix1

#### *Release 9.10*

- WOK\_9.7\_RuleEngine\_Fix3

#### *Release 9.9*

- WOK\_9.8\_RuleEngine\_Fix1

#### *Release 9.8*

- WOK\_9.6\_RuleEngine\_Fix4
- WOK\_9.7\_RuleEngine\_Fix1

### **Rules Management Console**

#### *Release 9.12*

- WOK\_9.10\_RMC\_Fix1
- WOK\_9.9\_RMC\_Fix1
- WOK\_9.8\_RMC\_Fix4
- WOK\_9.7\_RMC\_Fix5

#### *Release 9.10*

- WOK\_9.8\_RMC\_Fix3
- WOK\_9.7\_RMC\_Fix3

### *Release 9.9*

- WOK\_9.8\_RMC\_Fix2
- WOK\_9.7\_RMC\_Fix2
- WOK\_9.6\_RMC\_Fix6

### *Release 9.8*

- WOK\_9.7\_RMC\_Fix1
- WOK\_9.6\_RMC\_Fix4

### *Release 9.7*

- WOK\_9.6\_RMC\_Fix2

## ***Rules Development***

### *Release 9.12*

- WOK\_9.10\_RuleDesigner\_Fix1
- WOK\_9.7\_RuleDesigner\_Fix5

### *Release 9.9*

- WOK\_9.8\_RuleDesigner\_Fix1

### *Release 9.8*

- WOK\_9.6\_RuleDesigner\_Fix4
- WOK\_9.7\_RuleDesigner\_Fix1

### *Release 9.7*

- WOK\_9.6\_RuleDesigner\_Fix1

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Rules Engine***

#### *Release 9.7*

- WOK-5660  
Internal event rules do not fire directly after a New Data Action was executed.  
If a rule result contains a New Data Action to create a new instance of a data model and also an assignment result to assign a value to this new instance of a data model, internal event rules that listen for a “has changed” event on this new instance of a data model will not fire.  
This issue has been resolved.

### ***Rules Management Console***

#### *Release 9.10*

- WOK-8983  
Rule project migration via Public API fails in AIX environment.  
On AIX OS, invoking the Rules REST API service  
PUT `http://%mws_host%:%port%/wm_rma/rest/raw/project/%ruleProjectName%`  
with a rule project created in a version prior to 9.9 results in an HTTP error 400 and a  
“RuleProjectTransformationException ... ”.  
This issue has been resolved.

#### *Release 9.9*

- WOK-8197  
Cancel button does not cancel all changes and may cause an exception on Internet Explorer 11.  
On Internet Explorer 11, the cancel button in the decision entity editor will not cancel all edits if only an operator and no value were selected as cell content. Upon closing and re-opening the decision table, an exception may occur.  
This issue has been resolved.
- WOK-8110  
Show hidden warnings link causes an exception if no decision entity is selected.  
If no decision entity is selected in the Rules Management Console, clicking on the Show hidden warnings link in the Rule Project Verification window causes a NullPointerException.  
This issue has been resolved.

## *Release 9.8*

- WOK-7465  
Rows added to decision tables are lost when assigning principals.  
When assigning principals to two or more condition cells or result cells, the rows added to a decision table are lost.  
This issue has been resolved.

## **Rules Development**

### *Release 9.9*

- WOK-8178  
Restore Defaults button on the Rule Verification Preference page produces error.  
If the Optimistic radio button on the Rule Verification Preference page is selected, and you click Restore Defaults, both radio buttons (optimistic and pessimistic) are checked.  
This issue has been resolved.
- WOK-8031  
Content assist error dialog may appear when editing rules.  
When editing rules, an Errors During Content Assist dialog may appear.  
This issue has been resolved.
- WOK-8112  
Misleading message appears when deleting an unused parameter.  
A misleading message appears when trying to delete an unused parameter, as unused parameters cannot be successfully deleted.  
This issue has been resolved.

### *Release 9.8*

- WOK-7515  
When dragging and dropping a decision entity into a rule set, an exception is thrown.  
An exception is thrown when dragging and dropping one or more decision entities into a rule set.  
The action is successful and the items are copied.  
This issue has been resolved.
- WOK-7516  
Right-clicking a result row in an external event rule causes an exception.  
A problem exists when selecting result rows in an external event rule. A “ClassCastException” is reported to the error log, and the ability to cut, copy and paste is disabled. In addition, it is not possible to open the context menu.  
This issue has been resolved.
- WOK-7520  
Data model generation can fail when model fields contain special characters.

When generating a new data model from document types that contain certain special characters, the generated fields are not complete and are incorrect. This can result in incorrect decision column header names and errors in functions.

This issue has been resolved.

- WOK-7530

An exception occurs before a rule project is upgraded.

When attempting to open a decision table that requires an upgrade to version 9.7, a “NullPointerException” is reported to the error log. The decision table is still opened within an upgrade editor, and it is still possible to upgrade to 9.7.

This issue has been resolved.

- WOK-7533

When exporting or importing a rule project to or from a My webMethods Server repository, a misleading error message is displayed.

When attempting to export or import a rule project to or from a My webMethods Server repository, the error message does not contain sufficient information if the credentials for the My webMethods Server connection are invalid. The error message states: “Can’t connect to server. Check the connection!”

This issue has been resolved.

- WOK-7544

Problems occur when special characters are used in functions.

When the names of parameter elements that are used in functions contain dot, percent, backslash or double quote characters, errors occur when editing the functions.

This issue has been resolved.

### *Release 9.7*

- WOK-5660

Internal event rules do not fire directly after a New Data Action was executed.

If a rule result contains a New Data Action to create a new instance of a data model and also an assignment result to assign a value to this new instance of a data model, internal event rules that listen for a “has changed” event on this new instance of a data model will not fire.

This issue has been resolved.

- WOK-6708

Cannot add “,” to separate parameters in a function list.

When selecting two parameter elements as parameter to a function, it is not possible to manually add a “,” character to separate the parameter elements.

This issue has been resolved.

### *Release 9.6*

- WOK-5698

Renaming a rule project ignores event models.

When renaming a rule project which contains an event model, the event model is not correctly

renamed as well. This leads to a “com.softwareag.rules.metaphor.RuleConversionException” when the renamed rule project is being built.

This issue has been resolved.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### ***Rules Management Console***

#### *Release 9.12*

- Information about editing decision trees and working with a data provider service was added.
- Additional API REST services were documented in the webMethods Business Rules Reference help.

#### *Release 9.10*

- Chapter “Working with Decision Trees” was added.

#### *Release 9.9*

- API REST services were documented in the webMethods Business Rules Reference help.

#### *Release 9.8*

- Chapter “Working with Functions” was renamed to “Working with Expressions” and modified.
- All function descriptions were removed from the Working with Business Rules in My webMethods guide and assembled in the new webMethods Business Rules Reference help.
- Changes in the user interface were documented.

#### *Release 9.7*

- Chapter “Working with Functions” was added.
- Description of setting an in effect date was added.
- Description of assigning a principal was added.
- Description of new rule verification categories was added.
- Description of changing rule order was added.

- Description of setting viewing preferences was added.

## ***Rules Development***

### *Release 9.12*

- Information about working with a data provider service was added.

### *Release 9.10*

- Chapter “Working with Decision Trees” was added.

### *Release 9.8*

- Chapter “Working with Functions” was renamed to “Working with Expressions” and modified.
- All descriptions of functions, built-in services and rules-related event types were removed from the webMethods BPM Rules Development help and assembled in the new webMethods Business Rules Reference help.

### *Release 9.7*

- Chapters “Working with Functions”, “Working with Rules-Related Event Types” were added.
- Description of cut/copy/paste functionality was added.
- Description of new rule verification categories was added.

## **7.0 Terminology Changes**

A release is listed in this section only if changes occurred in that release.

## **8.0 Added, Removed, Deprecated, or Changed Items**

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

## **9.0 Added, Removed, Deprecated, or Changed Built-In Services**

A release is listed in this section only if changes occurred in that release.

## 10.0 Added, Removed, Deprecated, or Changed Parameters

A release is listed in this section only if changes occurred in that release.

## 11.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

### Release 9.12

Added API	Description
PUT <base URL>/projects/%ruleProjectName%/decision_trees/%decisionTreeName%	Updates the specified decision tree in the given rule project with the provided decision tree JSON.
GET <base URL>/projects/%ruleProjectName%/decision_trees/%decisionTreeName%/condition_nodes/%conditionNodeId%	Retrieves a condition node with the specified conditionNodeId in the given decision tree and rule project.
PUT <base URL>/projects/%ruleProjectName%/decision_trees/%decisionTreeName%/condition_nodes/%conditionNodeId%	Updates a condition node with the specified ConditionNode JSON for the conditionNodeId in the given decision tree and rule project.
GET <base URL>/projects/%ruleProjectName%/decision_trees/%decisionTreeName%/lines/%lineId%	Retrieves a condition line with the specified lineId in the given decision tree and rule project.
PUT <base URL>/projects/%ruleProjectName%/decision_trees/%decisionTreeName%/lines/%lineId%	Updates a condition line with the specified Line JSON for the lineId in the given decision tree and rule project.
GET <base URL>/projects/%ruleProjectName%/decision_trees/%decisionTreeName%/result_nodes/%resultNodeId%	Retrieves a result node with the specified resultNodeId in the given decision tree and rule project.
PUT <base URL>/projects/%ruleProjectName%/decision_trees/%decisionTreeName%/result_nodes/%resultNodeId%	Updates a result node with the specified ResultNode JSON for the resultNodeId in the given decision tree and rule project.
GET <base URL>/projects/%ruleProjectName%/decision_trees/%decisionTreeName%/results/%resultId%	Retrieves a result with the specified resultId in the given decision tree and rule project.
PUT <base URL>/projects/%ruleProjectName%/decision_trees/%decisionTreeName%/results/%resultId%	Updates a result with the specified Result JSON for the resultId in the given decision tree and rule project.
PUT <base URL>/projects/%ruleProjectName%/decision_trees/%decisionTreeName%/lock	Locks a decision tree so that it can be modified exclusively by the user applying the lock.



Added API	Description
PUT <base URL>/projects/%ruleProjectName%/decision_trees/%decisionTreeName%/unlock	Unlocks a decision tree so that it can be locked by another user for exclusive modification.

### **Release 9.10**

Added API	Description
GET <base URL>/projects/%ruleProjectName%/decision_trees/%decisionTreeName%	Returns the specified decision tree.
PUT <base URL>/project/%ruleProjectName%/unlockall	Unlock all entities of a rule project and the project itself.

### **Release 9.9**

Added API	Description
GET <base URL>/projects	Returns a list of rule projects that are currently available on My webMethods Server.
GET <base URL>/project/%ruleProjectName%	Returns the content and metadata for a given rule project.
PUT <base URL>/project/%ruleProjectName%/lock	Locks the given rule project.
PUT <base URL>/project/%ruleProjectName%/unlock	Unlocks the given rule project.
GET <base URL>/project/%ruleProjectName%/decisiontable/%decisionTableName%	Retrieves the given decision table.
PUT <base URL>/project/%ruleProjectName%/decisiontable/%decisionTableName%	Writes the changes for the given decision table to the My webMethods Server.
PUT <base URL>/project/%ruleProjectName%/decisiontable /%decisionTableName%/lock	Locks the given decision table.
PUT <base URL>/project/%ruleProjectName%/decisiontable /%decisionTableName%/unlock	Unlocks the given decision table.
POST <base URL>/project/%ruleProjectName%/deploy	Hot deploys the given rule project to an Integration Server that was configured on the My webMethods Server.
GET <base URL>/project/%ruleProjectName%	Retrieves the given rule project from the My webMethods Server.
PUT <base URL>/project/%ruleProjectName%	Stores the given rule project on the My webMethods Server.

Added API	Description
DELETE <base URL>/project/ %ruleProjectName%	Deletes the given rule project from the My webMethods Server.

## 12.0 Copyright Information

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## 13.0 Support

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Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

RULES-RM-912-20161018

# CentraSite 9.12 Readme

## October 2016

This file contains important information you must read before using CentraSite 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the Documentation website or the TECHcommunity website. At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- INM-19625  
When a SOAP API configured with “Enable REST support” policy action is published to API Portal, one invalid endpoint is added to the list of possible valid endpoints in the API Portal Try-Out page. You may ignore this, as there is no functionality impact because of the invalid endpoint.
- INM-19867  
Graphical asset navigator charts are not saved in Internet Explorer.  
When CentraSite Business UI is accessed via Internet Explorer, if attempts are made to save the graphical representation of relationships between assets by way of any one of the Asset Navigator charts, for example, TreeChart, SunBurst, Icicle, and GraphChart, CentraSite does not save the graphical chart as an image (.png, .jpg, .bmp or .gif) file.  
To resolve this issue in Internet Explorer, right click on the required chart and select the "Save picture as..." option from the context menu.
- INM-16782  
Potential conflicts between predefined profiles and user-defined profiles.  
In the user interface, the sequence number plays a vital role in the profile display order and the instance level profile permission. In general, the sequence numbers assigned to the predefined profiles and computed profiles are odd numbers and even numbers are assigned to the user-defined profiles. However, some predefined profiles are designated with an even sequence number. When a user creates a new profile, consider the system assigns an even sequence number that matches with one of the predefined profiles. When the user sets the profile-level permissions for the new profile, the same permissions are also assigned to the predefined profile that has the same even sequence number within the asset type. As a result, the user might get permissions to more profiles than intended.  
The following list shows some of the predefined profiles that have an even sequence number:
  - Identification
  - Summary
  - Technical Details
  - Default
  - Details
  - Specification
  - SupportThere is currently no workaround for this issue. However, Software AG strongly recommends that you create a new profile and delete the conflicting user-defined profile within the asset type.

Additionally, if the predefined profiles “Runtime Events” and “Runtime Metrics” are missing due to a conflicting sequence number, execute the following command in the command line interface CentraSiteToolbox.cmd (Windows) or CentraSiteToolbox.sh (UNIX) of CentraSite, to fix the sequence number issue:

```
CentraSiteToolbox.[cmd | sh] FixProfileSequenceNumber.jar <CENTRASITE-URL> <USER-ID> <PASSWORD>
```

For example:

```
CentraSiteToolbox.cmd FixProfileSequenceNumber.jar http://localhost:53307 Administrator manage
```

- INM-17284

Unable to renew expired API keys in CentraSite.

In CentraSite, it is not possible to renew an API key that has expired. Therefore, it is necessary to renew the API key before it expires.

To work around this issue, request a new key for consuming the API whose key has expired. You also need to update the applications of that particular API to use the new API key.

- PIE-33367

IS assets cannot be retracted from CentraSite after migrating Integration Server to version 9.7 or later.

After migrating Integration Server to version 9.7 or later, Integration Server cannot retract IS assets that were published to CentraSite by an earlier version of Integration Server.

There is currently no workaround for this issue. If you encounter this situation, contact Software AG Global Support.

### 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- CentraSite and webMethods API Portal Product Compatibility Matrix

The following table provides information about compatibility and coexistence for products, CentraSite and webMethods API Portal:

CentraSite / API Portal	API Portal 9.7	API Portal 9.8	API Portal 9.9	API Portal 9.10	API Portal 9.12
CentraSite 9.7	Supported	Supported	Supported	Supported	Supported
CentraSite 9.8	Not Supported	Supported	Supported	Supported	Supported
CentraSite 9.9	Not Supported	Supported	Supported	Supported	Supported
CentraSite 9.10	Not Supported	Supported	Supported	Supported	Supported

<b>CentraSite 9.12</b>	Not Supported	Supported*	Supported*	Supported*	Supported
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Supported\* : An issue with standalone API Portal usecase will be addressed as part of Fix 1.

- API Portal instances must be republished right after upgrading CentraSite to versions 9.9 and later. After upgrading CentraSite and webMethods API Portal to versions 9.9 and later, you must republish all of the API Portal instances that were created in earlier versions of CentraSite before executing publish or unpublish actions on APIs.

- If the machines support ONLY IPv4, *com.softwareag.centrasite.soalink.events.snmp.host* property in <SAG\_Root>/CentraSite/cast/cswebapps/SOALinkSNMPEventsListener/WEB-INF/web.xml should point to the hostname of the machine. The default value works fine for dual IP stacks.

- INM-18818

After upgrading to CentraSite 9.0 SP1 and later from an earlier version of CentraSite, the location of the WSDL and schema files imported in the new CentraSite installation point to a unique folder in WebDAV directory.

Prior to CentraSite 9.0 SP1, the location of WSDL and schema files was defined by the targetNamespace of the file.

For example:

```
.../ino:dav/ino:dav/projects/WSDL/<Target Namespace in WSDL>/uddi_<key>/<Name of WSDL>.wsdl
```

This resulted in long file names and complex relative paths of the imported files in WebDAV.

To address this issue, the location of newly imported WSDL and schema files is redefined by the unique folder in WebDAV directory.

For example:

```
.../ino:dav/ino:dav/projects/WSDL/uddi_<key>/<Name of WSDL>.wsdl
```

However, the WSDL and schema files imported with previous versions of CentraSite and transferred to CentraSite 9.0 SP1 and later will continue to include the targetNamespace of the file.

- INM-17023

Importing older versions of predefined asset types is no longer allowed.

Importing predefined asset types is no longer possible if the asset type is exported from a CentraSite installation prior to 9.6. For example, a predefined asset type from version 8.2 cannot be imported to CentraSite 9.8.

You can, however, import asset instances of older versions if the predefined asset type definition in the export archive matches with the existing asset type definition in the version 9.8 registry.

- INM-17243

NTLM Transparent Mode with Kerberos Authentication Support.

When a virtual service is configured for NTLM authentication scheme in transparent mode, Mediator behaves in "pass by" mode, allowing an NTLM handshake to occur between the client and server. This kind of NTLM handshake becomes unreliable on certain circumstances.

Mediator now supports Kerberos handshake in Transparent mode. If you choose to use the NTLM Transparent mode with Kerberos authentication, set the value of the `watt.pg.disableNtlmAuthHandler` property to "true" in the extended settings for the Integration

Server. For information about the `watt.pg.disableNtlmAuthHandler` property, see *Administering webMethods Mediator* (version 9.8). For more information about working with extended configuration settings, see the *webMethods Integration Server Administrator's Guide*.

- CentraSite does not support overinstall since version 9.7.  
CentraSite does not support overinstallation in versions 9.7 and later. This means that there is no overinstallation procedure for CentraSite. Instead, if you are upgrading to CentraSite 9.9 from an earlier version of CentraSite, you must use the side-by-side (SBS) installation. For detailed upgrade instruction, see *Upgrading webMethods and Intelligent Business Operations Products*.
- Upgrade procedure does not update custom SSL client configurations.  
If you perform an upgrade from CentraSite version 9.x to versions 9.9 and later, the upgrade does not automatically upgrade your custom SSL configurations for communication between clients and the CentraSite Registry Repository. As a result, some of your existing CentraSite 9.x custom configurations might not be valid for CentraSite versions 9.9 and later.  
Therefore, you need to adjust your custom SSL configurations after upgrading to CentraSite versions 9.9 and later. For detailed information about setting SSL configurations, see the *CentraSite Administrator's Guide*.
- New login module, LDAPLoginModule is used in CentraSite versions 9.7 and later. The module replaces SSXLoginModule that was used in CentraSite 9.6 and earlier. The SSXLoginModule, a native code implementation, was deprecated in CentraSite 9.6. The new LDAPLoginModule is a pure Java implementation. This module only supports LDAP server repositories.  
InternalLoginModule login module may be used for the INTERNAL domain.  
Some CentraSite Command utilities have been changed to support the new LDAPLoginModule in preference to the deprecated SSX login module.  
The following commands remain unchanged and support the new LDAPLoginModule:
  - add Admin
  - set PasswordThe following commands have been updated to support the new LDAPLoginModule:
  - set Authentication
  - get Authentication
  - list Authentication
  - remove Authentication
  - set DefaultDomainThe following command has been newly introduced to support the new LDAPLoginModule:
  - generate JaasConfigurationThe following commands have been newly introduced to support the old SSXLoginModule.
  - set SSX Authentication
  - get SSX Authentication
  - list SSX Authentication
  - remove SSX Authentication
  - validate SSX Authentication
  - set SSX DefaultDomain

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.10***

- INM\_9.10\_Fix4

### ***Release 9.9***

- INM\_9.9\_Fix11

### ***Release 9.8***

- INM\_9.8\_Fix18

### ***Release 9.7***

- INM\_9.7\_Fix25

### ***Release 9.6***

- INM\_9.6\_Fix23

### ***Release 9.5***

- INM\_9.5\_SP1\_Fix25

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

- INM-21302  
The OAuth check box can be cleared from a virtual service when the virtual service contains OAuth consumers.  
In CentraSite Business UI, the OAuth check box can be cleared from a virtual service's API Consumption Settings when the virtual service contains OAuth consumers. Due to this, when



the virtual service is republished to Mediator, the OAuth clients are still created in Mediator, even though the virtual service doesn't contain the OAuth policy.

This issue is resolved. User cannot clear the OAuth check box from the API Consumption Settings of a virtual service, unless all the OAuth consumers associated the virtual service are deleted.

- INM-20852

Mediator is unable to invoke the target REST service.

When dynamic routing is configured for a REST service, deployment of REST service with multiple resources fails. Also, the invocation of REST service is only possible through one method.

These issues are resolved.

- INM-21270

Expired APIKeys are displayed in Mediator.

When a virtual services' API key expires, the API Key for that virtual service is removed from CentraSite Business UI, however, the expired API key for a service is displayed in Mediator.

This issue is resolved.

- INM-21293

Incorrect VSD is published to Mediator when multiple evaluate policies is configured with OR condition in CentraSite.

When multiple evaluate policies are configured with OR condition for a virtual service, the VSD published from CentraSite to Mediator is incorrect.

This issue is resolved.

## **Release 9.10**

- INM-20399

CentraSite Fix Installation does not support working in distributed environments.

CentraSite Application Server Tier (CAST) and CentraSite Registry Repository (CRR) can be installed at different location or on different machines. However, CentraSite Fix Installation does not support working in distributed environments.

This issue is resolved. The CentraSite Core Fix now updates the CAST location. The CentraSite Server Common Fix, which is introduced in this fix, and the platform dependent CentraSite Server Fixes update the CRR location.

- INM-20447

Reporting in CentraSite Business UI using CentraSite XQuery and XML Data Source Connections results in an exception.

In CentraSite Business UI, if you are using CentraSite XQuery and XML Data Source Connections to query the CentraSite database and generate reports, reporting fails with the following exception: "Cannot find or process the ODA data source extension configuration".

This issue is resolved.

- INM-20486  
In CentraSite Business UI, publishing a virtual service to WebMethods Mediator fails with an exception when the logged-in user password contains unusual characters.  
When publishing a virtual service from CentraSite Business UI to WebMethods Mediator, if the logged-in user password contains unusual characters, for example, the Euro (€) character, publish operation fails with an exception.  
This issue is resolved.

## **Release 9.9**

- INM-17944  
Automatic user login configuration permits users to access CentraSite Business UI without supplying their login credentials.  
When the automatic user login configuration <LoginPage loginAsGuest="true"> is enabled in CentraSite Business UI using the configuration file centrasite.xml, CentraSite allows users to bypass the Log In page and directly access the Welcome page of Business UI. The auto-login configuration prevents the users from supplying their login credentials.  
This issue is resolved.
- INM-18551  
CentraSite does not support assigning APIs to communities.  
When attempting to publish an API to webMethods API Portal 9.8, CentraSite Business UI does not display the list of communities. As a result, the API cannot be assigned to any of the communities. However, CentraSite assigns the API to Public Community, by default.  
This issue is resolved.
- INM-18532  
Mediator gateways cannot be edited after migrating CentraSite to version 9.8.  
After migrating CentraSite from previous versions to version 9.8, the Mediator targets created with previous versions of CentraSite and transferred to CentraSite 9.8 as Mediator gateways throw error on editing.  
This issue is resolved.
- INM-18310  
Asset name is not displayed in the CentraSite Business UI.  
Asset name is not displayed in the CentraSite Business UI. This issue occurs when the default locale is not set to English (United States), and the user logs into CentraSite for the first time through the Business UI.  
This issue is resolved.
- INM-18532  
Some services cannot be virtualized after migrating CentraSite to version 9.8.  
After migrating CentraSite from previous versions to version 9.8, some of the services created with previous versions of CentraSite and transferred to CentraSite 9.8 cannot be virtualized.  
This issue is resolved.

## **Release 9.8**

- INM-18221  
Executing the API Consumption Settings from details page of a virtual API fails with an error. When you try to execute the API Consumption Settings action from details page of any virtual API, execution fails with the INMCLE0120 error. For example:  
“Failed to choose assets for ActivateAPIKey”  
The error occurs because the validation of the API consumption settings fails.  
This issue is resolved.
- INM-18216  
When publishing IS REST APIs to CentraSite, Base URL and Resource Path are not updated with the correct paths.  
When publishing REST APIs from Integration Server to CentraSite using Designer, the values for Base URL and Resource Path are not updated as expected in the CentraSite Business UI. For example, consider a REST API `http://my-server/rest/apiportal/api/books`. Currently, the Base URL field displays `http://my-server/rest/apiportal.api.books`, and the Resource Path field displays `/apiportal.api.books`. This issue occurs because the Base URL field includes a suffix that denotes the resource path, and the Resource Path field includes a suffix that denotes the resource folder structure of the API.  
This issue is resolved. After publishing, Base URL and Resource Path now point to the correct paths. Valid values for these attributes include the following:
  - Base URL  
`http://my-server/rest/apiportal/api`
  - Resource Path  
`/books`
- INM-18256  
CentraSite does not honor the path parameters defined at REST API level or Method level in version 9.7.  
If path parameters are defined at the REST API level, Resource level, and Method level, CentraSite does not honor the path parameters at the API level and Method level, but only honors path parameters at the Resource level.  
This issue is resolved. CentraSite now allows you to define path parameters at the Resource level only.
- INM-18453  
CentraSite does not retain the default value for Boolean attribute in custom policy actions. If a Boolean attribute with value set to "false" (the default) is specified in the custom policy action, CentraSite ignores the value specified for that attribute. Instead, CentraSite sets the value of the Boolean attribute to "true".  
This issue is resolved.

- INM-18512

Creation of new version of schema with Interactive resolution option fails.

Using CentraSite to create a new version of schema with Interactive resolution of XSDs fails with an error.

In some cases, CentraSite will not reuse the schemas which were independently versioned and uploaded to the repository. For example, consider a schema "Customer" referring to another schema "Address". When "Address" schema is first versioned and "Customer" schema is later versioned, CentraSite will not reuse the already versioned "Address" schema. Instead, CentraSite creates a new version of the existing "Address" schema.

As a best practice, you must version schemas from the top level. In this example, you must version "Customer" schema, and during the versioning, CentraSite will create a new version of the "Address" schema.

This issue is resolved.
- INM-18300

Saving changes to Advanced Settings in asset type definition fails.

Upon changing the asset type definition, for example, selecting the Visible in Search check box using the Edit Asset Type - Advanced Settings wizard, clicking the OK button fails to commit changes to the asset type.

This issue is resolved.

## **Release 9.7**

- INM-17068

Many error log messages "INTERNAL\UDDIsubscriptionUser" appear in the sag-osgi.log file.

To resolve this issue:

  1. Open the web.xml file of in a text editor. The web.xml file is located in the directory *Software AG\_directory/CentraSite/cast/cswebapps/UddiRegistry/WEB-INF*.
  2. Locate the parameter `<param-name>com.centrasite.uddi.store.subscription.userId</param-name>`.
  3. Manually edit the property value `<param-value>INTERNAL\UDDIsubscriptionUser</param-value>` to remove the value "INTERNAL\".
  4. After making the above change, the property value would look like the following:  
`<param-value>UDDIsubscriptionUser</param-value>`
  5. Save and close the file.
  6. Restart the Software AG Runtime for changes to take effect.
- INM-17110

Invalid Access URI displayed for a REST API.

The Consumer Overview profile of a REST API and its proxy contains an invalid Access URI value.

This behavior occurs because a suffix that has a declared resource name is missing in the Access URI.

This issue is resolved.

- INM-17125  
 Email notifications sent to users contain the `{user.displayname}` token and not the recipient's name. When the approval workflow system sends email notifications that uses the predefined email templates, the body of the email shows the `{user.displayname}` token.  
 To substitute the `{user.displayname}` token correctly, specify the user's First Name and Last Name in the User Preferences page. For more information about these settings, see *Working with the CentraSite Business UI*.
- INM-17218  
 Extension points in the Business UI are not working correctly.  
 Business UI extensions may not display correctly.  
 This issue is resolved.
- INM-17617  
 Unable to reset the HTTP Authentication Scheme for a REST virtual service.  
 Prior to CentraSite 9.7, when modifying a REST virtual service in CentraSite Control, the mode of HTTP authentication (Basic Authentication, NTLM, OAuth2, None) cannot be changed.  
 This issue is resolved.
- INM-17630  
 Evaluating XPath expression fails when CentraSite is using the Content-Based Routing feature of CentraSite Control.  
 When you use the Content-Based Routing processing step of CentraSite Control, evaluation of the XPath expression fails. This issue occurs because the generated XPath expression did not include the HTTP Method.  
 This issue is resolved. XPath expression now reflects the operation name.
- INM-17693  
 CentraSite Administrator cannot modify the display name for an asset type.  
 When modifying an asset type in CentraSite Control, the display name cannot be modified even if the current logged in user belongs to the CentraSite Administrator role. This is because CentraSite does not allow you to modify the display name after the type is created.  
 This issue is resolved. CentraSite now allows you to modify the display name for an asset type.
- INM-17732  
 Upgrading to CentraSite 9.7 from an earlier version of 8.2.2 using the side-by-side (SBS) installation fails with INOQJE0022 error.  
 If the CentraSite's metadata includes attribute names that contain non-ASCII characters, CentraSite Registry Repository fails to start after the side-by-side (SBS) procedure.  
 This issue is resolved.
- INM-17878  
 CentraSite server throws NullPointerException error while attempting to edit a Service asset type definition in German locale.  
 This error occurs in CentraSite Control when the locale for the current logged in user is set to "German". The error is triggered when the user tries to edit the Service asset type definition, for

example, Service or Virtual Service using the CentraSite Control user interface.  
This issue is resolved.

- NJX-1334  
IE11 Browser: CentraSite Control not displaying correctly.  
When accessing CentraSite Control using Microsoft Internet Explorer version 11 and attempting to change the screen orientation (right-to-left), the UI is not displayed correctly. This issue occurs because the right-to-left (RTL) screen orientation does not work correctly if Microsoft Internet Explorer version 11 is in Quirks mode. This is an issue with Microsoft Internet Explorer version 11 in Quirks mode.  
This issue is resolved.
- INM-17848  
Saved search returns incorrect results.  
When re-executing a saved search, CentraSite does not return the expected search results. This is because the search query was not saved properly.  
This issue is resolved.
- INM-17851  
Advanced search for Virtual Service reflects incorrect results.  
When executing an advanced search with OR condition qualifier for Virtual Service, the search results are not properly reflected. However, in the case of an advanced search with OR condition qualifier for Service, this is not happening.  
This issue is resolved.
- INM-17866  
CentraSite issues a FileNotFoundException while attempting to view the version of a supporting document.  
This issue is resolved.
- INM-17903  
Duplicate supporting documents created on deployment.  
When a virtual service contains reference to a supporting document, upon deployment of the service, multiple versions of the supporting document are added to the CentraSite database (Registry/Repository). The multiple versions of supporting document increase the size of CentraSite database.  
This issue is resolved.
- INM-18189  
Importing WSDL in CentraSite Business UI fails with "Timeout" error.  
In certain scenarios, when attempting to import a WSDL file using CentraSite Business UI, the following error is returned:  
"Timeout - The Document Processor Thread timed out waiting for the required inputs"  
This issue is resolved.

- INM-18220  
When virtualizing a service, the Description attribute mandates a value, even though it was not defined as a required attribute in the Service type definition.  
This issue is resolved.
- INM-18229  
You cannot delete a category within the Asset Catalog.  
The set of actions offered by the asset's context menu on the Asset Catalog screen provides the ability to add a category to an individual asset; however, does not provide support for deleting an existing category.  
The issue is resolved. Going forward, the "Add Category" option is removed from the asset's context menu.
- INM-18166  
Assets cannot be modified after upgrading CentraSite to version 9.6.  
After upgrading CentraSite from previous versions to version 9.6, the details of the assets that were created with previous versions of CentraSite cannot be modified using the CentraSite Business UI.  
This issue occurs because CentraSite did not parse the value of the Date attribute correctly.  
This issue is resolved.
- INM-18156  
In CentraSite Business UI, some of the customization properties do not work.  
After editing the centrasite.xml file (customization file for Business UI), some of the customization properties, for example, controlling the visibility of "Take a Tour" button, and modifying the Footer section, do not work as expected.  
This issue is resolved.
- INM-17830  
Prior to CentraSite 9.7, if CentraSite is configured to use Single Sign-On (SSO) authentication, the SSO authenticated users were not allowed to perform certain operations, for example, report execution, and lifecycle changes.  
This issue is resolved with a workaround as follows:

  1. Open the jaas.config file located in *Software AG\_directory/profiles/CTP/configuration* directory.
  2. Add the following line to the CentraSite login context:  
`com.softwareag.centrasite.security.cache.ShortTermTokenLoginModule sufficient;`
- INM-18159  
LDAP users cannot log into CentraSite.  
LDAP users who do not have the CentraSite Administrator cannot log into CentraSite. This issue occurs because the external groups were not encoded properly.  
This issue is resolved.

- INM-18477  
Email notifications are not always delivered to configured recipients.  
When a policy with 'Initiate Group-dependent Approval' action is triggered, the email notifications of pending approvals are not delivered to the recipients (users) configured in the action parameter.  
This issue is resolved.

## **Release 9.6**

- INM-17011  
Importing virtual service from one CentraSite instance to another ends with a DuplicateConceptException.  
When importing a virtual service from one CentraSite (source) instance to another (target) instance, the import fails with a DuplicateConceptException.  
This issue is resolved.
- INM-17053  
Redeploy of a virtual service fails with an INOXDE7730 error.  
When you try to redeploy a virtual service to webMethods Mediator using CentraSite Control, deployment fails with an error. For example,  
javax.xml.xpath.XPathException: INOQJE0032: Error executing the request with error [7730, INOXDE7730, (cvc-model-group.1): invalid end of sequence]  
This issue is resolved.
- INM-17175  
Asset type Web Application must have the attribute DeployedOn with "Multiplicity" checked.  
The asset type "Web Application" must have the attribute "DeployedOn" with the option "Multiplicity" checked, because one web application can be published to multiple application servers.  
This issue is resolved.
- INM-17193  
CentraSite Business UI does not display some user-defined profiles in base asset types.  
In the user interface, the sequence number plays a vital role in the profile display order and the instance level profile permission. In general, the sequence numbers assigned to the predefined profiles and computed profiles are odd numbers, and even numbers are assigned to the user-defined profiles. But, some predefined profiles are designated with an even sequence number. When a user creates a new profile, consider the system assigns an even sequence number that matches with one of the predefined profiles. In this case, the user-defined profile is not displayed in the base asset type as expected.  
This issue is resolved. CentraSite now alters the sequence number of predefined profiles, so that Business UI displays the user-defined profiles in the base asset type (as expected).  
If you want to adjust the sequence number of predefined profiles, you must execute the "FixProfileSequenceNumber" command in the command line interface CentraSiteCommand.cmd (Windows) or CentraSiteCommand.sh (UNIX) of Command Central. The tool is located in *CentraSiteInstallDir* /utilities. However, because of certain limitations with the sequence number, CentraSite does not resolve the instance level profile permission conflicts.



- INM-17225  
Request an Account feature is not working in CentraSite Business UI.  
Requesting a user account in CentraSite using the Business UI fails with "Authorization failed" error.  
This issue is resolved.
- INM-17241  
Attempting Bulk Load Groups from External Source results in INOXXE8610 error.  
When you add multiple LDAP groups through bulk load option, wherein you have more than one LDAP group with the same set of users, CentraSite issues "Database error (8610, INOXXE8610, Definitions for ino:userid, ino:groupname, and ino:aclname in the collection ino:security need to be unique)".  
This issue is resolved.
- INM-17270  
Two users with the same characters at the beginning of their username.  
When moving an asset to one of these users, CentraSite takes one of the two and not always the one that is selected.  
This issue is resolved.
- INM-17303  
CentraSite exhibits the following known issues when creating a user-defined asset type with attribute of type Date in Business UI:

  - When creating an instance of the asset type described above, the Date attribute mandates a value, even though it was not defined as a required attribute in the asset type definition.
  - If a value is set for the Date attribute, the value is saved to the Date/Time format instead of Date-only format.
  - When you try to switch back to Edit mode for this asset, CentraSite fails with the error "date value defined as date/time".

This issue is resolved.
- INM-17321  
LDAP group-user association is missing in Business UI.  
If you are adding an external LDAP group to CentraSite using the Add Group action in CentraSite Business UI, all the LDAP users who are associated to this group are automatically added to CentraSite registry, but an association between the LDAP group and the LDAP users is missing. In addition, the newly added LDAP group does not include the list of its associated users, and subsequently these users are unable to login to CentraSite Business UI.  
This issue is resolved.
- INM-17326  
Adding a LDAP group in CentraSite fails with `ssx_ldap_searchW: (-7)`.  
When attempting to add a LDAP group to the CentraSite registry, the following error is returned:  
`ssx_ldap_searchW: Failure during a search. Return code is (-7)`  
This error occurs because the LDAP group name contains a non-alphanumeric character.  
This issue is resolved.

- INM-17341  
 In CentraSite 9.5 SP1, promoting asset from one lifecycle stage to another result in `java.lang.NullPointerException`.  
 When you promote an asset from one lifecycle stage to the next, the asset creates an association with the organization of target user (identified by the Username field) instead of the specified target organization in the Promote Asset action. This results in `java.lang.NullPointerException` in `wrapper.log` file.  
 This issue is resolved.
- INM-17357  
 After upgrading to CentraSite 9.5 SP1 from an earlier version of CentraSite, redeploying a virtual service created from the earlier version ends with Exception: The inSequence for VSD is invalid. When redeploying a virtual service created in CentraSite versions prior to 9.5 SP1, results in exception: "The inSequence for VSD is invalid". This exception occurs because CentraSite versions prior to 9.5 SP1 do not have the endpoint configuration properties.  
 This issue is resolved.
- INM-17381  
 CentraSite Registry Repository does not start.  
 After applying the INM\_9.5\_SP1\_Fix3 on CentraSite 9.5 SP1 installation, the CentraSite Registry Repository does not start up with "startup repairs failed" error. This issue occurs intermittently.  
 This issue is resolved.
- INM-17402  
 Deploying a virtual service fails with an INOXME8568 error.  
 When you try to deploy a virtual service to webMethods Mediator using CentraSite Control, deployment fails with an error. For example,  
`javax.xml.xpath.XPathException: INOQJE0032: Error executing the request with error [8568, INOXME8568, Expected entity name for reference]`  
 This issue is resolved.
- INM-17410  
 Unable to retrieve supporting document from a virtual service.  
 CentraSite returns a "HTTP Status 500" error when attempting to retrieve a supporting document that is attached to a virtual service. For example, if you create a new virtual service, and attach a document from the Supporting Document Library (SDL) to the service, and then you save the virtual service, you cannot subsequently retrieve the supporting document that is attached to the service.  
 This issue is resolved.
- INM-17413  
 Unable to retrieve WSDL after the Guest access is disabled in CentraSite.  
 After disabling the Guest access in CentraSite Business UI using the configuration file `centrasite.xml`, retrieving the WSDL of a Service or Virtual Service asset using the CentraSite Control interface fails with "HTTP Status 500" error.  
 This issue is resolved.

- INM-17414

After upgrading to CentraSite 9.5 SP1 from an earlier version of CentraSite, the virtual REST service created with earlier version of CentraSite and transferred to CentraSite 9.5 SP1 using the side-by-side (SBS) installation, exhibits the following behavior:

  - The Technical Details profile does not contain the configured resources.
  - The Details page includes attributes that are specific to a SOAP-based service.

This issue is resolved.
- INM-17415

After importing taxonomies to CentraSite 9.5 SP1 from an earlier version of CentraSite, the imported taxonomies do not have an associated organization.

When you import taxonomies created with previous versions to CentraSite 9.5 SP1, the import fails with an error. This issue occurs because the imported taxonomies do not have an organization associated with them in CentraSite 9.5 SP1.

This issue is resolved.
- INM-17416

Unable to permanently remove the default value of a Date attribute from the asset type definition. After removing the default value of a user-defined Date attribute using the Edit Asset Type panel, updating the asset type definition, and then reviewing the asset type definition, the default value still persists in the asset type definition.

This issue is resolved.
- INM-17421

After upgrading to CentraSite 9.5 or later from an earlier version of CentraSite, while attempting to redeploy the virtual services to webMethods Mediator, CentraSite issues a NullPointerException.

This issue is resolved.
- INM-17475

CentraSite faces performance issues while handling LDAP authentication.

This issue is resolved.
- INM-17477

Attempting to run a Promote Asset policy with OnTrigger event fails with an error.

When a Promote Asset policy with OnTrigger is executed on an asset, the asset appears to be promoted successfully, but does not reflect in the CentraSite Control. This issue occurs because the import fails with an error in the data\aabinosrv.txt log file.

This issue is resolved.
- INM-17464

After upgrading to CentraSite 9.5 SP1 or later from an earlier version of CentraSite, while attempting to redeploy the virtual services to webMethods Mediator, CentraSite issues a NullPointerException.

This issue is resolved.

- INM-17489  
When creating a copy of virtual service, the processing step configurations are not copied over in the new virtual service.  
This issue is resolved.
- INM-17496  
Updates to documentation for CentraSiteBUIExtension.  
The Readme file for using CentraSiteBUIExtension has been updated to fix the CentraSite Business UI extension directory:  
*CentraSiteInstallDir/demos/CentraSiteBUIExtension*  
Updated version of the Readme file is available in the following directory:  
*CentraSiteInstallDir/demos/CentraSiteBUIExtension/Readme.txt*  
In addition, the CentraSite online documentation has been updated to fix the reference to extension Readme file directory.  
Refreshed version of the above documentation is available on the Software AG Documentation website <http://documentation.softwareag.com>.  
This issue is resolved.
- INM-17497  
In CentraSite 9.5 SP1, promoting assets from one lifecycle stage to another results in `java.lang.ClassNotFoundException`.  
When you promote assets from one lifecycle stage to the next, the Target State field does not render a list of the states defined for the lifecycle model. This results in `java.lang.ClassNotFoundException`.  
This issue is resolved.
- INM-17499  
Heartbleed SSL vulnerability issue in OpenSSL.  
Prior to CentraSite 9.7, the Windows implementation of SSL was vulnerable to clickjacking attacks.  
This issue is resolved.
- INM-17505  
Auto-Approval not working in CentraSite 9.5 SP1.  
In CentraSite 9.5 SP1, when the user who submits a request for lifecycle state change of an asset is also an authorized approver for the requested operation, the approval is not executed automatically.  
This issue is resolved.
- INM-17512  
Profile tabs are not displayed in the Application and Service asset instances that have been migrated from a previous product version. This issue occurs intermittently.  
This issue is resolved.
- INM-17513  
Unable to delete the new version of a lifecycle model if a lifecycle state of this model is associated with a PreStateChange or PostStateChange policy.  
This issue is resolved.

- INM-17541  
Promoting a virtual service from one CentraSite instance to another instance of CentraSite using the Promote Asset policy action is inordinately slow or fails.  
This issue is resolved.
- INM-17542  
Profile tabs are not displayed in the Application and Service asset instances that have been migrated from a previous product version. This issue occurs intermittently.  
This issue is resolved.
- INM-17549  
Viewing the Performance profile in CentraSite Control ends with a `java.lang.ClassNotFoundException` in `wrapper.log` file.  
This issue is resolved.
- INM-17591  
Uploading any WSDL using the HTTPS URL results in `java.lang.IllegalArgumentException`. When you try to upload a WSDL using the HTTPS URL, the upload fails with the following exception:  
`java.lang.IllegalArgumentException: truststore is not specified`  
This issue is resolved. The JVM cacerts are used if no truststore properties are specified. It is possible to specify a truststore in the Tomcat environment using the following CentraSite properties:  
- `com.softwareag.centrasite.security.trustStore`  
- `com.softwareag.centrasite.security.trustStorePassword`  
- `com.softwareag.centrasite.security.trustStoreType`  
Or, using the standard Java properties:  
- `javax.net.ssl.trustStore`  
- `javax.net.ssl.trustStorePassword`  
- `javax.net.ssl.trustStoreType`  
If the store type is omitted, it is assumed to be of type `java.security.KeyStore.getDefaultType()`  
The above properties may be specified in `wrapper.conf/custom_wrapper.conf` as `wrapper.java.additional.N=-Dproperty=value`  
The truststore should hold the CA (or at least the certificate) of the server being accessed.
- INM-17596  
CentraSite issues a `java.lang.StringIndexOutOfBoundsException` while attempting to change the organizational ownership for an imported asset.  
This issue is resolved.
- INM-17602  
CentraSite Registry Repository crashes after throwing a `java.lang.ClassNotFoundException` exception.  
Prior to CentraSite 9.7, if CentraSite is configured to use Single Sign-On (SSO) authentication, CentraSite Registry Repository throws a `java.lang.ClassNotFoundException` and crashes.  
This issue is resolved.

- INM-17606  
CentraSite does not honor the sub types in a relationship attribute.  
When adding a relationship attribute to an asset type definition, CentraSite does not use the sub types as values for the attribute. The top level types are used as values for the attribute instead.  
This issue is resolved. CentraSite now uses the sub types as values for the relationship attribute in an asset type definition.
- INM-17607  
Importing a WSDL overwrites an existing Service asset instead of creating a new Service asset.  
In CentraSite 9.5 SP1, after importing a WSDL using the Import File option in Create a New Asset wizard, the imported WSDL overwrites an existing Service asset instead of creating a new Service asset. The likelihood of unexpected behavior was compounded by the classification values “service local name” and “service namespace”, which were had the same values for the two assets and derived from the WSDL's "targetNamespace" attribute and "service name" element.  
This issue is resolved. The Create a New Asset Wizard is now enhanced to include a Resolution strategy, which allows you to specify how the imported files should be handled:
  - Always overwrite
  - Always create new versions
- INM-17622  
Not possible to modify processing steps of a virtual service.  
CentraSite server returns HTTP response code: 403 when attempting to modify a virtual service.  
For example, if you create a new virtual service, and configure its processing steps for deploying the virtual service to webMethods Mediator, and then you save the virtual service, you cannot subsequently modify the processing steps to specify a different configuration.  
This issue is resolved.
- INM-17624  
In CentraSite, deploying a virtual REST Service, whose display name or the resource name does not conform to the naming requirements for an NCName data type, fails with an error in the IS server log.  
This issue is resolved.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

- The Run-Time Governance with CentraSite guide contains information on Axis free mediation of REST services.
- The Run-Time Governance with CentraSite guide contains information on SAML.
- The Working with REST-based APIs guide contains information on HTTP Patch support.
- The Run-Time Governance Guide and the Working with the CentraSite Business UI Guide contains information on Kerberos support.
- The CentraSite Users guide contains information on granular permission to Report templates and JDBC support for reports.

### ***Release 9.10***

- The CentraSite Business UI Guide includes a new chapter called “OData Service Management”. This chapter provides conceptual information on the OData Entity Data Model (EDM), and the procedures for creating and managing OData services using the CentraSite Business UI.
- The chapter “Taxonomies” in the CentraSite Administrator’s Guide has been updated to include the enhanced CRUD functionalities for Taxonomies using the CentraSite Business UI.

### ***Release 9.9***

- The CentraSite Administrator’s Guide includes a new chapter called “Usage of the CentraSite Command Tools”. This chapter provides usage information for the various CentraSite Command line utilities.
- The Run-Time Governance with CentraSite guide contains the following new chapters:
  - “Consumer Applications” - This chapter provides information about creating and managing run-consumer applications using CentraSite Control and Business User Interfaces.
  - “Consumer Registrations” - This chapter provides information about providing users and any arbitrary assets the ability to consume other assets in CentraSite.
- The chapter “Working with Reports and Report Templates” in the CentraSite User’s Guide has been updated to include the enhanced reporting functionalities of CentraSite Business UI.

## **Release 9.8**

- Software AG documentation is no longer available on the Software AG installer. You can access all Software AG documentation on the [Documentation website](#).
- A new chapter “Importing a RESTful API” has been added to the Working with REST-based APIs guide.
- The chapter “Modelling a RESTful API” has been renamed to “Creating a RESTful API from Scratch” in the Working with REST-based APIs guide.

## **Release 9.7**

- Beginning with version 9.7, CentraSite HTML documentation pages are replaced with the following PDF deliverables:
  - CentraSite Administrator’s Guide
  - CentraSite Developer’s Guide
  - CentraSite User’s Guide
  - Getting Started with CentraSite
  - Run-Time Governance with CentraSite
  - Working with REST-based APIs
  - Working with the CentraSite Business UI
- The overinstallation procedure for CentraSite has been removed from the Getting Started with CentraSite guide. For detailed upgrade instructions, see Upgrading webMethods and Intelligent Business Operations Products.
- One new guide was added for CentraSite: Working with REST-based APIs.
- The Working with the CentraSite Business UI guide contains the following new chapters:
  - “Working with Run-Time Policies” - This chapter provides information about creating and managing run-time policies in CentraSite Business UI.
  - “Using CentraSite with webMethods API Portal” - This chapter provides information about integrating and communicating CentraSite Business UI with webMethods API Portal.
  - “Mediator Run-Time Aliases” - This chapter provides information about creating and referencing run-time aliases in CentraSite Business UI.
- The CentraSite Administrator’s Guide contains the following new sections:
  - “Cloning Base Type Profiles in Sub Types”
  - “Excluding Sub Types from CentraSite Business UI Search”

## **Release 9.6**

- The Working with the CentraSite Business UI guide contains a new section called “Managing API Keys and OAuth Tokens”. This section provides information about managing API keys and OAuth access tokens in CentraSite Business UI.



- The Run-Time Governance with CentraSite guide contains a new section called “Computed Runtime Actions”. This section provides information about writing custom computed run-time actions for Business UI.
- The Built-in Run-Time Actions Reference section has been added to the Run-Time Governance with CentraSite guide.

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

Old Term	New Term
None.	None.

### ***Release 9.9***

Old Term	New Term
Impact Analysis	Asset Navigator

### ***Release 9.8***

Old Term	New Term
Targets	Gateways

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

Added Item	Description
HTTP PATCH support	CentraSite supports HTTP PATCH for native and virtualized REST services.
JDBC support	CentraSite reporting framework supports JDBC as one of the data source.

Report template permission

CentraSite supports fine grained permission model for Report templates.

Removed Item	Replacement, if any
XTS support removal	CentraSite used to use XTS for replication. This has been dropped in this release to simply the deployment. This means customers don't have open the XTS port in firewall.
53305 port	CentraSite no more will use 53305 but instead 53307.

## **Release 9.10**

Added Item	Description
Taxonomy management	CentraSite supports creating and managing taxonomies using the CentraSite Business UI. The same is deprecated in Control UI.
LDAP validation service	CentraSite now supports validation of the LDAP authentication configuration at each step in the configuration process.
OData support	CentraSite now provides Open Data Protocol (OData) service management. CentraSite Business UI enables the creation of HTTP-based OData services, which allow resources to be identified using Uniform Resource Identifiers (URIs), and the virtualization of OData services. However, an instance of Virtual OData service can be published to the webMethods Mediator gateway only after applying the XB_9.10_Fix1.
New action added to the CentraSite Business UI	This release introduces a new action, "Notify Consumer" that you can use to send ad hoc e-mail notifications to all registered consumers of a particular API.
Enhancements to CentraSite Command	CentraSite Command has been enhanced to include the following functionalities:

1. The following two CentraSite Commands are introduced to allow access token management using the command line interface:

- restore accesstokens
- purge accesstokens

2. Report management using the command line interface has been improved to include additional commands for execution of the CRUD operations on reports.

#### Pluggable actions for CentraSite Business UI

In addition to the preconfigured set of actions, users now have the option to plug-in their own custom action implementations. The custom-created actions allow users to extend the product functionality. The following rendering mechanisms are supported for any custom action:

- WithUiRendering
- WithoutUiRendering

#### Access token enhancements

The following changes were made to improve the access token management using the CentraSite Business UI:

- Access token configuration screens have been improved to display a warning message because there is a possibility that changing the configuration of an API could invalidate the user access tokens. This improvisation ultimately offers a better user experience.

- The configuration screen for policy actions, for example, Throttling Traffic Optimization, has been simplified to display only the access tokens created for a particular API as the possible list of consumers during the virtualization process. This simplified user interface prevents users from choosing an unknown consumer accidentally.

- Previously, when an API is unpublished from webMethods API Portal, access tokens associated with API were deleted from the API Portal registry. Upon republishing, only the API was published to API Portal. Now, republishing the API also publishes the associated access tokens to API Portal.

#### Swagger enhancements

A new policy action, "Generate Swagger2.0 file", has been introduced to export a REST API or a

Virtual REST API in Swagger format. This policy action applies to the following set of events:

- Post-Create
- Post-Update
- Post-State Change
- OnTrigger

Handling of CentraSite logs

CentraSite logs have been separated from the logging containers and placed inside a dedicated log file called centrasite.log. This log file is available in the <Software AG\_directory>/profiles/CTP/configuration directory where wrapper.log is available.

Deprecated Item	Replacement, if any
Taxonomy management in Control	Beginning with version 9.10, CentraSite does not support creating and managing taxonomies using the Control UI. Instead, CentraSite supports creating and managing taxonomies using the CentraSite Business UI.

## **Release 9.9**

Added Item	Description
Pending approval enhancement	Now, an Administrator can override pending approval. This will be very useful if the approval is stuck for various reasons like user unavailability etc.
OAuth client revocation	Business UI supports revocation of OAuth clients.
Support for Insight gateway	Beginning with CentraSite version 9.9, Insight gateway is supported out of the box.
Virtualization enhancements	Beginning with CentraSite version 9.9, a Virtual service can be re-virtualized. This helps users to quickly change the policy actions instead of navigating back to Native service.

If the native REST service undergoes any change, say a new Resource is added, re-virtualization from native service allows users to take advantage of the new additions without versioning the virtual service.

## Report Scheduling

Users can schedule the Report execution. The report will be sent to the registered e-mail address as an attachment.

<b>Removed Item</b>	<b>Replacement, if any</b>
CentraSite report execution from Control and Designer	The execution of reports will no longer be possible neither from CentraSite Control nor from the Designer's 'CentraSite Search and Browse' perspective. This will be possible only from Business UI

<b>Deprecated Item</b>	<b>Replacement, if any</b>
Impact Analysis	For usecase except the generic traversal, Asset Navigator is preferred.

## Release 9.8

Added Item	Description
New concept "Gateway"	Beginning with CentraSite 9.8, both API Portal and Mediators are grouped under the concept "Gateway".
Predefined roles for managing gateways and publishing APIs	<p>This release introduces the following predefined roles:</p> <ul style="list-style-type: none"><li>- Mediator Administrator</li><li>- API Portal Administrator</li><li>- Mediator Publisher</li><li>- API Portal Publisher</li></ul> <p>To manage a Mediator gateway, you must belong to the "Mediator Administrator" role or have the "Full" instance-level permission on the Mediator instance itself.</p> <p>To manage an API Portal gateway, you must belong to the "API Portal Administrator" role or have the "Full" instance-level permission on the API Portal instance itself.</p> <p>To publish API to a Mediator gateway, you must have the "Mediator Publisher" role for the organization to which the Mediator instance belongs, or have the "Edit" instance-level permission on the Mediator instance itself.</p> <p>To publish API to an API Portal gateway, you must have the "API Portal Publisher" role for the organization to which the API Portal instance belongs, or have the "Edit" instance-level permission on the API Portal instance itself.</p> <p>After migrating CentraSite from previous versions to version 9.8, users who have the "Operations Administrator" role to create Mediator targets in previous versions of CentraSite will automatically get the "Mediator Administrator" role.</p> <p>After migrating CentraSite from previous versions to version 9.8, users who have the "API Portal Administrator" role to manage API Portal instances and publish APIs to the API Portal instances in previous versions of CentraSite will automatically get the "API Portal Publisher" role.</p> <p>For more information about roles, see <i>Getting Started with CentraSite</i>.</p>

Added Item	Description
New Asset Details layout	<p>CentraSite Business UI offers an enhanced profile layout that provides easier access to the details of the individual profiles of APIs and other assets. The enhanced profile layout provides a split view representation of the profile details for an individual object and includes a navigation panel and a content panel. The layout maintains a list of all of the profile names on the navigation panel and displays the details for the selected profile on the content panel. For complete information, see <i>Working with the CentraSite Business UI</i>.</p>
Importing Archived Assets	<p>CentraSite Business UI provides the Import Archive functionality to import an asset by importing the archive file (zip file) to which the asset was previously exported. The Import Archive functionality offers the same import preview and options that are provided by CentraSite Control. For more information about using this functionality, see <i>Working with the CentraSite Business UI</i>.</p>
Importers for RAML and Swagger	<p>In CentraSite 9.8, the existing REST data model interface is enhanced to support direct importing of REST APIs described in the RAML and Swagger API documentation formats. The CentraSite Business UI introduces a new field called “Import from a Specification File” that takes in the specification file of a RAML - version 0.8 or Swagger - version 2.0 format as the input, and then creates a REST Service asset that best describes the REST API with RAML or Swagger specification. For complete information, see <i>Working with REST-based APIs</i>.</p>
Scheduled Report Execution	<p>CentraSite provides default reports that API Portal consumers can use to monitor their API usage over a specific period. You can schedule these reports on a regular basis (daily, weekly, monthly) to automatically generate and distribute reports as an email attachment, in PDF format, to the consumer at the email address provided at registration. The consumer clicks the attachment to access the API usage metrics.</p>
Easy navigation between Native Service and Virtual Service	<p>Beginning with version 9.8, CentraSite Business UI provides a link that enables you to easily navigate from the virtual service details page to the corresponding native service details page in the user interface.</p>

Added Item	Description
Robust access token management between CentraSite and API Portal	<p>CentraSite supports configurable retry mechanism that ensures the delivery of messages from CentraSite to API Portal, and protects requests from transient failures that might occur while sending messages from CentraSite to API Portal. If access tokens are not delivered during the retry attempts, the undelivered tokens are flagged and persisted in the database. At a later time, these undelivered tokens can be viewed using the predefined “GetUndeliveredAccessTokens” portlet, which is introduced in this release. CentraSite uses a scheduler to automatically pick up the undelivered tokens, and resend them to the API Portals. For complete information about this mechanism, see <i>Working with the CentraSite Business UI</i>.</p>
Merged Publish and Unpublish actions for Mediator and API Portal.	<p>Prior to CentraSite 9.8, you publish and unpublish APIs to and from Mediator and API Portal instances, in sequence, using the following four distinct actions:</p> <ul style="list-style-type: none"> <li>- Publish</li> <li>- Publish to API Portal</li> <li>- Unpublish</li> <li>- Unpublish from API Portal</li> </ul> <p>In CentraSite 9.8, the above actions are replaced by two actions - Publish and Unpublish, which allow you to publish and unpublish APIs to and from Mediator and API Portal instances, simultaneously. These actions are also introduced in the Search Results page for performing bulk publish and unpublish of APIs. For more information about using these actions, see <i>Run-Time Governance with CentraSite</i>.</p>
CentraSite Control supports IE standard mode	<p>In previous versions, CentraSite Control used Quirks mode to render the content properly. CentraSite Control now supports standard mode in IE 11 and above.</p>



Added Item	Description
Target Management in CentraSite Control	<p>Beginning with version 9.8, CentraSite Control does not support creation of Mediator and Insight targets. This means that there is no option for creating targets using the “Add Target” wizard in CentraSite Control.</p> <p>However, if you have targets created with the previous versions or using the current version of CentraSite Business UI, you will be able to view the list of targets in the Targets page, and deploy services to the targets using the Deployment page. You cannot edit or delete these targets using the CentraSite Control user interface (even if you belong to the CentraSite Administrator role). Going forward, you must use the CentraSite Business UI to create and manage targets (now called gateways). For complete information, see <i>Run-Time Governance with CentraSite</i>.</p>
<p>Policy Actions using Groovy</p> <p>Support for policy actions written in Groovy (a scripting language) is removed. Going forward, CentraSite will cease support for any Groovy action.</p>	None.
<p>The following ESB (Enterprise Service Bus) types that appear in the Type Management page of CentraSite Control are removed.</p> <ul style="list-style-type: none"> <li>▪ ESB Document</li> <li>▪ ESB Document Field</li> <li>▪ ESB Document Type</li> <li>▪ ESB Folder</li> <li>▪ ESB Package</li> <li>▪ ESB Service</li> <li>▪ ESB Specification</li> <li>▪ ESB WS Descriptor</li> <li>▪ ESB WS Operation</li> </ul>	None.

Deprecated Item	Replacement, if any
Legacy Asset Details layout	The legacy asset details layout in CentraSite Business UI has been deprecated. The legacy layout is replaced with an enhanced profile layout which provides a split view representation of the profile details for an asset and includes a navigation panel and a content panel. The layout maintains a list of all of the profile names on the navigation panel and displays the details for the selected profile on the content panel. For complete information, see <i>Working with the CentraSite Business UI</i> .
Run-time functionalities in CentraSite Control	Beginning with CentraSite 9.8, the support for various run-time functionalities which include Virtualization of Services, Definition of Targets, Run-time Policies, Deployment Operations in CentraSite Control is deprecated and will be removed in future releases.

## Release 9.7

Added Item	Description
REST Data Model user interface	CentraSite Business UI includes new screens to work with REST-based APIs. For complete information, see <i>Working with REST-based APIs</i> .
Manage Governance Rules activity	CentraSite Business UI includes a new activity called "Manage Governance Rules" to create and manage components (aliases, policies, and API Portals) in the run-time environment. For complete information, see <i>Working with the CentraSite Business UI</i> .

Removed Item	Replacement, if any
REST Service, Virtual REST Service, XML Service, and Virtual XML Service cannot be created in CentraSite Control using the "Add Asset" wizard.	<p>Instead of using CentraSite Control, use the CentraSite Business UI for creating the following services:</p> <ul style="list-style-type: none"> <li>- REST Service</li> <li>- Virtual REST Service</li> <li>- XML Service</li> <li>- Virtual XML Service</li> </ul>

Deprecated Item	Replacement, if any
<p>Support for the following asset types in CentraSite Control is deprecated and will be removed in future releases.</p> <ul style="list-style-type: none"> <li>- REST Service</li> <li>- Virtual REST Service</li> <li>- XML Service</li> <li>- Virtual XML Service</li> </ul>	<p>Use CentraSite Business UI for REST and XML Service asset types.</p>
<p>SSX JAAS Login Module</p>	<p>LDAPLoginModule</p>
<p>Groovy as Policy execution environment</p>	<p>None.</p>
<p>Cache usage statistics Beginning with CentraSite version 9.7, usage statistics is enabled by default. You cannot disable the usage statistics.</p>	<p>None.</p>
<p>Run-Time Governance in CentraSite Control</p>	<p>In CentraSite 9.7, the Run-Time Governance functionality was enhanced. However, only the CentraSite Business UI contains these enhancements.</p>
<p>Report (BIRT) execution and management in CentraSite Control</p>	<p>Beginning with CentraSite 9.7, support for BIRT in CentraSite Control is deprecated and will be removed in future releases. Instead, use the BIRT reporting features provided in CentraSite Business UI or Designer.</p>

## **Release 9.6**

<b>Removed Item</b>	<b>Replacement, if any</b>
---------------------	----------------------------

The following ESB (Enterprise Service Bus) types that appear in the Type Management page of CentraSite Control should no longer be used and will be removed in future releases.

- ESB Document
- ESB Document Field
- ESB Document Type
- ESB Folder
- ESB Package
- ESB Service
- ESB Specification
- ESB WS Descriptor
- ESB WS Operation

<b>Deprecated Item</b>	<b>Replacement, if any</b>
------------------------	----------------------------

Active Directory Authentication other than LDAP

Because of architectural changes in the security infrastructure only LDAP authentication with Microsoft Active Directory is supported.

## 9.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

### ***Release 9.6***

Deprecated API	Replacement, if any
CentraSite WebDAV API	The CentraSite WebDAV API is deprecated and should no longer be used. It will be removed in future releases.
CentraSite Extensions for XQJ API	The support of CentraSite Extensions for XQJ API is deprecated and will be removed in future releases.
CentraSite Control API	The CentraSite Control API is deprecated and will be removed in future releases.

## 10.0 Copyright Information

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## 11.0 Support

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Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

CS-RM-912-20161018

# Closed Loop Analytics 9.12 Readme

October 2016

This file contains important information you must read before using Closed Loop Analytics 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.8***

- CLA\_9.7\_Sources\_Fix1
- CLA\_9.7\_Assets\_Fix1

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Release 9.9***

- WOK-8177  
Closed Loop Analytics shows a wrong timestamp in an escalation task at noon.  
If you trigger a Closed Loop Analytics escalation between 12:00 and 13:00, the Business Data tab for the escalation task shows wrong time values for the fields Time stamp of creation, Start date range and End date range.  
This issue has been resolved.



## **6.0 Documentation Changes**

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### ***Release 9.9***

- Product guide “webMethods Closed Loop Analytics Help” was added.

## **7.0 Terminology Changes**

A release is listed in this section only if changes occurred in that release.

## **8.0 Added, Removed, Deprecated, or Changed Items**

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

## **9.0 Added, Removed, Deprecated, or Changed Built-In Services**

A release is listed in this section only if changes occurred in that release.

## **10.0 Added, Removed, Deprecated, or Changed Parameters**

A release is listed in this section only if changes occurred in that release.

## **11.0 Added, Removed, Deprecated, or Changed APIs**

A release is listed in this section only if changes occurred in that release.

## **12.0 Copyright Information**

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## **13.0 Support**

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Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

CLA-RM-912-20161018

# webMethods CloudStreams Development 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods CloudStreams Development 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.12***

- WCD\_9.10\_Fix2

### ***Release 9.10***

- WCD\_9.9\_Fix2

### ***Release 9.9***

- WCD\_9.8\_Fix2

### ***Release 9.8***

- WCD\_9.7\_Fix1

### ***Release 9.5***

- WCD\_9.0\_SP1\_Fix1.

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### **Release 9.9**

- WCD-716  
For a cloud connector service, fields that have the *recordList* parameter populated, do not show up as documents.  
While creating a cloud connector service, once an operation and object are selected, the next screen shows a list of fields. While choosing a field, if the field has the *recordList* parameter populated, it should show up as a Document. Currently these fields show up as String fields.  
This issue is resolved.
- WCD-722  
Null pointer exception appears when workspace gets refreshed.  
Subsequent to creating a new connector using the CloudStreams Development perspective, when another connector is created or the workspace refreshed, a Null pointer exception is observed.  
This issue is resolved.
- WCD-724  
Errors that are related to creating or editing a Cloud Connector Service are not displayed in a dialog box.  
While creating or editing a Cloud Connector Service, if there is any error, the error is logged only in the error logs and not displayed in a dialog box. As a result, the user is not informed about the problem.  
This issue is resolved. The error information now appears in a dialog box.

### **Release 9.8**

- WCD-555  
SOAP Connector Validations.  
The following validation issues are observed for SOAP Connectors:
  - Delete does not work after the mapping is configured.
  - Signature configuration is not validated.
  - Remove configuration submenu is enabled even if there is no configuration for mappings.
  - Help button is not working in the Signature Configuration Wizard.
  - Parameters are not validated.
  - Format Service Argument parameters are not validated.These issues are resolved.
- WCD-585  
Sporadic behavior in WSDL consumption.  
Exception observed when trying to consume a WSDL from an URL location.

CloudStreams plugin had a problem with consuming a WSDL through a URL location where it throws a parsing exception with the error message “WSDL file is not available in the *tmpService* folder of the Connector project”.

This issue is resolved.

- WCD-612

Older connectors do not appear in the Integration Server Administration page even after a successful deployment from Designer.

The following errors are observed in the Integration Server error log:

*com.wm.app.b2b.server.ServiceException: java.io.FileNotFoundException:*

*C:\SoftwareAG\profiles\IS\_default\workspace\temp\tempDocTypeDir\sqs.xsd (The system cannot find the file specified)*

*Caused by: com.wm.app.b2b.server.ServiceException: java.io.FileNotFoundException:*

*C:\SoftwareAG\profiles\IS\_default\workspace\temp\tempDocTypeDir\sqs.xsd (The system cannot find the file specified)*

*Caused by: java.io.FileNotFoundException:*

*C:\SoftwareAG\profiles\IS\_default\workspace\temp\tempDocTypeDir\sqs.xsd (The system cannot find the file specified)*

This issue is resolved.

- WCD-658

Deployment log does not have sufficient information.

While deploying a connector from the CloudStreams Development perspective in the Designer, the Deployment log does not display adequate information. The log displays information whether the deployment was successful or unsuccessful but not from which Integration Server it is being deployed.

This issue is resolved.

- WCD-624

“Add Parameters” option from the “Operation” menu gets disabled after the first parameter is added.

In a SOAP Connector, if parameters are added from the Operation context menu, the “Add Parameters” option gets disabled after adding the first parameter.

This issue is resolved.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 9.8**

- Software AG documentation is no longer available on the Software AG installer. You can now access all Software AG documentation on the [Documentation website](#).

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

### **Release 9.8**

Old Term	New Term
Group	Provider Group
Connector Package	Package
Plug-In Content	Connector Content

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

Changed Item	Description
Icons updated to reflect changes in corporate branding.	Icons are updated in Perspectives, Views, Welcome screen, and About contributions.

## Release 9.10

### Removed Item

Redundant fields in REST service interface

### Replacement, if any

**Serialization type** fields are removed from the Cloud Connector Service (REST) > Resource tab > **Request Processing** section.

**Parsing type** fields are removed from the Cloud Connector Service (REST) > Resource tab > **Response Processing** section.

## Release 9.9

### Added Item

Publisher

An optional field "Publisher" is added for the CloudStreams Provider and CloudStreams Governance projects to obtain the publisher name.

Description

An optional field "Description" is added for the CloudStreams Provider and CloudStreams Governance projects to obtain the description.

## Release 9.8

### Added Item

Display Name

Added an optional field "Display Name" for Services, Operations, and Resources. This value is used for displaying the name of the item (Service, Operation, or Resource) in a connector.

New Group Dialog

Added the "New Group" dialog for a connection group selection which shows all available connection groups.

Copy

Added the "Copy" menu item in the CloudStreams Connector view to copy the CloudStreams Provider Project into the system clipboard.

Paste

Added the "Paste" menu item in the CloudStreams Connector view to paste the CloudStreams Provider Project from the system clipboard.

Hide

Added an optional field "Hide" for Operations for the SOAP Connector development. The CloudStreams Server will hide the operations during the Cloud Connector Service creation/selection.



## Release 9.7

Added Item	Description
Version Information	The version of the Designer has been included in the manifest of the CloudStreams Connector.

## 9.0 Added, Removed, Deprecated, or Changed Built-In Services

A release is listed in this section only if changes occurred in that release.

## Release 9.5

Removed Service	Replacement, if any
pub..util:getSalesforceSessionId	None

## 10.0 Copyright Information

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## 11.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

WCD-DEV-RM-912-20161018

# webMethods CloudStreams Server 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods CloudStreams Server 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- WST-2794  
For REST resources, if a Request resource excludes the root, CloudStreams fails to map a literal value to an xpath expression.  
While mapping a literal value to xpath, the xpath mapping handler does not consider the excludeRoot attribute for a REST resource's Request signature. As a result, the target path where the literal value should be set does not get formed properly for any resource, for which excludeRoot is set as true.  
There is currently no workaround for this issue.
- WST-2819  
CloudStreams fails to parse a response when the response formatter/builder is configured as "binary", and the request Accept header is set to "application/json".  
When the response formatter/builder for a Cloud Connector Service is configured to "binary", and the Accept header is configured to "application/json", CloudStreams fails to parse the resulting back end response.  
There is currently no workaround for this issue.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- A CloudStreams REST resource supports only one type of message builder and formatter for all response codes.
- CloudStreams does not support the RPC/encoded style WSDL.
- CloudStreams does not support the RPC/literal style WSDL.
- CloudStreams engine supports HTTP URL redirection only for GET, HEAD, and POST methods. This is as per HTTP 1.1 RFC.

- CloudStreams does not support sharing of Connector Virtual Services, Virtual Services, and Policies across nodes in a clustered setup. These artifacts should be manually deployed to a clustered node on need basis.
- Streaming Provider/Subscriber functionality will not work if configured with a proxy server for the Salesforce backend. This is due to a limitation from the Salesforce backend.
- For SOAP based connectors, if WSDL has multiple bindings for a given service, CloudStreams does not support changing multiple URLs dynamically to connect to the service endpoint.
- The MashZone based CloudStreams Analytics dashboard is deprecated from the 9.10 release.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.12***

- WST\_9.10\_Fix4

### ***Release 9.10***

- WST\_9.9\_Fix2

### ***Release 9.9***

- WST\_9.8\_Fix2

### ***Release 9.8***

- WST\_9.7\_Fix1.

### ***Release 9.7***

- WST\_9.6\_Fix2.

### ***Release 9.6***

- WST\_9.5\_SP1\_Fix2.

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

- WST-2817  
CloudStreams is not able to handle URI\_CONTEXT style parameter values with special characters. CloudStreams fails to process a Cloud Connector Service request, which specifies a value with special characters for parameters of type URI\_CONTEXT. In such cases, the outbound request fails to reach the back end.  
This issue is resolved.

### ***Release 9.10***

- WST-2378  
CloudStreams does not support creating Cloud Connector Services that have an array of JSON objects without the key/root in the request payload.  
In the absence of a parent root for the collection, it is not possible to represent the objects under the request payload. Because of this limitation, it is not possible to create or invoke services, which expect a root less array in the request payload.  
This issue is resolved.
- WST-2644  
Cloud Connector Services, which require mapping of parameters, fail to run.  
For a REST based connector, a parameter value cannot be assigned to another parameter by specifying a parameter to parameter mapping. This is because CloudStreams does not support parameter to parameter mapping.  
This issue is resolved. Parameter to parameter mapping is now supported.
- WST-2638  
CloudStreams is unable to handle excludeRoot properties in Request signature using XML.  
For a REST based connector which communicates in XML, if the “excludeRoot” option is set to “true”, then while sending a Request to the backend, CloudStreams is not able to exclude the root of the Request.  
This issue is resolved.
- WST-2639  
Cloud Connector service signature does not populate the picklist values.  
Cloud Connector service signature does not populate the picklist values even if the schema element has enumeration defined.

This issue is resolved. Now Cloud Connector service signature field's picklist attributes are populated with enumerated values available from the schema.

## **Release 9.9**

- WST-2555  
Authentication failure when Twitter resources expect messages to be sent as a query parameter. Some Twitter resources expect messages to be sent as a query parameter. While using such resources, if the messages sent contain a space, authentication failure is observed.  
This issue is resolved.
- WST-2524  
User is not able to see service references or dependents for CloudStreams artifacts. While checking dependents or references for CloudStreams assets using Software AG Designer, the user is not able to see the service references or dependents.  
This issue is resolved.

## **Release 9.8**

- WST-2126  
Connections after given timeouts are not automatically refreshed using OAuth refresh tokens. If OAuth refresh tokens are provided and session management is turned on, CloudStreams connections are not refreshing the access tokens automatically using the provided refresh tokens. This functionality may work with only the Salesforce provider and without using any proxies in the connection.  
Workaround: Manually update the access tokens with the latest valid access tokens.
- WST-2142  
Virtual service deployment errors are reported by CloudStreams Server at startup, when a cluster is enabled.  
In a clustered environment, at server startup, when a CloudStreams Server node joins a cluster, for each virtual service deployed on that node, if there is a corresponding entry in the shared virtual services cache, the CloudStreams Server node attempts to undeploy the existing deployed service, and thereafter attempts to redeploy the same service using the shared cache data for that service entry. Undeploy and subsequent redeploy of the connector virtual service fails with errors reported in the server logs.  
Extract of the error for the default SOAP connector virtual service WmCloudStreams.SoapVS:  
*[CLS.0050.0212E] Unknown exception deploying virtual service: WmCloudStreams.SoapVS Cause: 0*  
*[CLS.0050.0048E] Error getting endpoints for service:WmCloudStreams.SoapVS, Cause: Unknown exception deploying virtual service: WmCloudStreams.SoapVS Cause: 0*  
*[CLS.0030.0356E] VirtualServiceDeployer - unable to get endpoints for WmCloudStreams.SoapVS, caught this: type (com.softwareag.pg.exceptions.PGException), msg (Error getting endpoints for*

*service:WmCloudStreams.SoapVS, Cause: Unknown exception deploying virtual service: WmCloudStreams.SoapVS Cause: 0)*  
*[CLS.0030.0363W] VirtualServiceDeployer.redployUndeployedIfNecessary - service (WmCloudStreams.SoapVS) caught this: type (com.softwareag.pg.exceptions.DeploymentException) message (VirtualServiceDeployer - unable to get endpoints for WmCloudStreams.SoapVS, caught this: type (com.softwareag.pg.exceptions.PGException), msg (Error getting endpoints for service:WmCloudStreams.SoapVS, Cause: Unknown exception deploying virtual service: WmCloudStreams.SoapVS Cause: 0 ))*

This error is benign. Syncing up virtual service from shared cache is not supported in CloudStreams, so the sync up action performed by the node is redundant.

## **Release 9.7**

- WST-1898  
CloudStreams is not able to delete a connection from a different Administrator user.  
When an Administrator creates a CloudStreams connection, for example, a Salesforce connection and a different Administrator tries to delete that connection, the following error appears: *“Unable to modify; node <node\_name> is locked by another user”*.  
This issue is resolved. Now any Administrator user can delete a CloudStreams connection.
- WST-2066  
Authorization header value for OAuth v1.0a and v2.0 is not set correctly.  
For CloudStreams connectors using OAuth (v1.0a or v2.0), the "Authorization" header value in the outgoing message is not correctly set as per the OAuth version specification. For v1.0a, it should be set to "OAuth" and for v2.0 it should be set to "Bearer".  
This issue is resolved.
- WST-2019  
When a password is auto filled in the Integration Server Administration page, it does not get updated in the connection node.  
When the username for a connection node is updated and the password is filled using the browser's auto fill feature, the CloudStreams server fails to register the updated password. As a result, when the connection is enabled, the older password is used in combination with the updated username.  
This issue is resolved.
- WST-2008  
Request does not redirect when a SaaS provider provides a redirection response to the request.  
When a SaaS provider responds with a HTTP redirect response for a cloud connector service, the request is not automatically redirected to the new URL.  
This issue is resolved. As per HTTP protocol guidelines, redirect will happen only for GET, HEAD, and POST requests.

## Release 9.6

- WST-1389  
While generating the JSON request/response messages, CloudStreams adds an IS document type root element to the message.  
Currently, if JSON request/response message is represented as an IS document type for a connector service, the generated JSON message has the IS document type root element added as a key. This issue is resolved. Now, adding an IS document type as the root element to the message is configurable.
- WST-1411  
CloudStreams returns a ClassCastException when executing a SOAP connector service with an RPC/literal WSDL.  
When users attempt to execute a SOAP connector service with the RPC/literal style WSDL, the process fails. This issue occurs because CloudStreams does not support the RPC/literal style WSDL in SOAP connectors.  
This issue is resolved. Now CloudStreams does not return a ClassCastException, but users will not be able to send a valid request or to parse a valid response because CloudStreams server does not support the RPC/literal style WSDL.
- WST-1491  
CloudStreams services cannot handle JSON responses with multiple root nodes.  
CloudStreams Server cannot parse a JSON response with more than one root node. For example, when a REST resource returns the following JSON response {"node1": "value1", "node2": "value2"}, the CloudStreams engine will fail to parse the response.  
This issue is resolved. With REST virtual services, when working with requests and responses of the Content-Type application/json, the message content can contain one or more root nodes.
- WST-1563  
CloudStreams keeps all virtual service application references, even when the application is removed from the virtual service and is redeployed.  
When changing the consumer application definitions for a deployed virtual service, CloudStreams retains the old application definitions and uses them for run-time governance.  
This issue is not applicable to CloudStreams.
- WST-1685  
Cloud connector service (SOAP) does not pick the user-defined Default Values, specified for SOAP headers.  
Currently, the execution of a cloud connector service (SOAP) does not pick any user-defined Default Values configured in the SOAP header tab. Only the default value configured in the Connector Descriptor (XML) or explicitly specified to the service pipeline is picked during the service execution.  
Resolution: Explicitly map or specify a value to the service pipeline for the desired SOAP header. For non-mapped headers and modifiable mapped headers, CloudStreams picks up the user



specified default value set in the Headers tab.

## **Release 9.5**

- WST-1363  
For REST connectors, only the “Header” map type is supported as a target for assignment in the mapping statements.  
This issue is resolved.
- WST-1364  
The “Connector Virtual Services” tab of the CloudStreams “Virtual Services” administration page may show erroneous data regarding the list of connector services associated with a connector virtual service after connector services are configured. This issue happens when connector service is reconfigured to use another connector virtual service.  
This issue is resolved.
- WST-1365  
REST based connector connection does not get enabled when password contains & (ampersand) character.  
For example, the Salesforce back-end allows the & (ampersand) character in a password. But the CloudStreams REST cloud connector framework does not enable a connection if a password contains special characters such as " (quote), & (ampersand), ' (apostrophe), < (less than symbol), > (greater than symbol).  
This issue is resolved.

## **6.0 Documentation Changes**

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

- TLS and security related information
- Wire logging information updated
- CloudStreams FAQ and Troubleshooting Guide updated

### **Release 9.9**

- The *webMethods CloudStreams FAQ and Troubleshooting* guide available at

<http://documentation.softwareag.com/> provides FAQs and troubleshooting tips.

## Release 9.8

- Software AG documentation is now no longer available on the Software AG installer from this release. You can access all Software AG documentation on the [Documentation website](#).

## Release 9.5

- The *Administering webMethods CloudStreams* guide is available at <http://documentation.softwareag.com/>.

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### Release 9.12

Added Item	Description
Support for Transport Layer Security (TLS) 1.1 and 1.2	CloudStreams now supports the latest versions of TLS standard v1.1 and v1.2. Using Java Secure Socket Extension (JSSE) based libraries, CloudStreams supports TLS v1.1 and v1.2 for outbound connections.
Wire logging message	If you now enable the <b>Connection factory wire logging</b> option from the <b>CloudStreams &gt; Administration &gt; General</b> screen in the Integration Server Administrator, a warning message appears. The message informs the side effects of turning on this setting.

Changed Item	Description
Regrouping between <b>Basic</b> and <b>Advanced</b> views and reordering of fields within the <b>Credentials</b> , <b>Transport Protocol</b> , and <b>Request Headers</b> connection groups.	<p><b>Authentication Type</b> field is now moved ahead of the <b>Preemptive Auth</b> field so that fields in the <b>Basic</b> view stay ahead of the fields visible in the <b>Advanced</b> view for the <b>Credentials</b> connection group.</p> <p><b>Element Character Set</b> and <b>Strict Transfer Encoding</b> fields are moved to the <b>Advanced</b> view for the <b>Transport Protocol</b> connection group.</p> <p><b>Request Header Names</b> and <b>Request Header Values</b> fields are moved to the <b>Advanced</b> view for the <b>Request Headers</b> connection group.</p>

## Release 9.10

Deprecated Item	Replacement, if any
Software AG MashZone based CloudStreams Analytics dashboard.	The Software AG MashZone based CloudStreams Analytics dashboard is deprecated from this release.

Changed Item	Description
CloudStreams User Interface	The HTML-based utility used to administer webMethods CloudStreams has a new look and feel. Menu and screen locations have not changed and there is no change in the User Interface functionality.

## 9.0 Added, Removed, Deprecated, or Changed Built-In Services

A release is listed in this section only if changes occurred in that release.

## Release 9.9

### Added Service

pub.cloudstreams.admin.service:batchupdate

### Description

The batchUpdate service complements the update service by allowing batches of CloudStreams connector service nodes to be updated in one operation. You can use the batchUpdate service to update multiple CloudStreams connector service nodes from a lower version of the connector API to a higher version.

### Changed Service

pub.cloudstreams.admin.service:update

### Description

This service allows you to update a CloudStreams connector service node from one version of connector API to a higher version for various attributes such as the *Connection Alias* and the *Virtual Service Name*. The changes in this service are two new input parameters, *simulate* and *force*.

## Release 9.7

### Added Service

pub.cloudstreams.admin.service:update

### Description

Updates a CloudStreams connector service node for various attributes such as the *Connection Alias* and the *Virtual Service Name*.

## 10.0 Copyright Information

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## **11.0 Support**

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

WST-SRV-RM-912-20161018

# Software AG Command Central 9.12 and Software AG Platform Manager 9.12 Readme

October 2016

This file contains important information you must read before using Software AG Command Central 9.12 and Software AG Platform Manager 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find the suite-related information listed below.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

The following issues are resolved in Command Central 9.12 Fix 1:

- CCE-2553  
In Command Central, adding a new installation of Platform Manager on a Windows operating system does not install the C++ runtimes.  
The issue is resolved.
- CCE-2556  
In the Command Central CLI, the export composite template operation does not work without specifying the accept header.  
The behavior is incorrect, because the export of composite templates should work through a GET request and not require specifying any additional parameters.  
The issue is resolved.
- SPM-3689  
In Command Central, updating a product mirror repository without specifying a list of specific artifacts fails.  
When updating an existing product mirror repository by adding artifacts for another operating system or from a different source repository, the update operation fails.  
The issue is resolved.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

### ***Command Central and Platform Manager***

- You can use composite templates to migrate the following products from version 9.8 and 9.9 to version 9.10 or higher:
  - Integration Server
  - My webMethods Server
  - Process Engine
  - Task Engine
  - Software AG Common Runtime

- Trading Networks
- Universal Messaging
- You cannot provision the following Software AG products using Command Central:
  - Adabas Products
  - ApplinX
  - Entire Net-Work
  - EntireX
  - Event Replicator Target Adapter
  - MashZone
  - Natural Products
  - NaturalONE
  - OneData
  - Optimize for SAP
  - Presto Business Analytics
  - Process Performance Manager
  - Tamino XML Server
  - Web Services Stack
- You cannot install products with version 9.7 or lower using the “cc exec provisioning products install” command.
- SPM-1815  
 Command Central cannot manage configuration instances that have alias names and instance IDs containing non-ASCII characters.  
 When a configuration instance contains an alias name with non-ASCII characters, Platform Manager cannot process the alias name correctly. As a result, Command Central cannot manage the configuration instance.  
 Use an alias name that is unique for the instance or component and can be included in a user-friendly URL. The only valid characters in an alias name are ASCII characters, which include numbers, underscore (\_), dot(.), and a hyphen (-).



- SPM-2091  
When starting Platform Manager, the startup log contains a number of false errors, for example:  
“2014-01-27 17:27:49.706 PST (Osgi ) [Platform.Logger.bundle-log] ERROR:  
[org.eclipse.equinox.ds:1.4.100.v20130515-2026 (224)] Could not bind a reference of component  
com.softwareag.platform.management.template.impl.TemplateServiceImpl. The reference is:  
Reference[name = IFixServicePr, interface = com.softwareag.fixinstall.spm.api.IFixServiceProvider,  
policy = dynamic, cardinality = 0..1, target = null, bind = setFixService, unbind = unsetFixService]”  
The behavior occurs because of a bug in Eclipse equinox. For more information, see the Eclipse bug  
report for Eclipse equinox Bug ID 402750.  
There is currently no workaround for this issue.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Command Central***

#### *Release 9.10*

- CCE\_9.10\_Core\_Fix3
- CCE\_9.10\_CCCCommon\_Fix3
- CCE\_9.10\_WebUI\_Fix3
- CCE\_9.10\_SPMplugin\_Fix3
- CCE\_9.10\_CLI\_Fix3

#### *Release 9.9*

- CCE\_9.9\_Core\_Fix6
- CCE\_9.9\_CCCCommon\_Fix6
- CCE\_9.9\_WebUI\_Fix6
- CCE\_9.9\_SPMplugin\_Fix6
- CCE\_9.9\_CLI\_Fix6

#### *Release 9.8*

- CCE\_9.8\_Core\_Fix10

- CCE\_9.8\_CCommon\_Fix10
- CCE\_9.8\_WebUI\_Fix10
- CCE\_9.8\_SPMplugin\_Fix10
- CCE\_9.8\_CLI\_Fix10

### *Release 9.7*

- CCE\_9.7\_Core\_Fix8
- CCE\_9.7\_CCommon\_Fix8
- CCE\_9.7\_WebUI\_Fix8
- CCE\_9.7\_SPMplugin\_Fix8
- CCE\_9.8\_CLI\_Fix8

### *Release 9.6*

- CCE\_9.6\_Core\_Fix7
- CCE\_9.6\_CCommon\_Fix7
- CCE\_9.6\_WebUI\_Fix7
- CCE\_9.7\_SPMplugin\_Fix7
- CCE\_9.6\_CLI\_Fix7

### *Release 9.5*

- CCE\_9.5\_SP1\_Core\_Fix5
- CCE\_9.5\_SP1\_CCommon\_Fix5
- CCE\_9.5\_SP1\_WebUI\_Fix5
- CCE\_9.5\_SP1\_CLI\_Fix5

## ***Platform Manager***

### *Release 9.10*

- SPM\_9.10\_Core\_Fix3

- SPM\_9.10\_SPMCommon\_Fix3

#### *Release 9.9*

- SPM\_9.9\_Core\_Fix6
- SPM\_9.9\_SPMCommon\_Fix6

#### *Release 9.8*

- SPM\_9.8\_Core\_Fix10
- SPM\_9.8\_SPMCommon\_Fix10

#### *Release 9.7*

- SPM\_9.7\_Core\_Fix8
- SPM\_9.7\_SPMCommon\_Fix8

#### *Release 9.6*

- SPM\_9.6\_Core\_Fix7
- SPM\_9.6\_SPMCommon\_Fix7

#### *Release 9.5*

- SPM\_9.5\_Core\_Fix5
- SPM\_9.5\_SP1\_Fix5

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Command Central and Platform Manager***

#### *Release 9.9*

- SPM-2472  
When Command Central and Platform Manager connect to the Empower website to download products and fixes via a proxy server, in Command Central you configure the proxy server details for the Platform Manager component that connects to Empower. However, some of the Command Central functions disregard the Command Central proxy configuration. The following list describes

the functions that do not take into account the proxy configuration completely or support only specific proxy configuration:

- When creating bootstrap installer images, Command Central uses the OSGI-SPM proxy configuration of the installation with alias "local" and supports only HTTP, HTTPS, and SOCKS proxy configuration.
- When applying templates on a target installation to install products or fixes, Command Central uses the OSGI-SPM proxy configuration of the target installation and supports only HTTP, HTTPS, and SOCKS proxy configuration.
- When using the Command Central command line interface commands to list the content of fixes on the Empower website, Command Central does not use the proxy configuration details.
- When using the Command Central command line interface provisioning commands to install fixes on a target installation from the Empower website, Command Central does not use the proxy configuration.

The issue is resolved.

### *Release 9.8*

- CCE-1417  
When bootstrapping the complete distribution of Platform Manager, Command Central is also installed.  
The complete distribution of Platform Manager includes Platform Manager, Update Manager, the Command Central command line interface, and all Platform Manager plug-ins. However, when bootstrapping the complete distribution, Command Central is also installed.  
The issue is resolved.
- CCE-1429  
When using Command Central to apply the "um-layer" composite template for a cluster environment, the template does not create product instances.  
The issue is resolved.

### *Release 9.7*

- SPM-2348  
In Command Central, applying a template with configuration results in an exception.  
In Command Central, when applying a template that contains configuration, the job for the apply operation returns an Error status. The exception occurs because the configuration data for the ports in the new installation does not match the port configuration data in the template with configuration. This causes the Tomcat connectors for ports to reset when you apply a template with configuration for the first time.  
The issue is resolved.
- CCE-1389  
In Command Central, when applying a default snapshot template, the template does not create default product instances.  
The issue is resolved. The default snapshot templates now create default instances for managed products.

- CCE-1205  
After installing the is-bpm default template, the Business Rules and Monitor run-time components are not available in the Command Central inventory, even after restarting Platform Manager.  
The issue is resolved.

### *Release 9.6*

- SPM-1553  
Updating the license file in Command Central can produce a license for the wrong product and/or version.  
When using Command Central to update the license file for a Software AG product, it is possible to successfully update the license file for one Software AG product with the license for another Software AG product, or update a license for the correct Software AG product but for a different version. Command Central reports the update as being successful, however, the updated products will not be able to start. This behavior occurs because Command Central does not validate the product and its major version when updating the license file.  
This issue is resolved. Command Central now validates the product and its corresponding major version when updating the license file.
- SPM-1353  
When Platform Manager or Broker Server is using a non-English locale, Platform Manager throws an exception when you try to monitor the Platform Manager or Broker Server. This issue occurs because of the numeric data format difference between English and non-English languages.  
The issue is resolved.

### *Release 9.5*

- SPM-1368  
Platform Manager cannot read or update My webMethods Server SMTP settings when My webMethods Server is running on Derby.  
When My webMethods Server is configured to use the embedded Derby database, the "mws getconfig" command cannot load any configuration files while My webMethods Server is running. This behavior prevents access to the My webMethods Server email.properties file, and causes COMMON-SMTP configuration read and update operations from Platform Manager to fail with the error "Internal Error processing Platform Manager request". This error occurs in the Command Central web user interface and the command line interface.  
The issue is resolved.
- SPM-1640  
With Platform Manager, executing the "cc get monitoring runtimestate" command on HP-UX fails with an error.  
Executing the "cc get monitoring runtimestate" command on HP-UX, returns UnsatisfiedLinkError. The error occurs because reporting the "CPU load KPI" fails with the current UnixOperatingSystemMXBean implementation on HP-UX.  
The issue is resolved. Now Platform Manager retrieves the run-time state KPIs successfully after

running the "cc get monitoring runtimestate" command on HP-UX. CPU KPIs are not reported for HP-UX.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### ***Command Central and Platform Manager***

#### *Release 9.12*

The *Software AG Command Central Help* has been re-organized as follows:

- The "Getting Started with Command Central" topic contains the information that helps you understand, install, and upgrade Command Central.
- All topics related to tasks that you can do from the Command Central web user interface to manage your landscape are streamlined and much of the information has been moved to the web user interface, where it appears in the form of instructions and tooltips.
- The "Automation and Template-based Provisioning" topic includes all topics about using and developing composite templates.
- The "Command Central Developer Reference" topic includes reference details about the Command Central CLI and REST API.

All product-specific topics about administering product plug-ins for Platform Manager have been relocated to the product administration guides. For example, the administering Integration Server plug-in topics are now included in the Integration Server administration guide.

The *Getting Started with Command Central REST API* is no longer published as a separate PDF guide.

The *Software AG Command Central Feature Support Matrix* is a separate document that includes a feature support matrix for Command Central and all product plug-ins.

#### *Release 9.10*

- The "Installing Command Central Using Bootstrap Installer" topic includes information about new custom options when running bootstrap installer and a section on migrating an existing Command Central installation using bootstrap installer.
- The "Provisioning Environments" topic includes sections that describe how to use composite templates to update or migrate product environments.
- The "Managing Database Components Using Command Central" is a new topic that describes how

to create or migrate database schemas as part of provisioning or migration through a composite template.

- In the “Repository Management” topic, updated the sections about mirror repositories with information how to create, refresh, and update fix mirror repositories.
- The following product plug-ins for Platform Manager have added new sections:
  - Apama (“Administering Apama”)
  - Integration Server, My webMethods, and Universal Messaging (new sections about migrating product instances using the Command Central command line interface)
  - Universal Messaging (“JNDI Management”)

### *Release 9.9*

- Command Central and Platform Manager now have one release readme, named “Software AG Command Central and Software AG Platform Manager Readme”.
- Added a new topic about “Bootstrapping a Command Central Installation”. To access the topic from the Command Central online help, you must install Command Central 9.9 Fix 1.
- Added the “Installing and Uninstalling Fixes” topic.
- Updated the “Managing Users, Groups, and Roles” topic with LDAP-related changes.
- In the “Repository Management” topic, added a new section about creating, refreshing, and updating mirror repositories.
- Updated the “Managing Product License Reports” section to include information about aggregate monthly reports.
- In the “Java Service Wrapper” topic, added the “Configuring Java System Properties” section.
- Updated the provisioning topics with information about provisioning enhancements, such as viewing the status of a composite template apply job and bootstrapping Platform Manager over the OpenSSH service.
- Updated the monitoring topics with information about monitoring enhancements, for example consistent status reporting for run-time components.
- Added the “Using Command Central to Publish Events” section that replaces the section about using NERV.
- Removed the “Cloud Factory Services Overview” topic from the Command Central Help.
- The following product plug-ins for Platform Manager have added new sections:
  - Universal Messaging (“Universal Messaging Properties Configuration”)

- EntireX Broker (“Administering webMethods EntireX Broker”)
- Event Routing (“Administering Event Routing”)
- Optimize (“Administering Optimize Analytic Engine”)

### *Release 9.8*

- Following are major content changes in Software AG Command Central Help (online and PDF format):
  - In the “Template-based Provisioning” topic, added a new section about “Provisioning Environments”.
  - In the “Template Commands” topic, added information about the new composite template commands.
  - Updated the “Setting Outbound Authentication” and “Security Credentials” topics with information about using trusted authentication.
  - Added the “Working with Configurations that Include Passwords” topic to describe how to use shared secret password.
  - Added details about the syntax and usage of the product provisioning (in “Provisioning Products and Fixes Commands”) and list repositories commands (in “Repositories Commands”).
  - Added details about “Managing License Manifests” and using the license manifest commands.
  - Added the “Using Command Central to Manage Landscapes with Lower Versions” section.
  - In the “Universal Messaging Server Instance Management” section, added the following new parameters and relevant examples how to manage Universal Messaging Instances using the Universal Messaging instance management commands:
    - NumEnterpriseManager
    - NumTemplateApplications
    - instance.DataDir
- In the *Software AG Command Central Help* PDF guide, added:
  - The “Administering Terracotta” section.
  - A new appendix that lists the Command Central functions and types of configuration supported for different product versions. The appendix contains a reference section for each product that has a Platform Manager plug-in.

### *Release 9.7*

- The *webMethods Command Central* online help is renamed to *Software AG Command Central Help*.



- The *Software AG Command Central Help* guide replaces *webMethods Command Central Help* and *webMethods Command Central and Platform Manager Command Reference*.
- *Software AG Command Central Help* (online and PDF format) has been restructured to streamline and group together information on tasks that you perform with Command Central and Platform Manager. All major tasks are now under the “Working with Command Central and Platform Manager” topic.
- The following lists major content changes in *Software AG Command Central Help* (online and PDF format):
  - In the “Administering Installations” topic, added new sections about “Adding Installations with the Add Installation Wizard”, “Provisioning Bootstrap Installers Commands”, and “Provisioning Products and Fixes Commands”. The “About Administering Installations” topic is updated with information about bootstrapping Platform Manager installations.
  - Updated the “Securing the Command Central Landscape” topic.
  - In the “Repository Management” topic, updated the “Repositories Commands” section.
  - In “The Java Service Wrapper” topic, added the “Configuring the JVM in Command Central” section.
  - In the “Understanding Product-specific Administration” topic, added the “Cloud Factory Services Overview” section.

## *Release 9.6*

- The Command Central online help is a help set that you access from the Command Central web user interface. The Command Central online help now includes information how to configure, manage, and administer Command Central and Platform Manager, using the Command Central web user interface, command line tool, and REST API.
- The following lists major content changes in *webMethods Command Central Help* (online and PDF format):
  - In the “Command Central Overview” topic, added new sections about “Template-based Provisioning” and “Instance Management of Installed Products”.
  - In the “Using the Command Central Web User Interface” topic, added new information about “Accessing Command Central”.
  - In the “Configuring OSGi Profiles” section of the “Securing the Command Central Landscape” topic, added new section about “Port Authentication”.

- Renamed the “Managing Command Central Licenses” topic to “Managing Command Central Licenses and Product License Reports” and expanded the topic with new sections about how to create and manage product license reports.
- In the “Managing Users, Groups, and Roles” topic, added changes in the “Using Internally Defined User and Group Information” and “Using JASS with Command Central” sections.
- In the “Administering Product Lifecycle” topic, added a new section on “Viewing Product Logs”.
- The following are new topics:
  - “The Java Service Wrapper”
  - “Repository Management”
  - “Provisioning Using Templates”
  - “Configuring Integration Server”
- *Getting Started with the Command Central REST API* is a new guide.
- The following lists new content added in webMethods Command Central and webMethods Platform Manager Command Reference (online and PDF format):
  - Instance Management Commands
  - Repositories Commands

### *Release 9.5*

- The Command Central online help is a new help set that you access from the Command Central web user interface.

Two new chapters are added to *webMethods Command Central* and *webMethods Platform Manager Command Reference*:

- License Reports Commands
- Template Commands

## **7.0 Terminology Changes**

A release is listed in this section only if changes occurred in that release.

## Command Central

### Release 9.8

Old Term	New Term
n/a	Composite Template
n/a	Layer
Template	Snapshot Template

## Platform Manager

### Release 9.6

Old Term	New Term
IntegrationServer-ENGINE	IntegrationServer- <i>instanceName</i>
IS	IS- <i>instanceName</i>

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

## Command Central

### Release 9.12

Added Item	Description
Cross-site-request forgery prevention	Protected the Command Central web user interface against cross-site-request forgery attacks.
Web user interface instance creation wizard	Creates, updates, or deletes instances of Integration Server, My webMethods, Universal Messaging, and Apama for installations of release 9.12.
Instructions and tooltips	The wizards and screens of the Command Central web user interface have been enhanced with new instructions and tooltips.

Added Item	Description
Web user interface product installation wizard	<p>Installs products of release 9.8 or higher. You must consider the following when using this wizard:</p> <ul style="list-style-type: none"> <li>▪ Use mirror or master repositories. The product installation wizard does not support image repositories.</li> <li>▪ For installations of release 9.10 or higher, installing a Platform Manager product plug-in automatically restarts Platform Manager to activate the plug-in. For earlier releases, Platform Manager is not restarted automatically and you should use the ALL distribution (which includes all product plug-ins) or restart Platform Manager manually.</li> <li>▪ Checking for dependencies is not supported for older releases, which is indicated by a warning.</li> <li>▪ Installing language packs is supported only for installations of release 9.12.</li> <li>▪ Use the Software AG Installer to install products of release 9.7 and earlier.</li> </ul>
sagcc get templates composite export	Exports an existing composite template into a zip archive.

Changed Item	Description
Command Central bootstrap installer	Added support for the HP-UX and IBM AIX operating systems.
Logs	The Command Central logs are now reduced in number and made easier to read and understand.
Product and fix repository wizards	Streamlined and enhanced repository wizards to support browsing and searching the repositories.
Template-based provisioning enhancements	Enabled migration of existing environments to a different host, using a live or cloned database.

Changed Item	Description
Command Central REST API	<ul style="list-style-type: none"> <li>Improved performance and memory usage.</li> <li>A single WADL document for the Command Central REST API services. The document is located at <code>http(s)://&lt;ccehost&gt;:&lt;cceport&gt;/cce/application.wadl</code></li> </ul>

Removed Item	Description
Create/apply snapshot templates wizards in the Command Central web user interface	Use composite templates to provision existing installations with version 9.8 or higher.
Event Routing	Removed Event Routing from the Command Central bootstrap installer.

### *Release 9.10*

Added Item	Description
dbc	A new default composite template that installs the Database Component Configurator (DBC) on a local or remote installation and uses DBC to create a new database on a supported database server.
Configuration types	The COMMON-JVM-OPTIONS configuration type to configure extended options for JVM.
Command Central bootstrap installer	<ul style="list-style-type: none"> <li>- New custom options for the Command Central bootstrap installer: -D and -H</li> <li>- Migrating an existing Command Central installation</li> </ul>
CLI administration commands	Commands that perform custom administrative tasks for managed products.
Fix mirror repositories	Creating and updating fix mirror repositories, using the Command Central web user interface and CLI repository commands.
License keys	Adding and managing product license keys.
Login page and logout link	The Command Central web user interface now uses form-based login page and has a logout link.

Added Item	Description
Template-based provisioning enhancements	<p>The following enhancements were added in the composite templates:</p> <ul style="list-style-type: none"> <li>- use composite templates to migrate existing environments</li> <li>- customize migration options by adding an optional “migration” section in a composite template definition</li> <li>- define shell actions that a composite template executes at different points in the apply composite template operation</li> </ul>
“environment.mode” parameter	<p>Added in the “cc exec templates composite apply” command to specify whether the composite template will provision or migrate the environment.</p>
Migrate products using composite templates and the Command Central CLI	<ul style="list-style-type: none"> <li>▪ Migrate Integration Server, My webMethods Server, and Universal Messaging using composite templates and the CLI composite template commands.</li> <li>▪ Migrate Integration Server, My webMethods Server, and Universal Messaging instances using the CLI administration commands.</li> </ul>
Universal Messaging JNDI management	<p>Configure Universal Messaging connection factories and destinations in a JNDI namespace using the Command Central web user interface or command line interface.</p>

Deprecated Item	Replacement, if any
COMMON-MEMORY	<p>Deprecated for configuring extended options for JVM. Use COMMON-JVM-OPTIONS.</p>
Snapshot templates create and apply web user interface and CLI commands	<p>Use composite templates to provision existing environments with version 9.8 or higher</p>
Emitting XML-based events using Event Routing	

## Release 9.9

Added Item	Description
generic-layer	Added a new default composite template to provision multiple nodes using an external snapshot template, which is created from an existing installation using Command Central.
Configuration types	Added the COMMON-LDAP configuration type.
Fix installation web user interface	Installing and unstalling fixes and support patches remotely.
LDAP configuration properties	Configuring LDAP properties for Command Central and the products managed by Command Central. You configure LDAP properties using the Command Central web user interface and command line tool.
Mirror repositories	Creating and updating mirror repositories, using the Command Central web user interface and repository commands that you run in the Command Central command line tool.
Aggregate license reports	Generate aggregate monthly reports of the Command Central landscape, showing installed instances on an hourly/daily basis.
Java system properties configuration	Configure the Java system properties of managed products, such as My webMethods Server (including Task Engine), Integration Server, and Command Central using the COMMON-SYSPROPS configuration type for product instances.

Added Item	Description
Template-based provisioning enhancements	<p>The following enhancements were added in the composite templates:</p> <ul style="list-style-type: none"> <li>- Reference to external snapshot templates that the composite template applies for a given layer</li> <li>- Using the <code>\${node.host}</code> and <code>\${node.alias}</code> variables inside inline templates to create dynamic content that is host/alias specific</li> <li>- Reference to Java system properties in the <code>template.yaml</code> definition</li> <li>- Updating existing product instances when a composite template is re-applied</li> <li>- Combining an input properties files with additional parameters when running the <code>apply composite template</code> command</li> <li>- Specifying the path to the target installation directory in UNIX format that works for both UNIX and Windows hosts</li> <li>- Applying composite templates layer by layer</li> <li>- Returning WARNING status when a sub-job in a composite template apply job fails</li> </ul>
Consistent status reporting	<p>Reporting the status of run-time components after a lifecycle operation consistently in Command Central. The status on the summary and details screens is the same status reported by the run-time component.</p>
Command Central bootstrap installer	<p>Installing Command Central using a single executable installer package, downloaded from Empower.</p>
Support for the OpenSSH service on Windows	<p>Bootstrapping Platform Manager remotely over the OpenSSH service.</p>
Creating or editing a JDBC connection pool for Integration Server using Command Central	<p>The Available Connections Warning Threshold and Waiting Thread Threshold Count properties can be set when creating or editing a JDBC connection pool through Command Central.</p>



Added Item	Description
Universal Messaging properties configuration	Configuring a Universal Messaging server instance by editing the configuration parameters using the Command Central web user interface or command line interface.

Changed Item	Description
cc get monitoring state	The command now supports additional arguments.

Deprecated Item	Replacement, if any
cc get monitoring	cc get monitoring state

### *Release 9.8*

Added Item	Description
bpms	Default composite template. Provisions a typical BPMS environment.
is-layer	Default composite template. Provisions a standalone local or remote Integration Server, or an Integration Server cluster with multiple hosts.
mws-layer	Default composite template. Provision a standalone local or remote My webMethods Server, or a My webMethods Server cluster with multiple hosts.
reference	Default composite template. Contains DSL documentation and reference details.
repos	Default composite template. Contains the public master product and fix repositories version 9.5 or higher.
spm-layer	Default composite template. Bootstraps a single local or remote Platform Manager, or a number of remote Platform Managers on UNIX hosts via an SSH connection.
tc-layer	Default composite template. Provisions a standalone local or remote Terracotta Server or a two-server master/slave cluster on remote machines.

Added Item	Description
um-layer	Default composite template. Provisions a standalone Universal Messaging realm instance or a two-instance cluster on local or remote machines.
Composite template commands	Command Central command line interface commands that you use to import and apply composite templates.
Product provisioning commands	Command Central command line interface commands that you use to install and uninstall products.
Filtering product repository content	Command Central command line interface commands that you use to search and filter the contents of a product repository.
Trusted authentication	Added trusted authentication mode when administering run-time components in OSGI profiles with version 9.8.
Shared secret	Shared secret that Platform Manager uses when retrieving or updating run-time component configuration settings that contain passwords.
License reports based on license manifests	Creating and managing license reports for an installation, based on license manifest files.
Platform Manager plug-ins	Added Platform Manager plug-ins for the following run-time components: <ul style="list-style-type: none"> <li>▪ Terracotta</li> <li>▪ Task Engine and WmTask Client</li> <li>▪ Event Routing</li> <li>▪ My webMethods user interface for Optimize</li> </ul>

### *Release 9.7*

Added Item	Description
um-all	Default template with products. Contains a full distribution of Universal Messaging Server with a default 'umserver' instance and default HTTP port 9000.

Added Item	Description
tc-min	Default template with products. Contains a minimal Terracotta Server.
mws-min	Default template with products. Contains a default My webMethods Server instance with HTTP port 8585 and an embedded database.
mws-bpm	Default template with products. Contains a My webMethods Server instance for Business Process Management.
is-min	Default template with products. Contains a default Integration Server instance with HTTP port 5555 and an embedded database, but without a license file.
is-esb	Default template with products. Contains an Integration Server instance for Enterprise Service Bus.
is-bpm	Default template with products. Contains an Integration Server instance for Business Process Management.
fix-all	<p>Note: The is-bpm template is not supported on installations with version 9.5 and 9.6, because Business Rules requires providing a license during the installation.</p> <p>Default template with fixes. Contains all fixes available for a product from the Empower Product Support Website or from an image archive.</p>
broker-bin	<p>Default template with products. Contains only the Broker binary files, without a Broker server instance.</p> <p>Note: When installing broker-bin on an installation with version 9.5, Broker causes Platform Manager to shut down.</p>

Added Item	Description
Configuration types	<p>Added the following new configuration types:</p> <ul style="list-style-type: none"> <li>▪ COMMON-CLUSTER</li> <li>▪ COMMON-LOCAL-USERS</li> <li>▪ COMMON-MEMORY</li> <li>▪ COMMON-PROXY</li> <li>▪ COMMON-COMPONENT-ENDPOINTS</li> <li>▪ IS-CONSUMER-ENDPOINTS</li> <li>▪ IS-PROVIDER-ENDPOINTS</li> <li>▪ IS-FILEPERMISSION</li> </ul>
Install Platform Manager Remotely	<p>“Add Installation Wizard” in the Command Central web user interface that you use to add existing installations and bootstrap Platform Manager installations remotely.</p>
Internal User Management	<p>Web user interface page that you use to manage internal users and update passwords.</p>
Filtering fix repository content	<p>Added Command Central command line interface commands that you use to search and filter the contents of a fix repository.</p>
Fix provisioning commands	<p>Added Command Central command line interface commands that you use to install and uninstall fixes.</p>
Platform Manager plug-ins	<p>Added Platform Manager plug-ins for the following products:</p> <ul style="list-style-type: none"> <li>▪ Monitor</li> <li>▪ Business Rules</li> </ul>
Component Search Attributes	<p>Added arbitrary name/value attributes for instances and components that that you can use as search query parameters. You use the Command Central web user interface and command line interface to add, update, and delete the arbitrary attributes.</p>

Added Item	Description
Jobs View	Added Jobs view in the Command Central web user interface to monitor long running operations.

Deprecated Item	Replacement, if any
cc add repository fixes with node_alias	cc add repository fixes
cc add repository products with node_alias	cc add repository products
cc delete repository fixes with node_alias	cc delete repository fixes
cc delete repository products with node alias	cc delete repository products
cc exec repository fixes discover with node_alias	cc exec fixes discover
cc exec repository products discover with node_alias	cc exec repository products discover
cc list repository fixes with node_alias	cc list repository fixes
cc list repository products with node_alias	cc list repository products

*Release 9.6*

Added Item	Description
Create and apply template	Web user interface page that you use to create or apply templates.
Centralized repository management	Web user interface page that you use to create image repositories, register master repositories, edit repository details, and delete repositories.
License report management	Web user interface page that you use to create, download, and delete product license reports.
Integration Server configuration types	Web user interface page that you use to configure Integration Server properties.
Log access	Web user interface page that you use to view and download product logs.
Credentials for remote Platform Managers	Web user interface page that you use to set different credentials for remote Platform Managers.

Added Item	Description
SSL-related command options	Command options to configure SSL settings using the Command Central command line tool: <ul style="list-style-type: none"> <li>▪ --configuration-file</li> <li>▪ --ssl-truststore-file</li> <li>▪ --ssl-trust-all-hosts</li> <li>▪ ssl-truststore-password</li> </ul>
--force	The option forces the execution of a delete command without prompting for confirmation of the requested operation.

*Release 9.5*

Deprecated Item	Replacement, if any
accept	outputFormat Specifies the format for the returned data.
format	outputFormat Specifies the format for the returned data.
mediatype	inputFormat Specifies the content type of the input data for a command.

***Platform Manager***

*Release 9.12*

Added Item	Description
Platform Manager plug-ins	<ul style="list-style-type: none"> <li>▪ Platform Manager plug-in for ActiveTransfer</li> <li>▪ Platform Manager plug-in for PPM</li> </ul>
Trusted authentication	By default, Platform Manager uses trusted authentication with Command Central.

## Release 9.10

Added Item	Description
Platform Manager plug-ins	Platform Manager plug-in for Apama.
Configuration types	The COMMON-JVM-OPTIONS configuration type to configure extended options for JVM.
CLI administration commands	Commands that perform custom administrative tasks for managed products.

  

Deprecated Item	Replacement, if any
COMMON-MEMORY	Deprecated for configuring extended options for JVM. Use COMMON-JVM-OPTIONS.

## Release 9.9

Added Item	Description
Platform Manager plug-ins	Added Platform Manager plug-ins for the following run-time components: <ul style="list-style-type: none"><li>- EntireX Broker</li><li>- Optimize Analytic Engine</li></ul>

  

Changed Item	Description
cc get monitoring state	The command now supports additional arguments.
cc list monitoring alerts	The command now supports additional arguments.

  

Deprecated Item	Replacement, if any
cc get monitoring	cc get monitoring state

## Release 9.8

Added Item	Description
Shared secret	Shared secret that Platform Manager uses when retrieving or updating run-time component configuration settings that contain passwords.

Added Item	Description
Platform Manager plug-ins	<p>Added Platform Manager plug-ins for the following run-time components:</p> <ul style="list-style-type: none"> <li>▪ Terracotta</li> <li>▪ Task Engine and WmTask Client</li> <li>▪ Event Routing</li> <li>▪ My webMethods user interface for Optimize</li> </ul>

*Release 9.7*

Added Item	Description
New configuration types for run-time components	<p>Added the following new configuration types:</p> <ul style="list-style-type: none"> <li>▪ COMMON-CLUSTER</li> <li>▪ COMMON-LOCAL-USERS</li> <li>▪ COMMON-MEMORY</li> <li>▪ COMMON-PROXY</li> <li>▪ COMMON-COMPONENT-ENDPOINTS</li> <li>▪ IS-CONSUMER-ENDPOINTS</li> <li>▪ IS-PROVIDER-ENDPOINTS</li> <li>▪ IS-FILEPERMISSION</li> </ul>
Platform Manager plug-ins	<p>Added Platform Manager plug-ins for the following products:</p> <ul style="list-style-type: none"> <li>▪ Monitor</li> <li>▪ Business Rules</li> </ul>

Deprecated Item	Replacement, if any
<p>cc add repository fixes with node_alias  cc add repository products with node_alias  cc delete repository fixes with node_alias  cc delete repository products with node_alias</p>	<p>Repositories are centrally managed through Command Central instead of locally on each Platform Manager.</p>



Deprecated Item	Replacement, if any
cc exec repository fixes discover with node_alias	
cc exec repository products discover with node_alias	
cc list repository fixes with node_alias	
cc list repository products with node_alias	

### Release 9.6

Added Item	Description
Added new configuration types for the Integration Server runtime component.	<p>The following configuration types were added for Integration Server:</p> <ul style="list-style-type: none"> <li>▪ COMMON-LOGGERS</li> <li>▪ COMMON-VARS</li> <li>▪ COMMON-WMMESSAGING</li> <li>▪ IS-DEFAULT-WMMESSAGING</li> <li>▪ IS-QUIESCEPORT</li> <li>▪ IS-RESOURCES</li> </ul>

### Release 9.5

Changed Item	Description
--expected-values	The option can include a value with a logical OR operator. Use   as a separator for the logical OR operator.

Deprecated Items	Replacement, if any
accept	outputFormat Specifies the format for the returned data.
format	outputFormat Specifies the format for the returned data.
mediatype	inputFormat Specifies the content type of the input data for a command.

## 9.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

### **Command Central**

#### *Release 9.9*

Changed API	Description
Command Central REST API	<ul style="list-style-type: none"> <li>▪ Enhanced the following services: <ul style="list-style-type: none"> <li>▪ Repository</li> <li>▪ Provisioning</li> <li>▪ Monitoring</li> <li>▪ License Tools</li> </ul> </li> </ul>

#### *Release 9.8*

Changed API	Description
Command Central REST API	<ul style="list-style-type: none"> <li>▪ Added the Template Composite service that you use to manage composite templates of environments.</li> <li>▪ Added the Template Snapshot service that you use to manage snapshot templates of installations.</li> </ul>

## Release 9.7

Changed API	Description
Command Central REST API	<ul style="list-style-type: none"><li>▪ Added Provisioning service that you use to:<ul style="list-style-type: none"><li>▪ Bootstrap Platform Manager locally and remotely</li><li>▪ Install and uninstall fixes</li></ul></li><li>▪ Enhanced the following services:<ul style="list-style-type: none"><li>▪ Configuration</li><li>▪ Repository</li><li>▪ Job Manager</li><li>▪ Lifecycle</li><li>▪ Inventory</li></ul></li></ul>

## Release 9.6

Changed API	Description
Command Central REST API	<ul style="list-style-type: none"><li>▪ Added an Instance Management service that you use to create, update and delete an instance of an installed product that supports multiple instances under the same installation directory.</li><li>▪ Enhanced the following services:<ul style="list-style-type: none"><li>▪ Repository Service</li><li>▪ Log Access Service</li><li>▪ Template Service</li></ul></li></ul>

## Platform Manager

### Release 9.9

Changed API	Description
Platform Manager REST API	Enhanced the Monitoring service

## Release 9.7

Changed API	Description
Platform Manager REST API	Enhanced the following services: <ul style="list-style-type: none"><li>▪ Configuration</li><li>▪ Repository</li><li>▪ Job Manager</li></ul>

## Release 9.6

Changed API	Description
Platform Manager REST API	<ul style="list-style-type: none"><li>▪ Added an Instance Management service that you use to create, update and delete an instance of an installed product that supports multiple instances under the same installation directory.</li><li>▪ Enhanced the following services:<ul style="list-style-type: none"><li>▪ Repository Service</li><li>▪ Log Access Service</li></ul></li></ul>

## 10.0 Copyright Information

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## 11.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

CC-PM-RM-912-20161018

# webMethods Composite Application Development 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods Composite Application Development 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- WMC-3951  
Installing a Composite Application Framework (CAF) fix fails when the fix applies to multiple components, but the installation does not have all the components installed.  
The fix installation rolls back because it expects all components that the fix addresses to be present in the installation directory.  
The workaround is to install the missing components before installing the fix.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- WMC-3862  
When using a CAF HTML Input control in a Modal Dialog control, you must set the Lazy Load property of the modal dialog to “true”.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.12***

- DES\_9.10\_Fix2
- DES\_9.9\_CAD\_Fix1
- DES\_9.8\_CAD\_Fix2
- DES\_9.6\_CAD\_Fix5
- DES\_9.5\_SP1\_CAD\_Fix2

### ***Release 9.10***

- DES\_9.8\_CAD\_Fix1
- DES\_9.7\_CAD\_Fix2

- DES\_9.0\_SP1\_CAD\_Fix1

### ***Release 9.9***

- DES\_9.7\_CAD\_Fix1
- DES\_9.6\_CAD\_Fix4
- DES\_9.5\_SP1\_CAD\_Fix1

### ***Release 9.8***

- DES\_9.6\_CAD\_Fix2
- DES\_8.2\_SP1\_CAD\_Fix10

### ***Release 9.7***

- DES\_9.6\_CAD\_Fix1
- DES\_8.2\_SP1\_CAD\_Fix10

### ***Release 9.6***

- DES\_8.2\_SP1\_CAD\_Fix8

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

- MWS-16031  
The time zone of the CAF Date Range Input control does not match a My webMethods user's preferred time zone.  
When a Date Range Input control is added to a portlet, the time zone of the Date Range Input control does not match the user's preferred time zone when the user's time zone uses daylight savings time.  
The issue is resolved.



## **Release 9.9**

- MWS-14667  
Converting Composite Application Framework (CAF) applications to OpenCAF does not update navigation rules.  
When a CAF application is converted to OpenCAF, the navigation rules in the CAF faces-config.xml files are not updated to reference OpenCAF .xhtml files. The navigation rules still have references to removed .view files.  
This issue is now resolved.
- MWS-14666  
After converting a Task List Management CAF portlet to OpenCAF, clicking the Return button on the Task List Management page results in a javax.portlet.PortletException with the following message: "Cannot remove the same component twice".  
This issue is now resolved.

## **Release 9.7**

- WMD-3528  
The Task Node does not display in Solutions View.  
After a Designer restart, the Task Node does not display in Solutions View in a Mobile Application Project.  
This issue is now resolved.
- WMD-3529  
The Bindings view in Designer throws an exception.  
The Bindings view in Designer displays a "Could not create the view: com.webmethods.caf.faces.data.views.PageDataView" error message for a task in a Mobile Application Project.  
This issue is now resolved.
- WS-20830  
JSF core components and renderers are being overridden by My webMethods Server custom implementations.  
My webMethods Server overrides basic JSF component classes and renderers. This results in the usage of certain base JSF tags to render and behave like My webMethods Server-specific components instead.  
This issue is now resolved.

## **Release 9.6**

- WMC-2522  
An invalid session token is detected.  
When web services are called from a command button action, a "[POP.016.0056] Invalid session token detected. Please reload the page" message is displayed.

This issue is now resolved.

- WMC-2567  
Web Service Generation (WS-Stack) fails and no operations can be selected.  
In Designer, when you attempt to create a new web service connector using the new web service connector wizard, the "Select Operation" wizard step displays no operations to select.  
This issue is now resolved.
- WMC-2574  
An issue exists with hideable panel refresh.  
The hideable panel refresh seems to save the state from the previous time it was refreshed, so when the data is displayed again, it shows the previous values.  
This issue is now resolved.
- BPMSWEB-1860  
Designer should display an error when a user enters an incorrect value for the value property of a Combo box select item.  
Currently, Designer only displays a warning when a user enters an incorrect value for the value property of a Combo box select item. However, this incorrect value could cause class cast exceptions. The warning needs to be changed to be an error so that user fixes this problem before deploying their application to My webMethods Server.  
This issue is now resolved.
- BPMSWEB-1853  
The default Java package name in Designer should be changed so it is unique for Java classes generated in each project.  
If a user wants to export a package from a WAR file or Utility Jar project, the Java package name should be unique so it doesn't collide with other components.  
Proposed change is from the previous default java package:  
    com.webmethods.caf  
to:  
    caf.\${project\_type}.\${project\_name}  
Where \${project\_type} is replaced with "war" or "jar" depending on the type of the project and \${project\_name} is replaced with the name of the project.  
This issue is now resolved.

## **Release 9.5**

- WMC-2442  
If form validation fails on a submit, all the form values are reset to the last successful submit.  
When you submit a form and if the fields have not been filled in correctly, the field values are reverted to the last properly submitted ones and not the ones present when the form did not pass validation. This problem mainly occurs with Simple List and Dropdown components.  
This issue is now resolved.

- MWS-10922  
Problems result when a full-page refresh is not performed.  
Page-loading performance issues and rendering problems can occur when a full-page refresh is not performed.  
This issue is now resolved.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

- *webMethods CAF Development Help* is renamed *webMethods CAF and OpenCAF Development Help*.
- A new topic, “Developing OpenCAF Applications”, is added to *webMethods CAF and OpenCAF Development Help*. The topic provides an overview of the main OpenCAF functions as well as information about additional resources for developing OpenCAF applications.

### **Release 9.10**

A new topic, “Working with Gadgets”, has been added to the *webMethods CAF Development Help* online help and PDF guide.

### **Release 9.9**

A new topic, “Getting Started with OpenCAF Shell Page Development”, has been added to the *webMethods CAF Development Help* online help.

### **Release 9.8**

A new chapter, “Getting Started with OpenCAF Shell Page Development”, has been added to the *webMethods CAF Development Help* PDF guide.

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

Deprecated Item	Replacement, if any
Support for Axis 1.x, which is used for exposing web services from My webMethods Server, is deprecated.	
Support for using webMethods Glue to create web service connectors in CAF and OpenCAF applications is deprecated.	WS-Stack Client library

### **Release 9.10**

Added Item	Description
Drag And Drop File Input CAF control	Replaces the Drag And Drop applet.
Client-side validation support for the CAF File Validator	With the recent HTML5 changes in browsers, it is now possible to perform client-side validation of the value specified in the file input element.  Client-side validation prevents uploading the wrong type of file to the server or uploading files that are too large.  The browsers that support this capability are:  Google Chrome version 6.0 and higher Internet Explorer version 10.0 and higher Firefox version 3.6 and higher  For browsers that do not support HTML5, server-side validation would have to be performed instead.

Added Item	Description
Support for the "multiple" attribute in the File Input CAF control	<p>With the "multiple" attribute enabled, you can select and upload more than one file using the File Input control.</p> <p>When the "multiple" attribute is enabled, the value of the control should be bound to a List&lt;Part&gt; object.</p> <p>The browsers that support this capability are:</p> <p>Google Chrome version 6.0 and higher Internet Explorer version 10.0 and higher Firefox version 3.6 and higher</p> <p>If using other browsers, you can select only a single file through the File Input control.</p>
Support for standard JavaServer Faces ( JSF) 2 methods to do Ajax requests	CAF used a proprietary technique for performing partial page updates (Ajax) before the JSF standard offered support for Ajax requests. Now CAF supports the JSF 2.x standard for doing Ajax requests, replacing the proprietary technique.
webMethods Task Development now supports the String List data type when you configure task assignees with a webMethods Business Rules decision table in Software AG Designer.	You can assign a task to multiple user IDs by using a String List in the assignee field of your IS document type. For more information about working with task assignments, see <i>webMethods BPM Task Development Help</i> .

Changed Item	Description
The Attachments List CAF control has been improved.	The changes to the Attachments List control include replacing the Java applet-based drag and drop panel with an HTML5-based equivalent.
The SOAP Monitor, Color Picker, and File Attachment applets have been converted to CAF components.	In more recent versions of Chrome and Firefox applets are disabled by default and must be manually enabled. Applets represent security risks.

Changed Item	Description
The CAF project classpath has been simplified.	<p>When you create a new portlet application or web application project in Software AG Designer, on the JSF Capabilities page of the new project wizard, selecting the <b>CAF Libraries</b> JSF implementation library now displays the following message: 'The targeted "My webMethods Server" runtime will contribute the libraries required by this facet to the project classpath.'</p> <p>Also, when you specify project properties by right-clicking the project and going to <b>Properties &gt; Project Facets &gt; Java Server Faces &gt; CAF Libraries</b>, the properties wizard displays the same message.</p> <p>To clean up the project classpath for existing projects, right-click the project and go to <b>CAF Tools &gt; Repair CAF Project</b>.</p>

Deprecated Item	Replacement, if any
Applet CAF control	

## ***Release 9.9***

Changed Item	Description
The internal structure of the Import Template View CAF control	<p>Instead of being direct children of the Import Template View control, the controls loaded from the imported view are now held in a new "__viewLoaded" facet. However, because a facet can contain only one component, the imported controls are wrapped in a UIPanel control. As a result, the direct parent of the imported controls is the UIPanel wrapper, and the Import Template View control, in turn, is the parent of the UIPanel wrapper.</p>

## ***Release 9.8***

Changed Item	Description
Update JSF library to version 2.2.8.	The JSF library is updated to version 2.2.8 to integrate bug fixes from the community.

**Changed Item**

Switch to new JSF 2.2 tag library namespaces.

**Description**

In JSF 2.2, the core JSF tag library namespaces that start with `http://java.sun.com/jsf/` are renamed to `http://xmlns.jcp.org/jsf/*`. CAF has switched to using the new namespaces for new projects in order to avoid using deprecated items.

***Release 9.7*****Added Item**

Search Bar + Results portlet

**Description**

A predefined portlet that provides both the search bar and the search results, requiring no portlet-to-portlet wiring. When you select this portlet type, use the Display Style list to select table results, tree results, or a display that can be toggled from table to tree.

Redisplay property

JSF 2.0 added a new property to `UIMessage` named "redisplay" that can be used to indicate whether a `FacesMessage` should be redisplayed if it has already been rendered by another control. This property value is set to "True" to render the message even if it has already been rendered by another control. The default value is true.

Added Item	Description
Added a large number of base JSF components.	<p>OpenCAF has added the ability for customers to include the following JSF components to their application projects:</p> <ul style="list-style-type: none"> <li>• h:button</li> <li>• h:column</li> <li>• h:commandButton</li> <li>• h:commandLink</li> <li>• h:dataTable</li> <li>• h:form</li> <li>• h:graphicImage</li> <li>• h:inputHidden</li> <li>• h:inputText</li> <li>• h:inputTextarea</li> <li>• h:inputSecret</li> <li>• h:link</li> <li>• h:message</li> <li>• h:messages</li> <li>• h:outputFormat</li> <li>• h:outputLabel</li> <li>• h:outputLink</li> <li>• h:outputText</li> <li>• h:selectBooleanCheckbox</li> <li>• h:selectManyListbox</li> <li>• h:selectManyCheckbox</li> <li>• h:selectManyMenu</li> <li>• h:selectOneListbox</li> <li>• h:selectOneMenu</li> <li>• h:selectOneRadio</li> </ul>
Added pass-through attributes for existing JSF components.	<p>Existing JSF components can now implement new HTML5 attributes such as the type attribute for input elements and supporting values such as text, search, email, url, tel, number, and date. Use the following namespace to enable pass-through attributes</p> <p><code>&lt;xmlns:p="http://java.sun.com/jsf/passthrough"&gt;</code></p>

Changed Item	Description
Change "AppEditor Application" template selection name to "OpenCAF Shell"	When a user creates a new portlet application project, one of the currently available project templates names has been renamed from "AppEditor Application" to "OpenCAF Shell"



Changed Item	Description
<p>Changes to <code>javax.faces.PROJECT_STAGE</code>.</p>	<p>For version 9.7, the default value of the “<code>javax.faces.PROJECT_STAGE</code>” context parameter is set to “Development” when My webMethods Server is running in debug mode. When My webMethods Server is not running in debug mode, the value defaults to “Production”. When the “<code>javax.faces.PROJECT_STAGE</code>” is set as “Development”, the Mojarra JSF library included with CAF does some additional checks and will report some additional errors that you would not see otherwise. For more information, see:</p> <p><a href="https://blogs.oracle.com/rlubke/entry/jsf_2_0_new_feature2">https://blogs.oracle.com/rlubke/entry/jsf_2_0_new_feature2</a></p> <p><a href="https://weblogs.java.net/blog/driscoll/archive/2009/09/28/jsf-20-reminder-project-stage">https://weblogs.java.net/blog/driscoll/archive/2009/09/28/jsf-20-reminder-project-stage</a></p>
<p>Change CAF WAR file build script to put the compiled classes into a JAR file.</p>	<p>Build scripts for WAR files now zip up all compiled classes into a JAR file that is placed in the WEB-INF/lib folder instead of copying each of the individual .class files into the WEB-INF/classes folder. This will help to reduce errors related to “Too many open files.”</p>
<p>Changes when existing VDL files convert to new taglib values during runtime and import.</p>	<p>When importing a portlet application project or running the “migrate to JSF 2x” menu option, Designer converts existing VDL files taglibs to the updated values. Existing view files inside a My webMethods Server system have their values remapped when the file is read and no conversion is needed by the user.</p>
<p>Changes to Script block</p>	<p>A Script block works improperly in .xhtml VDL files. Users should convert their script blocks to basic script. For example:</p> <pre> &lt;script type="text/javascript"&gt;   &lt;![CDATA[     JavaScript content   ]]&gt; &lt;/script&gt; </pre>

## Release 9.6

Deprecated Item	Replacement, if any
BaseFacesBean.OUTCOME_OK BaseFacesBean.OUTCOME_ERROR	With the implementation of JavaServer Faces (JSF) version 2.x, these two actions are now deprecated. With JSF version 2.x or later, if you haven't defined an explicit <navigation-rule> in faces-config.xml for the outcome string, then the outcome string returned from an action handler method is expected to be null or the viewId of the page to switch to. You would want to return null if you want to stay on the same page, or the target viewId if you want the action to switch to a different view. Please see section 7.4.2 of the JSF 2.x specification if you want more details about the default navigation handler algorithm. As a result, we marked the BaseFacesBean.OUTCOME_OK and BaseFacesBean.OUTCOME_ERROR fields as deprecated to discourage their usage in future projects. So if your portlet is returning OUTCOME_OK or OUTCOME_ERROR from your action handler, you probably want to return null instead.
The 'for' attribute of the 'Equal' validator	The 'for' attribute of the 'Equal' validator is deprecated and hidden because it is a reserved attribute name for validators in JSF facelets. Use 'componentId' as the attribute name instead. When loading/exporting/converting an existing .view file, the attribute is renamed automatically.
Default Navigation Rules	Default Navigation Rules are being deprecated as the rules are no longer needed for new projects.

## 9.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

### Release 9.12

Added API	Description
com.webmethods.caf.common.thread.NamedThreadFactory: Method 'public NamedThreadFactory(java.lang.String, boolean)' has been added	
com.webmethods.caf.faces.bean.mws_ui.HtmlHead: Method 'public java.lang.String getEffectsJS()' has	

Added API	Description
been added	
com.webmethods.caf.faces.convert.FormattedDateTimeConverter:	Added protected field dateFormatDefault
com.webmethods.caf.faces.data.object.DateRange:	Added protected field controlCalendar
com.webmethods.caf.faces.data.object.DateRange:	Method 'protected java.util.Calendar getControlCalendar(javax.faces.context.FacesContext)' has been added
com.webmethods.caf.faces.data.object.DateRange:	Method 'public void setControlCalendar(java.util.Calendar)' has been added
com.webmethods.caf.mobile.notify.IMobileNotificationConstants:	Class
com.webmethods.caf.mobile.notify.IMobileNotificationConstants:	Class added
com.webmethods.caf.mobile.notify.IMobileNotificationProvider:	Class
com.webmethods.caf.mobile.notify.IMobileNotificationProvider:	Class added
com.webmethods.caf.mobile.notify.IMobileNotifierComponent:	Class
com.webmethods.caf.mobile.notify.IMobileNotifierComponent:	Class added
com.webmethods.caf.mobile.notify.activator.MobileNotificationActivator:	Class
com.webmethods.caf.mobile.notify.activator.MobileNotificationActivator:	Class added
com.webmethods.caf.mobile.notify.impl.MobileNotificationProvider:	Class
com.webmethods.caf.mobile.notify.impl.MobileNotificationProvider:	Class added
com.webmethods.caf.mobile.notify.impl.MobileNotifierComponent:	Class
com.webmethods.caf.mobile.notify.impl.MobileNotifierComponent:	Class added
com.webmethods.caf.mobile.notify.impl.TaskEventsHandler:	Class
com.webmethods.caf.mobile.notify.impl.TaskEventsHandler:	Class added
com.webmethods.caf.mobile.notify.task.Message:	Class
com.webmethods.caf.mobile.notify.task.Message:	Class added
com.webmethods.caf.mobile.notify.task.MonitorPendingNotificationMessages:	Class
com.webmethods.caf.mobile.notify.task.MonitorPendingNotificationMessages:	Class added
com.webmethods.caf.mobile.notify.task.NotificationSender:	Class
com.webmethods.caf.mobile.notify.task.NotificationSender:	Class added
com.webmethods.caf.mobile.notify.util.MobileNotifierUtil:	Class
com.webmethods.caf.mobile.notify.util.MobileNotifierUtil:	Class added
com.webmethods.caf.wssserver.auth.saml.SamlUtils:	Method 'public org.w3c.dom.Element marshalSamlObject(org.opensaml.xml.XMLObject)' has been added
com.webmethods.caf.wssserver.auth.saml.SamlUtils:	Method 'public org.opensaml.xml.XMLObject unmarshalElement(org.w3c.dom.Element)' has been added
com.webmethods.portal.bizPolicy.biz.dir.IGroupBizPolicy:	Class
com.webmethods.portal.bizPolicy.biz.dir.IGroupBizPolicy:	Class added

Added API	Description
com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy	to the set of implemented interfaces
com.webmethods.portal.bizPolicy.biz.dir.IPrincipalBizPolicy	Added
com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy	to the set of implemented interfaces
com.webmethods.portal.bizPolicy.biz.dir.IUserBizPolicy	Added
com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy	to the set of implemented interfaces
com.webmethods.portal.bizPolicy.biz.dir.impl.GroupBizPolicy	Added
com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy	to the set of implemented interfaces
com.webmethods.portal.bizPolicy.biz.dir.impl.GroupBizPolicy	Added
com.webmethods.portal.bizPolicy.biz.view.impl.ViewableContainerPolicy	to the list of superclasses
com.webmethods.portal.bizPolicy.biz.dir.impl.PrincipalBizPolicy	Added
com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy	to the set of implemented interfaces
com.webmethods.portal.bizPolicy.biz.dir.impl.PrincipalBizPolicy	Added
com.webmethods.portal.bizPolicy.biz.view.impl.ViewableContainerPolicy	to the list of superclasses
com.webmethods.portal.bizPolicy.biz.dir.impl.UserBizPolicy	Added
com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy	to the set of implemented interfaces
com.webmethods.portal.bizPolicy.biz.dir.impl.UserBizPolicy	Added
com.webmethods.portal.bizPolicy.biz.view.impl.ViewableContainerPolicy	to the list of superclasses
com.webmethods.portal.bizPolicy.biz.task.impl.TaskInfo	Added java.io.Serializable to the set of implemented interfaces
com.webmethods.portal.bizPolicy.biz.task.impl.TaskInfoExtended	Added java.io.Serializable to the set of implemented interfaces
com.webmethods.portal.bizPolicy.command.ICommandManager	Method 'public
com.webmethods.portal.bizPolicy.command.IRemoteCommandTransport	getRemoteCommandTransport(java.lang.String)' has been added to an interface
com.webmethods.portal.bizPolicy.command.ICommandManager	Method 'public java.util.List invokeClusterCommand(com.webmethods.portal.bizPolicy.IContext,
com.webmethods.portal.bizPolicy.command.ICommand,	com.webmethods.portal.bizPolicy.command.ICommandBean)' has been added to an interface
com.webmethods.portal.bizPolicy.command.ICommandResponseEntry	Class
com.webmethods.portal.bizPolicy.command.ICommandResponseEntry	added

Added API	Description
com.webmethods.portal.bizPolicy.command.dir.GetPortalStyle: Method 'protected void checkAccess(com.webmethods.portal.bizPolicy.IContext,	
com.webmethods.portal.mech.dir.IPrincipalMechanics, com.webmethods.portal.system.IURI)' has been added	
com.webmethods.portal.bizPolicy.command.dir.SearchDirectory: Method 'protected void checkAccess(com.webmethods.portal.bizPolicy.IContext,	
com.webmethods.portal.mech.dir.IDirServiceMechanics,	
com.webmethods.portal.service.meta2.thing.IThingID)' has been added	
com.webmethods.portal.bizPolicy.command.dir.SearchDirectoryEx: Method 'protected void checkAccess(com.webmethods.portal.bizPolicy.IContext,	
com.webmethods.portal.mech.dir.IDirServiceMechanics,	
com.webmethods.portal.service.meta2.thing.IThingID)' has been added	
com.webmethods.portal.bizPolicy.command.dir.SearchDirectoryRefined: Method 'protected void checkAccess(com.webmethods.portal.bizPolicy.IContext,	
com.webmethods.portal.mech.dir.IDirServiceMechanics,	
com.webmethods.portal.service.meta2.thing.IThingID)' has been added	
com.webmethods.portal.bizPolicy.command.dir.SearchDirectoryRefinedPaged: Method 'protected void checkAccess(com.webmethods.portal.bizPolicy.IContext,	
com.webmethods.portal.mech.dir.IDirServiceMechanics,	
com.webmethods.portal.service.meta2.thing.IThingID)' has been added	
com.webmethods.portal.bizPolicy.command.impl.CommandManager: Method 'public com.webmethods.portal.bizPolicy.command.IRemoteCommandTransport	
getRemoteCommandTransport(java.lang.String)' has been added	
com.webmethods.portal.bizPolicy.command.impl.CommandManager: Method 'public java.util.List invokeClusterCommand(com.webmethods.portal.bizPolicy.IContext,	
com.webmethods.portal.bizPolicy.command.ICommand,	
com.webmethods.portal.bizPolicy.command.ICommandBean)' has been added	
com.webmethods.portal.bizPolicy.command.remote.RemoteCommand: Class com.webmethods.portal.bizPolicy.command.remote.RemoteCommand added	
com.webmethods.portal.bizPolicy.command.remote.RemoteCommandBean: Class com.webmethods.portal.bizPolicy.command.remote.RemoteCommandBean added	
com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteCommandTransport: Class com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteCommandTransport added	
com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteCommandTransport\$RemoteJmsException: Class	

Added API	Description
com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteCommandTransport\$RemoteJmsException added	
com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteTransaction: Class com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteTransaction added	
com.webmethods.portal.bizPolicy.command.system.JndiRefreshCluster: Class com.webmethods.portal.bizPolicy.command.system.JndiRefreshCluster added	
com.webmethods.portal.bizPolicy.command.task.jms.AbstractTaskCommand: Class com.webmethods.portal.bizPolicy.command.task.jms.AbstractTaskCommand added	
com.webmethods.portal.bizPolicy.command.task.jms.AbstractTaskCommandBean: Class com.webmethods.portal.bizPolicy.command.task.jms.AbstractTaskCommandBean added	
com.webmethods.portal.bizPolicy.command.task.jms.AddTaskAttachmentJMS: Class com.webmethods.portal.bizPolicy.command.task.jms.AddTaskAttachmentJMS added	
com.webmethods.portal.bizPolicy.command.task.jms.AddTaskCommentJMS: Class com.webmethods.portal.bizPolicy.command.task.jms.AddTaskCommentJMS added	
com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskAttachmentJMS: Class com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskAttachmentJMS added	
com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskCommentJMS: Class com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskCommentJMS added	
com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskJMS: Class com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskJMS added	
com.webmethods.portal.bizPolicy.command.task.jms.GetTaskAttachmentsJMS: Class com.webmethods.portal.bizPolicy.command.task.jms.GetTaskAttachmentsJMS added	
com.webmethods.portal.bizPolicy.command.task.jms.GetTaskAuditJMS: Class com.webmethods.portal.bizPolicy.command.task.jms.GetTaskAuditJMS added	
com.webmethods.portal.bizPolicy.command.task.jms.GetTaskCommentsJMS: Class com.webmethods.portal.bizPolicy.command.task.jms.GetTaskCommentsJMS added	
com.webmethods.portal.bizPolicy.command.task.jms.GetTaskJMS: Class com.webmethods.portal.bizPolicy.command.task.jms.GetTaskJMS added	
com.webmethods.portal.bizPolicy.command.task.jms.QueueTaskJMS: Class com.webmethods.portal.bizPolicy.command.task.jms.QueueTaskJMS added	
com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksFieldsJMS: Class com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksFieldsJMS added	
com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksJMS: Class com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksJMS added	
com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksPagedJMS: Class	

Added API	Description
com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksPagedJMS	added
com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksTotalCountJMS	Class
com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksTotalCountJMS	added
com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskAttachmentJMS	Class
com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskAttachmentJMS	added
com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskCommentJMS	Class
com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskCommentJMS	added
com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskJMS	Class
com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskJMS	added
com.webmethods.portal.bizPolicy.command.task.jms.impl.TaskJMSUtils	Class
com.webmethods.portal.bizPolicy.command.task.jms.impl.TaskJMSUtils	added
com.webmethods.portal.bizPolicy.command.task.rs.MWSCustomDispatchProvider	Class
com.webmethods.portal.bizPolicy.command.task.rs.MWSCustomDispatchProvider	added
com.webmethods.portal.bizPolicy.command.task.rs.MWSRequestDispatcher	Class
com.webmethods.portal.bizPolicy.command.task.rs.MWSRequestDispatcher	added
com.webmethods.portal.bizPolicy.command.task.webservice.SearchTasksFieldsWS	Added
java.io.Serializable	to the set of implemented interfaces
com.webmethods.portal.bizPolicy.command.task.webservice.SearchTasksWS	Added
java.io.Serializable	to the set of implemented interfaces
com.webmethods.portal.bizPolicy.command.task.webservice.Task	Added
java.io.Serializable	to the set of implemented interfaces
com.webmethods.portal.bizPolicy.command.task.webservice.dotnet.SearchTasksDotNetWS	Added
java.io.Serializable	to the set of implemented interfaces
com.webmethods.portal.bizPolicy.command.task.webservice.dotnet.SearchTasksFieldsDotNetWS	Added
java.io.Serializable	to the set of implemented interfaces
com.webmethods.portal.bizPolicy.impl.upgrade.MoveVersionSystemComponentData	Class
com.webmethods.portal.bizPolicy.impl.upgrade.MoveVersionSystemComponentData	added
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent	Class
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent	added
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$ILListener	Class
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$ILListener	added
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$ISynchronousListener	Class
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$ISynchronousListener	added
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$Listeners	Class
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$Listeners	added

**Added API****Description**

com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$QueueListeners: Class  
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$QueueListeners added

com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$SynchronousListeners: Class  
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$SynchronousListeners added

com.webmethods.portal.event.dir.impl.DirPrincipalDNUpdateEvent: Class  
com.webmethods.portal.event.dir.impl.DirPrincipalDNUpdateEvent added

com.webmethods.portal.event.sso.ISSODataChangeEvent: Class  
com.webmethods.portal.event.sso.ISSODataChangeEvent added

com.webmethods.portal.event.sso.ISSODataChangeEvent\$IListener: Class  
com.webmethods.portal.event.sso.ISSODataChangeEvent\$IListener added

com.webmethods.portal.event.sso.ISSODataChangeEvent\$ISynchronousListener: Class  
com.webmethods.portal.event.sso.ISSODataChangeEvent\$ISynchronousListener added

com.webmethods.portal.event.sso.ISSODataChangeEvent\$Listeners: Class  
com.webmethods.portal.event.sso.ISSODataChangeEvent\$Listeners added

com.webmethods.portal.event.sso.ISSODataChangeEvent\$QueueListeners: Class  
com.webmethods.portal.event.sso.ISSODataChangeEvent\$QueueListeners added

com.webmethods.portal.event.sso.ISSODataChangeEvent\$SynchronousListeners: Class  
com.webmethods.portal.event.sso.ISSODataChangeEvent\$SynchronousListeners added

com.webmethods.portal.event.sso.impl.SSODataChangeEvent: Class  
com.webmethods.portal.event.sso.impl.SSODataChangeEvent added

com.webmethods.portal.framework.dispatch.handlers.system.SAMLSSOHandler: Class  
com.webmethods.portal.framework.dispatch.handlers.system.SAMLSSOHandler added

com.webmethods.portal.framework.dispatch.preProcessors.OpenRedirectCheck: Class  
com.webmethods.portal.framework.dispatch.preProcessors.OpenRedirectCheck added

com.webmethods.portal.framework.dispatch.resolvers.SAMLAuthReqResolver: Class  
com.webmethods.portal.framework.dispatch.resolvers.SAMLAuthReqResolver added

com.webmethods.portal.framework.impl.PortalServlet: Added public field  
PORTAL\_SERVLET\_LOCK\_OBJ

com.webmethods.portal.framework.portletcontainer.servlet.JettyPortletRequestWrapper: Method  
'public org.eclipse.jetty.util.MultiMap getParameterMultiMap()' has been added

com.webmethods.portal.framework.portletcontainer.servlet.JettyPortletRequestWrapper: Method  
'public java.util.Map getParameters()' has been added

com.webmethods.portal.jms.JMSPhaseProvider: Added com.webmethods.portal.system.IComponent  
to the set of implemented interfaces

com.webmethods.portal.jms.JMSPhaseProvider: Added com.webmethods.portal.system.IConstants to



Added API	Description
the set of implemented interfaces	
com.webmethods.portal.jms.JMSPhaseProvider: Added	
com.webmethods.portal.system.impl.BaseComponent	to the list of superclasses
com.webmethods.portal.jms.JMSPhaseProvider: Added	public field COMPONENT_NAME
com.webmethods.portal.jms.um.UmJMSClient: Added	abstract modifier to class
com.webmethods.portal.jms.um.UmJMSClient: Added	
com.webmethods.portal.system.init.IInitializable	to the set of implemented interfaces
com.webmethods.portal.jms.um.UmJMSClient: Added	com.webmethods.rtl.msg.jms.IJMSPProvider
to the set of implemented interfaces	
com.webmethods.portal.jms.um.UmJMSClient: Added	com.webmethods.rtl.msg.jms.JMSPProvider
to the list of superclasses	
com.webmethods.portal.jms.um.UmJMSClient: Added	
com.webmethods.rtl.msg.jms.JMSStdConnProvider	to the list of superclasses
com.webmethods.portal.jms.um.UmJMSClient: Method	'protected boolean createInitialContext()' has been added
com.webmethods.portal.jms.um.UmJMSClient: Method	'protected void registerFactory(org.w3c.dom.Element)' has been added
com.webmethods.portal.jms.um.UmJMSClient: Method	'protected void registerQueue(org.w3c.dom.Element)' has been added
com.webmethods.portal.jms.um.UmJMSClient: Method	'protected void registerTopic(org.w3c.dom.Element)' has been added
com.webmethods.portal.jms.um.UmJMSClient: Method	'protected void resetContext()' has been added
com.webmethods.portal.jms.um.UmJMSConnProvider: Added	
com.webmethods.portal.jms.um.UmJMSClient	to the list of superclasses
com.webmethods.portal.jms.um.UmJMSConnProvider: Method	'protected void onDisconnect(boolean)' has been added
com.webmethods.portal.jms.um.UmJMSConnProvider: Method	'public void onShutdown()' has been added
com.webmethods.portal.mech.dir.IDirServiceMechanics: Method	'public java.util.List updatePrincipalUUID(int)' has been added to an interface
com.webmethods.portal.mech.dir.IGroupMechanics: Added	
com.webmethods.portal.mech.view.IViewableContainerMechanics	to the set of implemented interfaces
com.webmethods.portal.mech.dir.IPrincipalMechanics: Added	
com.webmethods.portal.mech.view.IViewableContainerMechanics	to the set of implemented interfaces

**Added API****Description**

com.webmethods.portal.mech.dir.IRoleMechanics: Added  
com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces

com.webmethods.portal.mech.dir.IUserMechanics: Added  
com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces

com.webmethods.portal.mech.dir.impl.DirMechanicsUtils: Method 'public java.lang.String generateUUIDQuery(com.webmethods.portal.service.dir.IDirService, java.lang.String, int)' has been added

com.webmethods.portal.mech.dir.impl.DirServiceMechanics: Method 'public java.util.List updatePrincipalUUID(int)' has been added

com.webmethods.portal.mech.dir.impl.GroupMechanics: Added  
com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces

com.webmethods.portal.mech.dir.impl.GroupMechanics: Added  
com.webmethods.portal.mech.view.impl.ViewableContainerMechanics to the list of superclasses

com.webmethods.portal.mech.dir.impl.PrincipalMechanics: Added  
com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces

com.webmethods.portal.mech.dir.impl.PrincipalMechanics: Added  
com.webmethods.portal.mech.view.impl.ViewableContainerMechanics to the list of superclasses

com.webmethods.portal.mech.dir.impl.RoleMechanics: Added  
com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces

com.webmethods.portal.mech.dir.impl.RoleMechanics: Added  
com.webmethods.portal.mech.view.impl.ViewableContainerMechanics to the list of superclasses

com.webmethods.portal.mech.dir.impl.UserMechanics: Added  
com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces

com.webmethods.portal.mech.dir.impl.UserMechanics: Added  
com.webmethods.portal.mech.view.impl.ViewableContainerMechanics to the list of superclasses

com.webmethods.portal.mech.task.impl.RefreshTaskHandler: Class  
com.webmethods.portal.mech.task.impl.RefreshTaskHandler added

com.webmethods.portal.mech.task.impl.TaskHelper: Method 'public java.lang.ClassLoader getClassLoaderIfExists(com.webmethods.portal.service.task.ITaskDefinition)' has been added

com.webmethods.portal.mech.view.impl.ViewableContainerMechanics: Method 'protected com.webmethods.portal.service.view.IPagingCookie createPagingCookie(com.webmethods.portal.service.meta2.thing.IThingID)' has been added

com.webmethods.portal.service.access.IAccessPrivilegeConfiguration: Class  
com.webmethods.portal.service.access.IAccessPrivilegeConfiguration added

com.webmethods.portal.service.access.impl.DashboardAclManager: Class

Added API	Description
com.webmethods.portal.service.access.impl.DashboardAclManager	added
com.webmethods.portal.service.access.impl.DashboardAclManager\$DashboardAclResource	Class com.webmethods.portal.service.access.impl.DashboardAclManager\$DashboardAclResource added
com.webmethods.portal.service.access.impl.DashboardContainerAclManager	Class com.webmethods.portal.service.access.impl.DashboardContainerAclManager added
com.webmethods.portal.service.access.impl.DashboardContainerAclManager\$DashboardContainerAclResource	Class
com.webmethods.portal.service.access.impl.DashboardContainerAclManager\$DashboardContainerAclResource	added
com.webmethods.portal.service.access.impl.GadgetsAclManager	Method 'public java.util.Map getResultColumnMetadata()' has been added
com.webmethods.portal.service.access.impl.GadgetsAclManager	Method 'public java.util.List searchResources(com.webmethods.caf.faces.search.query.ISearchQuery)' has been added
com.webmethods.portal.service.access.impl.GadgetsAclManager\$GadgetAclResource	Method 'public java.lang.Object getValue(java.lang.Object)' has been added
com.webmethods.portal.service.access.impl.WMAppsAclManager	Method 'public void addServiceTracker(org.osgi.framework.BundleContext)' has been added
com.webmethods.portal.service.access.impl.WMAppsAclManager	Method 'public void stopServiceTracker()' has been added
com.webmethods.portal.service.cache.impl.AliasCache	Added
com.webmethods.portal.event.remove.IDeleteEvent\$ISynchronousListener	to the set of implemented interfaces
com.webmethods.portal.service.cache.impl.AliasCache	Method 'public void onSynchronousEvent(com.webmethods.portal.event.remove.IDeleteEvent)' has been added
com.webmethods.portal.service.dir.DirectoryTools	Added public field UUIDUserResolution
com.webmethods.portal.service.dir.DirectoryTools	Added protected field UUID_CONFIG
com.webmethods.portal.service.dir.DirectoryTools	Method 'public com.webmethods.portal.service.dir.IDirService
com.webmethods.portal.service.dir.IDirService	getDirectoryService(com.webmethods.portal.system.IURI)' has been added
com.webmethods.portal.service.dir.DirectoryTools	Method 'public java.util.List getEmptyUUIDUsers()' has been added
com.webmethods.portal.service.dir.DirectoryTools	Method 'public java.lang.Boolean getUUIDResolution()' has been added
com.webmethods.portal.service.dir.DirectoryTools	Method 'public java.lang.String getUserDNFromUserUUID(java.lang.String, com.webmethods.portal.service.meta2.IUserService)' has

Added API	Description
been added	
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public void invalidateGroupRoleCache(com.webmethods.portal.service.meta2.thing.IThingID)' has been added
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public com.webmethods.portal.service.meta2.thing.IThingID resolveUserByUUID(com.webmethods.portal.service.dir.init.IInitializableUser)' has been added
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public java.util.List updatePrincipalUUID()' has been added
com.webmethods.portal.service.dir.IDirConstants:	Added public field USER_UUID
com.webmethods.portal.service.dir.IDirQueryProvider:	Method 'public com.webmethods.portal.service.dir.IDirPrincipal lookupByUUID(int, java.lang.String)' has been added to an interface
com.webmethods.portal.service.dir.impl.DirServicePortletBean:	Method 'public boolean isSirNameFirst(com.webmethods.portal.bizPolicy.IContext)' has been added
com.webmethods.portal.service.dir.init.IInitializablePrincipal:	Method 'public java.lang.String getUUID()' has been added to an interface
com.webmethods.portal.service.dir.init.impl.InitializablePrincipal:	Method 'public java.lang.String getUUID()' has been added
com.webmethods.portal.service.meta2.IUserService:	Method 'public java.util.List getEmptyUUIDUsers()' has been added to an interface
com.webmethods.portal.service.meta2.IUserService:	Method 'public java.util.Map getUserDetailsByURI(com.webmethods.portal.system.IURI)' has been added to an interface
com.webmethods.portal.service.meta2.IUserService:	Method 'public java.util.Map getUserDetailsByUUID(java.lang.String)' has been added to an interface
com.webmethods.portal.service.meta2.IUserService:	Method 'public void invalidateUserUUID()' has been added to an interface
com.webmethods.portal.service.meta2.IUserService:	Method 'public void updateDistinguishedName(java.lang.String, java.lang.String, int)' has been added to an interface
com.webmethods.portal.service.meta2.IUserService:	Method 'public void updateUUID(java.lang.String, java.lang.String, int)' has been added to an interface
com.webmethods.portal.service.meta2.directory.IUserInfo:	Method 'public java.lang.String getUUID()' has been added to an interface
com.webmethods.portal.service.meta2.directory.impl.User:	Method 'public java.lang.String getUUID()' has been added
com.webmethods.portal.service.meta2.directory.impl.UserInfo:	Added protected field uuid

Added API	Description
com.webmethods.portal.service.meta2.directory.impl.UserInfo: Method 'public java.lang.String getUUID()' has been added	
com.webmethods.portal.service.meta2.impl.UserService: Method 'public java.util.List getEmptyUUIDUsers()' has been added	
com.webmethods.portal.service.meta2.impl.UserService: Method 'public java.util.Map getUserDetailsByURI(com.webmethods.portal.system.IURI)' has been added	
com.webmethods.portal.service.meta2.impl.UserService: Method 'public java.util.Map getUserDetailsByUUID(java.lang.String)' has been added	
com.webmethods.portal.service.meta2.impl.UserService: Method 'public void invalidateUserUUID()' has been added	
com.webmethods.portal.service.meta2.impl.UserService: Method 'public void updateDistinguishedName(java.lang.String, java.lang.String, int)' has been added	
com.webmethods.portal.service.meta2.impl.UserService: Method 'public void updateUUID(java.lang.String, java.lang.String, int)' has been added	
com.webmethods.portal.service.socialbpm.chart.impl.ChartData: Method 'public java.lang.String getTaskTypeID()' has been added	
com.webmethods.portal.service.socialbpm.chart.impl.ChartData: Method 'public void setTaskTypeID(java.lang.String)' has been added	
com.webmethods.portal.service.socialbpm.chart.impl.ChartService: Method 'protected java.lang.String getTaskTypeID(java.lang.String)' has been added	
com.webmethods.portal.service.sql.runtime.base.EmptyUUIDUserList: Class com.webmethods.portal.service.sql.runtime.base.EmptyUUIDUserList added	
com.webmethods.portal.service.sql.runtime.base.InvalidateUserUUID: Class com.webmethods.portal.service.sql.runtime.base.InvalidateUserUUID added	
com.webmethods.portal.service.sql.runtime.base.SetUserGroupUUID: Class com.webmethods.portal.service.sql.runtime.base.SetUserGroupUUID added	
com.webmethods.portal.service.sql.runtime.base.TaskLockSetNew: Class com.webmethods.portal.service.sql.runtime.base.TaskLockSetNew added	
com.webmethods.portal.service.sql.runtime.base.UserDetailsByURI: Class com.webmethods.portal.service.sql.runtime.base.UserDetailsByURI added	
com.webmethods.portal.service.sql.runtime.base.UserDetailsByUUID: Class com.webmethods.portal.service.sql.runtime.base.UserDetailsByUUID added	
com.webmethods.portal.service.task.ITaskLockingService: Method 'public com.webmethods.portal.service.task.ITaskLock acquireLock(com.webmethods.portal.system.IURI, com.webmethods.portal.system.IURI, long, long, boolean)' has been added to an interface	

Added API	Description
com.webmethods.portal.service.task.event.RefreshTaskEvent: Class com.webmethods.portal.service.task.event.RefreshTaskEvent added	
com.webmethods.portal.service.task.event.RefreshTaskEvent\$ISynchronousListener: Class com.webmethods.portal.service.task.event.RefreshTaskEvent\$ISynchronousListener added	
com.webmethods.portal.service.task.event.RefreshTaskEvent\$SynchronousListeners: Class com.webmethods.portal.service.task.event.RefreshTaskEvent\$SynchronousListeners added	
com.webmethods.portal.service.task.event.RefreshTaskEvent\$SynchronousListeners\$SynchronousListener: Class	
com.webmethods.portal.service.task.event.RefreshTaskEvent\$SynchronousListeners\$SynchronousListener added	
com.webmethods.portal.service.task.event.TaskChangedEventRetry: Class	
com.webmethods.portal.service.task.event.TaskChangedEventRetry added	
com.webmethods.portal.service.task.event.impl.RefreshTaskEvent: Class com.webmethods.portal.service.task.event.impl.RefreshTaskEvent added	
com.webmethods.portal.service.task.impl.TaskLockingService: Method 'public com.webmethods.portal.service.task.ITaskLock acquireLock(com.webmethods.portal.system.IURI, com.webmethods.portal.system.IURI, long, long, boolean)' has been added	
com.webmethods.portal.system.ISAMLSSOConstants: Class com.webmethods.portal.system.ISAMLSSOConstants added	
com.webmethods.portal.system.cluster.IClusterProvider: Method 'public java.lang.String getClusterId()' has been added to an interface	
com.webmethods.portal.system.cluster.IClusterProvider: Method 'public boolean isCurrentServer(com.webmethods.portal.system.cluster.IServer)' has been added to an interface	
com.webmethods.portal.system.cluster.IClusterProvider: Method 'public void recreateJNDIConnection()' has been added to an interface	
com.webmethods.portal.system.cluster.IClusterProvider: Method 'public boolean reloadJNDIProviderURL()' has been added to an interface	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Added public field CLUSTER_ID_PROP_KEY	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Added public field s_logCategory	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Method 'public java.lang.String getClusterId()' has been added	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Method 'public boolean isCurrentServer(com.webmethods.portal.system.cluster.IServer)' has been added	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Method 'public void	

**Added API****Description**

recreateJNDIConnection()' has been added

com.webmethods.portal.system.cluster.impl.ClusterProvider: Method 'public boolean reloadJNDIProviderURL()' has been added

com.webmethods.portal.system.sso.saml.idp.SAMLIdentityProvider: Class  
com.webmethods.portal.system.sso.saml.idp.SAMLIdentityProvider added

com.webmethods.portal.system.sso.saml.idp.SAMLSSODataChangeListener: Class  
com.webmethods.portal.system.sso.saml.idp.SAMLSSODataChangeListener added

com.webmethods.portal.system.sso.saml.idp.SAMLServiceProvider: Class  
com.webmethods.portal.system.sso.saml.idp.SAMLServiceProvider added

com.webmethods.portal.system.sso.saml.idp.SSOIDPConfiguration: Class  
com.webmethods.portal.system.sso.saml.idp.SSOIDPConfiguration added

com.webmethods.portal.system.sso.saml.idp.WebSSOPropsUtil: Class

com.webmethods.portal.system.sso.saml.idp.WebSSOPropsUtil added

com.webmethods.portal.taglib.TaglibUtil: Method 'public java.lang.String generateUniqueID()' has been added

com.webmethods.portal.webservices.wsclient.PortalArtifactFactory: Method 'public org.opensaml.saml2.core.AuthnRequest getAuthnRequest(java.lang.String)' has been added

com.webmethods.portal.webservices.wsclient.PortalArtifactFactory: Method 'public java.lang.String getResponse(java.net.URL, java.lang.String, java.util.Map, java.lang.String[], java.util.Map, org.opensaml.saml2.core.AuthnRequest)' has been added

com.webmethods.portal.webservices.wsclient.PortalArtifactFactory: Method 'public void reInitSecurityTokenService()' has been added

com.webmethods.rtl.event.DeliveryService: Method 'public java.lang.String addClusterIdPrefix(java.lang.String)' has been added

com.webmethods.rtl.event.DeliveryService: Method 'public void setClusterId(java.lang.String)' has been added

com.webmethods.rtl.event.DeliveryService: Method 'public void startRemoteDelivery()' has been added

com.webmethods.rtl.event.DeliveryService: Method 'public void stopRemoteDelivery()' has been added

com.webmethods.rtl.event.Event: Method 'public java.lang.String getJcrSessionUserData()' has been added

com.webmethods.rtl.event.IEvent: Method 'public java.lang.String getJcrSessionUserData()' has been added to an interface

com.webmethods.rtl.jms.PortalClientOverJMS: Class com.webmethods.rtl.jms.PortalClientOverJMS

Added API	Description
added	
com.webmethods.rtl.logging.EnhancedPatternLayout: Class com.webmethods.rtl.logging.EnhancedPatternLayout added	
com.webmethods.rtl.msg.jms.IJMSProvider: Method 'public java.lang.String getEndpointAddress()' has been added to an interface	
com.webmethods.rtl.msg.jms.IJMSProvider: Method 'public boolean isConnected()' has been added to an interface	
com.webmethods.rtl.msg.jms.JMSProvider: Added protected field m_endpointAddress	
com.webmethods.rtl.msg.jms.JMSProvider: Added protected field m_isConnected	
com.webmethods.rtl.msg.jms.JMSProvider: Method 'public java.lang.String getEndpointAddress()' has been added	
com.webmethods.rtl.msg.jms.JMSProvider: Method 'public boolean isConnected()' has been added	
com.webmethods.rtl.msg.jms.JMSProvider: Abstract method 'protected void stopConnections()' has been added	
com.webmethods.rtl.msg.jms.JMSStdConnProvider: Method 'protected void stopConnections()' has been added	
com.webmethods.rtl.script.JspC: Method 'public java.lang.String getExcludes()' has been added	
com.webmethods.rtl.script.JspC: Method 'public void setExcludes(java.lang.String)' has been added	
com.webmethods.rtl.util.xml.XMLUtil: Method 'protected org.w3c.dom.Document _loadDocumentUncaught(org.xml.sax.InputSource)' has been added	
com.webmethods.rtl.util.xml.XMLUtil: Method 'public org.w3c.dom.Document loadDocumentFromInputStreamUncaught(java.io.InputStream)' has been added	
com.webmethods.rtl.util.xml.XMLUtil: Method 'public org.w3c.dom.Document loadDocumentFromReaderUncaught(java.io.Reader)' has been added	
com.webmethods.rtl.util.xml.XMLUtil: Method 'public org.w3c.dom.Document loadDocumentFromXMLUncaught(java.lang.String)' has been added	
com.webmethods.rtl.util.xml.XMLUtil: Method 'public org.w3c.dom.Document loadDocumentUncaught(java.lang.String)' has been added	

Removed API	Replacement, if any
com.webmethods.caf.jcr.rmi.IRMITunnelHttpPortAware: Class com.webmethods.caf.jcr.rmi.IRMITunnelHttpPortAware removed	
com.webmethods.caf.jcr.rmi.JcrRMIMHttpToCGISocketFactory: Class	



**Removed API****Replacement, if any**

com.webmethods.caf.jcr.rmi.JcrRMIHttpToCGISocketFactory removed

com.webmethods.caf.jcr.rmi.JcrRMIMasterSocketFactory: Class  
com.webmethods.caf.jcr.rmi.JcrRMIMasterSocketFactory removed

com.webmethods.jackrabbit.server.io.DefaultHandler: Class  
com.webmethods.jackrabbit.server.io.DefaultHandler removed

com.webmethods.jackrabbit.servlet.JCRWebdavServerServlet: Class  
com.webmethods.jackrabbit.servlet.JCRWebdavServerServlet removed

com.webmethods.jackrabbit.servlet.SimpleWebdavServlet: Class  
com.webmethods.jackrabbit.servlet.SimpleWebdavServlet removed

com.webmethods.portal.jms.um.UmJMSClient: Field DEFAULT\_UM\_REALM has been removed, but it was previously a constant

com.webmethods.portal.jms.um.UmJMSClient: Method 'public void init()' has been removed

com.webmethods.portal.schema.bcgadget.GadgetDefinition: Removed field gadgetExternalScripts

com.webmethods.portal.schema.bcgadget.GadgetDefinition: Method 'public  
com.webmethods.portal.schema.bcgadget.GadgetDefinition\$GadgetExternalScripts  
getGadgetExternalScripts()' has been removed

com.webmethods.portal.schema.bcgadget.GadgetDefinition: Method 'public void  
setGadgetExternalScripts(com.webmethods.portal.schema.bcgadget.GadgetDefinition\$GadgetExternal  
Scripts)' has been removed

com.webmethods.portal.schema.bcgadget.GadgetDefinition\$GadgetExternalScripts: Class  
com.webmethods.portal.schema.bcgadget.GadgetDefinition\$GadgetExternalScripts removed

com.webmethods.portal.schema.bcgadget.ObjectFactory: Method 'public  
com.webmethods.portal.schema.bcgadget.GadgetDefinition\$GadgetExternalScripts  
createGadgetDefinitionGadgetExternalScripts()' has been removed

com.webmethods.portal.service.access.impl.GadgetsAclManager: Method 'protected java.lang.String  
buildXPathQuery(java.util.Map)' has been removed, but an inherited definition exists.

com.webmethods.portal.service.access.impl.GadgetsAclManager\$GadgetAclResource: Method 'public  
GadgetsAclManager\$GadgetAclResource(javax.jcr.Node, java.lang.String)' has been removed

com.webmethods.rtl.msg.jms.JMSProvider: Method 'public void enableMessageDelivery()' has been removed

com.webmethods.rtl.msg.jms.JMSProvider: Method 'public boolean hasInitialized()' has been removed

com.webmethods.rtl.msg.jms.JMSProvider: Method 'protected void  
setInstance(com.webmethods.rtl.msg.jms.JMSProvider)' has been removed

com.webmethods.rtl.msg.jms.JMSProvider: Method 'protected void startConnections()' has been removed

**Removed API****Replacement, if any**

com.webmethods.rtl.msg.jms.JMSStdConnProvider: Method 'protected void startConnections()' has been removed

**Changed API****Description**

com.webmethods.caf.common.bnd.PortletXmlAnalyzer: Parameter 1 of 'public boolean analyzeJar(aQute.lib.osgi.Analyzer)' has changed its type to aQute.bnd.osgi.Analyzer

com.webmethods.caf.common.bnd.WebXmlAnalyzer: Parameter 1 of 'public boolean analyzeJar(aQute.lib.osgi.Analyzer)' has changed its type to aQute.bnd.osgi.Analyzer

com.webmethods.caf.wssserver.auth.saml.SamlUtils: Parameter 2 of 'public void displayAssertion(java.io.PrintWriter, org.opensaml.SAMLAssertion)' has changed its type to org.opensaml.saml1.core.Assertion

com.webmethods.caf.wssserver.auth.saml.SamlUtils: Parameter 1 of 'public java.lang.String getLoginName(org.opensaml.SAMLAssertion)' has changed its type to org.opensaml.saml1.core.Assertion

com.webmethods.caf.wssserver.auth.saml.SamlUtils: Return type of method 'public org.opensaml.SAMLAssertion getSamlAssertion(java.lang.String, java.lang.String)' has been changed to org.opensaml.saml1.core.Assertion

com.webmethods.caf.wssserver.auth.saml.SamlUtils: Parameter 1 of 'public org.opensaml.SAMLAssertion getSamlAssertion(org.opensaml.SAMLResponse)' has changed its type to org.opensaml.saml1.core.Response

com.webmethods.caf.wssserver.auth.saml.SamlUtils: Return type of method 'public org.opensaml.SAMLAssertion getSamlAssertion(org.opensaml.SAMLResponse)' has been changed to org.opensaml.saml1.core.Assertion

com.webmethods.caf.wssserver.auth.saml.SamlUtils: Return type of method 'public org.opensaml.SAMLResponse getSamlResponse(java.lang.String, java.lang.String)' has been changed to org.opensaml.saml1.core.Response

com.webmethods.caf.wssserver.auth.saml.SamlUtils: Parameter 1 of 'public java.lang.String verifyAssertion(org.opensaml.SAMLAssertion)' has changed its type to org.opensaml.saml1.core.Assertion

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public UmJMSClient()' has been decreased from public to protected

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public void closeUMSession(com.pcbSYS.nirvana.client.nSession)' has been decreased from public to private

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public void createConnectionFactory(java.lang.String)' has been decreased from public to protected

com.webmethods.portal.jms.um.UmJMSClient: Return type of method 'public javax.naming.Context

**Changed API****Description**

`createJNDIContext()` has been changed to void

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method '`public javax.naming.Context createJNDIContext()`' has been decreased from public to private

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method '`public void createQueue(java.lang.String, boolean, int)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method '`public void createQueueConnectionFactory(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method '`public void createStringVal(java.lang.String, java.lang.String)`' has been decreased from public to package

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method '`public void createTopic(java.lang.String, boolean, int)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method '`public void createTopicConnectionFactory(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method '`public void createXAConnectionFactory(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method '`public void deleteConnectionFactory(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method '`public void deleteQueue(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method '`public void deleteQueueConnectionFactory(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method '`public void deleteTopic(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method '`public void deleteTopicConnectionFactory(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method '`public javax.naming.Context getJNDIContext()`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method '`public com.pcbsys.nirvana.client.nSession getSession()`' has been decreased from public to private

`com.webmethods.portal.service.bcgadget.IBCGadgetProvider`: Return type of method '`public java.util.List getAccessibleGadgets(com.webmethods.portal.service.meta2.thing.IThingID)`' has been changed to `java.util.Map`

`com.webmethods.portal.service.bcgadget.impl.BCGadgetProvider`: Return type of method '`public java.util.List getAccessibleGadgets(com.webmethods.portal.service.meta2.thing.IThingID)`' has been changed to `java.util.Map`

Changed API	Description
com.webmethods.portal.service.task.impl.TaskLockingService:	Accessibility of field TASK_LOCK_MAX_TIME has been increased from private to public
com.webmethods.portal.service.task.impl.TaskLockingService:	Accessibility of field TASK_LOCK_MAX_WAIT_TIME has been increased from private to public
com.webmethods.portal.service.task.impl.TaskLockingService:	In method 'protected
com.webmethods.portal.service.task.ITaskLock	createDbLock(com.webmethods.portal.service.sql.ISqlWorker,
com.webmethods.portal.service.meta2.thing.IThingID,	java.util.Date, java.util.Date)' the number of
arguments has changed	
com.webmethods.portal.system.PortalSystem:	Accessibility of method 'private void initGuestUser()' has been increased from private to public
com.webmethods.rtl.msg.jms.JMSProvider:	Accessibility of method 'public void onShutdown()' has been decreased from public to protected
com.webmethods.rtl.msg.jms.JMSProvider:	Accessibility of method 'private void setMaintenanceMode(boolean)' has been increased from private to protected
com.webmethods.rtl.msg.jms.JMSStdConnProvider:	Accessibility of method 'public JMSStdConnProvider()' has been decreased from public to protected
com.webmethods.portal.service.version.impl.dcv.DCVersionService:	Value of compile-time constant VERSION_SERVICES_ROOT has been changed

## Release 9.10

### Added API/ Description

com.webmethods.portal.bizPolicy.biz.access.IAccessPolicy: Method 'public

com.webmethods.portal.service.view.IListView

listSecurityRealmObjects(com.webmethods.portal.bizPolicy.IContext,

com.webmethods.portal.service.meta2.thing.IThingID)' has been added to an interface

com.webmethods.portal.mech.subscription.ISubscribableMechanics: Method 'public void

checkViewSubscription(com.webmethods.portal.system.IURI,

com.webmethods.portal.service.meta2.thing.IThingID, java.util.Map,

com.webmethods.portal.service.meta2.thing.IThingID)' has been added to an interface

com.webmethods.portal.bizPolicy.biz.IBizPolicyResolver: Method 'public

com.webmethods.portal.bizPolicy.biz.IBizPolicy getBizPolicyByType(java.lang.String, java.util.Map)'

has been added to an interface

com.webmethods.caf.wsclient.saml.IArtifactFactory: Method 'public java.lang.String

getAssertion(java.lang.String, java.lang.String[], java.util.Map)' has been added to an interface

com.webmethods.caf.wsclient.saml.IArtifactFactory: Method 'public java.lang.String

getAssertion(java.lang.String, java.lang.String[], java.util.Map, java.util.Map)' has been added to an

interface

com.webmethods.caf.wsclient.session.IWSClientSession: Method 'public java.util.Map

getSessionCookieMap()' has been added to an interface

com.webmethods.caf.wsclient.session.IWSClientSession: Method 'public void

setSessionCookieMap(java.util.Map)' has been added to an interface

com.webmethods.caf.wsclient.session.IWSClientSessionManager: Method 'public

com.webmethods.caf.wsclient.session.IWSClientSessionPool

getSessionPool(com.webmethods.caf.wsclient.proxy.IWSClientProxy, java.lang.String)' has been added

to an interface

com.webmethods.caf.faces.data.task.ITaskInfo: Method 'public java.util.Date getTaskScheduleDate()'

has been added to an interface

com.webmethods.caf.faces.data.task.ITaskInfo: Method 'public void setCreatedDate(java.util.Date)' has

been added to an interface

com.webmethods.caf.faces.data.task.ITaskInfo: Method 'public void

setTaskScheduleDate(java.util.Date)' has been added to an interface

com.webmethods.portal.service.task.ITask: Method 'public java.util.Date getTaskScheduleDate()' has

been added to an interface

### Changed API/ Description

com.webmethods.portal.event.system.ICriterionEvent\$IListener: Parameter 1 of 'public void onEvent(com.webmethods.portal.event.system.ISubscriptionEvent)' has changed its type to com.webmethods.portal.event.system.ICriterionEvent

com.webmethods.portal.event.system.ICriterionEvent\$ISynchronousListener: Parameter 1 of 'public void onSynchronousEvent(com.webmethods.portal.event.system.ISubscriptionEvent)' has changed its type to com.webmethods.portal.event.system.ICriterionEvent

com.webmethods.portal.service.access.impl.MwsObjectAclManager: In method 'protected int countAceProperties(java.util.List)' the number of arguments has changed

com.webmethods.caf.wsclient.session.impl.WSClientSessionManager: Parameter 2 of 'protected java.lang.String getSessionPoolID(com.webmethods.caf.wsclient.proxy.IWSClientProxy, com.webmethods.caf.wsclient.AuthCredentials)' has changed its type to java.lang.String

### Removed API/ Description

com.webmethods.portal.mech.system.ISystemMechanics: Removed  
com.webmethods.portal.mech.access.IAccessMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed  
com.webmethods.portal.mech.clipboard.IClipboardMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed  
com.webmethods.portal.mech.storage.IBasicMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed  
com.webmethods.portal.mech.subscription.ISubscribableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed  
com.webmethods.portal.mech.view.IViewableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.access.IAccessMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.clipboard.IClipboardMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.storage.IBasicMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.subscription.ISubscribableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.view.IViewableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.clipboard.impl.ClipboardMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.storage.impl.BasicMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.subscription.impl.SubscribableMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.view.impl.ViewableMechanics from the list of superclasses

com.webmethods.portal.webapp.jetty7.WebApplicationInstallService: Removed field  
COMPONENT\_DELETE\_RETRIES

com.webmethods.portal.service.global.impl.LanguagePackManager: Field QUERY\_STRING has been  
removed, but it was previously a constant

com.webmethods.caf.faces.convert.FormattedDateTimeConverter: Method 'protected  
java.text.DateFormat setupGMTDateTimeFormatter(javax.faces.context.FacesContext)' has been  
removed

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public  
java.util.List getTaskCommentsByProcessModelId(java.lang.String, int, int, int)' has been added to an  
interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public java.util.List  
getPaginatedTaskCommentsByProcessModelId(java.lang.String, int, int, int)' has been added to an  
interface

com.webmethods.portal.service.dir.IRoleSystem: Method 'public void  
clearCache(com.webmethods.portal.service.dir.IDirPrincipal)' has been added to an interface

com.webmethods.portal.mech.dir.IPrincipalMechanics: Method 'public void  
fireRoleMembershipEvent(com.webmethods.portal.service.meta2.thing.IThingID,  
com.webmethods.portal.system.IURI, com.webmethods.portal.service.dir.IDirPrincipalList,  
com.webmethods.portal.service.dir.IDirPrincipalList, int)' has been added to an interface

move the com.webmethods.jms.\*\* packages from caf-server bundle to a unique package name

com.webmethods.jms.JMSPhaseProvider: Class com.webmethods.jms.JMSPhaseProvider removed

com.webmethods.jms.db.DbJMSClient: Class com.webmethods.jms.db.DbJMSClient removed

com.webmethods.jms.db.DbJMSConnProvider: Class com.webmethods.jms.db.DbJMSConnProvider  
removed

com.webmethods.jms.db.impl.JMSConnection: Class com.webmethods.jms.db.impl.JMSConnection  
removed

com.webmethods.jms.db.impl.JMSConnection\$CompressedObject: Class  
com.webmethods.jms.db.impl.JMSConnection\$CompressedObject removed

com.webmethods.jms.db.impl.JMSDestination: Class com.webmethods.jms.db.impl.JMSDestination  
removed

com.webmethods.jms.db.impl.JMSDispatcherThread: Class  
com.webmethods.jms.db.impl.JMSDispatcherThread removed

com.webmethods.jms.db.impl.JMSEvent: Class com.webmethods.jms.db.impl.JMSEvent removed

com.webmethods.jms.db.impl.JMSMessage: Class com.webmethods.jms.db.impl.JMSMessage removed

com.webmethods.jms.db.impl.JMSMessageConsumer: Class  
com.webmethods.jms.db.impl.JMSMessageConsumer removed

com.webmethods.jms.db.impl.JMSMessageProducer: Class  
com.webmethods.jms.db.impl.JMSMessageProducer removed

com.webmethods.jms.db.impl.JMSObjectMessage: Class  
com.webmethods.jms.db.impl.JMSObjectMessage removed

com.webmethods.jms.db.impl.JMSPollThread: Class com.webmethods.jms.db.impl.JMSPollThread removed

com.webmethods.jms.db.impl.JMSQueue: Class com.webmethods.jms.db.impl.JMSQueue removed

com.webmethods.jms.db.impl.JMSQueuePollThread: Class  
com.webmethods.jms.db.impl.JMSQueuePollThread removed

com.webmethods.jms.db.impl.JMSQueueReceiver: Class  
com.webmethods.jms.db.impl.JMSQueueReceiver removed

com.webmethods.jms.db.impl.JMSQueueSender: Class  
com.webmethods.jms.db.impl.JMSQueueSender removed

com.webmethods.jms.db.impl.JMSQueueSession: Class  
com.webmethods.jms.db.impl.JMSQueueSession removed

com.webmethods.jms.db.impl.JMSSession: Class com.webmethods.jms.db.impl.JMSSession removed

com.webmethods.jms.db.impl.JMSTopic: Class com.webmethods.jms.db.impl.JMSTopic removed

com.webmethods.jms.db.impl.JMSTopicBatchMessage: Class  
com.webmethods.jms.db.impl.JMSTopicBatchMessage removed

com.webmethods.jms.db.impl.JMSTopicPublisher: Class  
com.webmethods.jms.db.impl.JMSTopicPublisher removed

com.webmethods.jms.db.impl.JMSTopicSession: Class com.webmethods.jms.db.impl.JMSTopicSession removed

com.webmethods.jms.db.impl.JMSTopicSubscriber: Class  
com.webmethods.jms.db.impl.JMSTopicSubscriber removed

com.webmethods.jms.db.impl.QueueFactory: Class com.webmethods.jms.db.impl.QueueFactory removed

com.webmethods.jms.db.impl.TopicFactory: Class com.webmethods.jms.db.impl.TopicFactory removed



com.webmethods.jms.db.impl.db2.EventDelivered: Class  
com.webmethods.jms.db.impl.db2.EventDelivered removed

com.webmethods.jms.db.impl.db2.EventPoll: Class com.webmethods.jms.db.impl.db2.EventPoll  
removed

com.webmethods.jms.db.impl.db2.EventSave: Class com.webmethods.jms.db.impl.db2.EventSave  
removed

com.webmethods.jms.db.impl.db2.GetSqlTime: Class com.webmethods.jms.db.impl.db2.GetSqlTime  
removed

com.webmethods.jms.db.impl.db2.PublishQueue: Class  
com.webmethods.jms.db.impl.db2.PublishQueue removed

com.webmethods.jms.db.impl.db2.PurgeEvents: Class com.webmethods.jms.db.impl.db2.PurgeEvents  
removed

com.webmethods.jms.db.impl.db2.PurgeInactiveSubscriptions: Class  
com.webmethods.jms.db.impl.db2.PurgeInactiveSubscriptions removed

com.webmethods.jms.db.impl.db2.RegisterDestination: Class  
com.webmethods.jms.db.impl.db2.RegisterDestination removed

com.webmethods.jms.db.impl.db2.RegisterSubscription: Class  
com.webmethods.jms.db.impl.db2.RegisterSubscription removed

com.webmethods.jms.db.impl.db2.UnregisterSubscription: Class  
com.webmethods.jms.db.impl.db2.UnregisterSubscription removed

com.webmethods.jms.db.impl.db2.UpdateSubscriptions: Class  
com.webmethods.jms.db.impl.db2.UpdateSubscriptions removed

com.webmethods.jms.db.impl.mssql.EventDelivered: Class  
com.webmethods.jms.db.impl.mssql.EventDelivered removed

com.webmethods.jms.db.impl.mssql.EventPoll: Class com.webmethods.jms.db.impl.mssql.EventPoll  
removed

com.webmethods.jms.db.impl.mssql.EventSave: Class com.webmethods.jms.db.impl.mssql.EventSave  
removed

com.webmethods.jms.db.impl.mssql.GetSqlTime: Class  
com.webmethods.jms.db.impl.mssql.GetSqlTime removed

com.webmethods.jms.db.impl.mssql.PublishQueue: Class  
com.webmethods.jms.db.impl.mssql.PublishQueue removed

com.webmethods.jms.db.impl.mssql.PurgeEvents: Class  
com.webmethods.jms.db.impl.mssql.PurgeEvents removed

com.webmethods.jms.db.impl.mssql.PurgeInactiveSubscriptions: Class  
com.webmethods.jms.db.impl.mssql.PurgeInactiveSubscriptions removed

com.webmethods.jms.db.impl.mssql.RegisterDestination: Class  
com.webmethods.jms.db.impl.mssql.RegisterDestination removed

com.webmethods.jms.db.impl.mssql.RegisterSubscription: Class  
com.webmethods.jms.db.impl.mssql.RegisterSubscription removed

com.webmethods.jms.db.impl.mssql.UnregisterSubscription: Class  
com.webmethods.jms.db.impl.mssql.UnregisterSubscription removed

com.webmethods.jms.db.impl.mssql.UpdateSubscriptions: Class  
com.webmethods.jms.db.impl.mssql.UpdateSubscriptions removed

com.webmethods.jms.db.impl.mysql.EventDelivered: Class  
com.webmethods.jms.db.impl.mysql.EventDelivered removed

com.webmethods.jms.db.impl.mysql.EventPoll: Class com.webmethods.jms.db.impl.mysql.EventPoll  
removed

com.webmethods.jms.db.impl.mysql.EventSave: Class com.webmethods.jms.db.impl.mysql.EventSave  
removed

com.webmethods.jms.db.impl.mysql.GetSqlTime: Class  
com.webmethods.jms.db.impl.mysql.GetSqlTime removed

com.webmethods.jms.db.impl.mysql.PublishQueue: Class  
com.webmethods.jms.db.impl.mysql.PublishQueue removed

com.webmethods.jms.db.impl.mysql.PurgeEvents: Class  
com.webmethods.jms.db.impl.mysql.PurgeEvents removed

com.webmethods.jms.db.impl.mysql.PurgeInactiveSubscriptions: Class  
com.webmethods.jms.db.impl.mysql.PurgeInactiveSubscriptions removed

com.webmethods.jms.db.impl.mysql.RegisterDestination: Class  
com.webmethods.jms.db.impl.mysql.RegisterDestination removed

com.webmethods.jms.db.impl.mysql.RegisterSubscription: Class  
com.webmethods.jms.db.impl.mysql.RegisterSubscription removed

com.webmethods.jms.db.impl.mysql.UnregisterSubscription: Class  
com.webmethods.jms.db.impl.mysql.UnregisterSubscription removed

com.webmethods.jms.db.impl.mysql.UpdateSubscriptions: Class  
com.webmethods.jms.db.impl.mysql.UpdateSubscriptions removed

com.webmethods.jms.db.impl.oracle.EventDelivered: Class  
com.webmethods.jms.db.impl.oracle.EventDelivered removed

com.webmethods.jms.db.impl.oracle.EventPoll: Class com.webmethods.jms.db.impl.oracle.EventPoll  
removed

com.webmethods.jms.db.impl.oracle.EventSave: Class com.webmethods.jms.db.impl.oracle.EventSave  
removed

com.webmethods.jms.db.impl.oracle.GetSqlTime: Class  
com.webmethods.jms.db.impl.oracle.GetSqlTime removed

com.webmethods.jms.db.impl.oracle.PublishQueue: Class  
com.webmethods.jms.db.impl.oracle.PublishQueue removed

com.webmethods.jms.db.impl.oracle.PurgeEvents: Class  
com.webmethods.jms.db.impl.oracle.PurgeEvents removed

com.webmethods.jms.db.impl.oracle.PurgeInactiveSubscriptions: Class  
com.webmethods.jms.db.impl.oracle.PurgeInactiveSubscriptions removed

com.webmethods.jms.db.impl.oracle.RegisterDestination: Class  
com.webmethods.jms.db.impl.oracle.RegisterDestination removed

com.webmethods.jms.db.impl.oracle.RegisterSubscription: Class  
com.webmethods.jms.db.impl.oracle.RegisterSubscription removed

com.webmethods.jms.db.impl.oracle.UnregisterSubscription: Class  
com.webmethods.jms.db.impl.oracle.UnregisterSubscription removed

com.webmethods.jms.db.impl.oracle.UpdateSubscriptions: Class  
com.webmethods.jms.db.impl.oracle.UpdateSubscriptions removed

com.webmethods.jms.db.impl.sybase.EventPoll: Class com.webmethods.jms.db.impl.sybase.EventPoll removed

com.webmethods.jms.db.impl.sybase.PublishQueue: Class  
com.webmethods.jms.db.impl.sybase.PublishQueue removed

com.webmethods.jms.db.impl.sybase.PurgeEvents: Class  
com.webmethods.jms.db.impl.sybase.PurgeEvents removed

com.webmethods.jms.um.UmJMSClient: Class com.webmethods.jms.um.UmJMSClient removed

com.webmethods.jms.um.UmJMSConnProvider: Class  
com.webmethods.jms.um.UmJMSConnProvider removed

electric.util.holder.ArrayOfbyteInOut: Class electric.util.holder.ArrayOfbyteInOut removed

electric.util.holder.ArrayOfbyteOut: Class electric.util.holder.ArrayOfbyteOut removed

com.webmethods.portal.bizPolicy.command.system.xml.XMLImport: Field  
OVERWRITE\_PERMISSIONS\_KEY has been removed, but it was previously a constant

com.webmethods.portal.service.dir.IDirService: Method 'public boolean supportsNestedGroups()' has been added to an interface

com.webmethods.caf.faces.application.CAFStateManager: Class  
com.webmethods.caf.faces.application.CAFStateManager removed

com.webmethods.caf.faces.application.CAFStateManager\$TreeStructure: Class  
com.webmethods.caf.faces.application.CAFStateManager\$TreeStructure removed

com.webmethods.caf.faces.portlet.PortletViewFragmentPhaseListener: Class  
com.webmethods.caf.faces.portlet.PortletViewFragmentPhaseListener removed

com.webmethods.caf.faces.portlet.PortletViewFragmentPhaseListenerWrapper: Class  
com.webmethods.caf.faces.portlet.PortletViewFragmentPhaseListenerWrapper removed

com.webmethods.caf.faces.portlet.PortletViewHandler: Method 'protected void  
initResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been removed

com.webmethods.caf.faces.portlet.PortletViewHandler: Method 'protected void  
renderResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been  
removed

com.webmethods.caf.faces.render.html.command.CommandFormRenderer: In method 'protected  
java.lang.String getTagName()' the number of arguments has changed

com.webmethods.caf.faces.render.html.command.DisjointFormRenderer: In method 'protected  
java.lang.String getTagName()' the number of arguments has changed

com.webmethods.caf.faces.view.BaseViewHandler: Field STATE\_KEY has been removed, but it was  
previously a constant

com.webmethods.caf.faces.view.BaseViewHandler: Method 'protected void  
initResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been removed

com.webmethods.caf.faces.view.BaseViewHandler: Method 'protected void  
renderResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been  
removed

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Field INJECT\_STATE has been  
removed, but it was previously a constant

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Field NO\_RENDER has been removed,  
but it was previously a constant

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Field STATE\_KEY has been removed,  
but it was previously a constant

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Field VIEW\_FRAGMENT has been  
removed, but it was previously a constant

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Field VIEW\_FRAGMENT\_CLIENT\_ID  
has been removed, but it was previously a constant

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Return type of method 'protected void  
initResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been changed  
to javax.faces.context.ResponseWriter

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Method 'protected void  
renderResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been  
removed

com.webmethods.caf.faces.view.ViewFragmentPhaseListener: Class  
com.webmethods.caf.faces.view.ViewFragmentPhaseListener removed

## **Release 9.9**

### **Added API/ Description**

com.webmethods.caf.faces.data.task.ITaskInfo: Method 'public java.lang.Integer getIsMandatory()' has been added to an interface

com.webmethods.caf.faces.data.task.ITaskInfo: Method 'public void setIsMandatory(java.lang.Integer)' has been added to an interface

com.webmethods.caf.wsclient.saml.IArtifactFactory: Method 'public java.lang.String validateSAMLResponse(javax.servlet.http.HttpServletRequest, java.lang.String)' has been added to an interface

com.webmethods.portal.bizPolicy.biz.access.IAccessPolicy: Method 'public  
com.webmethods.portal.service.view.IListView  
listSecurityRealmObjects(com.webmethods.portal.bizPolicy.IContext,  
com.webmethods.portal.service.meta2.thing.IThingID)' has been added to an interface

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public  
java.util.List getAllTaskAttachments(java.lang.String, int, int)' has been added to an interface

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public  
java.lang.Integer getAllTaskAttachmentsCount(java.lang.String)' has been added to an interface

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public  
java.util.List getTaskComments(java.lang.String, int, int)' has been added to an interface

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public  
java.lang.Integer getTaskCommentsCount(int)' has been added to an interface

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public  
java.lang.Integer getTaskCommentsCount(java.lang.String)' has been added to an interface

com.webmethods.portal.mech.subscription.ISubscribableMechanics: Method 'public void  
checkViewSubscription(com.webmethods.portal.system.IURI,  
com.webmethods.portal.service.meta2.thing.IThingID, java.util.Map,  
com.webmethods.portal.service.meta2.thing.IThingID)' has been added to an interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public java.util.List  
getAllTaskAttachments(java.lang.String, int, int)' has been added to an interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public  
java.lang.Integer getAllTaskAttachmentsCount(java.lang.String)' has been added to an interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public java.util.List  
getTaskComments(java.lang.String, int, int)' has been added to an interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public

### Added API/ Description

java.lang.Integer getTaskCommentsCount(int)' has been added to an interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public java.lang.Integer getTaskCommentsCount(java.lang.String)' has been added to an interface

com.webmethods.portal.service.task.ITask: Method 'public java.lang.Integer getIsMandatory()' has been added to an interface

com.webmethods.portal.service.task.ITaskDefinition: Method 'public java.lang.String getTaskDescription()' has been added to an interface

### Removed API/ Description

com.webmethods.caf.faces.component.gmap.GMarkerGroup: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.gmap.GMarkerList: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.logic.AsyncIterator: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.logic.Import: Removed javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.logic.ImportTemplate: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.logic.Iterator: Removed javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.Breadcrumbs: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.FirstLevelList: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.NavList: Removed javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.PopupMenus: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.SecondLevelList: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.StaticMenus\$SubList: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.StaticMenus\$SubSubList: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

## Removed API/ Description

com.webmethods.caf.faces.component.nav.ThirdLevelList: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.AsyncList: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.AsyncListbox: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.AsyncTabsList: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.DataList: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.ListBox: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.TabsList: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed  
com.webmethods.portal.mech.access.IAccessMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed  
com.webmethods.portal.mech.clipboard.IClipboardMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed  
com.webmethods.portal.mech.storage.IBasicMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed  
com.webmethods.portal.mech.subscription.ISubscribableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed  
com.webmethods.portal.mech.view.IViewableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.access.IAccessMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.clipboard.IClipboardMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.storage.IBasicMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.subscription.ISubscribableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

## Removed API/ Description

com.webmethods.portal.mech.view.IViewableMechanics from the set of implemented interfaces

com.webmethods.rtl.script.JspC: Removed java.lang.Cloneable from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.clipboard.impl.ClipboardMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.storage.impl.BasicMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.subscription.impl.SubscribableMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.view.impl.ViewableMechanics from the list of superclasses

com.webmethods.rtl.script.JspC: Removed org.apache.tools.ant.ProjectComponent from the list of superclasses

com.webmethods.rtl.script.JspC: Removed org.apache.tools.ant.Task from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.clipboard.impl.ClipboardMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.storage.impl.BasicMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.subscription.impl.SubscribableMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.view.impl.ViewableMechanics from the list of superclasses

com.webmethods.rtl.script.JspC: Removed org.apache.tools.ant.ProjectComponent from the list of superclasses

com.webmethods.rtl.script.JspC: Removed org.apache.tools.ant.Task from the list of superclasses

com.webmethods.caf.faces.component.logic.Import: Method 'public boolean isListenerForSource(java.lang.Object)' has been removed

com.webmethods.caf.faces.component.logic.Import: Method 'public void processEvent(javax.faces.event.SystemEvent)' has been removed

com.webmethods.caf.faces.component.logic.ImportTemplate: Method 'public boolean isListenerForSource(java.lang.Object)' has been removed

com.webmethods.caf.faces.component.logic.ImportTemplate: Method 'public void processEvent(javax.faces.event.SystemEvent)' has been removed

com.webmethods.caf.faces.component.nav.PopupMenus: Method 'protected javax.faces.component.UIColumn getColumn()' has been removed

com.webmethods.caf.faces.component.table.html.DataList: Method 'public boolean



## Removed API/ Description

`isListenerForSource(java.lang.Object)` has been removed

`com.webmethods.caf.faces.component.table.html.DataList`: Method `'public void processEvent(javax.faces.event.SystemEvent)'` has been removed

`com.webmethods.caf.faces.component.tree.DataTree`: Method `'protected void autogenerate()'` has been removed

`com.webmethods.portal.service.install.impl.BaseInstallService`: Method `'protected com.webmethods.portal.service.install.IInstallServiceConfig getConfig()'` has been removed

`com.webmethods.portal.service.sql.runtime.base.TaskSearchAll`: Method `'protected void parseSearchQuery(int, java.util.Map, com.webmethods.caf.faces.data.task.impl.TaskSearchQuery, com.webmethods.portal.service.sql.runtime.base.TaskSearchAll$QueryInfo)'` has been removed

`com.webmethods.portal.service.sql.runtime.base.TaskSearchAll`: Method `'protected void parseSearchQueryTerm(int, java.util.Map, com.webmethods.caf.faces.data.task.impl.TaskSearchQueryTerm, com.webmethods.portal.service.sql.runtime.base.TaskSearchAll$QueryInfo)'` has been removed

`com.webmethods.portal.service.sql.runtime.base.TaskSearchFromInboxesPaged`: Method `'protected void parseSearchQueryTerm(int, java.util.Map, com.webmethods.caf.faces.data.task.impl.TaskSearchQueryTerm, com.webmethods.portal.service.sql.runtime.base.TaskSearchAll$QueryInfo)'` has been removed

`com.webmethods.rtl.script.JspC`: Method `'public void init()'` has been removed

`com.softwareag.caf.controls.mwsx.PeoplePickerDialog$FacetsMap`: Class  
`com.softwareag.caf.controls.mwsx.PeoplePickerDialog$FacetsMap` removed

`com.softwareag.caf.controls.mwsx.PeopleSwapBox$FacetsMap`: Class  
`com.softwareag.caf.controls.mwsx.PeopleSwapBox$FacetsMap` removed

`com.webmethods.caf.faces.component.nav.StaticMenus$ChildrenList`: Class  
`com.webmethods.caf.faces.component.nav.StaticMenus$ChildrenList` removed

`com.webmethods.caf.faces.component.nav.StaticMenus$FacetsMap`: Class  
`com.webmethods.caf.faces.component.nav.StaticMenus$FacetsMap` removed

`com.webmethods.caf.faces.component.nav.ToggleMenus$ChildrenList`: Class  
`com.webmethods.caf.faces.component.nav.ToggleMenus$ChildrenList` removed

`com.webmethods.caf.faces.component.nav.ToggleMenus$FacetsMap`: Class  
`com.webmethods.caf.faces.component.nav.ToggleMenus$FacetsMap` removed

`com.webmethods.caf.faces.component.search.SearchBar$FacetsMap`: Class  
`com.webmethods.caf.faces.component.search.SearchBar$FacetsMap` removed

`com.webmethods.caf.faces.component.table.SelectRowCheckbox$ChildrenList`: Class  
`com.webmethods.caf.faces.component.table.SelectRowCheckbox$ChildrenList` removed

`com.webmethods.caf.faces.component.table.SelectRowCheckbox$FacetsMap`: Class

## Removed API/ Description

com.webmethods.caf.faces.component.table.SelectRowCheckbox\$FacetsMap removed

com.webmethods.caf.faces.component.table.html.HtmlTableColumn\$FacetsMap: Class  
com.webmethods.caf.faces.component.table.html.HtmlTableColumn\$FacetsMap removed

com.webmethods.caf.faces.component.table.specialized.Newsfeed\$ChildrenList: Class  
com.webmethods.caf.faces.component.table.specialized.Newsfeed\$ChildrenList removed

com.webmethods.caf.faces.component.table.specialized.Newsfeed\$FacetsMap: Class  
com.webmethods.caf.faces.component.table.specialized.Newsfeed\$FacetsMap removed

com.webmethods.caf.faces.component.util.BaseChildrenList: Class  
com.webmethods.caf.faces.component.util.BaseChildrenList removed

com.webmethods.caf.faces.component.util.BaseFacetsAndChildrenIterator: Class  
com.webmethods.caf.faces.component.util.BaseFacetsAndChildrenIterator removed

com.webmethods.caf.faces.component.util.BaseFacetsMap: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$BaseCollection: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap\$BaseCollection removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$BaseCollection\$BaseIterator: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap\$BaseCollection\$BaseIterator removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Entries: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap\$Entries removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Entries\$EntrySetIterator: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap\$Entries\$EntrySetIterator removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Keys: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap\$Keys removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Keys\$KeySetIterator: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap\$Keys\$KeySetIterator removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Values: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap\$Values removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Values\$ValuesIterator: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap\$Values\$ValuesIterator removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.AntBaseFileListTask: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.AntBaseFileListTask removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.AntBaseTask: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.AntBaseTask removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.GenerateOSGiManifest: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.GenerateOSGiManifest removed

## Removed API/ Description

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.GetPortletInfo: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.GetPortletInfo removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PostRegisterPortlet: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PostRegisterPortlet removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PreRegisterPortlet: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PreRegisterPortlet removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PreUnregisterPortlet: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PreUnregisterPortlet removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.CreateSkinInstance: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.CreateSkinInstance removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.CreateThemeInstance: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.CreateThemeInstance removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.GetSkinInfo: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.GetSkinInfo removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.RemoveSkinInstance: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.RemoveSkinInstance removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.RemoveThemeInstance: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.RemoveThemeInstance removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.CreateDBOTables: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.CreateDBOTables removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.DropDBOTables: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.DropDBOTables removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.ExecuteCommand: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.ExecuteCommand removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.ExecuteTargetLoop: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.ExecuteTargetLoop removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetComponentInfo: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetComponentInfo removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetIsOSGiRuntime: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetIsOSGiRuntime removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetSystemPath: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetSystemPath removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetComponentInfo: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetComponentInfo removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetIsOSGiRuntime: Class

## Removed API/ Description

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetIsOSGiRuntime removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetSystemPath: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetSystemPath removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.InstallComponent: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.InstallComponent removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LoadClasses: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LoadClasses removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LoadConfig: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LoadConfig removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LookupComponent: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LookupComponent removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.RegisterComponent: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.RegisterComponent removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.RunSQLScript: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.RunSQLScript removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.UninstallComponent: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.UninstallComponent removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.UnregisterComponent: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.UnregisterComponent removed

com.webmethods.portal.mech.install.impl.NativeInstallMechanics: Class

com.webmethods.portal.mech.install.impl.NativeInstallMechanics removed

com.webmethods.portal.service.install.IInstallServiceConfig: Class

com.webmethods.portal.service.install.IInstallServiceConfig removed

com.webmethods.portal.service.install.impl.InstallServiceConfig: Class

com.webmethods.portal.service.install.impl.InstallServiceConfig removed

com.webmethods.portal.service.install.impl.ant.AntInstallService: Class

com.webmethods.portal.service.install.impl.ant.AntInstallService removed

com.webmethods.portal.service.install.impl.ant.AntLogSupport: Class

com.webmethods.portal.service.install.impl.ant.AntLogSupport removed

com.webmethods.portal.service.install.impl.ant.AntRunner: Class

com.webmethods.portal.service.install.impl.ant.AntRunner removed

com.webmethods.portal.service.install.impl.ant.AntRunner\$AntPropertyHelper: Class

com.webmethods.portal.service.install.impl.ant.AntRunner\$AntPropertyHelper removed

com.webmethods.portal.service.install.impl.ant.LpInstallService: Class

com.webmethods.portal.service.install.impl.ant.LpInstallService removed

## Removed API/ Description

com.webmethods.portal.service.install.impl.ant.WarLpInstallService: Class  
com.webmethods.portal.service.install.impl.ant.WarLpInstallService removed

com.webmethods.rtl.logging.Mws13818Filter: Class com.webmethods.rtl.logging.Mws13818Filter removed

com.webmethods.rtl.util.msg.IRuntimeMessage: Class com.webmethods.rtl.util.msg.IRuntimeMessage removed

com.webmethods.rtl.util.msg.IRuntimeMessageCallback: Class  
com.webmethods.rtl.util.msg.IRuntimeMessageCallback removed

com.webmethods.rtl.util.msg.IRuntimeMessageHook: Class  
com.webmethods.rtl.util.msg.IRuntimeMessageHook removed

com.webmethods.rtl.util.msg.RuntimeMessageUtil: Class  
com.webmethods.rtl.util.msg.RuntimeMessageUtil removed

com.webmethods.rtl.util.msg.RuntimeMessageUtil\$RuntimeListeners: Class  
com.webmethods.rtl.util.msg.RuntimeMessageUtil\$RuntimeListeners removed

com.webmethods.rtl.util.msg.RuntimeMessageUtil\$RuntimeMessageListener: Class  
com.webmethods.rtl.util.msg.RuntimeMessageUtil\$RuntimeMessageListener removed

com.webmethods.rtl.util.obj.CyclicIterator: Class com.webmethods.rtl.util.obj.CyclicIterator removed

com.webmethods.rtl.util.obj.EmptyEnumeration: Class  
com.webmethods.rtl.util.obj.EmptyEnumeration removed

com.webmethods.rtl.util.obj.EmptyIterator: Class com.webmethods.rtl.util.obj.EmptyIterator removed

com.webmethods.rtl.util.obj.FileClassLoader: Class com.webmethods.rtl.util.obj.FileClassLoader removed

com.webmethods.rtl.util.obj.IntMinMaxInfo: Class com.webmethods.rtl.util.obj.IntMinMaxInfo removed

com.webmethods.rtl.util.obj.IntStringMap: Class com.webmethods.rtl.util.obj.IntStringMap removed

com.webmethods.rtl.util.obj.IteratorTools: Class com.webmethods.rtl.util.obj.IteratorTools removed

com.webmethods.rtl.util.obj.PersistentMap: Class com.webmethods.rtl.util.obj.PersistentMap removed

com.webmethods.rtl.util.obj.PropertyGroup: Class com.webmethods.rtl.util.obj.PropertyGroup removed

com.webmethods.rtl.util.obj.PropertyGroups: Class com.webmethods.rtl.util.obj.PropertyGroups removed

com.webmethods.rtl.util.obj.SortableArray: Class com.webmethods.rtl.util.obj.SortableArray removed

com.webmethods.rtl.util.thread.ReadWriteMutex: Class  
com.webmethods.rtl.util.thread.ReadWriteMutex removed

## Removed API/ Description

com.softwareag.caf.controls.mwsx.PeoplePickerDialog: Removed field m\_facets

com.softwareag.caf.controls.mwsx.PeopleSwapBox: Removed field m\_facets

com.webmethods.caf.faces.component.behavior.BaseBehavior: Removed field m\_for

com.webmethods.caf.faces.component.behavior.CustomDragBehavior: Removed field m\_allowDrag

com.webmethods.caf.faces.component.behavior.CustomDragBehavior: Removed field m\_cursor

com.webmethods.caf.faces.component.behavior.CustomDragBehavior: Removed field m\_move

com.webmethods.caf.faces.component.behavior.CustomDragBehavior: Removed field m\_propagateEvent

com.webmethods.caf.faces.component.behavior.CustomDropBehavior: Removed field m\_allowDrop

com.webmethods.caf.faces.component.behavior.CustomDropBehavior: Removed field m\_handleDrop

com.webmethods.caf.faces.component.behavior.CustomDropBehavior: Removed field m\_hoverClass

com.webmethods.caf.faces.component.behavior.CustomDropBehavior: Removed field m\_onDropSetValue

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_add

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_allowDrag

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_allowDrop

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_copy

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_handleDrop

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_hoverClass

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_remove

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_reorder

com.webmethods.caf.faces.component.behavior.DragToReorderColumnsBehavior: Removed field m\_storePreferences

com.webmethods.caf.faces.component.behavior.DragToResizeBehavior: Removed field m\_resizeBottom

com.webmethods.caf.faces.component.behavior.DragToResizeBehavior: Removed field m\_resizeLeft

com.webmethods.caf.faces.component.behavior.DragToResizeBehavior: Removed field m\_resizeRight

## Removed API/ Description

com.webmethods.caf.faces.component.behavior.DragToResizeBehavior: Removed field m\_resizeTop

com.webmethods.caf.faces.component.behavior.DragToResizeColumnsBehavior: Removed field m\_storePreferences

com.webmethods.caf.faces.component.behavior.RaiseOnChangeBehavior: Removed field m\_command

com.webmethods.caf.faces.component.behavior.SynchronizeValuesBehavior: Removed field m\_with

com.webmethods.caf.faces.component.command.html.AsyncCommandButton: Removed field m\_refresh

com.webmethods.caf.faces.component.command.html.AsyncCommandIcon: Removed field m\_refresh

com.webmethods.caf.faces.component.command.html.AsyncCommandInterval: Removed field m\_interval

com.webmethods.caf.faces.component.command.html.AsyncCommandInterval: Removed field m\_waitUntilReloaded

com.webmethods.caf.faces.component.command.html.AsyncCommandLink: Removed field m\_refresh

com.webmethods.caf.faces.component.command.html.AsyncHiddenCommand: Removed field m\_refresh

com.webmethods.caf.faces.component.command.html.CommandForm: Removed field m\_forms

com.webmethods.caf.faces.component.command.html.CommandIcon: Removed field m\_alt

com.webmethods.caf.faces.component.command.html.CommandIcon: Removed field m\_url

com.webmethods.caf.faces.component.command.html.CommandIcon: Removed field m\_urlMouseDown

com.webmethods.caf.faces.component.command.html.CommandIcon: Removed field m\_urlMouseover

com.webmethods.caf.faces.component.events.OpenAjaxScript: Removed field openAjaxTopic

com.webmethods.caf.faces.component.events.OpenAjaxScript: Removed field shouldSubscribe

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_converter

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_entriesProvider

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_exportCharacterEncoding

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_exportFileName

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_exportForceDownload

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_feedProvider

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_feedUrl

## Removed API/ Description

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_for  
com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_height  
com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_initialAddress  
com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_initialCountry  
com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_key  
com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_latitude  
com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_longitude  
com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_type  
com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_width  
com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_zoom  
com.webmethods.caf.faces.component.gmap.GMapControl: Removed field m\_anchor  
com.webmethods.caf.faces.component.gmap.GMapControl: Removed field m\_offsetX  
com.webmethods.caf.faces.component.gmap.GMapControl: Removed field m\_offsetY  
com.webmethods.caf.faces.component.gmap.GMapControl: Removed field m\_type  
com.webmethods.caf.faces.component.gmap.GMapGetCoordsScript: Removed field m\_latitude  
com.webmethods.caf.faces.component.gmap.GMapGetCoordsScript: Removed field m\_longitude  
com.webmethods.caf.faces.component.gmap.GMapKey: Removed field m\_key  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_clickable  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_draggable  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_icon  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_iconSizeHeight  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_iconSizeWidth  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_initialAddress  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_initialCountry  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_latitude  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_longitude  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_selected  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_title  
com.webmethods.caf.faces.component.gmap.GMarkerGroup: Removed field m\_groupProvider



## Removed API/ Description

com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_clickable  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_draggable  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_icon  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_iconSizeHeight  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_iconSizeWidth  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_initialAddress  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_initialCountry  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_latitude  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_longitude  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_multiple  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_title  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_multiple  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_title  
com.webmethods.caf.faces.component.input.DateInput: Removed field m\_pattern  
com.webmethods.caf.faces.component.input.DateInput: Removed field m\_showMonthAndYearMenus  
com.webmethods.caf.faces.component.input.DateInput: Removed field m\_showSeconds  
com.webmethods.caf.faces.component.input.DateInput: Removed field m\_showTime  
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com.webmethods.caf.faces.component.input.DateRangeInput: Removed field m\_layout  
com.webmethods.caf.faces.component.input.DateRangeInput: Removed field m\_pastRanges  
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com.webmethods.caf.faces.component.logic.Import: Removed field m\_value  
com.webmethods.caf.faces.component.logic.ImportTemplate: Removed field m\_value  
com.webmethods.caf.faces.component.logic.LoadResourceBundle: Removed field m\_basename

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com.webmethods.caf.faces.component.message.FormattedMessage: Removed field m\_showDetail  
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com.webmethods.caf.faces.component.output.refresh.RefreshIcon: Removed field m\_for  
com.webmethods.caf.faces.component.output.refresh.RefreshInterval: Removed field m\_for  
com.webmethods.caf.faces.component.output.refresh.RefreshInterval: Removed field m\_interval  
com.webmethods.caf.faces.component.output.refresh.RefreshInterval: Removed field m\_waitUntilReloaded  
com.webmethods.caf.faces.component.output.refresh.RefreshLink: Removed field m\_for  
com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_disableWhenHidden  
com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_lazy  
com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_refreshOnShow  
com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_suppressInputs  
com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_twoPass  
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com.webmethods.caf.faces.component.panel.OverlayPanel: Removed field m\_showEffect  
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com.webmethods.caf.faces.component.panel.PropertyLine: Removed field m\_description

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com.webmethods.caf.faces.component.panel.StackPanel: Removed field m\_value

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com.webmethods.caf.faces.component.panel.StaticRow: Removed field m\_width

com.webmethods.caf.faces.component.search.BaseSearchControlHelper: Removed field fQuerySupplied

com.webmethods.caf.faces.component.search.BaseSearchControlHelper: Removed field fQuerySuppliedExpr

com.webmethods.caf.faces.component.search.SearchBar: Removed field m\_facets

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com.webmethods.caf.faces.component.table.BaseSelectRow: Removed field m\_accesskey  
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com.webmethods.caf.faces.component.table.BaseSelectRow: Removed field m\_multiple  
com.webmethods.caf.faces.component.table.BaseSelectRow: Removed field m\_tabindex  
com.webmethods.caf.faces.component.table.DataPager: Removed field m\_for  
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com.webmethods.caf.faces.component.table.DataPages: Removed field m\_showAlways  
com.webmethods.caf.faces.component.table.MoveRowIcon: Removed field m\_title  
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com.webmethods.caf.faces.component.table.SelectRowCheckbox: Removed field m\_children  
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com.webmethods.caf.faces.component.table.html.AsyncList: Removed field m\_bufferMax  
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com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field dayVar  
com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field eventVar  
com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field m\_allDay  
com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field m\_calendarEndDate  
com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field m\_calendarStartDate

## Removed API/ Description

com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field m\_displayUnits

com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field m\_events

com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field m\_eventsSet

com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field m\_initialDate

com.webmethods.caf.faces.component.table.html.DataList: Removed field m\_marker

com.webmethods.caf.faces.component.table.html.DataList: Removed field m\_selected

com.webmethods.caf.faces.component.table.html.DataList: Removed field m\_selectedRowClass

com.webmethods.caf.faces.component.table.html.DataTable: Removed field createdToOriginalRowIds

com.webmethods.caf.faces.component.table.html.DataTable: Removed field filter

com.webmethods.caf.faces.component.table.html.DataTable: Removed field first

com.webmethods.caf.faces.component.table.html.DataTable: Removed field firstSet

com.webmethods.caf.faces.component.table.html.DataTable: Removed field originalToCreatedRowIds

com.webmethods.caf.faces.component.table.html.DataTable: Removed field var

com.webmethods.caf.faces.component.table.html.HtmlTableColumn: Removed field m\_facets

com.webmethods.caf.faces.component.table.html.ListBox: Removed field m\_rowClasses

com.webmethods.caf.faces.component.table.specialized.Newsfeed: Removed field m\_children

com.webmethods.caf.faces.component.table.specialized.Newsfeed: Removed field m\_facets

com.webmethods.caf.faces.component.table.specialized.Newsfeed: Removed field m\_layout

com.webmethods.caf.faces.component.table.specialized.Newsfeed: Removed field m\_size

com.webmethods.caf.faces.component.table.specialized.Newsfeed: Removed field m\_url

com.webmethods.caf.faces.component.toggle.InitiateToggle: Removed field m\_for

com.webmethods.caf.faces.component.toggle.OneWayToggle: Removed field m\_for

com.webmethods.caf.faces.component.toggle.OneWayToggle: Removed field m\_way

com.webmethods.caf.faces.component.toggle.html.HtmlOneWayToggle: Removed field m\_disabled

com.webmethods.caf.faces.component.toggle.html.HtmlOneWayToggle: Removed field m\_disabledClass

com.webmethods.caf.faces.component.toggle.html.HtmlOneWayToggle: Removed field m\_enabledClass

com.webmethods.caf.faces.component.toggle.html.HtmlOneWayToggle: Removed field m\_width

com.webmethods.caf.faces.component.toggle.html.HtmlOneWayToggleCheckbox: Removed field

## Removed API/ Description

m\_checked

com.webmethods.caf.faces.component.toggle.html.HtmlOneWayToggleCheckbox: Removed field m\_checkedWhenVisible

com.webmethods.caf.faces.component.toggle.html.HtmlToggle: Removed field m\_disabled

com.webmethods.caf.faces.component.toggle.html.HtmlToggle: Removed field m\_disabledClass

com.webmethods.caf.faces.component.toggle.html.HtmlToggle: Removed field m\_enabledClass

com.webmethods.caf.faces.component.toggle.html.HtmlToggle: Removed field m\_layout

com.webmethods.caf.faces.component.toggle.html.HtmlToggle: Removed field m\_width

com.webmethods.caf.faces.component.tree.AsyncTree: Removed field m\_initialDepth

com.webmethods.caf.faces.component.tree.AsyncTree: Removed field m\_progressDelay

com.webmethods.caf.faces.component.tree.AsyncTree: Removed field m\_progressFlashOnComplete

com.webmethods.caf.faces.component.tree.AsyncTree: Removed field m\_progressMsg

com.webmethods.caf.faces.component.tree.AsyncTree: Removed field m\_refillDepth

com.webmethods.caf.faces.component.tree.AsyncTree: Removed field m\_refreshOnShow

com.webmethods.caf.faces.component.tree.AsyncTree: Removed field m\_suppressInputs

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_collapseAllIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_collapseIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_expandAllIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_expandIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_leafIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_lineBottomIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_lineIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_lineNoneIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_lineTopIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_loadingIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_showSortLink

com.webmethods.caf.faces.view.BaseViewHandler: Removed field RE\_FE\_URL

com.webmethods.portal.faces.view.PortalViewHandler: Removed field RE\_FE\_URL

com.webmethods.portal.taglib.PortalIterationTagSupport: Removed field EMPTY\_ITERATOR

## 10.0 Copyright Information

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## 11.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

CAF-RM-912-20161018

# webMethods Content Service Platform 9.0 SP1 Readme

June 2013

This file contains important information you must read before using webMethods Content Service Platform 9.0 SP1. You can find additional information about Content Service Platform 9.0 SP1 on the [Software AG Documentation website](#). In addition, the following suite-related information is also available at that location:

*webMethods Product Suite Release Notes*

*webMethods System Requirements*

*webMethods System Cache Specifications*

*Using the Software AG Installer*

*Installing webMethods Products*

*Using the Software AG Update Manager (fixes)*

*Upgrading webMethods Products*

Product Documentation

You can find the following information in the Products section of the [Empower website](#):

Security Information

Globalization Information

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[4.0 Fixes and Enhancements](#)

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## 1.0 Critical Information

This section lists the critical issues that were known when this readme was published. For critical information found later, go to the Knowledge Center portion of the [Empower website](#).

- IPv6 Support.  
The CSP Windows client does not support IPv6. If your environment is using IPv6, and one of your CSP clients does not display content, then to solve this problem replace the string "\$Dynamic IP" with the IPv4 address that is reachable from the client in each of the comm.spring.xml files. Specifically, after all products are installed, replace "\$Dynamic\_IP" with the correct IP address in each of the "comm.spring.xml" files in <your install dir>/CSP/server.
- AIX Support.  
When Content Service Platform is installed on AIX you need to manually modify the configuration at: <installation folder>/CSP/server/cfg/IOC/Communication/comm.spring.xml. Specifically, the "keyManagerFactory" property should be set to "IbmX509" instead of "SunX509".

## 2.0 Known Issues

This section lists issues that were known when this readme was published. For known issues found later, go to the Knowledge Center portion of the [Empower website](#).

- CCV-106  
Error messages appear in the console upon startup when connected to an Oracle database.  
When webMethods Content Service Platform is connected to an Oracle database, error messages appear in the console when you start the CSP with csp.[bat | sh]. These error messages are in the form 'ERROR: [sag-cjdbc42-0011][Oracle JDBC Driver][Oracle]ORA-01408: such column list already indexed', and are the result of a low-level API that is outside the scope of CSP.  
Workaround: These messages are not actually errors, but are informative messages. They do not affect functionality and can be safely ignored.
- CCV-145  
Attaching SharePoint content to one task and then attaching the same content to another task leads to no search results for this content.  
When SharePoint content is attached to only one task, the content is available as expected. If the user attaches the same content to a second task, the content is not visible in either task, and a search by the taskID of either task returns no results. SharePoint uses the type Multiline of Text, and if Enhanced Text is used, this returns <div> wrapped values. Content is associated with a task by using an index-named TaskID. For the search to work, TaskIDs must contain numbers only. When these numbers are wrapped in <div> tags, the search fails.  
Workaround: In SharePoint, configure TaskIDs and ProcessIDs to be "Plain Text". This can be edited from the Additional Column Settings (this is relevant only for the type Multiline of Text).
- CCV-151  
CSP Server cannot start due to external repositories not running.  
When you start webMethods Content Service Platform, the application checks for connectivity to the defined external repositories. If these external repositories are not found, CSP will automatically shut down. This condition can occur when there are network issues between CSP and the external repository, or if the external repository is not running. Various biz.i2z.system errors are recorded in the log file.  
Workaround: To successfully start CSP, resolve any connectivity issues and ensure that the external repository is running.

- **CCV-208**  
When defining CSP content filters, the filter wizard interface may become unstable.  
In My webMethods Server, when creating Content Service Platform filters, some instability might occur. For example, if you attempt to create a filter for "System", "system", "Auto\*", "+", ..., then all nodes in the content hierarchy disappear.  
There is no workaround for this issue.
  
- **CCV-276**  
A connection error occurs when the Integration Server is not found at the default host/port combination.  
When My webMethods Server and Integration Server are on different servers, using the Content Configurator page in My webMethods Server causes a java.net.ConnectException: Connection refused error.  
Workaround: Edit the hard-coded host and port values found in the web.xml and portlet.xml files of the wm\_csp\_configurator.war. You must edit those values to point to your Integration Server location when your Integration Server and My webMethods Server are not on the same machine, and/or your Integration Server is not running on the standard port of 5555.
  
- **CCV-352**  
CSP server continues running when a shutdown script is executed on Linux platform.  
On a Linux platform, executing the shutdown.sh script provided in the CSP installation will not shutdown the CSP server.  
Workaround: Open a browser with this shutdown URL: http://localhost:<port value>/shutdown/, where "<port value>" is six greater than your CPS's SMI port. For example if you installed the CSP with a default SMI port value of 9010, which is the port provided for you in the Installer, then the shutdown URL would be http://localhost:9016/shutdown/.
  
- **CCV-354**  
The CSP server may not operate properly if a CSP port is reassigned.  
The default CSP server port value is defined as 9010, and only ports with values that are divisible by 10 (9020, 9030, etc.) have been tested as supportable port values for the CSP server. Defining the port to a value not divisible by 10 (such as 9011) may cause the server to operate improperly.  
Workaround: When changing the default port number of 9010, reassign the CSP port to a value divisible by 10.

## 3.0 Usage Notes

This section highlights product limitations and changes to product behavior introduced in this release.

None.

## 4.0 Fixes and Enhancements

For a detailed list of the enhancements included in webMethods Content Service Platform 9.0 SP1, see the Release Notes available on the [Software AG Documentation website](#).

### 4.1 Fixes and Service Packs Included in This Release

This section lists the fixes and service packs for previous releases that have been included into the current release. If only some issues in a fix or service pack have been included, that partially included fix or service pack



is not listed here, and those issues are listed separately in [Section 4.2 Resolved Issues](#). See the Knowledge Center section of the [Empower website](#) for more information about fixes and service packs.

- DES\_8.2\_SP2\_Process\_Fix8
- CCV\_8.2\_SP2\_Fix1
- CCV\_8.2\_SP2\_Client\_Fix1
- CCV\_8.2\_SP2\_MWS\_Fix1

## **4.2 Resolved Issues**

This section lists issues that were resolved in this release and that are not included in the fixes and service packs listed in [Section 4.1 Fixes and Service Packs Included in This Release](#). These issues might have been resolved in a fix or service pack that was not included in its entirety into this release, or they might have been resolved since the last fix or service pack was released.

- CCV-66  
A listener defined with “<>” as a filter condition does not function as expected.  
If a listener is defined to filter with the “<>” condition, the condition will not be observed and processes expected to be filtered will instead be triggered.  
This issue is now resolved.
- CCV-89  
A null pointer exception is shown on the CSP console when a process is executed.  
Process execution that is triggered by a CSP-defined listener will cause a null pointer exception to be displayed on the CSP.  
This issue is now resolved.
- CCV-101 (CCV\_8.2\_SP2\_MWS\_Fix1)  
A task content attachment Last Modified Date is not updated.  
When editing attached task content or adding/removing an attached task file, the Last Modified Date column is not updated and remains empty. The Last Modified Date field should initially show the creation date and then the date when the attachment was last updated.  
The issue is now resolved.
- CCV-110  
An Integration Server contained in a defined listener cannot be changed after the listener is created in Content Configurator.  
If a listener is created in the Content Configurator, the Integration Server defined in the listener cannot be subsequently changed to a different server.  
This issue is now resolved.
- CCV-116 (CCV\_8.2\_SP2\_MWS\_Fix1)  
A pop-up dialog box does not close after clicking the Cancel button.  
This situation occurs after opening a dialog box, such as the Add Filter function. If no values are specified and the Cancel button is clicked, the dialog box does not close.  
This issue is now resolved.
- CCV-122 (CCV\_8.2\_SP2\_MWS\_Fix1)  
In My webMethods, the Content Configurator page does not load on a Linux system.

When running My webMethods Server on a Linux system, the following error occurs when trying to access the Content Configurator page: "[POP.016.0006] View source is not found: /Wm\_csp\_configurator\_wizard/Home.view".  
This issue is now resolved.

- CCV-140  
Identical functionality occurs with the Delete Event and Deactivate Event actions.  
The CSP features of Delete Event and Deactivate Event for a listener are identical.  
This issue is now resolved. The Delete Event action is removed.
  
- CCV-142 (CCV\_8.2\_SP2\_MWS\_Fix1)  
A CSP listener does not fire after the listener is modified.  
After a user modifies an existing listener, the listener data is disabled and the document association removed. This causes the listener to fail to detect new document instances.  
This issue is now resolved.
  
- CCV-156  
The installed documentation is not the latest version.  
The HTML documentation installed in the ..\csp\doc directory is the documentation for release version 8.2, and does not include the updated content for version 8.2.2.  
This issue is now resolved.
  
- CCV-157 (CCV\_8.2\_SP2\_MWS\_Fix1)  
Cannot connect to a CSP server.  
After configuring a Content Service Platform environment and server in My webMethods, a "connection refused" error occurs when trying to connect to the CSP server. This error occurs when My webMethods Server and Integration Server are running on different servers.  
This issue is now resolved.
  
- CCV-161 (CCV\_8.2\_SP2\_MWS\_Fix1)  
Connections cannot be defined to more than one Content Service Platform (CSP) server.  
For a given CSP installation, creating connections to two or more Content Service Platform servers leads to unpredictable results.  
The issue is now resolved.
  
- CCV-163 (CCV\_8.2\_SP2\_MWS\_Fix1)  
A CSP listener no longer works as expected after modification.  
After a CSP listener is created, if it is modified, the listener becomes inactive and the specified document type is no longer associated with the listener.  
This issue is now resolved.
  
- CCV-166 (DES\_8.2\_SP2\_Process\_Fix3)  
Document creation fails for Content Service Platform/E-form documents.  
This can occur when a workspace or any combination of names contains a space during Content Service Platform or e-form document creation. The following errors can occur: "Cannot store information about the selected item" and "Cannot create field."  
This issue is now resolved.
  
- CCV-191 (CCV\_8.2\_SP2\_Fix1 and CCV\_8.2\_SP2\_MWS\_Fix1)  
Connections cannot be defined to more than one Content Service Platform (CSP) server.  
For a given CSP installation, creating connections to two or more Content Service Platform servers leads to

unpredictable results.

The issue is now resolved.

- CCV-223 (CCV\_8.2\_SP2\_Fix1 and CCV\_8.2\_SP2\_MWS\_Fix1)  
The CSP Server does not start after applying wMFix.cspserver\_8.2.2.0001-0007.  
This issue is now resolved.
- CCV-226 (CCV\_8.2\_SP2\_Fix1 and CCV\_8.2\_SP2\_MWS\_Fix1)  
CCV\_8.2\_SP2\_Fix1 is not getting installed in Red Hat Enterprise Linux environment.  
This issue is now resolved.
- CCV-277 (DES\_8.2\_SP2\_Process\_Fix8)  
You may be unable to edit templates in Designer when your Content Service Platform environment uses non-default credentials.  
This is because default credentials were hard coded in the Designer e-form client library.  
This issue is now resolved.
- WMDPD-6751 (DES\_8.2\_SP2\_Process\_Fix7)  
When trying to import an e-form from a remote My webMethods Server, you may receive a connection error even though the server is listening on the necessary port. In the Eclipse workspace metadata log, you may see a StackOverflow error.  
This occurs because of a recursive loop in the hash generation algorithm when traversing the e-form document object model.  
This issue is now resolved.

### **4.3 Enhancements**

For a detailed list of the enhancements included in Content Service Platform 9.0 SP1, see the Release Notes available on the [Software AG Documentation website](#).

### **4.4 Documentation Changes**

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content.

None.

### **4.5 Terminology Changes**

This section lists terminology that has changed since the last full release of the product.

None.

### **4.6 Added, Removed, Deprecated, or Changed Items**

This section lists product functionality that has been added, removed, deprecated, or changed since the last full release of the product. Deprecated Built-In services and APIs are listed in the relevant sections that follow this one.

None.

## **4.7 Added, Removed, Deprecated, or Changed Built-In Services**

This section lists Built-In services that have been added, removed, deprecated, or changed since the last full release of the product.

None.

## **4.8 Added, Removed, Deprecated, or Changed APIs**

This section lists APIs that have been added, removed, deprecated, or changed since the last full release of the product.

None.

## **5.0 Copyright Information**

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## **6.0 Support**

To obtain support for webMethods Product Suite components, refer to the following resources:

### [Empower website](#)

Visit the Empower website to learn about support policies and critical alerts, read technical articles and papers, download products, fixes, and service packs, submit feature/enhancement requests, and more.

### [Software AG Developer Community for webMethods](#)

Visit the Software AG Developer Community to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

CCV-RM-90SP1-20130618a

# webMethods Database Component Configurator 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods Database Component Configurator 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues that were known for the current release when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- WDA - 918  
In the Database Component Configurator, when a product is selected and then the mouse cursor is pointed to the radio button component, the selection is set back to All. Moving the mouse cursor without clicking the button should not change the selection.  
There is currently no workaround for this issue.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.12***

- DC\_9.9\_DBS\_Fix5
- DC\_9.8\_DBS\_Fix8
- DC\_9.7\_DBS\_Fix10
- DC\_9.6\_DBS\_Fix11

### ***Release 9.10***

- DC\_9.9\_DBS\_Fix3

- DC\_9.8\_DBS\_Fix6
- DC\_9.7\_DBS\_Fix8
- DC\_9.6\_DBS\_Fix9

### ***Release 9.9***

- DC\_9.8\_DBS\_Fix2
- DC\_9.7\_DBS\_Fix5
- DC\_9.6\_DBS\_Fix6
- DC\_8.2\_SP2\_DBS\_Fix12

### ***Release 9.8***

- DC\_9.6\_DBS\_Fix4
- DC\_9.0\_SP1\_DBS\_Fix5
- DC\_8.2\_SP2\_DBS\_Fix11

### ***Release 9.7***

- DC\_9.6\_DBS\_Fix2
- DC\_9.5\_SP1\_DBS\_Fix4
- DC\_9.5\_SP1\_DCC\_Fix1
- DC\_9.0\_SP1\_DBS\_Fix4
- DC\_8.2\_SP2\_DBS\_Fix10

### ***Release 9.6***

- DC\_9.5\_SP1\_DBS\_Fix1
- DC\_9.0\_SP1\_DCC\_Fix1
- DC\_9.0\_SP1\_DBS\_Fix2
- DC\_8.2\_SP2\_DBS\_Fix8

## **Release 9.5**

- DC\_9.0\_SP1\_DBS\_Fix1
- DC\_8.2\_SP2\_DBS\_Fix7

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

- WDA-844  
Incorrect Copyright year in the DCC "About" window.  
The Copyright year in the DCC "About" window shows 2006 – 2015. It should be 2006 – 2016.  
This issue is resolved.

### **Release 9.8**

- WDA-768  
Database Component Configurator does not work with SSO/NTLM authentication when it is installed on Microsoft Windows.  
When you try to use the Authentication Method as NTLM to establish a connection to Microsoft SQL Server, Database Component Configurator fails with the following exception:  
*Authentication was requested but the required DDJDBCx64Auth05.dll was not found on the path specified by the java.library.path system property.*  
Workaround: Add the following statement in the setEnv.bat file available at  
<Install\_Dir>\common\db\bin:  
set SSO=<Install\_Dir>\common\bin  
set JAVA\_OPTS=%JAVA\_OPTS% -Djava.library.path="%SSO%"  
where <Install\_Dir> is the installation directory.

### **Release 9.5**

- WDA-317  
Database component upgrades from 7.1.2.0 to 8.0.1.0 fail.  
If you try to migrate database components using a PRODUCT option, for example, PRODUCT - Optimize, you receive the error "Optimize 7.1.2.0 not installed. Migration path may be wrong."  
The workaround is to migrate individual database components. For instructions, see the webMethods Upgrade Guide. Do not use the PRODUCT options to migrate database components.



- WDA-693  
The Database Component Configurator issues a `NullPointerException` when importing the configurations through the command line interface (CLI) on Linux/Unix.  
The Database Component Configurator does not store passwords in exported configurations file, and while importing the configurations file, DCC issues a `NullPointerException` when it encounters a null value for the password.  
This issue is resolved.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### ***Release 9.8***

- Software AG documentation is no longer available on the Software AG installer. You can access all Software AG documentation on the [Documentation website](#).

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

## 9.0 Copyright Information

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## 10.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

DCC-RM-912-20161018

# webMethods Deployer 9.12 and webMethods Asset Build Environment 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods Deployer 9.12 and webMethods Asset Build Environment 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

### *Deployer*

- LJP-2016  
For AgileApps assets, Deployer displays the asset ID instead of the asset name, while checking for unresolved dependencies.  
While adding AgileApps package assets to a Deployment set, asset IDs are shown instead of asset names for unresolved dependencies of selected packages.  
There is currently no workaround for this issue.
- WMDPD-1067  
Deployer does not show process models as dependencies for associated event maps.  
When you include an event map that is associated with a process model in an Optimize deployment set, Deployer does not list the process model as a dependency. You therefore cannot resolve this dependency and include the process model in the deployment set.  
Workaround: Create and deploy a deployment set that includes the process model and then deploy the event map.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

### *Deployer*

- Runtime-based deployment projects can deploy assets from 7.1 SP3 and later releases of webMethods runtimes. To accommodate deployment of assets from earlier releases, create source and target servers for specific versions of the Deployer. Projects can include only sources and targets of the same version except for version 8.0 assets, which you can deploy to either 8.0 or 8.2 servers.

- Repository-based deployment projects support checkpoint and rollback for all runtimes except for webMethods Optimize.
- Repository-based deployment projects support deletion sets for all runtimes except for Optimize.
- Repository-based projects support configuration of project settings through the Project Automator.
- Deployer now supports using zip file as a source in SideBySide upgrade.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Deployer***

#### ***Release 9.12***

- DEP\_9.0\_SP1\_Fix10
- DEP\_9.6\_Fix8
- DEP\_9.7\_Fix7
- DEP\_9.8\_Fix4
- DEP\_9.9\_Fix3
- DEP\_9.10\_Fix1

#### ***Release 9.10***

- DEP\_8.2\_SP2\_Fix19
- DEP\_9.0\_SP1\_Fix9
- DEP\_9.5\_SP1\_Fix7
- DEP\_9.6\_Fix6
- DEP\_9.7\_Fix5
- DEP\_9.8\_Fix3
- DEP\_9.9\_Fix1

## ***Release 9.9***

- DEP\_8.2\_SP2\_Fix18
- DEP\_9.0\_SP1\_Fix8
- DEP\_9.5\_SP1\_Fix6
- DEP\_9.6\_Fix5
- DEP\_9.7\_Fix4
- DEP\_9.8\_Fix2

## ***Release 9.8***

- DEP\_8.2\_SP2\_Fix17
- DEP\_9.0\_SP1\_Fix6
- DEP\_9.5\_SP1\_Fix4
- DEP\_9.6\_Fix3
- DEP\_9.7\_Fix2

## ***Release 9.7***

- DEP\_8.2\_SP2\_Fix15
- DEP\_9.0\_SP1\_Fix4
- DEP\_9.5\_SP1\_Fix2
- DEP\_9.6\_Fix1

## ***Release 9.6***

- DEP\_8.2\_SP2\_Fix14
- DEP\_9.0\_SP1\_Fix3
- DEP\_9.5\_SP1\_Fix1

## ***Release 9.5***

- DEP\_8.2\_SP2\_Fix12
- DEP\_9.0\_SP1\_Fix1

## ***Asset Build Environment***

### ***Release 9.12***

- ABE\_9.7\_Fix4
- ABE\_9.8\_Fix3
- ABE\_9.9\_Fix1
- ABE\_9.10\_Fix1

### ***Release 9.10***

- ABE\_9.0\_SP1\_Fix5
- ABE\_9.5\_SP1\_Fix4
- ABE\_9.7\_Fix3
- ABE\_9.8\_Fix2

### ***Release 9.9***

- ABE\_8.2\_SP2\_Fix11
- ABE\_9.0\_SP1\_Fix4
- ABE\_9.5\_SP1\_Fix3
- ABE\_9.6\_Fix4
- ABE\_9.7\_Fix2
- ABE\_9.8\_Fix1

### ***Release 9.8***

- ABE\_8.2\_SP2\_Fix10
- ABE\_9.0\_SP1\_Fix4
- ABE\_9.5\_SP1\_Fix3
- ABE\_9.6\_Fix3
- ABE\_9.7\_Fix1

## ***Release 9.7***

- ABE\_8.2\_SP2\_Fix10
- ABE\_9.0\_SP1\_Fix3
- ABE\_9.5\_SP1\_Fix2
- ABE\_9.6\_Fix1

## ***Release 9.6***

- ABE\_8.2\_SP2\_Fix9
- ABE\_9.0\_SP1\_Fix2
- ABE\_9.5\_SP1\_Fix1

## ***Release 9.5***

- ABE\_8.2\_SP2\_Fix7
- ABE\_9.0\_SP1\_Fix1

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Release 9.10***

- PIF-12248  
Cannot deploy JNDI assets from a source Universal Messaging server to a target Universal Messaging server using webMethods Deployer.  
This issue is resolved.



## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

- The “webMethods Deployer User’s Guide” now contains information on deploying AgileApps assets.

### **Release 9.8**

- In the “webMethods Deployer User’s Guide”, under the section “Universal Messaging Assets”, the following new assets were added:
  - Topic Connection Factories
  - Queue Connection Factories
  - XA Connection Factories
  - JNDI Topics
  - JNDI Queues

These assets can now be deployed to a target server using the Deployer.

- The “webMethods Deployer User’s Guide” now contains information on deploying Application Platform assets.
- Software AG documentation is no longer available on the Software AG installer. You can access all Software AG documentation on the [Documentation website](#).

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### *Deployer*

#### **Release 9.12**

Added Item	Description
AgileApps	Deployer now supports deployment of AgileApps version 10.7 assets and later.

#### **Release 9.10**

Deprecated Item	Replacement, if any
Universal Messaging cluster configuration	Cluster configuration is deprecated as a deployable asset type. Use the Universal Messaging cluster management feature in Software AG Command Central.

#### **Release 9.9**

Added Item	Description
webMethods Business Rules	<ul style="list-style-type: none"><li>Deployer now allows webMethods Business Rules assets to be built and deployed to the Rules Management Console in My webMethods Server.</li><li>Rule project is a new asset added to Business Rules Assets section.</li><li>Business Rules runtime is now renamed to Business Rules IS.</li><li>Deployer now supports Business Rules MWS runtime.</li></ul>
Universal Messaging	Deployer now supports deployment of assets to Universal Messaging servers that are configured to enforce authentication. Both basic authentication (username/password) and certificate-based authentication are supported.

## ***Release 9.8***

<b>Added Item</b>	<b>Description</b>
Application Platform	Deployer now supports deployment of Application Platform assets.
My webMethods Server	Deployer now allows users to rollback a previous deployment of My webMethods Server assets. Deployer also allows users to browse and delete existing My webMethods assets from a My webMethods Server.
webMethods Business Rules	Deployer now allows users to rollback a previous deployment of webMethods Business Rules assets from a Rules Engine on Integration Server. Deployer also allows users to browse and delete existing webMethods Business Rules assets from a Rules Engine on Integration Server.

## ***Asset Build Environment***

### ***Release 9.12***

<b>Added Item</b>	<b>Description</b>
AgileApps	Asset Build Environment can now be used to build the composites for AgileApps.

### ***Release 9.8***

<b>Added Item</b>	<b>Description</b>
Application Platform	Asset Build Environment can now be used to build the composites for Application Platform.

## **9.0 Copyright Information**

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## **10.0 Support**

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Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

DEPABE-RM-912-20161018

# Software AG Designer 9.12 Readme

## October 2016

This file contains important information you must read before using Software AG Designer 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- SDEF-2269  
Secure storage master password provider that uses Windows APIs to encrypt a randomly generated 'master' password specific to the login credentials, fails to work in Amazon EC2 Windows 2012 R2 server system. An exception is displayed "Unable to encrypt master password for storage." in that case.  
To work around this problem, navigate to Designer secure storage preference. Clear Windows Integration provider option. This would then use the "UI prompt" master password provider.
- SDEF-1929  
In high screen resolution, Designer does not auto-scale icons and fonts as per the specified DPI. This issue occurs as a result of Eclipse Bug 462952.  
There is currently no workaround for this issue.
- SDEF-1960  
On Windows 10 operating system, Designer does not have default preference for the user interface appearance. This causes a difference in the appearance of Designer user interface.  
To work around this issue, you must select the appearance theme in the Preferences page. In Preferences > General > Appearance, select Windows as Theme and select Default (current) as Color and Font theme. Restart Designer.
- SDEF-1832  
On Mac OS X, the layout of Software AG Designer installation has changed to keep in line with Eclipse 4.5. As part of the layout change, the shell script designerc.sh is used to launch Software AG Designer. You can customize the bash script at Designer/Eclipse.app/Contents/MacOS/designerc.sh file. However, there is an issue with restarting Software AG Designer from within the Workbench. To work around this issue, close Software AG Designer and relaunch.
- SDEF-1526  
When running on RHEL 7 operating system, Designer faces the following issues:
  1. Upon clicking Help > About Software AG Designer, Designer displays the following error message instead of the About Software AG Designer dialog box:  
MOZILLA\_FIVE\_HOME not set

To work around this issue, download the rpm version of GTK+ web content engine library for RHEL 7(webkitgtk-2.2.4 or latest) and use the "rpm -i webkitgtk.x86\_64.\*.rpm" command.

2. While Software AG Designer that is running on RHEL 7 operating system is starting up, the following alert message is displayed at times:  
"Software AG Designer is not responding"  
This message only indicates that the initialization of Designer is in progress and does not indicate any issue with your Designer. Software AG recommends that you click Wait in the alert message window and wait until Designer starts up completely.

- SDEF-1704  
The Welcome page for Designer which is installed on the SUSE Linux Enterprise Server 12 platform does not display correctly. The links on the page are not ordering correctly and some icons on the Welcome page are not displayed. There is currently no workaround for this issue.

### 3.0 Usage Notes

This section provides any additional information you need to work with the current release of Software AG Designer.

- The Eclipse update sites listed in Window > Preferences > Install/Update > Available Software Sites have been disabled. Software AG does not recommend using these sites to update Designer's Eclipse platform because doing so might have undesired consequences. Use the Software AG Update Manager to apply updates to Designer.
- The Software AG Installer automatically adds the following Java option in the eclipse.ini file when installing Designer on SUSE Linux Enterprise 12:  
- Dorg.eclipse.swt.internal.gtk.disablePrinting  
This entry in the eclipse.ini file will resolve the Eclipse Bug 153936 - Eclipse freezes when opening an editor.

### 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

#### ***Release 9.12***

- None

#### ***Release 9.10***

- SDF\_9.8\_Fix1

## ***Release 9.8***

- SDF\_9.7\_Fix1
- SDF\_9.6\_Fix2
- SDF\_9.5\_SP1\_Fix2

## ***Release 9.7***

- CEP\_9.5\_SP1\_Fix4
- SDF\_9.6\_Fix1
- SDF\_9.5\_SP1\_Fix1

## ***Release 9.6***

- CEP\_9.5\_SP1\_Fix3

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

- SDEF-2006  
When Designer is launched for the first time from the Start menu, the following error message appears: "An internal error occurred during: "Setup check". There is no eclipse.launcher property defined". This error message can be ignored and does not notify any problem with the Designer setup. This issue occurs due to Eclipse bugs 471731 and 464122.  
This issue is resolved.

### ***Release 9.10***

- SDEF-1185  
The context menu in the Project Explorer view of Designer displays the Import option twice upon deleting a project from the Project Explorer view.  
This issue occurs as the result of the Eclipse Bug 448873.  
This issue is resolved.
- SDEF-1495  
Designer displays the same icons multiple times in the toolbars of various views in Designer upon



resetting a perspective to its original layout.

This issue occurs due to an Eclipse known issue Bug 448873.

This issue is resolved.

## **Release 9.8**

- SDEF-1339

Designer requires an installation of Java SE in order to run on Mac OS X.

If no other Java SE is installed apart from the JVM that was installed with Designer, Designer running on Mac OS X displays a message at startup stating that a Java SE Runtime must be installed.

This issue is resolved. To resolve this issue, a new shell script, `designerc.sh`, is provided to launch Designer from a terminal shell. This shell script is available in the Software AG root installation directory/`Designer/eclipse` directory. Alternatively, installing Java SE also resolves this issue. In both these cases, Designer will use the JVM provided by Software AG.

- SDEF-1575

Designer updated to include JGit version 3.4.2 that resolves a JGit client vulnerability in Eclipse.

A vulnerability affecting all versions of Git clients was announced in <https://github.com/blog/1938-vulnerability-announced-update-your-git-clients> (Eclipse Bug 456947).

This problem is resolved in JGit version 3.4.2, which is shipped along with Designer 9.8.

- SDEF-1498

After configuring NTLM authentication for the process audit database in Integration Server, Designer issues the following error when testing the connection:

```
[SoftwareAG][SQLServer JDBC Driver]NTLM (type-2) Authentication was requested but the required DDJDBCx64Auth05.dll was not found on the path specified by the java.library.path system property.
```

This issue is resolved.

- SDEF-1280

Right-clicking in the SVN Repositories view does not display the context menu.

When you right-click in the SVN Repositories view in Software AG Designer, the context menu does not show up. The menu is displayed only after right-clicking several times. The problem occurs due to Eclipse 4.3 compatibility issues with the SVN Repositories right-click context menu.

This issue is resolved.

- SDEF-915

When defining a Software AG Runtime instance in the Servers view, two Password Required dialog boxes appear.

When you define a Software AG Runtime instance in the Servers view after starting Designer with a new workspace, two Password Required dialog boxes appear when you select the Platform Manager URL box.

This issue is resolved.

## **Release 9.7**

- SDEF-1243  
Creating a Software AG Runtime instance using a secure connection fails.  
In the Servers View, when you attempt to create a Software AG Runtime instance using an https Platform Manager URL and then click 'List Servers', Software AG Designer returns an error and no connection is established.  
The issue is resolved. A secure connection is now the default when creating a Software AG Runtime instance.
- SDEF-917  
Fix names are not clearly displayed in Software AG Designer.  
Software AG Eclipse features and plug-ins encode the fix number as the fourth part of their full versions. For example, the version 8.2.3.0001-0235 represents fix #1 of version 8.2, service pack 3, build 235. In addition, a single product might comprise several features, and a fix might update only some features. Thus, identifying the latest fix becomes complex.  
The About Software AG Designer dialog box has been enhanced to display clear information about the installed products, organized in tabs according to the provider.  
The Software AG tab displays all installed Software AG products by name, including version and the highest fix number, if a fix has been applied. For example:  
webMethods Service Development  
Version 9.7 (fix #3 applied)
- SDEF-916  
The button labels in the About Software AG Designer dialog box do not provide information about the installed products.  
The button tool-tips in the About Software AG Designer dialog box display the provider name, for example Software AG, instead of the product name. When checking the version and fix level of a Designer plug-in, you might need to click a number of buttons before identifying the correct button for the product.  
Now the About Software AG Designer dialog box displays clear information about the installed products, organized in tabs according to the provider.  
The Software AG tab displays all installed Software AG products by name, including version and fix number, if a fix has been applied. For example:  
webMethods Service Development  
Version 9.7 (fix #3 applied)  
In addition, the button tool-tips display the Eclipse feature(s) related to a particular product.

## **Release 9.6**

- SDEF-1291  
The New Server wizard in Software AG Designer displays an incorrect error message when validating an IPv6 address.  
While creating a new Software AG Runtime server in Designer, if you provide an invalid IPv6 address in the Platform Manager URL field, the New Server wizard displays the following incorrect

error message: "Cannot connect to the Platform Manager. Check the URL and the credentials."  
This issue is resolved. Now the New Server wizard displays the message: "The URL is invalid."

- SDEF-1010

Software AG Designer does not display the Welcome page properly.

On the Welcome page in Designer, when you click the "Visit Software AG Community Website" link and then go back to the Welcome page using the "Navigate to previous topic" arrow, Designer displays an empty Welcome page.

This issue is resolved. Now Designer opens the "Software AG Community Website" link in an external window.

- SDEF-894

When the Welcome page of Software AG Designer is open as a view, the page does not inform you that you have no products installed.

With only Designer installed, when you open the Welcome page and then double-click the page tab, the minimized Welcome page does not display the message: "You have no installed products."

This issue is resolved.

- SDEF-893

The Welcome page of Software AG Designer is not displayed properly after using the "Customize page" toolbar icon.

When you click the "Customize page" toolbar icon on the Designer Welcome page and select a home page theme other than Software AG, the Welcome page layout becomes unreadable.

This issue is resolved. The "Customize page" icon is no longer available.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

- The following new topic is included in the online help set *Tips, Training, and Other Resources* and in the PDF publication *Working with Software AG Designer*:
  - Configuring the Secure Storage

### **Release 9.10**

- The following new topics are included in the online help set *Tips, Training, and Other Resources* and in the PDF publication *Working with Software AG Designer*:
  - Enabling Automatic Updates

- Enabling Eclipse Update Sites
- Enabling Error Reporting Notifications
- Enabling Preference Recorder

## **Release 9.9**

- The following new topics are included in the online help set *Tips, Training, and Other Resources* and in the PDF publication *Working with Software AG Designer*:
  - Verifying Java Byte Code
  - Java Code Cache

## **Release 9.8**

- Software AG documentation is no longer available on the Software AG installer. You can access all Software AG documentation on the [Documentation website](#).  
Note: Software AG Designer online help and other online helps that are installed along with Designer features are still available as part of Designer Eclipse Help under the Software AG Designer Guides node. However, the Designer documentation that is available on the [Documentation website](#) might contain more comprehensive information about the new features.
- Working with Software AG Designer now contains a new topic, Managing the Designer User Configuration, which includes information that was available in the following topics as well additional information related to installing Designer into a subfolder of Program Files:
  - Implementing a Multi-User Eclipse Configuration
  - Configuring Eclipse for Non-Administrator Accounts
  - Considerations when Starting Designer on Windows

## **Release 9.7**

- A new section, “Finding Installed Products, Versions, and Fixes”, has been added to the PDF publication *Working with Software AG Designer* and to the online help set *Tips, Training, and Other Resources*.

## **Release 9.6**

- A new section, “Considerations when Starting Designer on Windows”, has been added to the PDF publication *Working with Software AG Designer* and to the online help set *Tips, Training, and Other Resources*.

## Release 9.5

- The topic “Configuring SSL Connections in Designer” is added to the online help set *Tips, Training, and Other Resources* and to the PDF publication *Working with Software AG Designer*.

## 7.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### Release 9.12

Changed Item	Description
Eclipse version upgrade	Software AG Designer and all its plug-ins are now supported on the latest service release of Eclipse 4.5.2.
Default encrypting algorithm	Software AG Designer is enhanced with PBEWithSHA1AndDESede as the preselected algorithm.

### Release 9.10

Removed Item	Replacement, if any
CVS Support	CVS is no longer included with Eclipse packages by default.  You can install CVS integration component into Software AG Designer from the Eclipse Marketplace.

Changed Item	Description
Eclipse version upgrade	Software AG Designer and all its plug-ins are now supported on the latest service release of Eclipse 4.5.

### Release 9.9

Changed Item	Description
Eclipse version upgrade	Software AG Designer and all its plug-ins are now supported on the latest service release of Eclipse, 4.4.2.

## **Release 9.8**

<b>Added Item</b>	<b>Description</b>
Installation folder for Designer	It is now possible to install Designer in a subfolder of Program Files.
<b>Changed Item</b>	<b>Description</b>
Eclipse version upgrade	Software AG Designer and all its plug-ins are now supported on Eclipse 4.4.

## **Release 9.7**

<b>Added Item</b>	<b>Description</b>
Ability to select and copy product information from the Software AG Preferences page.	It is now possible to select some or all rows in the Installed Software AG Features table and copy the information to the clipboard.
<b>Changed Item</b>	<b>Description</b>
"About Software AG Designer" dialog box.	The "About Software AG Designer" dialog box was redesigned and enhanced to display installed products categorized by provider. It displays information about version and applied fixes for the products provided by Software AG.

## **Release 9.6**

<b>Removed Item</b>	<b>Replacement, if any</b>
"Customize page" icon on Welcome page.	
<b>Changed Item</b>	<b>Description</b>
Eclipse update sites are disabled by default.	The Eclipse update sites listed in Window > Preferences > Install/Update > Available Software Sites have been disabled. Software AG does not recommend using these sites to update Designer's Eclipse platform because doing so may have undesired consequences.

## **Release 9.5**

Software AG Designer is now based on Eclipse version 4.3. The plugins that Software AG provides are developed and tested for Eclipse version 4.3.

## 8.0 Copyright Information

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DES-RM-912-20161018

# Software AG Digital Event Services 9.12 Readme

October 2016

This file contains important information you must read before using Software AG Digital Event Services 9.12. You can find system requirements, user documentation, and installation instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- EDA-1415  
If a Universal Messaging (UM) service that is in use is configured with an invalid URL, and you specify a correct URL afterwards, the change does not take effect and the service cannot receive and/or send events.  
By default, the pre-configured Universal Messaging service uses a localhost server running on port 9000. If you modify the Provider URL of the service to an invalid UM address while the service is



sending or receiving events of a particular event type, Digital Event Services logs an error and suspends the event flow. However, if you later specify a valid URL, the runtime does not take the change into account. As a result, the service can no longer send or receive events of the particular event type.

A workaround for this issue is to restart the runtime after specifying a valid URL.

- EDA-3297

Universal Messaging (UM) channels with limited capacity receive events out of order.

Digital Event Services (DES) creates Universal Messaging channels automatically on first use, if such channels do not exist. The channels have a default capacity of 0, which means that their capacity is unlimited. If a UM channel that DES uses is configured with a finite capacity, and the JMS engine and honor capacity properties are set to “true”, events that DES sends to the channel may be received out of order.

A workaround for this issue is to not set a finite capacity for Universal Messaging channels.

- EDA-3376

Events are received out of order after you change the Digital Event Services configuration at run time.

If you change the Provider URL of a Universal Messaging service that is in use while the service is sending or receiving events, a single out of order event may be received.

A workaround for this issue is not to change the Provider URL of a UM service while the service is in use.

- EDA-3429

The Command Central web user interface for Digital Event Services is very slow.

If an event type repository contains hundreds of event types, it may take too long to open any of the Digital Event Services views in the Command Central web user interface. If the Command Central web user interface timeout is reached, Command Central may display an error before a view opens.

A workaround for this issue is to reduce the number of event types that are deployed in the event type repository by manually deleting unused event types. Note that an event type might reference another event type. When deleting an event type from the event type repository, ensure that the deleted type is no longer used by another type.

- EDA-3453

Digital Event Services (DES) allows you to reconfigure a delivery mode while the server runtime that embeds DES is started. Specifically it allows you to change the delivery mode from “Persistent” to “Non-Persistent” while the server is up. DES recognizes such a configuration change (with a certain processing latency) and delivers events in accordance to the updated configuration.

However, if events for the given event type are stored in the on-disk queue when the reconfiguration happens, due to the unavailability of the configured Universal Messaging server, events are removed from on-disk queue and not sent to the configured Universal Messaging server.

A workaround is to change the delivery mode from “Persistent” to “Non-Persistent” only when the configured Universal Messaging server is started.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

## 4.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

- A new guide was added for Digital Event Services: *“Using Digital Event Services to Communicate between Software AG Products.”*

## 5.0 Copyright Information

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Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

DEV-RM-912-20161018

# webMethods EntireX 9.12 Readme

**October 2016**

This file contains important information you must read before using webMethods EntireX 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- EXX-7206  
With the COBOL Mapping Editor, it is currently not possible to remove a previously extracted interface using the context menu action COBOL > Modify Interface.
- EXX-7213  
IMS RPC Server: runtime error '1001 0009: Invalid format buffer'; IMS specific PCB pointers are part of the server-side mapping file.
- EXX-7453  
Micro Focus RPC server sporadically gets the error "Inconsistency detected by ld.so" during runtime scenario with Java client.
- EXX-8540  
ETBINFO does not find profile files in an exclusive "EntireX Administration and Monitoring" package installation.
- EXX-9115  
A broker with a hyphen "-" or exclamation mark "!" in its name cannot be administered in Command Central. It can be created, but the status is always unknown.
- EXX-9156  
EntireX does not yet support provision, i.e. installation with Command Central. Unfortunately the EntireX SPM plugin already appears on the list of modules that can be installed via CC. It is strongly recommended to not select any EntireX component for provisioning.
- EXX-9203  
In case you install EntireX Broker on Linux systems, executing the afterInstallAsRoot script will not register the EntireX Admin Broker daemon to your system. If you want to register this daemon, you can do that manually by executing a command as root or with sudo. First you need to find out the internal installation ID of your installation. Search for the installation path in the file /etc/sagconf.xml. Here you will find entries such as:

```
<environment id="5">  
  <path>/opt/softwareag</path>  
</environment>
```

When you have found the entry with your installation path, remember the ID (in the example above it is "5").

Then execute the following command:

```
<inst_path>/common/bin/daemon.sh -f <inst_path>/EntireX/bin/sagexx -u  
<uid> -n sagexx912 -i <ID>
```

where

<inst\_path> is the installation root path, in this example /opt/softwareag  
<ID> is the ID of the installation path as found in /etc/sagconf.xml, and  
<uid> is the user under which the registered process should be started.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- Change to z/OS installation  
The broker stub executables are distributed prelinked with unresolved references to z/OS components. To resolve these external references, relink them in your environment. See step *Install the Broker Stubs and Bind the Broker Stub Executables* in the z/OS installation documentation.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### **Release 9.12**

- EXX\_9.10\_Designer\_Fix2      Fix 2 for Eclipse

### **Release 9.10**

- EXX\_9.9\_Core\_Fix2      Fix 2 for EntireX Core
- EXX\_9.9\_SPM\_Fix3      Fix 3 for SPM
- EXX\_9.9\_Designer\_Fix5      Fix 5 for Eclipse
- EXB990L006      Fix 6 for z/OS
- EXX990L006      Fix 6 for z/OS
- XAI\_9.9\_Fix2      Fix 2 for the EntireX Adapter

### **Release 9.9**

- EXX\_9.7.0\_Fix10      Fix 10 for EntireX Core
- XAI\_9.7.0\_Fix10      Fix 10 for EntireX Adapter
- EXX\_9.7.0\_Designer\_Fix15      Fix 15 for Eclipse  
(if Natural ONE is installed, must be version 8.3.5 or above)

- EXX\_9.7.0\_Fix11                      Fix 11 for EntireX Runtime
- EXX970L019                          Fix 19 for z/OS
- EXP970P020                          Fix 20 for z/OS

### **Release 9.7**

- EXB960P001                          Fix 1 for z/OS
- EXX960P001                          Fix 1 for z/OS

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### **Release 9.7**

- EXX-6228  
Under UNIX and Windows, you can now keep the current and the previous four Broker log files.
- EXX-6303  
For COBOL RPC clients, performance for marshalling has been enhanced.
- EXX-6519  
Some errors (e.g. error 0148) in the stub log did not contain the error class (e.g. 0215). Stub log now contains the error class to identify the error.
- EXX-7019  
Description of broker attribute `HEAP-SIZE` and dynamic memory management has been enhanced.

## **6.0 Documentation Changes**

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

- Command Central  
The separate Command Central documentation has been reorganized; product-specific information is now provided with the product itself. See *Administering EntireX Broker with Command Central* in the EntireX documentation. The command-line documentation has been enhanced, and a new section describing the graphical user interface is provided.

- Application Monitoring MashApp  
As in earlier versions, a sample Application Monitoring MashApp is provided in Empower under Products & Documentation > Download Components > EntireX - Application Monitoring MashApp. This MashApp is no longer described in the main EntireX documentation. Separate documentation (PDF) and a readme file are also provided for download from Empower.

## **Release 9.10**

- Web Services Stack  
Multiple sections of the EntireX documentation reference the separate Web Services Stack documentation. Since webMethods Suite 9.8, this documentation is part of the *Software AG Infrastructure Administrator's Guide*, also available under <http://documentation.softwareag.com> > *Guides for Tools Shared by Software AG Products*.

## **Release 9.9**

- Software AG documentation is no longer available on the Software AG installer. You can access all Software AG documentation on the [Documentation website](#).
- Documentation for EntireX Adapter is now incorporated in the EntireX documentation for ease of use. A standalone PDF file of the Adapter documentation is also provided for your convenience.
- For platform z/VSE, sections have been added to set up ATLS (Automatic Transport Layer Security).

## **Release 9.7**

- COBOL Mapping Editor documentation thoroughly reworked. Functions documented for each interface type.
- Scenario "Calling Integration Server from COBOL" expanded.
- New documentation section Installing EntireX RPC Servers under IMS.
- Application Transparent Transport Layer Security (AT-TLS): various sections dealing with SSL or TLS support have been reworked and also include sections on how to set up AT-TLS.

## **Release 9.6**

- Common Integration Scenarios section has been enhanced with regard to navigation. High-level, illustrated scenario descriptions lead to more detailed sections below.
- Documentation for mapping of fixed and unbounded arrays has been enhanced.
- Various sections dealing with SSL or TLS support have been reworked. See *Using SSL or TLS with*



*the RPC Server* under CICS | Batch | IMS, and *SSL or TLS and Certificates with EntireX* in the Security documentation.

- A new section describes IBM Language Environment runtime options relevant for CICS, Batch and IMS RPC servers.

## **Release 9.5**

- SVM File Handling  
Documentation of SVM file handling has been enhanced for all supported RPC servers.
- CVM File Handling  
Documentation of CVM file handling has been enhanced.
- Supported RPC Protocols  
New section lists the RPC protocols supported by the different EntireX and Natural versions.
- Conversion Error Messages  
All error messages of class 1003 have been reworked and several new messages have been added.
- Internationalization  
The internationalization documentation has been thoroughly reworked.

## **7.0 Terminology Changes**

A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

<b>Old Term</b>	<b>New Term</b>
WebSphere MQ RPC Server	web Methods EntireX RPC Server for IBM® MQ
WebSphere MQ RPC Listener	web Methods EntireX RPC Listener for IBM® MQ

### **Release 9.7**

<b>Old Term</b>	<b>New Term</b>
SVM file	Server-side mapping file.
CVM file	Client-side mapping file.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists features, functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### Release 9.12

Added Item	Description
Increased platform support	EntireX now supports AIX 7.2.
Workbench enhancements	<ul style="list-style-type: none"><li>Enhanced COBOL MPO support: For MPO groups based on a <code>REDEFINE</code> declaration, the MPO selector definition can be anywhere in the <code>DATA DIVISION</code> of the COBOL source: before, inside or after the MPO group. With the IMS MPP Message Interface (IMS Connect) you can now determine the position of an MPO selector using a fixed offset starting from the end of the message. You can also use an offset from the beginning of the message as in earlier versions.</li><li>The IDL Extractor for Natural now supports Arabic shaping as well as multibyte character sets.</li><li>Date and Time support for EntireX Adapter [02848]. The EntireX Adapter now supports user-defined formats for mapping the IDL data types Date and Time.</li><li>Trace Utility enhancement [03277]. The EntireX Trace Utility has been enhanced: a date field has been added to the generated CSV file.</li></ul>
Brainstorm ideas	
Command Central	<p>The following operations on EntireX Broker have been added:</p> <ul style="list-style-type: none"><li>Display Services</li><li>Display Server Instances of a Service</li><li>Stop Server Instance</li><li>Create new EntireX Brokers</li><li>Delete existing EntireX Brokers</li></ul>
RPC server	Enhanced COBOL MPO support for EntireX COBOL RPC servers (CICS, Batch, IMS BMP, Micro Focus, CICS ECI, IMS Connect). See Workbench enhancements above for details.

Added Item	Description
EntireX Adapter enhancements	<ul style="list-style-type: none"> <li>• User-defined formats for mapping the IDL data types Date and Time are now supported.</li> <li>• You can now use mixed-case passwords for CICS ECI connections.</li> <li>• Enhanced COBOL MPO support. See Workbench enhancements above for details.</li> </ul>
XML/SOAP Listener and high availability	<p>The XML/SOAP Listener now supports persistent sockets, socket reconnect and security handling. This means it can now be used in high-availability scenarios where the EntireX Broker is load-balanced.</p>
ICU custom conversion under z/OS	<p>Custom conversion using ICU is now available under z/OS in addition to the support already provided under UNIX and Windows.</p>

Removed Item	Replacement, if any
Direct SSL/TLS support for broker stubs under z/OS	<p>Direct SSL/TLS support (using GSK) inside the broker stubs under z/OS has been dropped. We recommend using IBM's Application Transparent Transport Layer Security (AT-TLS) instead.</p>
Administration using System Management Hub	<p>Administration with SMH is no longer supported. This also includes the batch interface argbatch and SNMP. The most important functionality is provided by Command Central. Minor features have been moved to the command line or were dropped.</p>
Dynamic IDL/RPC parameters with IBM® MQ	<p>webMethods EntireX RPC Server and Listener for IBM® MQ no longer support dynamic IDL/RPC parameters.</p>
Microsoft Visual Studio 2010, 2012 or 2013	<p>These versions are no longer supported. The following EntireX components support Microsoft Visual Studio version 2015:</p> <ul style="list-style-type: none"> <li>• C Wrapper</li> <li>• DCOM Wrapper</li> <li>• Microsoft Visual Studio Wizard for .NET Wrapper</li> </ul>

▪ Changed Item	Description
Command Central	When using the command-line mode to get information from or to administer EntireX, the data representation for input and output of some commands has changed.
Authorization rules	Authorization rules for UNIX and Windows are no longer managed with System Management Hub. Instead, rules can be stored in an LDAP repository (as in earlier versions of EntireX) or in a new section of the Broker attribute file, <code>DEFAULTS=AUTHORIZATION-RULES</code> .
Broker attribute file validation	The validation of the broker attribute file has been thoroughly reworked. Inconsistent definitions may result in an unexpected error when you start your broker.
COBOL RPC Client and Server	The sources generated by the EntireX Workbench component COBOL Wrapper can be compiled by any compiler supported by the COBOL Wrapper: standard COBOL compiler, for example IBM Enterprise COBOL for z/OS 4.2 or 5.1.
Microsoft Visual Studio support	<p>The following EntireX components support Microsoft Visual Studio version 2015:</p> <ul style="list-style-type: none"> <li>• C Wrapper</li> <li>• DCOM Wrapper</li> <li>• Microsoft Visual Studio Wizard for .NET Wrapper</li> </ul> <p>Older versions of Microsoft Visual Studio (2010, 2012 or 2013) are no longer supported.</p>

Changed Item	Description
EntireX Adapter	<p>The mapping of MPO groups to Integration Server data structures and to the signature has been changed with this version to simplify the usage of the MPO construct in the Integration Server.</p> <p>Previously the alternatives of an MPO group (groups in the IDL file with the attribute <code>CHOICE</code>) were mapped to arrays with either zero array elements (unselected alternative) or one array element (selected alternative). This has been changed such that arrays are no longer used. Unselected alternatives are suppressed and thus not visible in the output pipeline. The selected alternative is directly represented in the output pipeline without the enclosing array.</p> <p>However, this enhancement means the new output signature is not compatible with existing Adapter services. This also affects the runtime behavior. If you use MPO groups, regenerate these Adapter services from the Designer and adapt the services that are using the new Adapter service to the changed output signature.</p>
DIV Persistent Store Parameter Handling	<p>Defining a DIV persistent store has been streamlined. New broker attributes have been introduced to replace format parameters.</p>

## Release 9.10

Added Item	Description
Increased platform support	<p>EntireX now supports z/OS version 2.2 and Windows 10 Professional and Enterprise 64-bit editions.</p>
Workbench enhancements	<ul style="list-style-type: none"> <li>• COBOL program ID and Channel name can now be modified after extraction, using the COBOL Mapping Editor.</li> <li>• EntireX now uses Eclipse version 4.5.</li> </ul>
EntireX Adapter	<p>New connection type "COBOL Converter" introduced to convert IS data structures from/to a byte array representing the COBOL binary data.</p>

Added Item	Description
Command Central	<p>Enhanced support for EntireX Broker instances running under UNIX or Windows. You can now perform the following operations on EntireX Broker in addition to the operations supported in EntireX version 9.9:</p> <ul style="list-style-type: none"> <li>• Configure Application Monitoring</li> <li>• Configure EntireX Broker Persistent Store</li> <li>• Configure EntireX Broker Security</li> <li>• Enable and specify EntireX Broker Trace Level dynamically</li> </ul>
KPIs for CPU time	<p>New KPIs are available with Command and Information Services interface for showing amount of CPU time consumed since Broker start. CPU time can also be shown in the Software AG product Optimize for Infrastructure.</p>
Support for Visual Studio 2012 and 2013	<p>The EntireX .NET Wrapper Wizard now supports Microsoft Visual Studio version 2012 and 2013 in addition to version 2010 already supported.</p>

Removed Item	Description
Windows 32-bit Operating Systems	<p>Software AG no longer supports Windows 32-bit operating systems. However, the following EntireX components are supported for 32-bit applications on Windows 64-bit operating systems:</p> <ul style="list-style-type: none"> <li>• EntireX Mini Runtime</li> <li>• Transaction Object Editor of Broker ActiveX Control</li> <li>• .NET Wrapper Runtime</li> </ul>
Java Message Service	<p>JMS support has been dropped.</p>
Publish and Subscribe	<p>The EntireX Broker communication model Publish and Subscribe is no longer supported. You therefore need to remove the broker attribute PUBLISH-AND-SUBSCRIBE from your broker attribute file, otherwise error ETBE0023 'Unknown attribute PUBLISH-AND-SUBSCRIBE ' is returned.</p>

Removed Item	Description
Swapping out New Units of Work	The ability to swap out new units of work that was provided in earlier EntireX versions is now no longer required. The corresponding broker attributes <code>SWAP-OUT-NEW-UOWS</code> and <code>MIN-UOW-CONVERSATIONS-IN-MEMORY</code> are no longer supported and will be ignored.
Library <i>broker.so</i>	Under UNIX, library <i>broker.so</i> has been replaced by library <i>libbroker.so</i> . Library <i>libbroker.so</i> was already delivered in earlier EntireX versions and is identical. Make sure you applications use only <i>libbroker.so</i> .
SMH Technical Information	The System Management Hub Technical Information Agent is no longer delivered.
SNMP	The SNMP (Simple Network Management Protocol) interface of the System Management Hub is no longer supported.

Deprecated Item	Description
Direct SSL/TLS Support for Broker Stubs under z/OS	Direct SSL/TLS support (using GSK) inside the broker stubs under z/OS will be dropped in the next version. We recommend using IBM's Application Transparent Transport Layer Security (AT-TLS) instead.
Administration using System Management Hub	Administration with SMH (including the batch interface <code>argbatch</code> ) will be dropped in the next version of EntireX. The most important functionality will be provided by Command Central.
Encryption/decryption mechanism provided by EntireX Security	We strongly recommend using the Secure Sockets Layer/Transport Layer Security protocol.
Microsoft Visual Studio 2010, 2012, 2013	<p>With the next version of EntireX, the following components will support Microsoft Visual Studio version 2015:</p> <ul style="list-style-type: none"> <li>• C Wrapper</li> <li>• DCOM Wrapper</li> <li>• .NET Wrapper Wizard for Microsoft Visual Studio</li> </ul> <p>Older versions will no longer be supported.</p>

Deprecated Item	Description
WebSphere MQ RPC Server and Listener Support for dynamic IDL/RPC parameters	

Changed Item	Description
Installation Packages	<p>The EntireX installation packages have been streamlined and restructured:</p> <ul style="list-style-type: none"> <li>• EntireX Broker can now stay running while runtime updates outside EntireX Broker are made.</li> <li>• Administration and Monitoring functionality has been clearly separated from the runtime parts.</li> <li>• Mini Runtime is now a separate installation package.</li> <li>• Examples have been reworked and streamlined.</li> </ul>
EntireX built with Visual Studio 2015	<p>This version of EntireX was built with Microsoft Visual Studio 2015. When you install EntireX components, the necessary Microsoft Redistributable Files are also installed.</p>
COBOL Wrapper, generic RPC service modules	<p>The generic RPC service modules for the following interface types need to be generated with the EntireX Workbench. See COBOL Wrapper documentation for details.</p> <ul style="list-style-type: none"> <li>• COBSRVID for CICS with standard linkage calling convention</li> <li>• COBSRVIB for Batch with standard linkage calling convention</li> </ul>

## ***Release 9.9***

Added Item	Description
Enhanced null value suppression	<p>A new button in the XML Mapping Editor Overview Page enables you to set the current null value suppression settings to all mappings.</p>



Added Item	Description
COBOL MPO support	The IDL Extractor for COBOL - together with the EntireX Adapter or EntireX RPC Servers - supports the concept of multiple possible output (MPO). This means that the output structure returned is decided by the COBOL server at runtime; the COBOL layout on output varies.
COBOL server using data length to process a variable number of array elements	The IDL Extractor for COBOL - together with the CICS RPC Server, the EntireX Adapter with IMS Connect connections, or the IMS Connect RPC Server - supports COBOL server programs that use the data length of their interface to process a variable number of array elements in a fixed-size COBOL table.
Command Central support	<p>With the Software AG's Command Central you can configure, manage, and administer one or more installations of the webMethods product suite in your enterprise. EntireX supports Command Central for EntireX Broker instances running on Linux, UNIX or Windows. They must have been created with version EntireX 9.9 by System Management Hub, Command Central or command line (SMH, CC, or Broker command-line utility etbsrv).</p> <p>You can start, stop and configure EntireX Broker instances from a single location, using the Command Central user interface or from a command line. Basic monitoring KPIs for EntireX Broker instances can be seen from the UI.</p>
EntireX Adapter Listeners	A new information screen provides statistics about the listeners of the EntireX Adapter.
Application Monitoring Data Collector	The Data Collector now provides callback functionality for the processing of incoming events.

Added Item	Description
Logging exit for EntireX scripting commands	Since version 9.7, EntireX has provided a set of command-line scripts with which, for example, you can monitor your environment and check that all components (broker, RPC servers) are up and running. Now an optional logging exit is provided. This is called every time a component in the environment is checked; results can be written to a CSV file. You can use the sample script <code>log_environment.bat</code> as a template.
Set application name with .NET Wrapper	For accounting purposes, a new property <code>ApplicationName</code> has been introduced for the .NET Wrapper. Set this property before calling one of the Logon methods if you want to replace the default application name.
Preview of Date/DateTime Pattern in XML Mapping Editor	The Preferences page of the XML Mapping Editor now shows a preview for date and dateTime patterns entered.

Removed Item	Replacement, if any
EntireX Mini Runtime is no longer delivered with EntireX.	Functionality is provided with EntireX Libraries in the Software AG Installer.
EntireX support for Software AG's Integrated Authentication Framework (IAF) has been dropped from all interfaces.	
EntireX Wrapper for Enterprise JavaBeans. It is no longer possible to enable Java-based components to access an EntireX RPC server using Enterprise JavaBeans.	
Adapter Services Wrapper for Natural.	The functionality is already covered by using the IDL Extractor for Natural and the Integration Server Wrapper.
Partner Broker ID.	
Support for IBM compiler PL/I for MVS & VM.	Support for Enterprise PL/I for z/OS compiler will continue.
Microsoft Visual Studio Wizard for EntireX DCOM Wrapper.	The functionality is provided by the EntireX Workbench.

Removed Item	Replacement, if any
Broker Control Block Definitions NATDEF12 and NATDEF21 of ACI for Natural.	Use NATDEF in your application for Broker control block definition.
Deprecated Item	Replacement, if any
Encryption/decryption provided by EntireX Security will be deprecated in the next version.	For encrypted transport we strongly recommend using the Secure Sockets Layer/Transport Layer Security protocol.
EntireX Broker support for Java Message Service will be dropped in the next version.	
EntireX Broker support for Publish and Subscribe communication model will be dropped in the next version.	
Direct SSL/TLS support (using GSK) inside the broker stubs under z/OS will be dropped in the future.	We recommend using IBM's Application Transparent Transport Layer Security (A T-TLS) instead.
Administration using System Management Hub (including batch interface <code>argbatch</code> ) and SNMP support is planned to be dropped in a future version of EntireX.	
The Generic RPC services modules COBSRVIB and COBSRVID delivered on mainframe will be moved to the examples in the next version.	For your integration scenarios, use the modules generated by the EntireX Workbench.
Changed Item	Description
DCOM Wrapper	The wrapper now supports Microsoft Visual Studio 2012 and 2013 in addition to the already supported Visual Studio versions.
Integration Server Wrapper	The wrapper no longer creates the <code>&lt;IDL&gt;_IS.properties</code> file. Existing property files are ignored.
Platform support	EntireX and EntireX Adapter 9.9 now run under SUSE Linux Enterprise Server for x86-64 (64-bit) version 12 in addition to version 11.

Changed Item	Description
Java 8 support in Java Wrapper and IDL Extractor for WSDL	<p>When generating Java RPC clients (Bean-compliant) with the Java Wrapper, the name generation rules have changed slightly to ensure greater consistency. This means a name used for more than one IDL group parameter with different content is always changed.</p> <p>With the IDL Extractor for WSDL, prefix name assigning has been enhanced to ensure consistent generation of XML mapping files. If more than one prefix is associated with a URL, the last prefix (in alphabetical order) is used.</p> <p>See EntireX Release Notes for examples.</p>
EntireX Adapter license handling	<p>License handling for EntireX Broker connections now better reflects the EntireX pricing model: a license status line has been introduced for EntireX Broker connections (ACI connections or normal RPC connections), and a warning message is given in the case of a possible license coverage mismatch.</p>
CICS RPC user exit COBUEX02	<p>The user exit now provides the maximum expected length of output data (reply) before calling the target CICS program.</p>
Compatibility with webMethods Suite Naming Conventions	<p>The name of the UNIX start/stop script for the EntireX Broker Administration Service has changed to comply with webMethods suite naming conventions:</p> <p>in <i>directory etc/init.d</i>: from <i>sag&lt;n&gt;etbsrv</i> to <i>sag&lt;n&gt;exx99</i>  in directory <i>EntireX/bin</i>: from <i>sag&lt;n&gt;etbsrv</i> to <i>sagexx</i></p>
Running the XML/SOAP RPC server in the Software AG Runtime	<p>After installation, the default XML/SOAP RPC Server using Broker "localhost:1971" and server address "RPC/XMLSERVER/CALLNAT" is no longer started automatically.</p>
OpenSSL Support	<p>The OpenSSL Project has announced it will no longer support version 0.9.8 from December 31, 2015. EntireX now supports OpenSSL version 1.0.1. See CIPHER-SUITE under <i>Broker Attributes</i> in the EntireX documentation.</p>

## Release 9.7

### Removed Item

Broker Services were partially retired with EntireX version 8.0; they are now fully retired.

Location Transparency support was dropped in EntireX version 9.5. Location Transparency has now been removed from all major interfaces.

### Replacement, if any

See Release Notes

### Deprecated Item

See *Features to be Dropped in Future Versions* in the EntireX Release Notes for comprehensive list.

### Replacement, if any

### Changed Item

IDL Extractor for Integration Server

### Description

The handling of content types when mapping Integration Server data types to IDL has changed. See *IDL Extraction from Integration Server* in the webMethods EntireX Adapter documentation.

WebSphere MQ Listener

The handling of the correlationId and the messageId in synchronous request/reply scenarios has been changed. See *Support for Synchronous Request/Reply Scenarios* under *Advanced WebSphere MQ Listener Functionality* in the EntireX documentation.

## Release 9.6

### Removed Item

Removed support for z/OS 1.12, z/VSE 4.3.

### Replacement, if any

The following platforms are no longer supported: z/OS 1.12, z/VSE 4.3.

No new version of IAF is delivered with this release of the webMethods suite.

If you are running IAF, you can continue using the version delivered with an earlier suite version.

### Deprecated Item

Broker stub BKIMBTSO is no longer provided.

### Replacement, if any

The functionality is covered by stub BROKER. The default transport method for BKIMBTSO was TCP; default for BROKER is NET. However, this can be changed to TCP if required.

## Release 9.5

The following functionality has been dropped in this release:

- Location Transparency Location transparency is no longer supported in this version.
- Windows Server 2008 (32-bit) Windows Server 2008 (32-bit) is no longer supported. We suggest you upgrade to the 64-bit or a more recent Windows version. See *List of Components per Platform* in the EntireX Release Notes for full list
- JBoss Application server JBoss is no longer supported.

## 9.0 Added, Removed, Deprecated, or Changed Built-In Services

A release is listed in this section only if changes occurred in that release.

### Release 9.9

All services apply to EntireX Adapter.

Added Service	Description
<code>pub.listener.createDocumentTypes</code>	Creates document type objects, using the metadata stored in the listener, connection or adapter service object.
<code>pub.listener.createFlow</code>	Creates flow objects for the specified EntireX Adapter listener object.
<code>pub.listener.createIDL</code>	Creates an IDL file, using the metadata which is stored in the listener, connection or adapter service object.
<code>pub.wmentirex.directrpc.admin.setTLSProtocols</code>	Change the set of enabled TLS protocols.
<code>pub.wmentirex.directrpc.admin.getTLSProtocols</code>	Return the value of <code>setTLSProtocols</code> .
<code>pub.wmentirex.directrpc.admin.setCipherSuites</code>	Change the set of enabled cipher suites.
<code>pub.wmentirex.directrpc.admin.getCipherSuites</code>	Return the value of <code>setCipherSuites</code> .

Changed Service	Description
<code>com.softwareag.entirex.wmadapter.Deployment</code>	Namespace changed to <code>pub.wmentirex.listener</code> . The service is still available using the old namespace.

## Changed Service

pub.wmentirex.listener:  
generateIDLfromService

## Description

The meaning of parameter `fileName` has changed. This is the name of the IDL file with extension ".idl". You cannot specify a folder name. The file is created in the folder `<IntegrationServer_instance>/packages/WmEntireX/resources`.

## 10.0 Added, Removed, Deprecated, or Changed Parameters

A release is listed in this section only if changes occurred in that release.

### Release 9.12

#### Added Parameter

Multiple broker attributes under  
DEFAULTS=AUTHORIZATION-RULES

#### Description

Use these attributes to define authorization rules in the broker attribute file.

Multiple security-specific attributes starting with  
LDAP

Use these attributes to define authorization rules stored in an LDAP repository.

Multiple broker attributes under  
DEFAULTS=DIV

DIV persistent store handling has been streamlined and these new attributes replace format parameters.

SECURITY-SYSTEM

Specifies whether authentication is performed against the local operating system or LDAP repository.

#### Removed Parameter

Security-specific broker attributes  
AUTHENTICATION-TYPE and  
AUTHORIZATIONRULE

#### Description

Replaced by new DEFAULTS=AUTHORIZATION-RULES section.

Multiple broker-specific attributes `SSL*` and  
`TCP*`, for example `SSL-RESTART`

Use the corresponding SSL-specific and TCP-specific attributes instead, for example `RESTART` in the attribute file section `DEFAULTS=SSL`.

## ***Release 9.9***

<b>Added Parameter</b>	<b>Description</b>
Broker attribute <code>MAX-TRACE-FILES</code>	Maximum number of backup copies of trace file <code>ETB.LOG</code> .
Broker attribute <code>TRACE-FILE-SIZE</code>	Maximum size of one trace file. If this value is exceeded, a new trace file is allocated up to the limit specified in <code>MAX-TRACE-FILES</code> .

<b>Changed Parameter</b>	<b>Description</b>
Broker attribute <code>CIPHER-SUITE</code> .	New default value to support OpenSSL version 1.0.1.

<b>Deprecated Parameter</b>	<b>Replacement, if any</b>
Support for dynamic IDL/RPC parameters will be dropped in a future version.	

## ***Release 9.7***

<b>Changed Parameter</b>	<b>Description</b>
Broker attribute <code>POLL</code> .	Default value changed from YES to NO for z/OS and z/VSE.

## **11.0 Added, Removed, Deprecated, or Changed APIs**

A release is listed in this section only if changes occurred in that release.

### ***Release 9.7***

<b>Removed API</b>	<b>Replacement, if any</b>
Location Transparency.	No replacement. Support for Location Transparency was dropped in EntireX version 9.5. It has now been removed from all major interfaces.



## 12.0 Copyright Information

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EXX-RM-912-20161018

# webMethods Event Persistence 9.12 Readme

October 2016

This file contains important information you must read before using webMethods Event Persistence 9.12. You can find user documentation on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find the suite-related information listed below.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- WF-6022  
webMethods Event Persistence is not supported in non-OSGi environments.  
There is currently no workaround for this issue.
- WF-6298  
webMethods Event Persistence does not support persistence to Elasticsearch clusters with Shield enabled.  
There is currently no workaround for this issue.
- WF-6624  
Event Persistence does not provide a migration utility for migrating Event Persistence services from 9.10 to 9.12.  
As a workaround, create new Event Persistence services in the new environment.

### 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- Before you can store events with Event Persistence using HDFS as the storage engine, you must configure the Hadoop cluster by deploying the custom Hive SerDe and Joda Date/Time libraries from your Event Persistence installation to your CDH Hadoop 5.3 distribution.  
To configure Hadoop HDFS as the storage engine for Event Persistence:
  1. In your Software AG installation, locate the Joda Date/Time and the custom Event Persistence Hive SerDe .jar files:
    - joda-time\_2.9.3.jar – available in the Software AG\_directory\common\runtime\bundles\platform\eclipse\plugins\directory.
    - com.softwareag.evp.hive.serde\_9.12.0.0000-*nnnn*.jar – available in the Software AG\_directory\common\runtime\bundles\evs\eclipse\plugins directory (where *nnnn* is the build number of your Event Persistence installation).
  2. Copy both files to the Hive library directory on all nodes in the Hadoop cluster where Hive is running, for example HDFS\_directory/lib/hive/lib.
  3. Copy both files into the Yarn library directory on all data nodes in the Hadoop cluster, for example HDFS\_directory/lib/hadoop-yarn/lib or HDFS\_directory /lib/hadoop-mapreduce/lib if using MRv1.
  4. Restart Hive.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### **Release 9.12**

- Event Persistence 9.10 Fix 1

### **Release 9.10**

- Event Persistence 9.9.0 Fix1

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

Added Item	Description
Support for Elasticsearch 2.3.2 as an EDA event store	Event Persistence now supports persisting EDA events to and querying events from Elasticsearch 2.3.2.

## ***Release 9.10***

### **Added Item**

Support for Elasticsearch 1.7.2 as an EDA event store

### **Description**

Event Persistence now supports persisting EDA events to and querying events from Elasticsearch 1.7.2.

## **9.0 Added, Removed, Deprecated, or Changed APIs**

A release is listed in this section only if changes occurred in that release.

## ***Release 9.12***

### **Added API**

com.softwareag.eda.estore.query.api.  
builder.QueryBuilder

### **Description**

In addition to using an SQL-like language, the EVP simple query API now supports a simple query domain-specific language (DSL). The QueryBuilder enables a user to generate simple queries using Java.

BETWEEN

Added support for BETWEEN operator to the simple query API, the simple query DSL, and to the full text search DSL.

### **Changed API**

com.softwareag.eda.estore.query.api.  
FullTextQuery

### **Description**

Added setFilter(ExpressionBuilder filter) method to enable filters on full text searches.

## ***Release 9.10***

### **Added API**

com.softwareag.eda.estore.query.api.  
FullTextQuery

### **Description**

Contains methods that allow a user to define and execute a full text query. Currently, only the Elasticsearch storage engine supports full text search.

Added API	Description
com.softwareag.eda.estimate.query.api. FullTextQueryResponse	Contains the result set from the execution of a full text query. A full text query response contains an array of full text query hits.
com.softwareag.ade.estimate.query.api. FullTextQueryHit	Contains an individual event result from a full text query.

Changed API	Description
com.softwareag.eda.estimate.query.api.Query	Added an explain() method for debugging purposes. Query.explain() method returns a byte[] containing the user specified query and the native query that is generated from it.

## 10.0 Copyright Information

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EVP-RM-912-20161018

# Software AG Event Routing 9.12 Readme

October 2016

This file contains important information you must read before using Software AG Event Routing 9.12. You can find user documentation on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find the suite-related information listed below.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- EDA-2825  
Event Routing might not deliver events to the correct service group in case a configuration change coincides with the first event being sent by the client application.  
Event Routing allows the Administrator to define one or more services to which events can be sent. Services are grouped together as a set of one or more services. Each product runtime where Event Routing is used has a default service group. All event types that are not explicitly associated to any custom service group are considered to be associated to the default group. However, if the Administrator modifies the event type association configuration at the same time when a client application sends its first event of a particular event type, Event Routing might fail to deliver the events.  
Note: This issue does not occur in case the client application has already sent events of the particular event type.  
As a workaround, make sure you stop the server runtime and restart it once the event type association configuration updates are done.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- In case your event-driven environment contains applications that use the JMS capabilities of Integration Server (or the JMS protocol in general) to send and receive events of a particular EDA event type, and you create applications that use NERV and/or Event Routing to send and receive events of the same EDA event type, the respective JNDI entries might not be created correctly in the Universal Messaging server for the two application types to work.  
As a workaround, open a command line prompt in Software AG\_directory\common\lib, and run the event-routing-jms-util.jar utility. This will ensure the JNDI entries and topics have been created in your Universal Messaging server. For more information about how to run the utility, see the readme file in event-routing-jms-util.jar.



## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.10***

- EDA\_9.9\_NERV\_Fix1
- EDA\_9.9\_ERSharedBundles\_Fix1
- EDA\_9.9\_EDAspm\_Fix1
- EDA\_9.9\_NERV\_Fix2
- EDA\_9.9\_NERV\_Fix3

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Release 9.10***

- EDA-2371  
A `NullPointerException` occurs during deployment of a NERV route bundle.  
If an invalid NERV route bundle is constructed and deployed to an EDA target server using `webMethods Deployer`, the deployment fails. The log file of the corresponding Software AG Platform Manager contains a `NullPointerException`.  
The issue is now fixed, and no `NullPointerException` occurs even if the deployed NERV bundle is invalid.

## 6.0 Documentation Changes

This section describes significant changes to the documentation in each release, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 9.9**

The new “*Communicating between Software AG Products Using Event Routing*” PDF publication has been included in this release. It contains information about administering, configuring, and using Software AG Event Routing.

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### **Release 9.9**

Added Item	Description
com.softwareag.event.routing.EventRouting	Central interface for sending and consuming events.
com.softwareag.event.routing.nonosgi.EventRoutingProvider	Entry point for usage of Event Routing outside OSGi.

## 9.0 Copyright Information

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ER-RM-912-20161018

# webMethods Extended Character Set 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods Extended Character Set 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find the suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

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## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

## 4.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

- LPUT-93  
The time containing half an hour for a different time zone is incorrectly converted and displayed in the Users profile page. For example, GMT (Greenwich Mean Time) + 5:30 IST (Indian Standard Time) is displayed as GMT + 5:00 IST.  
This issue is resolved. If the time is GMT + 5:30 IST, then GMT + 5:30 IST is displayed in the Users profile page.

### ***Release 9.10***

- No change in 9.10 release

### ***Release 9.8***

- LPUT-76  
`com.softwareag.g11n.text.NCNameCoder.validate` affects the performance of Integration Server when the version of java being used is Java 8.  
When Integration Server validates XML documents, `com.softwareag.g11n.text.NCNameCoder.validate` validates if the given string satisfies NCName datatype specification. However, the performance of Integration Server is affected when the version of java being used is Java 8.

This issue is resolved.

## **Release 9.5**

- LPUT-39  
Extended Character Set artifacts contain duplicate classes. Extended Character Set artifacts contain duplicate classes, making them large in size. Also, the artifacts cannot be signed.  
This issue is resolved. The Extended Character Set artifacts do not have duplicate classes and can be signed.

## **5.0 Documentation Changes**

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

## **6.0 Terminology Changes**

A release is listed in this section only if changes occurred in that release.

## **7.0 Added, Removed, Deprecated, or Changed Items**

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## 9.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

ECS-RM-912-20161018

# Software AG Infrastructure 9.12 Readme

## October 2016

This file contains important information you must read before using Software AG Infrastructure 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

JConsole has some known issues when using a JMX connection to the CTP profile. The connection over SSL is not possible due to Java limitations. This capability is disabled for versions higher than 1.7.0\_25 (vulnerabilities found: [CVE-2013-2453](#), [CVE-2013-2457](#))\

There is currently no workaround for this issue. This affects releases: 9.5, 9.6, 9.7, 9.8, 9.9, 9.10, 9.12

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Software AG Runtime***

#### *Release 9.12*

- OGI\_9.10\_Fix3

#### *Release 9.10*

- OGI\_9.9\_Fix1

#### *Release 9.9*

- OGI\_9.8\_Fix4

#### *Release 9.8*

- OSGi\_Platform\_9.7\_Fix10

*Release 9.7*

- OSGi\_Platform\_9.6\_Fix7

*Release 9.5*

- OGI\_9.0\_SP1\_Fix11

**Software AG Security Infrastructure**

*Release 9.10*

- SIN\_9.9\_Fix1

*Release 9.9*

- SIN\_9.8\_Fix2

*Release 9.7*

- SIN\_9.6\_Fix5

*Release 9.6*

- SIN\_9.6\_Fix5

*Release 9.5*

- SIN\_9.0\_SP1\_SIN\_Fix0007

**Software AG Web Services Stack**

*Release 9.12*

- WSS\_9.10\_Fix3

*Release 9.10*

- WSS\_9.9\_Fix10

*Release 9.9*

- WSS\_9.8\_Fix4

*Release 9.8*

- WSS\_9.7\_Fix3

### *Release 9.7*

- WSS\_9.6\_Fix3

### *Release 9.6*

- WSS\_9.5\_SP1\_Fix3

### *Release 9.5*

- WSS\_9.0\_SP1\_Fix2

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Software AG Runtime***

#### *Release 9.9*

- OGI-927  
With OSGi Common Platform, when a daily time-based rollover is used, a size-based rollover causes the timestamp in the filename to be wrongly incremented by one day.  
The issue is resolved.
- OGI-1005  
PseudoUUID class produces non-unique IDs. Tests showed that non-unique UUID string would be created when 40 or more threads were requesting UUIDs simultaneously. The source of random values used by this class was changed to provide a more secure list of random values.

#### *Release 9.8*

- OGI-723  
In the OSGi platform, the JAAS configuration file contains plain text credentials. The issue is resolved. The OSGi platform can now modify the JAAS configuration file to hide the values of certain fields marked by the user as secure. You can mark plain text credentials as secure in the JAAS configuration file and the OSGi platform automatically hides the credentials the first time it reads the configuration file.

## **Software AG Web Services Stack**

### *Release 9.12*

- WSSTACK- 2190  
With Web Services Stack, potential clickjacking security vulnerability is detected in the Web Services Stack administration pages.  
The issue is resolved.

### *Release 9.9*

- WSSTACK- 1904  
With Web Services Stack, HttpClient 4.2 causes issues when used with HttpClient 4.4.1.  
The issue is resolved. The HttpClient component set is updated to 4.4.1.
- WSSTACK-1862  
With Web Services Stack, serving the WSDL when there are references/imports to external schemes may fail with a "String out of range -1" error. The issue is resolved.

### *Release 9.5*

- WSSTACK-1420  
SOAP Faults are not signed with WS-Security Policy  
When a Web service provider secures a web service with an X509Authentication\_Signature policy over HTTP, SOAP faults are not signed. As a result, the consumer returns a "SOAP header missing" error.  
This issue is now resolved.
- WSSTACK-1399  
Web Service Client generation fails for a local file  
On a Windows OS, when you use the wds12java command to create programmatically a WS Client from a locally stored WSDL file, the command fails if the path to the file contains blank spaces.  
This issue is now resolved.

## **Software AG Security Infrastructure**

- SIN-1087  
ClassCastException during MWS startup The initialization of the OWASP Enterprise Security API used by Software AG Security infrastructure fails with ClassCastException if ESAPI loggers are accessed before its initialization is complete. The issue is resolved.
- SIN-1096  
With Software AG Common Platform, the bouncycastle-bcprov 1.47 library has a known security vulnerability. The issue is resolved. The library is updated to the stable version bouncycastle-bcprov 1.52.

- SIN-1077  
The recursive search for users and groups does not work properly. With Software AG Security Infrastructure, the recursive search for users and groups does not work properly when `memberInfoInGroups=false`. The issue is resolved.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### ***Release 9.9***

- New Software AG Infrastructure Administrator's Guide  
The documentation for Software AG Common Platform, Software AG Runtime, Software AG Security Infrastructure, Software AG Web Services Stack, and the Tanuki Software, Ltd. Java Server Wrapper as it is used by Software AG products has been combined into a single guide named Software AG Infrastructure Administrator's Guide .
- New Software AG Infrastructure Readme  
The readmes for Software AG Common Platform, Software AG Runtime, Software AG Security Infrastructure, and Software AG Web Services Stack have been combined into a single Software AG Infrastructure readme. In addition, the combined readme has been expanded to contain cumulative information for these products back to the 9.5 release.

### ***Software AG Security Infrastructure***

#### *Release 9.6*

- With the Software AG Security Infrastructure 9.6 release, Integrated Authentication Framework is deprecated. All Integrated Authentication Framework-specific information has been removed from the guides. If you need information about Integrated Authentication Framework features, see an earlier version of the *Software AG Security Infrastructure Documentation*.

### ***Software AG Web Services Stack***

#### *Release 9.6*

- *Using Software AG Web Services Stack* is a PDF publication that provides information about using Web Services Stack and replaces the HTML version of the Web Services Stack documentation.

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

### **Software AG Runtime**

#### *Release 9.6*

Old Term	New Term
Software AG Tomcat Server	Software AG Web Server based on Apache Tomcat

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### **Software AG Security Infrastructure**

#### *Release 9.10*

Deprecated Item	Description
IAF	SSX authentication over IAF is deprecated.

### **Software AG Runtime**

#### *Release 9.12*

Added Item	Description
Tomcat Upgrade	Apache Tomcat is upgraded to version 7.0.70, which resolves known security vulnerabilities.

#### *Release 9.9*

Added Item	Description
Tomcat Upgrade	Apache Tomcat is upgraded to version 7.0.62, which resolves known security vulnerabilities.
Gemini Web Upgrade	Gemini Web is upgraded to version 2.2.7, which resolves known issues.

Added Item	Description
Direct the Java Util Logging framework to the Software AG Runtime log	Provides efficient bridging of the Java Util Logging logs to the Log4J backend used by Software AG Runtime.

### Release 9.8

Added Item	Description
Dynamic Bundle Deployment	Allows the OSGi platform to deploy bundles from a target directory at runtime. The directory can be continuously monitored by the platform or the deployment can be triggered explicitly via a call to an OSGi service.

### Release 9.7

Added Item	Description
Migration support from 9.0 to 9.7	An automated utility for migrating configurations from release 9.0 to release 9.7. Located in: <SoftwareAG_directory>\profiles\CTP\bin\migrate\migrate901sbs.dat

Changed Item	Description
Tomcat Upgrade	Apache Tomcat is upgraded to version 7.0.53, which resolves known security vulnerabilities.

### Release 9.6

Added Item	Description
Hot configuration reload	The configuration files in <SoftwareAG_directory>\profiles\CTP\configuration\com.softwareag.platform.config.propsloader are reloaded shortly after being modified without the need to restart Software AG Runtime.

## **Software AG Web Services Stack**

### *Release 9.12*

<b>Changed Item</b>	<b>Description</b>
Spring Upgrade	Spring Framework is upgraded to version 3.2.17, which resolves known security vulnerabilities.

### *Release 9.8*

<b>Changed Item</b>	<b>Description</b>
Secured WSS Admin and Happy Axis pages	WSS Admin page and Happy Axis page are now secured with Software AG Security Infrastructure.

## **9.0 Added, Removed, Deprecated, or Changed Built-In Services**

A release is listed in this section only if changes occurred in that release.

### **Software AG Runtime**

#### *Release 9.8*

<b>Added Service</b>	<b>Description</b>
Passman MBean	This service provides password retrieval using passman handles.

### **Common Landscape Asset Registry**

#### *Release 9.12*

<b>Added Service</b>	<b>Description</b>
Common Landscape Asset Registry built-in services	This is the initial release. All services are effectively added.

### **Common Service Container**

#### *Release 9.12*

<b>Added Service</b>	<b>Description</b>
Common Service Container built-in services	This is the initial release. All services are effectively added.



## 10.0 Added, Removed, Deprecated, or Changed Parameters

A release is listed in this section only if changes occurred in that release.

### Software AG Runtime

#### Release 9.9

Added Parameter	Description
com.softwareag.catalina.env.pid-suffix.properties	<p>Configuration property files for Environment Entries Configuration, which are located in <code>&lt;SoftwareAG_directory&gt;\profiles\CTP\configuration\com.softwareag.platform.config.propsloader</code>. They have the following properties: context, enabled, (1-9).env-entry.name, (1-9).env-entry.type, (1-9).env-entry.value, (1-9).env-entry.override.</p> <p>This configuration can be applied to every profile.</p> <p>Environment Entries support multiple configurations, which must have different names. To achieve this, the 'suffix' in the configuration name must be changed.</p>

## Release 9.8

Added Parameter	Description
com.softwareag.bundle.watchdog.pid	A configuration file for Dynamic Bundle Deployment, which is located in <code>&lt;SoftwareAG_directory&gt;\profiles\CTP\configuration\com.softwareag.platform.config.propsloader</code> . It has the following properties: <code>directory</code> , <code>scanPoll</code> , <code>scanInitial</code> , <code>start</code> , <code>startLevel</code> . This configuration can be applied to every profile.
com.softwareag.bundle.watchdog.global.pid	A configuration file for Dynamic Bundle Deployment, which is located in <code>&lt;SoftwareAG_directory&gt;\profiles\CTP\configuration\com.softwareag.platform.config.propsloader</code> . It has the following properties: <code>refreshToWireOptionals</code> , <code>refreshToAttachFragments</code> and controls the common behavior of the Bundle Deployment.

## Release 9.7

Removed Parameter	Replacement, if any
com.softwareag.platform.catalina.launcher.skip	

## Software AG Web Services Stack

### Release 9.7

Added Parameter	Description
restDispatchers	Enables the specifying of custom implemented dispatchers for REST requests.
wSDL4jRegisterDefaultExtensionAttributeTypes	Used to configure whether Axis2 registers default extension attribute types in the WSDL4J extension registry.
enableSoapValidation	Defines whether SOAP messages are validated when compliant with the SOAP specification.  Note: Supported in Web Services Stack 9.6.

## ***Common Landscape Asset Registry***

*Release 9.12*

<b>Added Parameter</b>	<b>Description</b>
Common Landscape Asset Registry configuration parameters	This is the initial release. All configuration parameters are effectively added.

## ***Common Service Container***

*Release 9.12*

<b>Added Parameter</b>	<b>Description</b>
Common Service Container configuration parameters	This is the initial release. All configuration parameters are effectively added.

## **11.0 Added, Removed, Deprecated, or Changed APIs**

A release is listed in this section only if changes occurred in that release.

### ***Software AG Runtime***

*Release 9.6*

<b>Removed API</b>	<b>Replacement, if any</b>
DataDirect Driver	

## ***Common Landscape Asset Registry***

***Release 9.12***

<b>Added API</b>	<b>Description</b>
Common Landscape Asset Registry APIs	This is the initial release. All APIs are effectively added.

## Common Service Container

### Release 9.12

Added API	Description
Common Service Container APIs	This is the initial release. All APIs are effectively added.

## 12.0 Copyright Information

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## 13.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

INFRA-RM-912-20161018

# Software AG Installer Readme

## October 2016

This file contains important information you must read before using the Software AG Installer October 2016 release. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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### 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

- Always read the Critical Requirements and Recommendations chapter in see *Using the Software AG Installer* before installing products.
- You might experience download issues while using the Software Installer. For suggestions on diagnosing and resolving the issues, see *Using the Software AG Installer*.
- Software AG strongly recommends that you create installation images of your products and store them on your internal network. Create an image for each operating system on which you plan to

install that is covered by your license agreement. Storing images enables you to ensure consistency across installations over time; the installer provides only the latest product releases, while installation images contain the product releases you download into them. In addition, installing from images helps you reduce WAN traffic and improve installation speeds. For instructions on creating images, see *Using the Software AG Installer*.

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- WIR-9963, MWS-19466

UNIX daemon is not registered when installing My webMethods Server on AIX

When installing My webMethods Server on an AIX system, you chose the option 'Register UNIX daemon for automatic start up,' but the daemon was not registered, and you received this error from the mkitab command:

```
[daemon.sh] /usr/sbin/mkitab "sag5mws912_default_5:235:wait:/etc/sag5mws912_default_5 start ..."  
(1)
```

The root cause is that the init-script name sag5mws912\_default\_5 is more than 14 characters long. The workaround is to use the daemon.sh tool and register the My webMethods Server daemon manually with a shorter base name, as shown in the following example where the base name is passed with -n mws912:

```
/opt/softwareag/common/bin/daemon.sh -f  
/opt/softwareag/profiles/MWS_default/bin/sagmws912_default_1 -n mws912  
/usr/sbin/rmitab: 0481-204 The ident field is not correct.  
Usage: /usr/sbin/rmitab "ident"  
[daemon.sh] ERROR: /usr/sbin/rmitab sag1mws912_default_1 failed (1)  
[daemon.sh] /etc/sag1mws912_default_1 removed (ok)  
[daemon.sh] Created /etc/sag1mws912 (ok)  
[daemon.sh] chmod 775 /etc/sag1mws912 (ok)  
[daemon.sh] /usr/sbin/mkitab "sag1mws912:235:wait:/etc/sag1mws912 start ..." (ok)
```

Note: The output shows the message "The indent field is not correct." with the rmitab command. You can ignore this message.

If the mkitab command shows no ERROR like in the example, then you have successfully registered the daemon on AIX.

- WIR-9986

My webMethods Server does not register Windows service or UNIX daemon correctly.

When installing on Windows, the installer will not create a service even if the "Register Windows

service/UNIX daemon" check box is selected. The workaround is to run mws.bat to register the Windows service.

When installing on UNIX, the installer will always try to create a daemon even if the check box is cleared. This means that if the sudo password is provided, a daemon will always be registered. If the sudo password is not provided, the installer will add a script line that will be executed when afterInstallAsRoot.sh is run later. The workaround is to use the daemon.sh command line tool to unregister the UNIX daemon. For instructions, see *Installing Software AG Products*.

- WIR-9975

Product daemons do not start automatically on Solaris.

During installation on a Solaris system, you chose the daemon registration option for products that offer that option. However, product daemons are not starting automatically with the Multi User Runlevel (Runlevel 2). The root cause is that the common/bin/daemon.sh does not include Runlevel 2 by default.

The workaround is to use the daemon.sh tool to register the daemons again while specifying the intended runlevels with option '-N', as shown in the following example for Platform Manager:

1. Change to root user:

```
$ su root # or sudo sh
# cd /opt/softwareag/common/bin
```

2. List the init-script and rc-script names of all registered daemons:

```
# ./daemon.sh -L
/etc/init.d/sag5spm912 /opt/softwareag/profiles/SPM/bin/sagspm912
```

3. Register the daemon again for Runlevels 2 and 3, using the rc-script names:

```
# cd /opt/softwareag/common/bin
# ./daemon.sh -N 2,3 -f /opt/softwareag/profiles/SPM/bin/sagspm912
```

- WIR-5418

UAC dialog box that prompts for administrator privilege settings is minimized in taskbar

When you install on a Windows system using the exe, a UAC dialog box may display that prompts administrator privileges. However, the dialog box minimizes to the taskbar instead of displaying on top of other windows.

The workaround is to click the taskbar to maximize the window and grant administrative privileges.

- WIR-7037

Download fails and installer log shows warning about password-protected Zip files

The installation files for some Software AG products contain password-protected Zip files that are used for MashZone. These products are Application Monitor Data Collector, Active File Transfer, Business Event Server, CloudStreams, MashZone, and OneData. If you have selected any of these products for installation, a warning that a Zip file was blocked due to security policy settings might be written to the installation log file. In some circumstances, a company's firewall or security application policy settings may notice this warning and block downloading of those products from the Software AG Software Download Center, causing the installation download to fail.

The workaround is to restart the installer, set logging to verbose, and select the products to install again. If you get the same failure, search the log file for the warning. If you find the warning, deselect the products listed above and finish the installation of any other products. Then contact Software AG Global Support to request an installation image of the blocked products.

### **3.0 Usage Notes**

This section provides any additional information you need to work with the current release of this product.

- The installer does not support running in compatibility mode on Windows systems. For example, the installer does not support running in Windows XP compatibility mode on Windows Vista or Windows 7.

### **4.0 Other Resolved Issues**

This section lists the issues that were resolved in each release. A release is listed in this section only if changes occurred in that release.

#### ***Release 9.12***

- WIR-9462  
Cannot create image generation script  
When trying to create an image generation script (select Create script and For image generation on Scripts tab, select Create image on Images tab), the installer displays the message “You cannot create a script and create an image at the same time.”  
The workaround for UNIX is to create the image generation script in console mode. For Windows, there is no workaround.  
The issue has been resolved.

#### ***Release 9.10***

- WIR-8895  
When creating a script and installing on local machine, the path to the installer-provided JDK is not set, and products cannot access it.  
This issue has been resolved.

#### ***Release 9.9***

- WIR-8320  
Installer looped over identifying a 1.7 JVM location.  
This issue has been resolved.



- WIR-8411  
Changing the log level in Advanced Options after invoking the installer with the `-readImage` option changed the image path.  
This issue has been resolved.
- WIR-8762  
Product jars were deleted when an uninstallation script was created.  
If you tried to create an uninstallation script and cleared the Uninstall Product checkbox, the script was created successfully but the product jars were removed.  
This issue has been resolved.

## **Release 9.8**

- WIR-7665  
Inconsistent behavior when moving backwards and forward through installer wizard  
Moving backwards and forwards after selecting products may cause some fields in the custom product panels to behave improperly (for example, by disabling fields).  
This issue has been resolved.
- WIR-7651  
Restore Defaults feature is not available in console mode.  
Restore Defaults has been removed from the installer.

## **Release 9.7**

- WIR-6994  
Errors occur when editing a script that installs from an image. When you edit a script that installs from an installation image, you may see errors after entering the name of the script and the location of the image in the Advanced Options tabs and clicking OK.  
This issue has been resolved.
- WIR-6645  
On Mac systems, installer configures products to use incorrect JRE  
When using a pre-April 2014 Software AG Installer to install products on Mac systems, you downloaded your own JDK to run the installer, and the installer configured the products to use that JDK. When using the April 2014 Software AG Installer to install products on Mac systems, you download your own JRE to run the installer, but the installer installs a JDK and should configure the products to use it. However, the installer is incorrectly following pre-April 2014 behavior, and configuring the products to use the JRE you installed to run the installer.  
This issue has been resolved.

## **Release 9.6**

- WIR-6979 Edit script overwrites “Install from Image”  
If you attempt to edit an installation script that has set the option to “install from image”, the

Installer resolves incorrectly and will instead create an image.  
This issue has been resolved.

- WIR-6535 Temporary directories not readable by current user cause installer to exit.  
If one or more temporary directories created by previous runs of installer under the temporary directory (usually /tmp or /var/tmp) are not readable by the user that running the installer, the installer will exit with a NullPointerException.  
This issue has been resolved.

## **Release 9.5**

- WIR-6429  
When non-writable directory was specified in console mode, installer did not allow user to exit the error message.  
You can now exit the error message and specify a writable directory.
- WIR-5705  
Product selection tree nodes from the second level down remained expanded even after requesting a collapse all.  
All nodes now collapse when collapse all is requested.
- WIR-5632  
Checkboxes on product selection tree did not indicate that child nodes were already installed.  
Checkboxes now have different shades of gray to indicate selection or non-selection of child nodes.
- WIR-5935  
Banner not displaying correctly on Linux systems.  
The banner now displays correctly.
- WIR-5728  
Message dialog boxes were displaying incorrectly on MAC systems, including truncation of text.  
Message dialog boxes now display correctly on MAC systems.
- WIR-5602  
Warning dialog box showed buttons for OK and Cancel when actually confirmation was needed.  
Affect dialog boxes have been changed to ask whether to continue, and buttons for Yes and No have replaced OK and Cancel buttons.
- WIR-6221  
My webMethods Server panel requested database connection parameters even when not creating an instance.  
When no creating an instance, database connection parameters should not be requested.  
Database connection fields are now disabled when not creating an instance.

## 5.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

## 6.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

## 7.0 Added, Removed, Deprecated, or Changed Items

This section lists features, functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

## 8.0 Copyright Information

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information, samples, useful resources, online discussion forums, and more

INSTLR-RM-20161018

# webMethods Integration Agent 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods Integration Agent 9.12. You can find user documentation on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### ***Release 9.9***

- Information about using webMethods Integration Agent is located in the *webMethods Integration Agent Administrator's Guide*.

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

## **8.0 Added, Removed, Deprecated, or Changed Items**

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

## **9.0 Added, Removed, Deprecated, or Changed Built-In Services**

A release is listed in this section only if changes occurred in that release.

## **10.0 Added, Removed, Deprecated, or Changed Parameters**

A release is listed in this section only if changes occurred in that release.

## **11.0 Added, Removed, Deprecated, or Changed APIs**

A release is listed in this section only if changes occurred in that release.

## **12.0 Copyright Information**

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## 13.0 Support

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IA-RM-912-20161018



# webMethods Integration Cloud 3.0.0 Readme

## October 2016

This file contains important information you must read before using webMethods Integration Cloud 3.0.0. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- LIP-3087  
Pipeline mapping screen does not respond if there is a large number of nested complex fields. The pipeline mapping page becomes unresponsive when a large number of nested complex fields is selected in a custom operation.  
Workaround: While creating a custom operation, ensure that you select only the required fields.
- LIP-2543  
Infinite document reference loops lead to errors.  
When a document type is created with a document reference to the same document type, it leads to infinite document reference loops. Errors are observed when this document type is used in the pipeline.  
There is currently no workaround for this issue.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of webMethods Integration Cloud.

- webMethods Integration Cloud is best experienced using Google Chrome browser or Mozilla Firefox. Some features may not work if you are using Microsoft Internet Explorer 10.0 or earlier versions.

## 4.0 Other Resolved Issues

This section lists the issues that were resolved in each release. A release is listed in this section only if changes occurred in that release.

### ***Release 2.6.0***

- LIP-1233  
On upgrading webMethods Integration Cloud, the older version browser's cache and cookies are

not cleared automatically.

When Integration Cloud is upgraded to a new version, the browser's cache and cookies are not cleared automatically. This leads to incorrect display of page content.

This issue is resolved.

## **Release 2.1.0**

- LIP-1842  
If you click "Settings" when the iPad is in portrait mode, Users, Password Policy, Access Profiles, Advanced Security, Company Information, and Stages Management links are not visible.  
This issue is resolved.

## **Release 1.5.1**

- RGHCC-82  
If SuccessFactors is queried with more than 200 requests, the operation is successful for the first batch of 200 requests, but fails for the second batch.  
This issue is resolved.
- RGHCC-84  
Operation creation fails for the following Goal Business Objects:  
GOAL\$1, GOAL\$2, GOAL\$3, GoalMilestone\$2, GoalMilestone\$3, GoalTask\$2, and GoalTask\$3.  
This issue is resolved.

## **Release 1.5**

- LIP-1292  
Fonts does not appear consistent when viewed in an iPad.  
When webMethods Integration Cloud is viewed in an iPad, the fonts are not consistent.  
This issue is resolved.
- LIP-1340  
The *Unmap* option in the Transformer window does not allow you to unmap multiple mappings.  
While adding a Transformer, the user is not able to unmap multiple mappings.  
This issue is resolved.

## **Release 1.2**

- LIP-1042  
Session time out effects.  
If the session times out when you are in the Stages Management, Integrations, or Applications pages, and if you click any link, the login page is not displayed.  
This issue is resolved.

- LIP-1116  
 Providing values for an array of complex data structure in the Query parameters section are not handled.  
 You will not be able to provide values for an array of complex data to Query parameters in the Data filter step of the Integration Wizard. You can provide multiple values for a field of type String array.  
 This issue is resolved.
- LIP-1066  
 Save button in the Integration wizard is always enabled even when the Integration is saved.  
 This issue is resolved.
- LIP-945  
 Selected Integration collapses when pulled into a stage.  
 When you select an Integration and pull it into a stage, the Integration list page is refreshed and your selection is lost.  
 This issue is resolved.
- LIP-1165  
 Logout after deleting or changing the Access Profile of the Administrator.  
 Integration Cloud logs off after the Administrator is deleted or the Access Profile of the Administrator is changed.  
 It is recommended not to delete or change the Access Profile of the Administrator.  
 This issue is resolved.

## **Release 1.1**

- LIP-1084  
 Incorrect validation message appears when an Integration, Account, or Operation name contains a period "." in it.  
 The following message appears when the name has a period in it, which is not descriptive of the issue:  
*"You have entered an invalid Account name. Details: Extra words after ."*  
 Workaround: Period is an invalid character in a name. Remove the invalid character from the name.
- LIP-1106  
 UI inconsistencies.  
 Alignment issues on the Connector details, and Settings pages, Integration, and Operation wizards.  
 The issues are resolved.
- LIP-1074  
 Scheduler Issues.  
 Scheduler is scheduling past dates in the "Schedule At" field. Further, the "Repeat every" field is not shown as mandatory.  
 The issues are resolved.

- LIP-1149  
Clear button is not working in the Integration wizard.  
The “Clear All” button is not clearing the Look up and Transformer fields.  
This issue is resolved.
- LIP-1176  
“Australia” is missing from the “Country” list displayed in the Registration page.  
The “Country” list did not have a record for Australia and other countries.  
This issue is resolved.
- LIP-1175  
“List of Integrations” page does not display properly if all the four stages are present.  
The “List of Integrations” page does not display properly if all the four stages are present. Three stages appear correctly but if one more stage is added, the Stages tab shifts to the right.  
This issue is resolved.
- LIP-1113  
Access profiles are not sorted correctly in the New User page.  
Access Profiles listed in the New User page are not sorted accurately.  
This issue is resolved.
- LIP-1124  
Connection or Account icon is incorrect for the Account with the same name on the Stages Management page.  
If you create an Account in two stages and if you create an Account in the other connector or Application with the same name, but have configured it only in the development stage, the correct icon does not appear for that particular connection.  
This issue is resolved.
- LIP-1153  
Company information cannot be modified.  
The Company Information cannot be edited. The Apply button is grayed out and not active.  
This issue is resolved.
- LIP-1151  
Message for unlimited available Accounts does not appear in the UI.  
Accurate message does not appear in the UI for available unlimited Accounts.  
This issue is resolved.

## 5.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 3.0.0**

- Container management service
- Complex fields
- Upgrade

### **Release 2.6.0**

- Dashboard for monitoring
- SAML 2.0 based Single Sign-On
- Business data logging
- Secure File Transfer Protocol (SFTP) Application including predefined SFTP operations
- Amazon Simple Notification Service (SNS) Application
- SAP Cloud for Customer (C4C) OData v2.0 Application
- Marketo Application

### **Release 2.5.0**

- New services added under String category
- FTP predefined operations
- Alfabet Application Account configuration fields

### **Release 2.1.0**

The following new sections are added in the *webMethods Integration Cloud Help*:

- New services added under Date, Document, List, and Flow
- Changes to Reference Data signature

- Indexed mapping

## **Release 2.0**

The following new sections are added in the *webMethods Integration Cloud Help*:

- Document Types
- Define input/output signature of an Integration
- File Transfer Protocol (FTP/FTPS) Application
- New services added under Flat File, JSON, and XML
- Audit Log

## **Release 1.6.0**

Added the following sections in the *webMethods Integration Cloud Help*:

- Advanced Security
- Custom Applications
- Built-In Services
- Reference Data

## **Release 1.5**

- Added a section in the *webMethods Integration Cloud Help* on how to create orchestrated Integrations.

## **Release 1.0**

- The new context-sensitive *webMethods Integration Cloud Help* describes how to use Integration Cloud and its features.

## **6.0 Terminology Changes**

A release is listed in this section only if changes occurred in that release.

## 7.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### **Release 3.0.0**

Added Item	Description
Container management service	You can now package existing webMethods Integration Server services as a Docker image or a repository and upload them in the Integration Cloud registry using the Docker CLI. From the Integration Cloud User Interface, you can create Docker containers from those repositories and start, stop, or delete the container services.
Support for upgrading Accounts and Operations	You can now upgrade Accounts and Operations from a lower version to a higher version. If an upgrade is available, the upgrade notification text appears on the Applications screen beside the Application. In this release, only Salesforce CRM Application can be upgraded from v29 to v31.
Support for complex fields	Integration Cloud now allows you to select nested data fields while creating a custom operation.
Enhanced look and feel for the User Interface	Integration Cloud User Interface has a new look and feel in this release. The screen layout and width has changed but there is no change in the User Interface functionality.
Field level help texts	For some fields in Integration Cloud, you can now point the mouse cursor to the help icon ( ? ) next to a field, and view the field level help text.

### **Release 2.6.0**

Added Item	Description
Performance data on Welcome screen	You can now view performance data regarding Integration executions on the Integration Cloud Welcome screen.



Added Item	Description
Dashboard for monitoring	Dashboard provides a centralized and intuitive way to view and monitor Integration executions and performance details. You can quickly identify, diagnose, and address problems in Integrations. Dashboard is available on the “Monitor” menu.
Integration Cloud User Interface	“Audit Log” and “Execution Results” are now available on the “Monitor” menu.
Business Data Logging	Integration Cloud now allows you to log select business data from the Operation and Integration signature. Values of logged fields can be viewed in the “Business Data” section in Execution Results. You can also create aliases for the logged fields.
Download Execution Results	You can now download execution results from the Execution Results screen.
SAML 2.0 based Single Sign-On (SSO)	Integration Cloud now supports Single Sign-On (SSO) that allows users to authenticate themselves against an Identity Provider (IdP). Both Service Provider and Identity Provider initiated SSO capabilities are supported.
Federation ID for SSO	You can now enter the Federation ID in the User profile > Basic tab if your Identity Provider passes the Federation ID for Single Sign-On.
Secure File Transfer Protocol (SFTP)	You can now connect to a SFTP server using the new SFTP Application and download files from or upload files to an SFTP-enabled server using the secure file transport channel.
Amazon Simple Notification Service (SNS)	An additional Application for Integration Cloud. Integration Cloud connects to Amazon Simple Notification Service (Amazon SNS) using the REST interface and allows you to publish messages and deliver them to subscribers and other applications.

Added Item	Description
SAP Cloud for Customer (C4C) OData v2.0	An additional Application for Integration Cloud. Integration Cloud connects to SAP Cloud for Customer (C4C) including SAP Cloud for Sales, SAP Cloud for Service, and SAP Cloud for Social Engagement solutions using the REST interface, and allows you to do standard CRUD operations on business objects by connecting to the OData Service endpoint. The SAP Cloud for Customer (C4C) OData v2.0 Application is a Beta candidate.
Marketo	An additional Application for Integration Cloud. Integration Cloud connects to Marketo using the Marketo REST API and allows you to create, retrieve, and remove entities and data stored within Marketo.

## **Release 2.5.0**

Added Item	Description
Added new services under String block	The following new services are added: isNumber, isAlphanumeric, isNullOrBlank, isDate, substitutePipelineVariables, compareStrings.
Added a new FTP predefined operation	renameFile operation is added for FTP Application.
Alfabet	An additional Application for Integration Cloud. Integration Cloud connects to Alfabet using the Interface for RESTful Web Services Version 1 and supports working with the various object types as defined in Alfabet. You can use it to query, retrieve, create, update, and delete objects of any type, and also manage relations between the objects.
Ability to connect to Salesforce using Partner SOAP API version 31 and Salesforce Bulk API version 31	Integration Cloud can now connect to Salesforce using the Partner SOAP API version 31 and the Salesforce Bulk API version 31.
Added a new Salesforce CRM predefined operation	uploadDataToWave operation is added for Salesforce CRM.

Added Item	Description
Download Integration Cloud Readme	You can now download the Integration Cloud Release Readme from the <i>About webMethods Integration Cloud</i> page (<Logged in User> > About > About webMethods Integration Cloud).

Changed Item	Description
Integration Cloud User Interface	Integration Cloud has a new look and feel in this release. The location of the menu has changed but there is no change in the User Interface functionality.

## **Release 2.1.0**

Added Item	Description
Added new services under Date, Document, List, and Flow blocks	The following new services are added: compareDates, incrementDate, insertDocument, deleteDocuments, documentListToDocument, documentToDocumentList, appendToDocumentList, appendStringList, sizeOfList, stringListToDocumentList, getLastError.
Test Integration executions in real time	You can now test the Integration execution in real time and view the execution results in the “Test Results” pane.
Support for document references	You can now create pipeline variables as document references, create document types comprising of document references, and also define the signature of Integrations comprising of document references.
Connection status for FTP and SOAP Accounts	You can now select “Test Connection” if you want to view the status of the connection for an FTP or custom SOAP Application. In earlier releases, Integration Cloud automatically verified the connection status.
Integration inputs during scheduling	You can now use “Schedule” or “Run Now” options available in the Integration details page and provide inputs to the Integration based on the defined input signature.

Added Item	Description
Enhanced Reference Data signature	<p>You can now filter the Reference data by providing an appropriate "matchCriteria". The output of Reference Data used in an Integration is a list of documents that match the specified "matchCriteria". Reference Data signature is derived from the column names of the uploaded text file. The root element in the output of Reference Data created from Integration Cloud version 2.1.0 has the same name as the one given to the Reference Data.</p>
<p>Map an indexed item of a String List, Document List, Document Reference List, or Object List</p>	<p>You can now add an indexed item to a String List, Document List, Document Reference List, or Object List and also map the indexed item. You can delete the selected indexed item provided the indexed item or none of its child fields are mapped.</p>

### ***Release 2.0.1***

Added Item	Description
Microsoft Dynamics CRM	<p>An additional Application for Integration Cloud. Integration Cloud connects to Microsoft Dynamics CRM 2013 using the Microsoft Dynamics CRM SOAP API. You can manage CRM data and access metadata that defines the specific CRM instance to which you are connecting.</p>

## **Release 2.0**

<b>Added Item</b>	<b>Description</b>
Create and edit Document types	You can now create a Document type and use it to define the input or output parameters for an Integration.
Specify input/output signatures	You can now declare input and output parameters for an Integration using the Input and Output tabs.
Invoke an Integration from another Integration	A new “Integrations” block is added, which displays the list of Integrations created in Integration Cloud. You can now invoke an Integration from another Integration. When copying integrations from one stage to another, all the referred Integrations and their dependents are also copied. You can also edit the referred Integration, which will open the Integration in a new tab.
Improved Orchestrated Integration User Interface	Blocks are reordered for improved usability.
Perform pipeline variable substitution	You can now perform pipeline variable substitution if you want to replace the value of a pipeline field at run time.
View execution results within Integration Cloud	You can now view the last five execution results in the Integration details page.
File Transfer Protocol (FTP/FTPS) Application	You can now connect to a FTP server using the new FTP/FTPS Application and download files from or upload files to the FTP-enabled server.
Added new services	New services are added under Flat File, JSON, and XML in this release.
WSDL file selection for a custom SOAP Application	You can now select a WSDL file from your local file system while creating a custom SOAP Application.
Ability to upload custom Application logos	You can now select a different icon for your custom SOAP Application.
Support for Partner or agent	You can now define Partner users. Even if “Allow User Interface Access” permission available under

**Added Item****Description**

Access Profile > Administrative Permissions > Account Controls is not enabled, a Partner User can still perform on-premise tasks.

View and download Audit Logs and update the retention period

You can now view and download audit logs related to additions, deletions, updates, export, schedule, login, logout, password changes, record access attempts, access violations, deployments, and so on for a user.

**Release 1.6.0****Added Item****Description**

Advanced Security

Integration Cloud now allows you to upload Keystores, Truststores, and Partner Certificates. These can be applied while creating an Account for a Custom Application.

Custom SOAP Applications

Integration Cloud now allows you to create Custom SOAP Applications. Custom SOAP Applications enable you to access third party web services hosted in the cloud or on-premise environment. The Custom SOAP Application uses a WSDL that is accessible through publicly or locally accessible URLs.

Web Service Security

Integration Cloud now allows you to create Custom SOAP Applications with third party Web Services that have WS-Security policies annotated in them. The WS-Security policies are automatically acknowledged in Integration Cloud if those policies are enforced on the Web Services.

New Services

*findDocuments*, *fuzzyMatch*, *bytesToStream*, and *streamToBytes* services are added to Integration Cloud in this release.

Reference Data

Integration Cloud now allows you to upload Reference Data from a text file containing tabular data separated by a character. Reference data is a

collection of key-value pairs, which can be used to determine the value of a data field based on the value of another data field. You can access the uploaded Reference Data in Orchestrated Integrations as a list of documents, by using the Reference Data block and providing an appropriate name.

Add fields to the pipeline

Integration Cloud now allows you to add a field to the pipeline while creating an Orchestrated Integration.

### **Release 1.5.1**

<b>Added Item</b>	<b>Description</b>
<i>Remove field</i> <i>Restore field</i>	You can drop or remove an existing pipeline input field. Once you drop a field from the pipeline, it is no longer available to subsequent services in the flow. The field which is removed can be restored.

### **Release 1.5**

<b>Added Item</b>	<b>Description</b>
Orchestrated Integration	Integration Cloud now supports advanced integration scenarios involving multiple application endpoints, complex routing, and orchestrations requiring multiple steps. Using a graphical drag and drop tool, you can create complex, orchestrated integrations and run them in the Integration Cloud environment.

### **Release 1.2**

<b>Added Item</b>	<b>Description</b>
Better logging and auditing capabilities	For better debugging of the integration execution failures, more information is now provided in the “Execution Results” page.
Application Account enable and disable functionality	You can now configure the Account details correctly in a stage. If you have configured the Account details incorrectly in any stage, the stage will appear in red color in the “Connectivity Status” column. If an Account

Ability to expose an Integration as a REST service	<p>is configured correctly in a particular stage, then that stage will appear in green color, and if an Account is not configured in a particular stage, then that stage will appear in white color.</p> <p>You can now trigger the execution of an Integration from an external system. This feature provides you with one more option to trigger Integration executions from a software application, for example, a REST Client, apart from manual and scheduled integrations from the user interface.</p>
Amazon Simple Storage Service (S3)	<p>An additional Application for Integration Cloud. Integration Cloud connects to Amazon Simple Storage Service (S3) using the REST interface and provides read, write, and delete access to the Amazon S3 buckets and objects within the Amazon instance.</p>
Amazon Simple Queue Service (SQS)	<p>An additional Application for Integration Cloud. Integration Cloud connects to Amazon Simple Queue Service (SQS) using the REST interface and provides access to the SQS objects within the Amazon instance.</p>
StrikeIron Contact Verification	<p>The StrikeIron Contact Verification Application has been added in this release.</p>
Predefined operations added in Salesforce CRM	<p><i>getDeletedBusinessObjectIDs</i> - Fetches the ID field of business objects deleted within the provided timeframe.</p> <p><i>getUpdatedBusinessObjectIDs</i> - Fetches the ID field of business objects updated within the provided timeframe.</p>
Salesforce Bulk Data Loader	<p>An additional Application for Integration Cloud. Integration Cloud connects to Salesforce using the Salesforce Bulk API version 29 and supports Job and Batch resources. You can use it to create, update, query jobs and batches, and operate on large number of records asynchronously by submitting batches which are processed in the background by Salesforce.</p>



SuccessFactors HCM

An additional Application for Integration Cloud. Integration Cloud connects to SuccessFactors using the SuccessFactors web service SFAPI, and performs SuccessFactors operations (Create, Read, Update, Delete, Fetch, Insert, Query, queryMore, and Upsert) over HTTP, using synchronous SOAP protocols. This Application has been tested with the following business objects: GOAL\$1, GOAL\$2, GOAL\$3, GoalMilestone\$2, GoalMilestone\$3, GoalTask\$2, GoalTask\$3, MatrixManager, and CustomManager.

ServiceNow Enterprise Service Management

An additional Application for Integration Cloud. webMethods Integration Cloud connects to different areas (Incident, Problem, and Change management) of ServiceNow using the Calgary version of the ServiceNow API. You can create incidents, get details of created incidents, and update and delete them. Similar operations are available for problem and change management cloud applications.

## **Release 1.1**

<b>Removed Item</b>	<b>Replacement, if any</b>
StrikeIron Contact Verification	The <i>StrikeIron Contact Verification</i> Application has been temporarily removed. If you have created StrikeIron Accounts, Custom Operations, and Integrations, these will not function. The Application may be reintroduced in a future release.

## **8.0 Copyright Information**

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## **9.0 Support**

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IL-RM-300-20161018

# webMethods Integration Server 9.12 Readme

October 2016

This file contains important information you must read before using webMethods Integration Server 9.12. You can find user documentation on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- **PIE-42679**  
The Integration Server migration utility does not list the command-line parameters supported for a cloned database.  
While using a cloned database for migrating Integration Server, the migration utility does not list the following command-line parameters associated with the cloned database:  
-cloneDbURL  
-cloneDbUser  
-cloneDbPassword  
However, the migration utility supports these parameters and allows you to specify their values during the process of migration.  
There is no workaround for this issue.
- **PIE-42189**  
Kerberos authentication fails for inbound calls with Service Principal Name format: host-based.  
Kerberos authentication for inbound calls with Service Principal Name format: "host-based" fails with the following exception:  
INFO | jvm 1 | 2016/08/08 11:27:54 | java.security.PrivilegedActionException: GSSEException: No valid credentials provided (Mechanism level: Failed to find any Kerberos credentials).  
There is no workaround for this issue.
- **PIE-42372**  
An FTPS connection over JSSE between Integration Server and a client that connects using the pub.client.ftp:login service is successful only when both are configured to use JSSE.  
The server can handle inbound FTPS connection requests only if the FTPS port is configured with the 'Use JSSE' parameter set to Yes. Similarly, for the client to create FTPS connections by using the pub.client.ftp:login service, the value of the useJSSE parameter must be set to Yes. If either of the values is set to No, the FTPS connection fails.  
There is no workaround for this issue.
- **PIE-42554**  
Refactor of a variable fails when the source element that contains the variable is not selected during the refactor preview.  
When you select a variable for refactor in Designer, but do not select the source element that contains the variable while previewing the selections for refactor, Integration Server throws a ServiceException and the refactor operation fails.  
There is no workaround for this issue.
- **PIE-42535**  
Refactor of a variable with the same name and type as another variable in a different service results in renaming of both the variables, in certain situations.  
When a flow service invokes another service whose signature contains a variable with the same

name and type as the calling service, refactoring one of the two variables also renames the other. There is no workaround for this issue.

- PIE-42424  
When a flow service has two variables of the same name but different types, and one of the variables is selected for refactor, the preview list does not display correct results. There is no workaround for this issue.
- PIE-42215  
Integration Server allows the refactor of an element that has its referenced elements already locked by another user. There is no workaround for this issue.
- PIE-42837  
Integration Server in an API Gateway configuration logs an error when restarted after configuration of multiple registration ports for a single external port.  
When an Integration Server in an API Gateway configuration is restarted after you configure multiple API Gateway registration ports for a single API Gateway external port, the Integration Server logs the following error message:  
[ISS.0070.0003W] Error encountered creating HTTP listener on port  
<port\_number>: null  
where <port\_number> indicates the port number of the API Gateway registration port. There is no workaround for this issue.
- PIE-42943  
All the configured external and registration ports are deleted from API Gateway on updating details of an external port.  
When you update the details of an external port from the Ports page of API Gateway, all the configured external and registration ports are deleted from API Gateway, and the following error message appears:  
HTTPListener@<port\_number> successfully deleted  
where <port\_number> indicates the port number that is deleted.  
A separate message appears for every port that gets deleted. There is no workaround for this issue.
- PIE-42992  
The screen for configuring Enterprise Gateway ports is enabled in the Integration Server Administrator when API Gateway is installed on Integration Server. There is no workaround for this issue.
- PIE-8533 (was 1-1Z6J9O)  
Integration Server does not shut down if an audit logging queue contains records waiting to be written to a destination.  
To work around this issue, wait for the records in the queue to be written to the destination.
- PIE-25824  
Cache-related failures on HP-UX.

When Overflow To Disk is enabled for a local cache, Integration Server returns multiple cache-related exceptions in the log at start up. For example,

```
"java.lang.IllegalArgumentException: Initial table allocation failed. Initial Table Size (slots) : 64
Allocation Will Require : 1KB Table Page Source :
com.terracottatech.offheapstore.disk.paging.MappedPageSource@56cac09
at com.terracottatech.offheapstore.OffHeapHashMap.<init>(OffHeapHashMap.java:204)
at com.terracottatech.offheapstore.AbstractLockedOffHeapHashMap.<init>(AbstractLocked
OffHeap HashMap.java:58)
at com.terracottatech.offheapstore.AbstractOffHeapClockCache.<init>(AbstractOffHeapClock
Cache.java:61)
at com.terracottatech.offheapstore.disk.persistent.AbstractPersistentOffHeapCache.<init>
(AbstractPersistent OffHeapCache.java:30)
at com.terracottatech.offheapstore.disk.persistent.PersistentReadWriteLockedOffHeapClock
Cache.<init>(PersistentReadWriteLockedOffHeapClockCache.java:26)
at net.sf.ehcache.store.offheap.factories.EhcachePersistentSegmentFactory$EhcachePersistent
Segment.<init>(EhcachePersistentSegmentFactory.java:67)
at net.sf.ehcache.store.offheap.factories.EhcachePersistentSegmentFactory.newInstance
(EhcachePersistentSegmentFactory.java:50)
at net.sf.ehcache.store.offheap.factories.EhcachePersistentSegmentFactory.newInstance
(EhcachePersistentSegmentFactory.java:27)
at com.terracottatech.offheapstore.concurrent.AbstractConcurrentOffHeapMap.<init>
(AbstractConcurrentOffHeapMap.java:98)
at com.terracottatech.offheapstore.disk.persistent.AbstractPersistentConcurrentOffHeapMap.<init>
(AbstractPersistentConcurrentOffHeapMap.java:42)
at net.sf.ehcache.store.offheap.disk.EhcachePersistentConcurrentOffHeapClockCache.<init>
(EhcachePersistentConcurrentOffHeapClockCache.java:52)
at net.sf.ehcache.store.offheap.disk.OffHeapDiskStoreFactory.createBackingMap(OffHeapDisk
StoreFactory.java:213)
at net.sf.ehcache.store.offheap.disk.OffHeapDiskStoreFactory.create(OffHeapDiskStore
Factory.java:63)
at net.sf.ehcache.EnterpriseFeaturesManager.createNonPersistentStore(EnterpriseFeatures
Manager.java:211)...."
```

This issue occurs only on HP-UX 11.

To work around this issue, update wrapper.conf file located under profiles/IS\_<instanceName>/configuration directory. Modify wrapper.java.command parameter in wrapper.conf file to point to <SAG\_DIR>/jvm/jvm/jre/bin/IA64W/java\_q4p

- PIE-4767 (was 1-1P2PV4)  
Invalid WSDL generated for C service for Axis and .Net clients.  
Integration Server generates invalid WSDL for a C service that takes a document specification as input. Axis and .Net clients cannot handle the resulting Java stub classes and throw an error.  
There is currently no workaround for this issue.
- PIE-8045 (was 1-1Y1BZ7)  
Installing a package that contains a schema with a target namespace that is the same as an existing schema on the Integration Server may result in two sets of definitions or declarations for the same

components.

If you only need the schema definitions or declarations contained in one schema, delete the other schema. However, if you need definitions from both schemas, there is no workaround for this issue.

- PIE-8185 (was 1-1YBYQD)

Web service connector ends with the error [ISC.0082.9034] Field is absent, field must exist.

If the output signature of a service used as an operation in a provider web service descriptor (WSD) contains a field that has a namespace URI without a prefix, Integration Server adds a prefix when generating a WSDL document for the provider WSD. In the consumer WSD created from the WSDL, the web service connector that corresponds to the operation (IS service) specifies a prefix for the field in the service output. However, the web service provider does not include a prefix with the field in the response. As a result, the contents of the SOAP response cannot be mapped to the web service connector output and the web service connector ends with the error [ISC.0082.9034] Field is absent, field must exist.

To avoid this issue, if a service will be exposed as a web service, always associate a prefix with a namespace URI for fields in the service signature.

- PIE-8494 (was 1-1Z342R)

The xsi:nil attribute in an element does not convert properly when generating an IS document from an XML document.

If an XML document has an element containing only xsi:nil as an attribute and an IS document is generated from that XML document using the pub.xml.xmlNodeToDocument service, the xsi:nil attribute is generated as an @xsi:nil field for the element in the resulting IS document. This occurs even if the element with the xsi:nil attribute has a simple type string; however, the document type that is created from the XML schema (which is used by the XML document) has a string field for the xsi:nil element instead of the IS document. There is a type difference between the generated document and the document type.

To work around this issue, manually edit the generated IS document to remove the @xsi:nil attribute and then convert the IS document to string field.

- PIE-16451

WSDL generated for a web service descriptor with a service signature, header document type, or a fault document type containing derived document types does not contain the schema definitions for the derived document types.

To work around this issue, create a WSDL with the schema definitions for the derived document types and then create a WSDL first web service descriptor.

- PIE-18649

When creating a WSDL first provider web service descriptor, Integration Server does not preserve the original service name from the WSDL document.

When Integration server generates a WSDL document for the provider web service descriptor, the service name will not match the service name in the source WSDL document.

There is currently no workaround for this issue.

- PIE-19157

IMAP email listener does not start.

This issue occurs when an IMAP e-mail port is configured to receive requests from an e-mail server that uses NTLM for authentication. With this configuration, the following error is returned when the port is enabled:

```
"Failed to start EmailListener:imap: <UserName>@<HostName>: [ISS.0070.9003] Enable failed:
Could not log into account <UserName>@<HostName>"
```

To resolve this issue, do one of the following:

If you want to disable NTLM authentication, follow these steps:

1. Open `custom_wrapper.conf` located under `<Software AG_directory>/profiles/IS_default/configuration` directory.
2. Add the following property:  
`wrapper.java.additional.n=-Dmail.imap.auth.ntlm.disable=true`  
where `n` is the next unused sequential number in the file.
3. Restart Integration Server.

Note that this behavior is consistent with the past releases of Integration Server.

If you want to enable NTLM authentication, follow these steps:

1. Download `jcifs-1.3.15.jar` file from <http://jcifs.samba.org/src/> into the `<IntegrationServer_directory>/instances/<instanceName>/lib/jars` or `<IntegrationServer_directory>/lib/jars` directory.
2. Restart Integration Server.

- **PIE-22556**

Java service throws `java.lang.reflect.InvocationTargetException` when attempting to use jars from `<JRE_directory>/lib/ext` directory, such as classes in the `com.sun.crypto.provider` package.

If you plan to use jars from the `<JRE_directory>/lib/ext` directory, you can avoid this issue by modifying the `config.ini` as follows:

1. Open the `config.ini` file located in `<Software AG_directory>/profiles/IS_<instanceName>/configuration`.
2. Add the following line:  
`osgi.parentClassloader=app`
3. Restart Integration Server.

- **PIE-32205**

Integration Server does not provide Java-based NTLM (Windows NT LAN Manager) support for proxy servers that support NTLM authentication. You can only use the NTLM authentication support in Integration Server to allow clients to access resources in web servers that support NTLM authentication, such as Microsoft Internet Information Server (IIS).

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- **PIE-4086 (was 1-1MDBR7)**

In the ClearCase dynamic view, reverting a node after performing a checkout, edit, save, or rename command causes the node to disappear.



When an uncheckout command is issued in ClearCase dynamic view, there is a delay of few seconds before the file is copied to the view. During the delay, the node disappears from Designer. This node reappears in Designer only after the view is refreshed.

This issue occurs only for direct installation of Integration Server in the Dynamic view for certain types of nodes, such as flat file schema. The issue does not occur when working directly in SnapShot view or when working with a folder that is mapped to a SnapShot or Dynamic view.

- PIE-6901 (was 1-1V7X71)

The jar files for an adapter are not removed from the system when the adapter is deleted. When you delete an adapter using the Package Management screen in Integration Server Administrator, the jar files in the code/jars and code/jars/static directory are not removed. The jar files in code/jars folder are loaded by the Package class loader and jars files in code/jars/static folder are loaded by Integration Server class loader. These jar files are locked by the Integration Server and can only be deleted when the server is shut down. If you install a new adapter package without removing the old jar files, Integration Server uses the old jar files with the new package. This can result in inconsistent or unexpected behavior.

When you install a new version of the adapter package, ensure that the new jar files are loaded by following these steps:

1. Delete the adapter package using Integration Server Administrator.
2. Shut down the Integration Server.
3. If there are any jar files left in the <IntegrationServer\_directory>/ instances/<instanceName>/ packages/<packageName>/code/jars and <IntegrationServer\_directory>/ instances/<instanceName>/ packages/<packageName>/code/jars/static directories, delete them.
4. Restart Integration Server.
5. Install the new adapter package.

- PIE-7720 (was 1-1X7C9N)

Publishable documents are not always synchronized with the Broker after Integration Server is restarted.

To work around this issue, start Software AG Designer and select File > Sync Document Types > All. Click Set All to Push, and then click Synchronize to push all publishable document types to the Broker.

- PIE-13975

Integration Server uses the default JVM implementation of JAXP. The JAXP implementation is used to validate XML schema during IS schema creation and WSDL schema during WSD creation. With this implementation, however, the schema or WSDL validation may incorrectly report problems. If validation problems occur during IS schema or web service descriptor creation, you should use the Xerces JAXP implementation.

To use the Xerces JAXP implementation, set the javax.xml.validation.SchemaFactory system property to org.apache.xerces.jaxp.validation.XMLSchemaFactory.

The Xerces JAXP implementation should resolve the validation problems during schema or WSDL validation.

- PIE-16497

Integration Server does not generate the \*doctype field for IS document types generated from

derived document types in a schema, when:

- Deriving a complex type from an empty complex type by extension.
- Deriving a complex type from a simple type by extension.

▪ PIE-21844

Integration Server throws Xerces validation errors while attempting to generate an IS asset from an XML Schema definition that imports multiple schemas from the same target namespace.

When creating an IS schema, IS document type, or flow service from an XML Schema definition that imports multiple schemas from the same target namespace, Integration Server throws Xerces validation errors indicating that the element declaration, attribute declaration, or type definition cannot be found. The Xerces Java parser honors the first <import> and ignores the others. This also occurs when creating a consumer web service descriptor or WSDL first provider web service descriptor from a WSDL document that contains multiple schemas imported from the same target namespace.

To work around this issue, do one of the following:

- Combine the schemas from the same target namespace into a single XML Schema definition. Then change the XML schema definition to import the merged schema only.
- When creating the IS asset, clear the "Validate schema using Xerces" check box to disable schema validation by the Xerces Java parser. When generating the IS asset, Integration Server will not use the Xerces Java parser to validate the schemas associated with the XML Schema definition.

Note: When creating an IS asset from an XML Schema definition, Integration Server always uses the internal parser to validate the schema. However, the Xerces Java parser offers stricter validation than the internal parser.

▪ PIE-22403

To make Integration Server more secure, as of version 9.0, the Execute ACL has been changed from Anonymous to Administrators for the following services:

- wm.server.tx:start
- wm.server.tx:restart
- wm.server.tx:execute
- wm.server.tx:end

If there are client applications that use the com.wm.app.b2b.client.TContext class to connect to your Integration Server anonymously, those applications will no longer work. In order for those applications to work, you must do one of the following:

1. Modify the client applications to use an administrative account when connecting to Integration Server.

- Or -

2. Change the Execute ACL for the services listed above back to Anonymous. This is less secure than the first option.

- When you upgrade to Integration Server 9.12 from a version of Integration Server that did not use port aliases, Integration Server assigns each port, with the exception of e-mail ports, an alias using the following naming convention:

<protocol>Listener\_<portNumber>\_<packageName>

where protocol is the protocol specified for the port, <portNumber> is the number assigned to the port, and packageName is the package with which the port is associated.

For e-mail ports, Integration Server uses the following naming convention for the port alias:

EMailListener\_<userName>\_<hostName>\_<packageName>

Where <userName> is the user name specified for the port, <hostName> is the host name specified for the port, and <packageName> is the package with which the port is associated.

The alias that Integration Server assigns to a port cannot be changed.

- When securing web services using policies based on WS-SecurityPolicy, you cannot alter an inbound message before the security processing executes or alter an outbound message after the security processing completes. For inbound messages, Integration Server always performs the security processing first upon receiving the message. As a result, Integration Server cannot invoke custom handlers before the security processing of an inbound message. For outbound messages, Integration Server always performs the security processing last, right before it sends the message. As a result, Integration Server cannot invoke custom handlers after the security processing of an outbound message.
- Integration Server uses Xerces Java parser version J-2.11.0. Limitations for this version are listed at <http://xerces.apache.org/xerces2-j/xml-schema.html>.
- If you want to use WS-SecurityPolicy to secure a web service and also want to use MTOM streaming, be aware that if the fields to be streamed are being signed and/or encrypted, Integration Server cannot use MTOM streaming because Integration Server needs to keep the entire message in memory to sign and/or encrypt the message.
- Added support for session-based authentication.  
When a client invokes a stateful service, Integration Server creates a session, and includes the session ID in its response to the client. If the client returns to invoke a service during the same session, Integration Server should use this session ID to identify the client, but this is not happening. Instead, Integration Server is reauthenticating the client for each service invocation. This behavior is similar to that performed for stateless services. When a client connects to a stateless service, the session is not maintained, and Integration Server's response does not include a session ID, so Integration Server must reauthenticate the client during the next service invocation. With this update, if a client returns to invoke a stateful service during the same session, Integration Server uses the session ID to identify the client, rather than performing authentication for each service invocation. This behavior allows the Integration Server to perform session-based authentication for stateful services, that is, authentication that lasts for the duration of the client's session with Integration Server.  
For best performance, use stateful services if your Integration Server receives requests from repeating clients. The client can connect to Integration Server, be authenticated just once, and then issue many service invocations during the same session. Use stateless services if clients typically send a single invocation request to Integration Server at a time. Using a stateless service prevents the creation of sessions that will sit unused, taking up resources in Integration Server.  
Note: This change does not require any changes to your existing implementation.
- Web services security implemented using WS-Security facility in Integration Server does not support partial message operations (Sign/Encrypt). Integration Server allows only the body of the SOAP message to be signed and encrypted.

- Do not modify the following file unless instructed to do so by Software AG:  
 <IntegrationServer\_directory>\instances\<instanceName>\config\wss\axis2.xml  
 Changes to this file may result in an unstable configuration. Software AG will not support issues that arise as a result of changes to this file that were not authorized by Software AG.
- Software AG does not support the deployment of custom handlers or modules via placement of an Axis Module (\*.mar) file in the following directory:  
 <IntegrationServer\_directory>\instances\<instanceName>\config\wss\modules  
 Unexpected behavior that arises due to the manual deployment of mar files directly to this location is the responsibility of the user and will not be addressed by Software AG.
- Software AG does not support the deployment of web services via placement of an Axis Archive (\*.aar) file in the following directory:  
 <IntegrationServer\_directory>\instances\<instanceName>\config\wss\services  
 Unexpected behavior that arises due to the manual deployment of aar files directly to this location is the responsibility of the user and will not be addressed by Software AG.
- Now, when you start Integration Server, Integration Server receives configuration settings (for example, the size of the Java heap) from the wrapper.conf and custom\_wrapper.conf files located in the *Software AG\_directory*\profiles\IS\_instance\_name\configuration directory. Integration Server no longer obtains settings from setenv.bat/sh or server.bat/sh.  
 If you need to modify the default property settings for Integration Server, you can override the settings using the custom\_wrapper.conf file. The following table shows the settings formerly set in the setenv.bat/sh file that are now set using properties in the custom\_wrapper.conf file:

<b>This setting in setenv.bat/sh...</b>	<b>Is replaced with the following property in custom_wrapper.conf...</b>
APPENDCLASSES/ APPEND_SYSTEM_CLASSPATH	wrapper.java.additional.203= Dwatt.server.append.classes=
JAVA_CUSTOM_OPTS	wrapper.java.additional.n
JAVA_MAX_DIRECT_SIZE	wrapper.java.additional.n=XX:MaxDirectMemorySize=
JAVA_MAX_MEM	wrapper.java.maxmemory
JAVA_MAX_PERM_SIZE	wrapper.java.additional.n=XX:MaxPermSize=
JAVA_MIN_MEM	wrapper.java.initmemory
PREPENDCLASSES/ PREPEND_SYSTEM_CLASSPATH	wrapper.java.additional.202= Dwatt.server.prepend.classes=

The following table shows settings you can change that were formerly in the setenv.bat/sh file, but are now located in other files or removed:

<b>Setting</b>	<b>New location (if applicable)</b>
DEBUG_ENABLED	<i>Software AG_directory</i> \profiles\IS_instance_name\bin\ startDebugMode.bat/sh

JAVA_PROFILER_OPTS/ PROFILER_ENABLED	Removed.
Java location	wrapper.java.command in <i>Software AG_directory</i> \profiles\ <i>IS_instance_name</i> \configuration\wrapper.conf
JMX_ENABLED	Removed. JMX monitoring is enabled by default and cannot be disabled.
JMX_PORT	The port property in <i>Software AG_directory</i> \profiles\ <i>IS_instance_name</i> \configuration\com.software.jmx.connector.pid-port.properties

The startup.bat/sh and shutdown.bat/sh scripts contained in the *Integration Server\_directory*\instances\*instance\_name*\bin and *Integration Server\_directory*\bin directories are deprecated. You should use the scripts contained in the *Software AG\_directory*\profiles\*IS\_instance\_name*\bin directory to start and stop Integration Server. If you will manage Integration Server through Command Central, you *must* use the scripts located in the *Software AG\_directory*\profiles\*IS\_instance\_name*\bin directory.

The installSvc.bat file located in *Integration Server\_directory*\instances\*instance\_name*\support\win32 directory is also deprecated. You should use the service.bat file from the *Software AG\_directory*\profiles\*IS\_instance\_name*\bin directory to register or remove an Integration Server instance as a Windows service.

For complete instructions for using any of the features affected by these changes, see *webMethods Integration Server Administrator's Guide* and *Working with the webMethods Product Suite and the Java Service Wrapper*.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### **Release 9.12**

- IS\_8.0\_SP1\_Core\_Fix32
- IS\_8.2\_SP2\_Core\_Fix20
- IS\_9.0\_SP1\_Core\_Fix14
- IS\_9.5\_SP1\_Core\_Fix11
- IS\_9.7\_Core\_Fix8
- IS\_9.7\_Tomcat6\_Fix2

- IS\_9.8\_Core\_Fix5
- IS\_9.9\_Core\_Fix2
- IS\_9.9\_SPM\_Fix2
- IS\_9.10\_Core\_Fix1
- IS\_9.10\_OData\_Fix1
- WAR\_9.7\_Fix2
- WAR\_9.8\_Fix3
- WAR\_9.10\_Fix2
- WFF\_8.2\_SP2\_Fix6
- WFF\_9.5\_SP1\_Fix4
- WFF\_9.6\_Fix4
- WFF\_9.8\_Fix1
- WFF\_9.9\_Fix1

### ***Release 9.10***

- IS\_7.1.3\_Core\_Fix28
- IS\_8.2\_SP2\_Core\_Fix19
- IS\_9.0\_SP1\_Core\_Fix13
- IS\_9.5\_SP1\_Core\_Fix10
- IS\_9.5\_SP1\_Portal\_Fix3
- IS\_9.6\_Core\_Fix9
- IS\_9.7\_Core\_Fix5
- IS\_9.7\_Portal\_Fix4
- IS\_9.8\_SPM\_Fix1
- IS\_9.9\_Core\_Fix1
- IS\_9.9\_SPM\_Fix1
- WAR\_9.5\_SP1\_Fix6

- WAR\_9.8\_Fix2
- WFF\_8.2\_SP2\_Fix5
- WFF\_9.0\_SP1\_Fix2
- WFF\_9.5\_SP1\_Fix3
- WFF\_9.6\_Fix1
- WFF\_9.7\_Fix4

### ***Release 9.9***

- IS\_8.2\_SP2\_Core\_Fix17
- IS\_9.0\_SP1\_Core\_Fix10
- IS\_9.0\_SP1\_WmCloud\_Fix1
- IS\_9.5\_SP1\_Core\_Fix8
- IS\_9.5\_SP1\_WmCloud\_Fix1
- IS\_9.6\_Core\_Fix7
- IS\_9.6\_MobileSupport\_Fix1
- IS\_9.6\_SubVersion\_Fix1
- IS\_9.6\_Tomcat6\_Fix3
- IS\_9.7\_Core\_Fix4
- IS\_9.7\_Migration\_Fix1
- IS\_9.7\_SPM\_Fix2
- IS\_9.8\_Core\_Fix2
- WAR\_9.5\_SP1\_Fix5
- WAR\_9.7\_Fix1

### ***Release 9.8***

- IS\_7.1.2\_Core\_Fix47
- IS\_7.1.3\_Core\_Fix27

- IS\_8.2\_SP2\_Tanuki\_Fix1
- IS\_8.2\_SP2\_Tomcat6\_Fix7
- IS\_9.0\_SP1\_Core\_Fix8
- IS\_9.0\_SP1\_Tanuki\_Fix1
- IS\_9.5\_SP1\_Migration\_Fix1
- IS\_9.5\_SP1\_Portal\_Fix2
- IS\_9.5\_SP1\_Tanuki\_Fix1
- IS\_9.5\_SP1\_Tomcat6\_Fix1
- IS\_9.6\_Core\_Fix4
- IS\_9.6\_Migration\_Fix2
- IS\_9.6\_Portal\_Fix1
- IS\_9.6\_Tanuki\_Fix1
- IS\_9.6\_Tomcat6\_Fix1
- IS\_9.7\_AssetPublisher\_Fix1
- IS\_9.7\_Core\_Fix2
- IS\_9.7\_Portal\_Fix2
- IS\_9.7\_Tomcat6\_Fix1
- IS\_9.7\_WmCloud\_Fix1
- WAR\_8.2\_SP2\_Fix6
- WAR\_9.0\_SP1\_Fix2
- WAR\_9.5\_SP1\_Fix4
- WAR\_9.6\_Fix3
- WFF\_9.0\_SP1\_Fix2
- WFF\_9.5\_SP1\_Fix3
- WFF\_9.6\_Fix1



## ***Release 9.7***

- IS\_8.0\_SP1\_Core\_Fix30
- IS\_8.2\_SP2\_Core\_Fix14
- IS\_9.0\_SP1\_Core\_Fix6
- IS\_9.0\_SP1\_Portal\_Fix1
- IS\_9.0\_SP1\_Tomcat6\_Fix1
- IS\_9.5\_SP1\_Core\_Fix4
- IS\_9.6\_Core\_Fix2
- IS\_9.6\_Migration\_Fix1
- WAR\_8.2\_SP2\_Fix3
- WAR\_9.0\_SP1\_Fix1
- WAR\_9.5\_SP1\_Fix3
- WAR\_9.6\_Fix2
- WFF\_8.2.2\_Fix3
- WFF\_8.2\_SP2\_Fix5
- WFF\_9.0.1\_Fix1
- WFF\_9.5.1\_Fix1
- WFF\_9.5\_SP1\_Fix2
- WFF\_9.6\_Fix1

## ***Release 9.6***

- IS\_8.0\_SP1\_Core\_Fix29
- IS\_8.2\_SP2\_Core\_Fix11
- IS\_8.2\_SP2\_WmDB\_Fix2
- IS\_8.2\_SP2\_WmPKI\_Fix2
- IS\_9.0\_SP1\_Core\_Fix3
- IS\_9.0\_SP1\_Win32\_Fix1

- IS\_9.5\_SP1\_Core\_Fix1

## **Release 9.5**

- ART\_8.2\_SP2\_Fix1
- WFF\_8.2.2\_Fix2
- IS\_8.0\_SP1\_Core\_Fix28
- IS\_8.2\_SP1\_Core\_Fix11
- IS\_8.2\_SP1\_VCS\_Fix2
- IS\_8.2\_SP2\_Core\_Fix9
- IS\_8.2\_SP2\_Portal\_Fix2
- IS\_8.2\_SP2\_Tomcat6\_Fix6
- IS\_8.2\_SP2\_Win32\_Fix3
- IS\_9.0\_SP1\_Core\_Fix1

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

- PIE-39870 (IS\_9.0\_SP1\_Core\_Fix14, IS\_9.5\_SP1\_Core\_Fix11, IS\_9.9\_Core\_Fix2, IS\_9.10\_Core\_Fix1)  
Service fails to run automatically after the cache expires when the Prefetch parameter is set to True. When the Prefetch parameter is set to True and the cache expires, the service fails to run automatically. The following exception is displayed in the server logs. "[ISS.0086.9249] Missing Parameter:num1" .  
This issue is resolved.
- PIE-39177 (IS\_9.0\_SP1\_Core\_Fix14, IS\_9.9\_Core\_Fix2)  
Integration Server logs contain duplicate entries after a port is enabled and disabled. When a port is enabled and disabled, Integration Server creates two entries for each action in the server logs. This issue occurs if the logging level is set to Debug. Integration Server logs the same information in the Debug log and the Info log which causes duplicates.

This issue is resolved. Now, if the logging level is set to Debug Integration Server logs information related to enabling and disabling of ports in the Info log.

- PIE-36924 (IS\_9.5\_SP1\_Core\_Fix11)  
An additional prefix is included in an XML document input when restored from the pipeline. Integration Server includes an additional prefix dx: at the root of an XML document instance. This issue occurs when the XML document is updated as specified in the following sequence of steps:
  - (1) The XML document is provided as input to an operation in a provider web service descriptor.
  - (2) The document is saved to a pipeline.
  - (3) The pipeline is restored.The issue is now resolved.
- PIE-39114 (IS\_9.7\_Core\_Fix8, IS\_9.9\_Core\_Fix2)  
Discrepancy in session count on Server > Statistics page and Server > Statistics > Session page. In Integration Server Administrator, the current total sessions displayed on the Server > Statistics page does not match the number of rows for Current Sessions displayed on the Server > Statistics > Sessions page.  
This issue is now resolved.
- PIEAR-746 (IS\_9.7\_Core\_Fix8)  
The threads waiting for the connection and the threads releasing the connection from the connectionPool are blocked in the ConnectionPool.  
When the connection creation thread acquires a lock on the ConnectionPool, the thread goes to the wait state and the state of this thread does not change. This prevents the connection from being released.  
To resolve this issue, Integration Sever now includes the following server configuration parameter: `watt.server.jca.connectionPool.createConnection.interrupt.waitTime` Specifies the wait time, measured in milliseconds, that elapses before Integration Server interrupts a connection creation thread that is in a wait state. There is no default value. You must restart Integration Sever for changes to this parameter to take effect.
- PIE-39355 (IS\_9.7\_Core\_Fix8)  
Integration Server does not indicate when it is disconnected from a cluster.  
Integration Server does not log an error message when it is disconnected from a cluster, preventing automatic detection of the situation.  
Now, Integration Server logs the following error message when it is disconnected from the cluster.  
[ISS.0033.151] The cluster is now not operational.  
Additionally, Integration Server logs the following error message when it rejoins the cluster.  
[ISS.0033.152] The cluster is now operational.
- PIE-34518 (IS\_9.8\_Core\_Fix5)  
Addition of CDATA block support to outbound SOAP processing.  
When processing an outbound SOAP message, Integration Server ignores CDATA delimiters in String fields.  
If a String field contained text in a CDATA block, Integration Server treats the text as regular text

instead of character text and url-encodes special characters in the delimiters and in the text block. Integration Server now provides CDATA block support for processing of outbound SOAP messages only when Integration Server hosts the web service provider. When a service used as an operation in a web service provider returns String values containing CDATA blocks, when encoding the IData into a SOAP message, Integration Server places the CDATA text in the outbound SOAP message in a CDATA section and does not url-encode special characters in the delimiters or text block.

Keep the following information in mind:

- A CDATA block begins with <![CDATA[ and ends with ]]> - Multiple CDATA blocks may be used in a single String value.
- CDATA blocks may not overlap or be nested.

Note: When Integration Server is acting as the web service client, Integration Server does not provide CDATA block support when processing outbound SOAP messages. If a String value containing the request is passed to the web service connector and the string contains CDATA, the contents of CDATA block will be treated as regular text and special characters in the delimiters and text block will be url-encoded in the outbound SOAP request.

- PIE-35132 (IS\_9.8\_Core\_Fix5)  
Changes to Integration Server to address the security vulnerabilities identified during internal security testing.  
This fix resolves the security issues found during internal security testing.
- PIE-38427 (IS\_9.8\_Core\_Fix5)  
A NullPointerException occurs when modifying or saving a flow service if dependency checking features are disabled.  
A NullPointerException occurs in Software AG Designer when modifying or saving a flow service if the server configuration parameter `watt.server.ns.dependencyManager` is set to false.  
This issue is resolved.
- PIE-38649 (IS\_9.8\_Core\_Fix5)  
Host name of an email port is displayed incorrectly in the View Email Client Details page in Integration Server Administrator.  
The host name of an email port is incorrect and contains garbled characters when the email port is viewed in the Security > Ports > View Email Client Details page in Integration Server Administrator.  
This issue is resolved. The host name is now displayed correctly in the Ports > View Email Client Details page in Integration Server Administrator.
- PIE-38920 (IS\_9.8\_Core\_Fix5)  
Certification of Integration Server with MySQL version 5.6.  
Integration Server 9.8 is now certified for use with MySQL version 5.6
- PIE-39009 (IS\_9.9\_Core\_Fix2)  
Messages are rolled back to Universal Messaging incorrectly if the webMethods messaging trigger

is configured to Suspend and Retry Later.

If a webMethods messaging trigger specifies Suspend and Retry Later for On Retry Failure, Integration Server rolls back a message to Universal Messaging if a transient error causes the trigger to fail. However, instead of rolling back a single message, Integration Server rolls back all of the received but unacknowledged messages for the trigger. For concurrent triggers, this can cause messages to be reprocessed. For serial triggers, this can cause messages to be lost.

Now, when a webMethods messaging trigger specifies Suspend and Retry Later and a transient error prevents the trigger from executing successfully, Integration Server rolls back a single message at a time to Universal Messaging. Additionally, Integration Server clears the trigger queue on the Integration Server immediately after suspending the trigger. Clearing the queue removes any messages that the trigger received but did not process. These messages will be redelivered.

- PIE-39287 (IS\_9.9\_Core\_Fix2)

Integration Server displays the predefined Client Prefix instead of the user-defined Client Prefix after a restart.

After restarting Integration Server, the user-defined Client Prefix for a new Broker Connection Alias is replaced with the predefined Client Prefix that Integration Server creates.

This issue is resolved. Now, Integration Server displays the user-defined Client Prefix correctly after a restart.

- PIE-39295 (IS\_9.9\_Core\_Fix2)

An attempt to create a web service descriptor from a WSDL document fails with a NullPointerException if the WSDL document contains multiple services but the services are not associated with all of the binding and portType definitions in the WSDL document.

Creating a consumer web service descriptor or a WSDL first provider web service descriptor from a WSDL document fails with a NullPointerException if the WSDL document defines multiple services and every service is not associated with every binding and portType defined in the WSDL document.

This issue is resolved. Each web service descriptor generated from a service in a WSDL document exposes only the binding and portTypes associated with the service.

- PIE-40157 (IS\_9.10\_Core\_Fix1)

Correction to a spelling error in Queue Provider field.

On the Settings > Logging > Edit <loggerName> Details page, Integration Server Administrator lists Universal Messaging instead of Universal Messaging as one of the Queue Provider values.

The spelling error is now corrected.

- PIE-37272

Deadlock among threads in XA recovery store prevents XA transactions from completing.

The XA recovery store contains information about each XA transaction, including the transaction ID (XID), the global state of the transaction at each point in the transaction, and the state of each resources participating in the transaction. During an XA transaction, a deadlock between threads accessing the XA recovery store occurred because an exception occurred after a thread acquired a lock. The exception prevented the release of the lock.

This issue is now resolved. In addition to resolving the issue described above, Integration Server now includes server configuration parameters to control recovery logging.

`watt.server.transaction.xastore.performXALogging`

Specifies whether or not Integration Server writes transaction information to the XA recovery store. Set to true to instruct Integration Server to log information about the state and progress of each XA transaction. Set to false to instruct Integration Server to skip logging XA transaction information. The default is true.

Important! If you set `watt.server.transaction.xastore.performXALogging` to false, Integration Server does not log any information to the XA recovery store while processing a transaction, making transaction recovery impossible. If you want Integration Server to automatically resolve incomplete transactions or you want to manually resolve incomplete transactions, Integration Server must perform XA logging.

You must restart Integration Server for changes to this parameter to take effect.

`watt.server.transaction.xastore.maxTxnPerFile`

Specifies the maximum number of unique XA transactions in an XA recovery log file. When the XA recovery log file reaches the maximum number of transactions, Integration Server creates a new file. The default is 2000 transactions.

Consider increasing the maximum number of unique XA transactions for the XA recovery log file if there are more than 2000 active XA transactions and Integration Server exhibits a performance delay due to input/output. Increasing the number of unique XA transactions allowed per file decreases the number of files used for the XA recovery log, which, in turn, may result in fewer files for Integration Server to search when performing XA recovery.

Decreasing the number of unique XA transactions stored in file may help during transaction recovery as it might decrease the time to read and consolidate open transactions.

- **PIE-37566**  
Executing anonymous services creates persistent sessions.  
Some anonymous services in the WmRoot package create persistent sessions. Repeated execution of these services can consume all of Integration Server's licensed sessions.  
This has been fixed. Anonymous services in WmRoot are now stateless which means that Integration Server creates sessions to execute these services and discards the sessions immediately.
  
- **PIE-38112**  
Integration Server does not restart after improper shut down.  
If Integration Server does not shut down properly, which can be caused by a JVM crash or a machine crash, configuration files such as `acls*.cnf` become corrupted or are reduced to a size of zero. In turn, this causes a restart of Integration Server to fail. To recover, data must be restored manually from a backup directory. This issue resulted from how Integration Server persists data into the file system. Prior to this fix, Integration Server tried to overwrite the existing file in the file system. If Integration Server shut down improperly right after the file was recreated but before the new content was written to the file system, the file content became corrupted or the file was reduced to a size of zero.  
With this fix, Integration Server changes how it saves changes to configuration files. When saving changes to configuration files, Integration Server first saves the configuration changes in a

temporary file in the `IntegrationServer_directory/instances/instanceName/config/work` directory. After saving the changes in a temporary file, Integration Server moves the temporary file to the actual configuration file. This ensures that if unexpected behavior occurs before the configuration changes are initially saved to the temporary file, only the temporary file is impacted. The actual configuration file is not corrupted. At start up, if Integration Server detects files in in the `IntegrationServer_directory/instances/instanceName/config/work`, it suggests that changes to a configuration file were not saved to the temporary file and that, therefore, the changes were not made to the actual configuration file. Use the contents of the `IntegrationServer_directory/instances/instanceName/config/work` directory to determine which configuration files were in the process of being changed. Decide whether or not you want to redo the changes to the configuration files. Delete the files under the directory and redo the configuration change if you so choose.

- **PIE-38470**  
The `xsd:any` element and attributes are not generated for a web service descriptor when the `Allow Unspecified Fields` property is true.  
The WSDL document for a web service descriptor does not include the `xsd:any` element and attributes when the web service descriptor uses a Document variable for which the `Allow unspecified fields` property is set to true. This issue occurs even when the server configuration parameter `watt.core.schema.createSchema.omitXSDAny` is set to false.  
To address this issue, the web service descriptor now includes a property, `Omit xsd:any` from WSDL. When set to false, the WSDL document generated by Integration Server includes an `xsd:any` element. When set to true, the WSDL document does not include the `xsd:any` element. The default value is true. For changes to this property to take effect, after saving the change to the property, either refresh the web service descriptor or reload the package that contains the web service descriptor.
- **PIE-38658**  
When a client sends multiple HTTP PUT requests to Integration Server, every second request fails with a 400 Bad Request response.  
Now, alternating HTTP PUT requests from the same client will not fail. Integration Server handles multiple HTTP PUT request from the same client correctly.
- **PIE-38686**  
GET request mandatorily adds a default value to the `Content-Type` header.  
If `Content-Type` header is not specified in a GET request, the `pub.client.http` service adds a default `Content-Type:"application/x-www-form-urlencoded"`. According to HTTP 1.1, it is not mandatory to specify the `Content-Type` header. If the `Content-Type` header is not specified, the the `pub.client.http` service should not add a default `Content-Type`.  
Now, if no `Content-Type` header is specified, `pub.client.http` service does not add a default `Content-Type` to the request. However, if you pass the data using 'args' or 'table' keys, default `Content-Type: "application/x-www-form-urlencoded"` is added.
- **PIE-38751**

In Integration Server, sometimes publishing a guaranteed document to Universal Messaging server fails due to transaction failure.

This issue occurs when the Universal Messaging server does not respond to the transaction within the specified EvenTimeout.

This issue is resolved. A new server configuration property, `watt.server.um.producer.transaction.commitRetryCount` is introduced in the server configuration file. This property specifies the number of retry attempts Integration Server makes to publish the message to the Universal Messaging server. The maximum number of retries is 9. If you try to assign a value greater than 9, Integration Server automatically sets the value of the property to 9. The default is 0. When setting a retry value, you must ensure that the total transaction time does not exceed the `MaxTransactionTime`. The total transaction time is calculated by multiplying the total number of attempts with the `EvenTimeout`. For example, if the retry value is set to 9, and the `EvenTimeout` is set to 60s, the total transaction time is  $60,000(9+1) = 600s$ .

- PIE-38932

Integration Server loads a package more than once during deployment.

During deployment of multiple packages at the same time, Integration Server reloads the packages more than once.

Now, when a deployment operation includes multiple packages, Integration Server loads each package only once.

- PIE-39017

In a clustered environment, Integration Server sometimes does not create child tasks when a new server is added to the cluster or when an existing server is restarted.

When a task is scheduled to run on all servers in a clustered environment, Integration Server creates a parent task and a child task for each server in the cluster. When a new server is added to the cluster or when an existing server in the cluster is restarted, Integration Server creates a corresponding child task upon server restart. However, Integration Server sometimes does not create the child task for the newly added server or for the server that was restarted. As a result, the complete information for all servers in the cluster is not available on the Scheduler screen.

This issue is resolved.

- PIE-39164

SSL handshake fails as no client certificate is sent when a new connection is opened through proxy. When Integration Server tries to open a connection to web server that requires client certificate through proxy, the SSL handshake using JSSE fails as no client certificate is sent. This happens only when the `keyStoreAlias` and `keyAlias` parameters are set using `pub.security.keystore:setKeyAndChain` service and not when they are set using the Integration Server Administrator (Security > Certificates). This issue occurred because the client certificate attachment was missing in the request.

This issue is now resolved. Now, client certificate is sent to web server when a connection is opened through proxy.

- PIE-39178



Repository-based deployment fails when deploying locally publishable documents on the target Integration Server.

When deploying locally publishable documents on the target Integration Server using a repository-based deployment, Integration Server cannot find a messaging connection alias for the locally publishable document. This causes the deployment to fail. When the publishable document type is set to locally only, there is no messaging connection alias attached to it.

This issue is resolved. Now, Integration Server does not check for a messaging connection alias during deployment when the publishable document type in Integration Server is set to locally only.

- PIE-39210  
Integration Server experiences memory leak due to orphaned entries of type `com.wm.app.b2b.server.ostore.FileCache$InvokeCounter` located in `com.wm.app.b2b.server.ostore.FileCache`.  
This issue is now resolved.
  
- PIE-39268  
Enhancement to Integration Server to use a file for specifying allowed cipher suites.  
The following server configuration properties identify the list of cipher suites for use with inbound and outbound SSL connections.  
`watt.net.ssl.client.cipherSuiteList`  
`watt.net.ssl.server.cipherSuiteList`  
`watt.net.jsse.client.enabledCipherSuiteList`  
`watt.net.jsse.server.enabledCipherSuiteList`  
Prior to this enhancement, the properties accepted a comma-separated list of cipher suites. However, specifying a long list of cipher suites can be cumbersome. To make it easier to specify a long list of cipher suites, Integration Server now allows specifying a file as the value for the cipher suite server configuration properties. In the file, specify each cipher suite on a different line. For each cipher suite server configuration property for which you want to specify a file instead of a list of cipher suites, specify the following as the value of the property: `file:directoryName\filename` For example: `watt.net.jsse.server.enabledCipherSuiteList=file:c:\ssl\ciphers.txt`.  
Note: You can set the value of a cipher suite server configuration property to a comma-separated list, default, or the absolute path to a file. You cannot specify a combination of these. Integration Server loads the file and its list of supported cipher suites at start up. Changes to the contents of the file that are made after Integration Server starts will not take effect until the next time Integration Server starts. Integration Server throws the following exception if it cannot find the specified file: `ISS.0070.9048E Integration Server cannot find the file {0} specified for the server configuration parameter {1}`.  
Cause The specified server configuration parameter uses a file to identify the allowed cipher suites; however, Integration Server cannot find the file.  
Action Make sure the server configuration parameter specifies the correct location of an existing file.
  
- PIE-39278  
Message not found for messageKey 68.29 and 68.30.

If an email port has "Log out after each mail check=Yes" , Integration Server fails to retrieve the error messages for messageKey 68.28 and messageKey 68.30.

Following messages appear in the server log:

For IMAP: ISP.0068.0029I] Message not found for messageKey 68.29. For POP3: ISP.0068.0029I] Message not found for messageKey 68.30.

This issue is now resolved. Now, correct messages are displayed for messageKey 68.28 and messageKey 68.30.

- PIE-39298

Error in getting SFTP server host key, if a key exchange algorithm is not supported by SFTP server. Jsch has a default key exchange algorithm order.

During the handshake, jsch checks the client key exchange algorithms one by one with SFTP server key-exchange algorithms. The first matching algorithm is used as the key-exchange algorithm between SFTP client and SFTP server. However, Jsch does not support 2048-bit keys for diffie-hellman-group-exchange-sha256 and diffie-hellman-group-exchange-sha1 key exchange algorithms in Java 1.7 and earlier versions. Consequently, if the Integration Server runs with Java 1.7 or earlier version and SFTP server expects 2048-bit keys for these algorithms, then the handshake between SFTP server and SFTP client fails.

To avoid this issue, the order of these key exchange can be changed using the `watt.ssh.jsch.kex` parameter so that, any other matching key exchange algorithm can be selected as the key exchange algorithm between the SFTP client and SFTP server.

To address this issue, Integration Server now include a server configuration parameter to change the order of the key exchange algorithm.

`watt.ssh.jsch.kex` Specifies the order of the key exchange algorithm for Jsch. The specified order overrides the default key exchange algorithms order supported by Jsch.

For example: `watt.ssh.jsch.kex=diffie-hellman-group-exchange-sha1, diffie-hellman-group1-sha1,diffie-hellman-group14-sha1` If the SFTP server expects 2048-bit keys for diffie-hellman-group-exchange-sha1, then the order of this algorithm can be changed so that, any other matching algorithm can be selected as key exchange algorithm between the SFTP client and SFTP server.

`watt.ssh.jsch.kex=diffie-hellman-group1-sha1, diffie-hellman-group14-sha1, diffie-hellman-group-exchange-sha1` Integration Server must be restarted for changes to this parameter to take effect.

- PIE-39357

Integration Server fails to retrieve the SFTP Get Host Key during the SFTP Server Alias creation. SFTP Server Alias creation fails with 'Auth Cancel' exception, as Integration Server fails to retrieve the SFTP Get Host Key.

The issue is now resolved.

- PIE-39380

Integration Server issues an Access Denied error message during the logon process and logs an authentication exception in the server log.

Integration Server issues the following error message during the logon process and logs the exception in the server log:

Access to Integration Server is denied because of the following authentication exception:

LoginModule "com.wm.app.b2b.server.auth.jaas.X509LoginModule" unavailable.  
The issue is now resolved.

- PIE-39574  
Web service connector does not capture all the Set-Cookie HTTP response headers sent back by the web service provider.  
When a web service connector sends a request to a web service provider that sends back multiple Set-Cookie response headers, the connector captures only one Set-Cookie response header.  
This issue is resolved. Now, if the web service provider sends back multiple Set-Cookie HTTP response headers, the connector returns all of the headers in its output.
  
- PIE-39585  
Missing fields in an IS document type generated from an XML Schema Definition (XSD) that has complex type definitions referring to group elements defined later in the schema.  
When an Integration Server document type is generated from an XSD where the complex type definitions contain references to group elements defined later in the schema, the generated document type does not contain the fields corresponding to such references.  
This issue is now resolved.
  
- PIE-39701  
Integration Server migration utility reports an exception during migration of Trading Networks package.  
During migration of Integration Server, if the source Integration Server contains a Trading Networks package, the migration utility throws an exception if JDBC pool information was not selected during migration of configuration files and JDBC pool information was specified during installation of Trading Networks.  
Trading Networks data and configuration file Migrator : Unable to locate the database configuration information. File  
<IntegrationServer\_installDirectory>\bin\migrate\..\..\instances\default\config\jdbc\pool\<poolName>.xml does not exist. Where poolName refers to the pool name specified for the Trading Networks functional alias.  
This issue is now resolved. Integration Server migration utility correctly migrates Trading Networks data.
  
- PIE-39735  
Synchronization of publishable documents with the messaging provider fails when using a startup service to run pub.publish:syncToProvider.  
When the pub.publish:syncToProvider service runs as part of a startup service, Integration Server reloads the webMethods messaging triggers but fails to update the state of the triggers.  
This issue is resolved.
  
- PIE-39762  
REST API descriptor treats parameter of type byte[] as byte.  
When creating a REST API descriptor, if a selected REST resource contains a service with byte[] in

the service signature, the REST API descriptor treats the parameter as a byte instead of byte[]. This issue is now resolved.

- **PIE-39819**  
An error occurs when you create or edit a file polling port if the path to the monitoring directory contains a backslash '\'.  
When you create or edit a file polling port and the path to the monitoring directory contains a backslash '\', the following error message is displayed. "No listener defined with the specified key: FilePollingListener: c: mp" This issue occurs because the Integration Server Administrator uses the wrong encodingType.  
This issue is resolved.
  
- **PIE-39825**  
A synchronous or asynchronous publish and wait does not receive a reply.  
If a publishable document type is empty, that is, it does not contain any fields besides the \_env field, and values are mapped to fields the \_env field before publishing the document using pub.publish:publishAndWait, Integration Server does not receive a reply to the published request. This occurs for synchronous and asynchronous publish and wait requests.  
This issue is now resolved.
  
- **PIE-39839**  
Universal Messaging does not reuse the session on Integration Server even though watt.server.trigger.reuseSession is set to true.  
When the server configuration property, watt.server.trigger.reuseSession is set to true and Broker is the messaging provider, Broker reuses the session on Integration Server. Whereas, Universal Messaging as the messaging provider does not reuse the session.  
This issue is resolved.
  
- **PIE-39847**  
JDBC connection pools are blocked after the database restarts.  
After the database used by a JDBC pool restarts, Integration Server does not release connections from the pool because of an unexpected exception thrown by the JDBC driver.  
Now, Integration Server exception handling prevents the exception thrown by the JDBC driver from blocking the release of connections from the JDBC pool.
  
- **PIE-39848**  
After migrating to Integration Server 9.5 or later, Integration Server displays an exception when calling a web service and using MTOM streaming.  
After migrating 2 to Integration Server 9.5 or later, sending a web service request that uses MTOM streaming for which more than one chunk is sent, the following exception occurs: "Exception --> org.apache.axis2.AxisFault: Connection reset by peer: socket write error"  
This issue is now resolved.

- **PIE-39853**  
Unable to view assigned input values for services in Integration Server Administrator when the server configuration property `watt.server.disableXSSFilter=true`.  
When creating a scheduled task, assigning input values using the "Assign Inputs" button displays an empty input field even though the assigned value is saved in the input field. Since the XSS filter is disabled by setting the server configuration property `watt.server.disableXSSFilter=true`, Integration Server is unable to encrypt quotation marks (") in the input values. Therefore, the assigned input values are not displayed in the input field in Integration Server Administrator. This issue is resolved. Integration Server is now able to encrypt quotation marks (") in input values when the server configuration property `watt.server.disableXSSFilter=true`.
  
- **PIE-39876**  
Swagger document generated by Integration Server does not represent REST resources with required list parameters correctly.  
If a REST API descriptor contains REST resources that refer to a list parameter, such as String list, Document list, Document Reference list, and Object list, and the list parameter is required, the definitions section of the generated Swagger document does not indicate that the parameter is required.  
This issue is now resolved.
  
- **PIE-39877**  
If a REST API descriptor contains a REST resource that refers to a parameter of type String table, the generated Swagger document does not indicate the type of the parameter as "array".  
This issue is now resolved.
  
- **PIE-39938**  
Reliable messaging sequences on Integration Server are timed out when the inactivity timeout interval is set to a value of -1.  
This issue is now resolved. The reliable messaging sequences do not get timed out when the inactivity timeout interval is set to -1 in the Integration Server Administrator (Settings > Web Services > Reliable Messaging > Edit Configuration).
  
- **PIE-39967**  
Service error statistics counter causes memory leak.  
An internal mechanism used to report the last 60 seconds worth of service failures has a memory leak. The memory leak occurs when a steady stream of exceptions, at least one every 60 seconds, are thrown without interruption.  
To resolve the memory leak, Integration Server clears the service error statistics counter when new entries are added.
  
- **PIE-40014**  
Selected Authentication Type does not get populated under HTTP Transport Properties in

consumer web service descriptor endpoint alias.

When creating a consumer web service descriptor endpoint alias, the selected Authentication Type is not populated under HTTP Transport Properties.

The issue is now resolved.

- PIE-40027  
Integration Server logs the wrong message when it cannot find the encoder "esapi".  
When Integration Server cannot find the encoder "esapi", it logs the following wrong error message: [ISC.0072.0023E] Couldnt initialize encoder "{0}".  
Whereas, Integration Server should log the following message:  
ISC.0072.0023E] Failed to initialize the bundle for encoder 'esapi'.  
This issue is resolved now.
- PIE-40048  
In the Service Usage screen, some of the values are displayed as &nbsp; instead of the actual value.  
In the Service Usage screen of Integration Server Administrartor, some of the values in the Count and Last Run columns are displayed as &nbsp; instead of the actual value. This issue occurs because of encoding issues in Integration Server.  
This issue is resolved. Now, the values in the Count and Last Run columns are displayed correctly.
- PIE-40109  
The pub.xml:getNextXMLNode service incorrectly returns a NullPointerException when the NodeIterator does not have XML nodes to return.  
This issue is resolved. The pub.xml:getNextXMLNode service returns null when there are no XML nodes to return.
- PIE-40126  
Results window does not show parameter names when using Natural CALC subprogram.  
From the Natural CALC subprogram, the IDL and IS connection are created. When using Integration Server and Adapter 9.9, and running the example CALC flow service in Software Designer from the Service Development perspective, the results window does not show the parameter names. The field name abbreviator (as used for XmlData) truncates field names that start or end with #.  
With this fix, the Field name abbreviator no longer truncates field names that start or end with #.
- PIE-40139  
Integration Server becomes unresponsive due to an OutOfMemoryError caused by lack of PermGen space.  
A memory leak in the package classloader may result in an java.lang.OutOfMemoryError: PermGen space, which causes Integration Server to become unresponsive.  
The memory leak in the package classloader is now repaired.
- PIE-40141

The `pub.event.routing*` services are not working properly in Integration Server 9.9.

The `pub.event.routing*` services of `send`, `subscribe`, and `unsubscribe` are not working properly. For example, the `send` service throws the following `ServiceException`: `Could not run 'send'`  
`com.wm.app.b2b.server.ServiceException: com.wm.app.b2b.server.ServiceException: Event Routing service not available.`

This issue is resolved now.

- **PIE-40183**  
Different error messages for primary and regular HTTP ports.  
When Integration Server receives a client request for a web service that does not exist, it returns different error messages depending on whether the request was received through the primary port or an HTTP port.  
Now, Integration Server returns the same error message regardless of the port through which it receives the request.
- **PIE-40189**  
Missing schema definition for the `envelope (_env)` field in the WSDL document when a service containing reference to a publishable document type is exposed as a web service.  
When a service containing reference to a publishable document type is exposed as a web service, the resulting WSDL document does not contain the schema definition for the `envelope (_env)` field.  
This issue is now resolved.
- **PIE-40194**  
A `webMethods` messaging trigger that receives messages from a Universal Messaging cluster becomes disconnected and does not reconnect.  
When a Universal Messaging connection alias that specifies a cluster of Universal Messaging servers and the network between the Universal Messaging servers fails, one or more `webMethods` messaging triggers that use the alias might disconnect and then not reconnect. This might happen even if the trigger can successfully connect to one of the Universal Messaging servers but not the other servers in the cluster.  
Now, if a `webMethods` messaging trigger becomes disconnected from a cluster of Universal Messaging servers, the trigger reconnects only when the cluster has a quorum. In addition to resolving the issue described above, Integration Server now redirects the Universal Messaging client log entries from the default `stdout` to the Integration Server's log directory, `Integration Server_directory/instances/instanceName/logs/umClient.log`. The `umClient.log` file can be used when debugging Universal Messaging issues.
- **PIE-40195**  
Integration Server does not validate a Kerberos ticket sent by an Internet browser.  
If Integration Server receives a request on a port configured to accept Kerberos tickets, Integration Server returns a 401 status code with a "Negotiate" header challenge to the Internet browser. Upon receiving the Negotiate header challenge, a properly configured Internet browser generates a Kerberos ticket and sends the request, along with the Kerberos ticket, to Integration Server. Integration Server should validate the Kerberos ticket and either allow or deny the client request

based on the ACL settings. However, Integration Server could not process the Kerberos ticket because a Kerberos ticket sent by an Internet browser is structurally different from tickets generated by a Java client. Because Integration Server could not process the ticket, Integration Server could not validate the Kerberos ticket. Instead, Integration Server returned a 401 status code and prompted the client for username and password credentials.

Integration Server can now process a Kerberos ticket generated by an Internet browser.

- PIE-40202

JDBC connection pool for ISInternal functional alias is blocked.

Integration Server does not release connections from the JDBC connection pool used by the ISInternal functional alias because of an unexpected exception thrown by the JDBC driver.

Now, Integration Server exception handling prevents the exception thrown by the JDBC driver from blocking the release of connections from the JDBC connection pool.

- PIE-40212

Enhancement for using a public cache, including a distributed cache, for service results caching. Previously, Integration Server stored cached service results in the ServiceResults system cache which is part of the SoftwareAG.IS.Services system cache manager.

With this enhancement, a local or distributed public cache can now be used for service results caching. By using a distributed cache as the service results cache, multiple Integration Servers can access cached service results.

Keep the following information in mind when using a public cache for service results caching:

- The cache must be configured such that elements do not expire once they are placed in the cache. That is, the Eternal check box must be selected for the cache. The duration of cached service results depends on the Cache expire property value for the service and the `watt.sever.cache.flushMins` server configuration parameter value.

- When using a distributed cache as a service results cache, make sure that all the Integration Servers that share the service results cache have the same packages.

- When returning cached results for a service, by default, Integration server returns a reference to the cached results instead of the actual value of the cached results. If you want Integration Server to return the actual value instead of a reference, make sure that the Copy on Read and Copy on Write check boxes are selected for the public cache.

- If you want to be able to use Integration Server Administrator or the `pub.cache.serviceResults:listCache` service to view the cached elements for a service, make sure that the service results cache is searchable and that the cache allows automatic indexing for keys. That is, for the service results cache, the Searchable check box must be selected and the Key check box next to Allow Automatic Indexing must be selected.

- When a public cache used for service results caching is disabled or a public cache manager that contains the cache used for service results caching is shut down, Integration Server does not cache or retrieve service results. Instead of using cached results, Integration Server executes the service.

- When a public cache used for service results caching is enabled or the public cache manager that contains the public cache used for service results is started, Integration Server re-initializes the cache.

For detailed information about creating a public cache, public cache manager, and a distributed



cache, see the webMethods Integration Server Administrator's Guide.

Note: In Integration Server Administrator, the Server > Service Usage page displays statistics about service results. For a distributed cache, this statistics corresponds to the current Integration Server instance only. Integration Server Administrator does not provide aggregated statistics for all the Integration Servers using the same distributed cache for service results caching.

To configure Integration Server to use a public cache for service results caching, you specify the name of the cache and cache manager in the server configuration parameters `watt.server.serviceResults.cache` and `watt.server.serviceResults.cacheManger`, respectively.  
`watt.server.serviceResults.cache`

Specifies the name of the public cache to use for service results caching. If no value is specified for the `watt.server.serviceResults.cache` parameter, Integration Server uses the `ServiceResults` cache in the cache manger specified in the `watt.server.serviceResults.cacheManager` parameter as the service results cache. If the cache manager in the `watt.server.serviceResults.cacheManager` parameter does not contain a cache named `ServiceResults`, Integration Server throws an error at start up and does not cache service results. You must restart Integration Server for changes to this parameter to take effect.

`watt.server.serviceResults.cacheManager`

Specifies the name of the public cache manager that contains the public cache to use for service results caching. If no value is specified for this parameter, Integration Server uses the `SoftwareAG.IS.Services` system cache manager as the service results cache manager. If the `SoftwareAG.IS.Services` system cache does not contain a cache with a name that matches the value of the `watt.server.serviceResults.cache`, Integration Server throws an error at startup and does not cache service results. You must restart Integration Server for changes to this parameter to take effect.

Note: To use the `ServiceResults` system cache located in the `SoftwareAG.IS.Services` system cache manager as the service results cache, do not specify a value for `watt.server.serviceResults.cache` or `watt.server.serviceResults.cacheManager`.

- **PIE-40246**  
The `pub.client:soapClient` service does not use the private key and certificate chain set using the `pub.security.keystore:setKeyAndChain`.  
This issue is now resolved.
  
- **PIE-40259**  
Using the delete icon to delete an OpenID Provider on the Security > OpenID page does not delete the OpenID Provider.  
In the Security > OpenID page of Integration Server Administrator, clicking the delete icon in the Delete Provider column invokes an unknown service, resulting in the display of the following message:  
[ISC.0072.9001] Unknown service: `wm.server.security.openid:deleteProvider`  
Furthermore, the OpenID Provider is not deleted.  
Now, clicking the delete icon in the Delete Provider column on the Security > OpenID page results in Integration Server deleting the OpenID Provider.

- PIE-40261

Use JSSE option is missing on external port if the internal port is set to HTTP.

On Integration Server Administrator, when you view a port for which the Enterprise Gateway External Port is set to HTTPS and Enterprise Gateway Registration Port is set to HTTP, the "Use JSSE" option does not appear. The "Use JSSE" option appears only if the Enterprise Gateway Registration Port is set to HTTPS.

This issue is now resolved.
  
- PIE-40275

Enhancement to allow the default locale for pub.date\* services to be the server locale instead of the client locale.

When executing a pub.date\* service with a locale input parameter for which no locale is specified Integration Server uses the locale from the session used by the client that invoked the service. Integration Server now includes a server configuration parameter that you can use to specify that the default locale for pub.date\* services should be the server locale.

watt.server.session.locale.ignore

Specifies whether the default locale for the pub.date\* services is the server locale or the locale from the session used by the client that invoked the service. When set to true, when executing a pub.date\* service for which a locale input parameter value is not specified, Integration Server uses the server locale as the value of the locale parameter. When set to false, when executing a pub.date\* service for which a locale input parameter value is not specified, Integration Server uses the locale from the session used by the client that invoked the service. The default is false.

You do not need to restart Integration Server for changes to this parameter to take effect.
  
- PIE-40300

Under heavy load, Integration Server might generate duplicate contextIDs for audit log messages resulting in an AuditLogManagerException.

Under heavy load, Integration Server might generate duplicate contextIDs for audit log messages, causing Integration Server to write the following AuditLogManagerException to the server.log: [ISS.0095.9998] AuditLogManager Exception: com.webmethods.sc.auditing.api.logger.WmAuditLoggerException: Null or duplicate context given to logger 'Error Logger'

Now Integration Server generates unique contextIDs even under heavy load.
  
- PIE-40324

Integration Server throws an error when an incoming message contains a pre-populated contextID and audit contextID.

Integration Server write the following error to the server.log when an incoming message contains a pre-populated context ID and audit contextID. [BAA.0000.0061] This context has already been used in the current context stack.

Integration Server now handles a message with a pre-populated contextIDs and audit contextID and no longer logs the above error.

- PIE-40362  
 Unable to publish a package to multiple subscribers.  
 When publishing a package to multiple subscribers, clicking the 'Send Release' button in Integration Server Administrator prompts you to select a subscriber even though subscribers are selected.  
 This issue is resolved.
- PIE-40363  
 UserInfo service does not receive error information.  
 If an OpenID Provider's UserInfo Endpoint returns an error, information about the error should be passed to the userInfoError input variable in the UserInfo service registered for the OpenID Provider. This is not happening.  
 This issue is now resolved.  
 Note: Previously, the userInfoError input variable was named error.
- PIE-40372  
 Reply messages are sometimes not received with asynchronous request-reply using webMethods messaging and Universal Messaging as the messaging provider.  
 In an asynchronous request-reply for webMethods messaging, the pub.publish:publishAndWait service is first invoked followed by the pub.publish:waitForReply. When the messaging provider is Universal Messaging, some reply messages are not received if Integration Server receives the reply message before invocation of the pub.publish:waitForReply service.  
 This issue is now resolved.
- PIE-40408  
 Enhancements for managing a service results cache. Integration Server now includes built-in services that you can use to manage a service results cache, including:  
 pub.cache.serviceResults:resetServerCache resets the entire cache.  
 pub.cache.serviceResults:resetServiceCache resets the cache for a particular service.  
 pub.cache.serviceResults:listServiceCache lists the cached results for a particular service.  
 In addition to the above services, Integration Server Administrator now includes a way to view the cached service results for a particular service. To use Integration Server Administrator to view the cached service results, do the following:

  1. Open Integration Server Administrator if it is not already open.
  2. In the Packages menu of the Navigation Panel, click Management.
  3. In the Packages list, click the package containing the service for which you want to view cached service results.
  4. Click Browse Services in packageName.
  5. In the Services list, click the name of the service for which you want to view the cached service results.
  6. On the Packages > Management > packageName > Services > serviceName page, click List Service Cache. Integration Server displays a list of the cached results for the service. For each cached element, Integration Server displays the key for the cached element, the cached service inputs, and the associated cached service outputs.

Notes:

- You can also access the Packages > Management > packageName > Services > serviceName page in the following way: Under Server, click Service Usage. On the Server > Service Usage page, click the name of the service for which you want to list cached results.

- To return a list of cached result for a service, the services results must be searchable and that the cache allows automatic indexing for keys. That is, for the service results cache, the Searchable check box must be selected and the Key check box next to Allow Automatic Indexing must be selected.

Note that exposing the contents of the service results cache may represent a security risk.

- You can view cached service results for a public service results cache only. You cannot view cached service results in the ServiceResults system cache.

Below is more information about each of the new built-in services.

pub.cache.serviceResults:listServiceCache WmPublic.

Returns a list of the cached service results for a particular service.

Input Parameters

serviceName String. Name of the service for which you want to view the cached service results.

Output Parameters elements Document List. Conditional. A document list (IData ) containing the cached service results for the specified service. The pub.cache.serviceResults:listServiceCache service returns the elements output only if the service results cache contains cached results for the specified service. For each set of cached service results, the

pub.cache.serviceResults:listServiceCache returns the following information:

key String. Optional. Key for the cached element containing the service results.

input. Document. Optional. An IData containing the key/value pairs for the cached service input.

output Document. Optional. An IData containing the key/value pairs for the cached service output

Usage Notes:

- If serviceName specifies a service that does not exist or a service for which Integration Server does not cache service results, Integration Server returns an empty elements output parameter.

- You can use the pub.cache.serviceResults:listServiceCache with a public service results cache only. You cannot use the pub.cache.serviceResults:listServiceCache with the ServiceResults system cache.

- For the pub.cache.serviceResults:listServiceCache service to return results, make sure that the service results cache is searchable and that the cache allows automatic indexing for keys. That is, for the service results cache, the Searchable check box must be selected and the Key check box next to Allow Automatic Indexing must be selected.

- Exposing the contents of the service results cache via the listCacheService may represent a security risk.

pub.cache.serviceResults:resetServerCache

WmPublic. Resets the cache for all services in the service results cache, resulting in the removal of all cached service results for all services from the service results cache.

Input Parameters None.

Output Parameters message String. Message indicating whether or not Integration Server cleared the service results cache successfully.

- "Cache reset successfully" indicates that Integration Server cleared the entire service results cache successfully.

- "Error resetting cache!" indicates that Integration Server did not clear the entire service results cache successfully. Review the sever log and error log to determine why Integration Server did not clear the service results cache successfully.

pub.cache.serviceResults:resetServiceCache

WmPublic. Resets the cache for specific service, resulting in the removal of cached service results for the service.

Input Parameters serviceName String. Fully qualified name of the service in the format folder.subfolder:serviceName for which you want to remove cached service results.

Output Parameters message String. Message indicating whether or not Integration Server cleared the service results cache for the specified service successfully.

- "Cache reset successfully" indicates that Integration Server cleared the cached service results for the specified service successfully.

- "Error resetting cache!" indicates that Integration Server did not clear the cached service results for the specified service successfully. Review the sever log and error log to determine why Integration Server did not clear the service results cache successfully.

Note: To avoid revealing whether or not a service exists, if serviceName specifies a service that does not exist, the message output parameter returns the message "Cache reset successfully"

- PIE-40422  
Integration Server grants access to a user account disabled by the external user manager. Integration Server caches information for users who provide valid credentials. If the user later provides invalid credentials, Integration Server denies access but does not remove the cached information about the user. Consequently, if the user later provides valid credentials, Integration Server grants access even if an external user manager disabled the user account. Now, when a user provides invalid credentials, Integration Server removes the user information from the cache.
- PIE-40454  
The pub.storage:get service fails in a cluster. Integration Server improves the performance of the pub.storage\* services by caching the DATASTORE\_ID values from the IS\_DATASTORE table. However, in a cluster, a cached DATASTORE\_ID value might become stale due to actions taken by other Integration Servers in the cluster. A pub.storage\* service fails when it attempts to use a stale DATASTORE\_ID. Now, when a pub.storage\* service attempts to use a stale DATASTORE\_ID, Integration Server replaces it with the current DATASTORE\_ID.
- PIE-40467  
Corrections for cosmetic issues in Integration Server Administrator. Integration Server Administrator displays some cosmetic issues, such as empty cells, deeply nested tables, and missing graphics, that are now repaired.
- PIE-40480  
When restarting Integration Server fix after applying a fix, expected changes are not made to the embedded database. If the ISInternal functional alias uses the embedded, internal database and application of an Integration Server fix made changes made to the database structure, Integration Server should perform some database updates upon restart of Integration Server. However, this was not happening.

This issue is now resolved.

- PIE-40504  
A `NullPointerException` occurs when Integration Server enters quiesce mode and the JMS subsystem has not been initialized.  
This issue is resolved. Integration Server can now enter quiesce mode even if the JMS subsystem has not been initialized.
- PIE-40505  
Memory leak when invoking `pub.jms:reply` Integration Server did not correctly release JMS Session and MessageProducer objects when invoking the `pub.jms:reply` service, resulting in a memory leak.  
The issue is now resolved.
- PIE-40516  
In a cluster of Integration Servers, the scheduled task for which the target node is set to "Any Node" and "Repeat After Completion" executes the same service simultaneously on different cluster nodes when the Terracotta Server Array becomes unavailable.  
This issue is now resolved. Now, in a cluster of Integration Servers, a scheduled task with target node set to "Any Node" and "Repeat After Completion", executes the service only on one of the cluster nodes at a time when the Terracotta Server Array becomes unavailable.
- PIE-40517  
Specifying a value of true for the `watt.net.ssl.client.useJSSE` server configuration property does not use JSSE for all of the outbound HTTPS connections from Integration Server.  
After applying a fix or upgrading to a release that includes PIE-38599, Integration Server no longer honors the value of `watt.net.ssl.client.useJSSE` for outbound HTTPS connections. This occurs because PIE-38599 changed the default value of the `useJSSE` input parameter in the `pub.client:http` service to "no" from a null value. A value of "yes" or "no" for the `useJSSE` input parameter overrides the value of the `watt.net.ssl.client.useJSSE` server configuration property. A null value for the `useJSSE` input parameter causes the service to defer to the value of the `watt.net.ssl.client.useJSSE` server configuration property.  
Now, the default value of the `useJSSE` input parameter for the `pub.client:http` service is null, which allows the `watt.net.ssl.client.useJSSE` server configuration property to determine the default behavior for outbound HTTPS connections.
- PIE-40548  
Performance degradation observed in Integration Server.  
Integration Server exhibits a performance degradation in the GA versions 9.8, 9.9, and 9.10. Integration Server versions 9.6 and 9.7 exhibit a similar performance degradation after applying the latest fix.  
The cause of the apparent performance degradation is now resolved.
- PIE-40561

During the migration of Integration Server from 9.0 to a later release, the migration utility also migrates the server configuration parameters `watt.core.schema.validateIncomingXSDUsingXerces` and `watt.server.wsdl.validateWSDLSchemaUsingXerces`.

The migration utility need not migrate these server configuration parameters during the migration of Integration Server from 9.0 to a later release because the functionalities provided by the two parameters are replaced in releases starting with 9.0.

- The 'Validate schemas using Xerces' option in the New Web Service Descriptor wizard replaces the functionality of the `watt.core.schema.validateIncomingXSDUsingXerces` parameter.

- The value of the 'Validate schemas using Xerces' option is stored as the web service descriptor property 'validateSchemaUsingXerces' (which replaces the functionality of the `watt.server.wsdl.validateWSDLSchemaUsingXerces` parameter).

The issue is resolved. The specified server configuration parameters are removed from Integration Server starting with release 9.0.

- **PIE-40569**

Integration Server logs a message about JDBC connection pool waiting threads threshold count being exceeding erroneously.

Integration Server should log the following message only when a thread is waiting for the JDBC connection pool to have an available connection.

[ISS.0096.0009I] JDBC Connection pool waiting threads threshold exceeded, <number> threads waiting for connection for pool <JDBCPoolName> Integration Server should not log the above message if the JDBC pool is empty or the JDBC driver threw an exception when Integration Server attempts to create a connection. In these cases, there is not actually a waiting thread.

This issue is now resolved.

- **PIE-40576**

SFTP transfers fail due to timestamp parsing failure.

A change in the Log Timestamp Format (Settings > Logging > View Server Logger Details > Log Timestamp Format) changes the timestamp format returned by `pub.client.sftp:ls` service. This causes the SFTP transfers to fail due to the timestamp parsing failure.

To address this issue, Integration Server now includes a server configuration parameter which specifies the timestamp format for SFTP client public services.

`watt.server.sftp.dateStampFmt`

Specifies the format of date to be used in the SFTP client public services.

To specify the date format to use, you can use any format that is supported by the Java class `java.text.SimpleDateFormat`. For example, to display the date with the format 08-12-02

14:44:33:1235, specify `dd-MM-yy HH:mm:ss:SSSS`. The default format for `watt.server.sftp.dateStampFmt` property is `yyyy -MM -dd HH:mm:ss z`.

It is not necessary to restart Integration Server after you change the value of this parameter.

- **PIE-40578**

Reloading the Packages > Management page in Integration Server Administrator results in a re-execution of the last command on the page.

The Packages > Management page in Integration Server Administrator encodes the last action as

part of the URL. Web browsers remember the last action as part of the history, resulting in the re-execution of the last action when reloading the frame.

To resolve this issue, for HTML5-compatible browsers, Integration Server alters the browser history so that the URL for the Packages > Management page does not include the last action as part of the URL. As a result, when reloading the frame, the last action will not be re-executed.

- PIE-40629

A concurrent webMethods messaging trigger may not utilize all available threads.

When a concurrent webMethods messaging trigger uses the maximum available threads for message processing, the next request for a thread must wait for a thread to be returned to the thread pool before another message can be processed. Integration Server returns a thread to the thread pool once message processing completes. When a thread becomes available, the waiting request should begin executing. However, instead of the request using a thread as soon as it becomes available, the request waits until the number of threads used by the trigger reaches 0 (zero). This results in periods of time when the trigger is not using all of the available threads. Note: A trigger uses the maximum available threads when the number of messages being processed by the trigger equals the Max execution threads property value. For example, if Max execution threads is set to 10, the trigger uses the maximum available threads when it is processing 10 messages.

Now, a concurrent webMethods messaging trigger will not wait for the number of the threads used by the trigger reaches zero before processing a waiting request. Instead, the trigger begins processing the waiting request as soon as a thread become available.

- PIE-40664

The JSSE-enabled HTTPS ports fail to use the updated certificate.

After adding a new certificate to the truststore and then reloading the truststore using the Integration Server Administrator (Security > Keystore), the JSSE-enabled ports do not use the added certificate.

This issue is now resolved. The JSSE-enabled HTTPS ports now use the updated certificate after the corresponding truststore is reloaded using Integration Server Administrator.

- PIE-40684

Integration Server Administrator sometimes displays two scrollbars right next to each other instead of a single scrollbar.

This issue is now resolved.

- PIE-40687

Display non-ASCII Unicode characters in the body of a Java service.

When you persist Java services, Integration Server encodes non-ASCII Unicode characters as ASCII Unicode escape sequences (for example, the Korean character '?' is saved as '\uD55C'). By default, Integration Server does not decode the escape sequences. Therefore, when Integration Server sends Java service code to Software AG Designer, escape sequences appear in Designer instead of the original Unicode characters.

This fix lets you configure Integration Server to decode the escape sequences. In Integration Server



Administrator, go to Extended Settings and add "watt.server.ns.decodeJavaService=true." The change will take effect immediately (no server restart necessary).

Note: After this change, Unicode escape sequences will no longer display in the Java service code in Integration Server. For example, if you use the string "\uD55C" in Java service code, the string will save correctly, but the editor will display it as "?".

- PIE-40688  
Invoking pub.storage:get causes a pub.storage lock to be released immediately.  
When using pub.storage:get to retrieve an item, Integration Server released the lock on the item immediately. However, when using pub.storage:get to retrieve an item, the lock on the item should remain until the lock is removed by a call to pub.storage:unlock, a call to pub.storage:put, or the lock expires.  
This issue is now resolved.
- PIE-40693  
Slow file transfer speed using pub.client.ftp:put.  
While transferring files with large size (around 1 GB) using pub.client.ftp:put service, the file transfer speed is observed to be slow. Hence, it takes longer to complete the file transfer. This issue was due to the buffer limit in the amount of data that can be read and written to the stream (1KB). This issue is now resolved. Now, the buffer size is increased (32 KB) and hence, the transfer time for large files is less and is comparable with the FTP client on Microsoft Windows.
- PIE-40702  
Change to Integration Server to address security vulnerability.  
A certain form of URL, if executed, can cause a redirection that allows for the possibility of credential theft. The form of URL no longer causes a redirection. Instead, the Integration Server user receives an HTTP 404 response.
- PIE-40742  
Package deployment fails because some packages are partially loaded.  
When using Deployer to deploy IS packages, some packages only partially load. This causes deployment to fail.  
This issue is now resolved. Packages are no longer partially loaded.
- PIE-40867  
Modification to Integration Server to control the logging of messages about duplicate universal names for document types.  
Whenever Integration Server loads a document type with an explicit universal name (such as when a package is loaded), Integration Server registers the universal name. If Integration Server loads a document type whose explicit universal name is a duplicate of one that is already registered, Integration Server logs the following error message:  
"[ISC.0081.0002E] Error registering universal name <universal\_name>, already registered to <document\_type>" filling the IS logs  
A user cannot use Designer or Developer to assign the same universal name to a document type.

However, if the same WSDL document is used to generate multiple consumer Web service descriptors and/or multiple WSDL first provider Web service descriptors, Integration Server creates multiple document types with the same universal name explicit. When loading a package containing these document types, Integration Server logs the error message mentioned above multiple times which can clutter the log file. To suppress the error message about registering a duplicate universal name, add the following to extended settings on the Settings > Extended > Edit Extended Settings page

```
watt.server.ns.logErrorsOnRegisteringMultipleDocTypesForAUniversalName=false
```

After you save your changes, you do need to restart Integration Server for these changes to take effect. If you want Integration Server to resume logging message about registering duplicate universal names, set `watt.server.ns.logErrorsOnRegisteringMultipleDocTypesForAUniversalName` to true. The default value is true.

Note: Setting `watt.server.ns.logErrorsOnRegisteringMultipleDocTypesForAUniversalName` to false suppresses the error messages about duplicate universal names only. It does not resolve the duplicate names.

- PIE-40940

OAuth authentication is not disabled for requests that contain an Authorization header with a Bearer access token even after setting the `watt.server.auth.oauth.accessToken.useHeaderFields` parameter to false.

When `watt.server.auth.oauth.accessToken.useHeaderFields` is set to false, Integration Server should not perform OAuth authentication if Authorization header field contains an `access_token`.

However, if the Authorization header field of an incoming request contains a Bearer access token and the `watt.server.auth.oauth.accessToken.useHeaderFields` is set to false. Integration Server writes the following messages to the server log:

```
[ISS.0012.0012W] Authentication of user "bearer" failed with exception: [ISS.0010.8044] Integration Server rejected the request to access this resource. The access token is either invalid or expired.
```

```
[ISS.0053.0002C] Access denied for user bearer on port 5555 -> ...
```

This issue is now resolved. If `watt.server.auth.oauth.accessToken.useHeaderFields` is set to false and a request contains an Authorization header field with a Bearer access token, Integration Server disables OAuth authentication for the request.

- PIE-40950

Failure to close JSSE SSL connections after handling stateless requests may negatively impact performance.

When Integration Server finishes handling a stateless request received on a port that uses JSSE for SSL, Integration Server does not close the SSL connection. This causes Integration Server to build up stale connections and slows down port allocation, which affects performance.

This issue is now resolved.

- PIE-40962

The `encode` method of `IDataXMLCoder` class closes the `OutputStream` after encoding the `IData` object.

The `encode` method of `IDataXMLCoder` class, `encode(java.io.OutputStream os, IData data)` encodes

the IData object and closes the OutputStream even though the OutputStream is created by the caller.

This issue is resolved.

- **PIE-40984**  
Configuration property to determine whether missing SOAP headers result in an error message. Prior to Integration Server version 9.0, when processing a SOAP received by a web service descriptor, Integration Server did not properly validate that all of the SOAP headers were present. As a result, Integration Server did not throw an error when a SOAP response was missing a SOAP header. Note that all headers in a web service descriptor, whether generated from the original WSDL document or added to the web service descriptor, are treated as required. This is an application of the WS-I basic profile rules declaring that all headers in a WSDL be treated as required. Beginning in Integration Server version 9.0, Integration Server properly validates SOAP responses for required headers. If a required header is not present, Integration Server throws the following error: [ISS.0088.9443] One or more required Headers <headerName> are not present in the SOAP response."  
After upgrading to Integration Server 9.0 or higher from an earlier version, web service connectors that previously succeeded when a required header was missing from a SOAP response now fail. While failure when a required header is missing is the correct and documented behavior, Integration Server now provides a configuration property to control whether missing required headers in a SOAP response results in an error. This can be useful in migration situations. When `watt.server.SOAP.ignoreMissingResponseHeader` is set to true, a SOAP response that does not contain a required header will not result in an error. The default is false, a SOAP response that does not contain a required header results in an error. Integration Server restart is not required for changes to take effect.
- **PIE-40985**  
SOAP web service fixes for backward compatibility.  
This fix bundles four separate fixes relating to upgrade and migration of web services. The fixes allow backward compatibility of behavior that has since been prohibited through stricter validation in newer releases.  
(1) Allow 7.1.3 web service providers to process requests with mismatched SOAP versions.  
A range of fix levels in 7.1.3 allowed web service providers to process SOAP requests with a SOAP version that did not match the SOAP version that was declared in the WSDL binding. This fix adds a new extended server setting to emulate the old, less strict behavior so that consumers will not have to update their SOAP requests. The setting only affects web service providers that were created in releases older than 8.2.2 and for which the property "Pre-8.2 compatibility mode"=true. The new parameter is `watt.server.SOAP.pre82WSD.ignoreVersionMismatch`. By default, this parameter is set to false. To use the parameter to emulate the old behavior, go to Integration Server Administrator and add `watt.server.SOAP.pre82WSD.ignoreVersionMismatch=true` to the extended settings.  
(2) Correctly perform document type-directed decoding of a SOAP message when the corresponding namespace qualified document type field does not have a namespace prefix. Starting with release 8.2.2, any document type field that contains a namespace must have a

namespace prefix in its name in order to be used with web services. In 7.1.x, this prefix was not required. With this fix, document types migrated from 7.1.x that do not meet the 8.2.2 and later IS web service requirements will match the decoded IData representations of SOAP messages as they did in 7.1.x. Specifically, this issue applies in cases where the Decoder needs to choose between converting a simple type value into a string field or into a mixed content DocType with a \*body field.

(3) Allow empty or absent \*body values to pass validation.

A validation error occurred in some 9.x releases during decoding of mixed content elements that have an enumeration restriction. The error occurred when optional missed content was absent, because an empty value was not listed as an option in the enumeration set for the \*body field. This fix adds an extended setting to skip this validation and treat the \*body as completely optional. The new parameter is `watt.core.validation.skipAbsentStarBody`. By default, this parameter is set to false.

To use the parameter to skip the new validation, go to Integration Server Administrator and add `watt.core.validation.skipAbsentStarBody=true` to the extended settings. (4) Process one-way SOAP request without a Null Pointer Exception. After receiving a SOAP request, some one-way web service providers return an error containing a Null Pointer Exception. This fix handles the condition that resulted in an error when processing the SOAP request.

- PIE-41066

When executing the `pub.soap.wsrn:createSequence` service without specifying the value of the `sequenceKey` input parameter, Integration Server incorrectly reports the messaging sequence as null.

This issue is now resolved. When the `pub.soap.wsrn:createSequence` service is executed without specifying the value of the `sequenceKey` input parameter, Integration Server returns the server Sequence ID associated with the messaging sequence.

- PIE-41090

Enhancement to Integration Server to use regular expressions for specifying the URIs for allowed origin servers.

When CORS is enabled, the `watt.server.cors.allowedOrigins` server configuration parameter indicates the origin servers from which Integration Server will accept requests. The `watt.server.cors.allowedOrigins` value can be a comma-separated list identifying the specific origin servers or a "\*", meaning any origin server is allowed. A comma-separated list can become long and difficult to maintain.

To make the list of origin servers easier to maintain, Integration Server now supports the use of regular expressions in the comma-separated list of allowed origin servers. Integration Server treats any value in the comma-separated list that begins with "r:" as a regular expression. Integration Server treats any value that does not begin with "r:" as a simple string. The server configuration parameter uses the Java regular expression syntax, as documented at <https://docs.oracle.com/javase/7/docs/api/java/util/regex/Pattern.html>. A regular expression value must match the entire value of the Origin header in the HTTP request for it to be considered a match.

Example:

watt.server.cors.allowedOrigins=http://test1.domain.com,r:https?://.\*.test2.domain.com:[0-9]+,r:.\.[a-zA-Z]\*-int.domain.com

Integration Server treats the first value, "http://test1.domain.com", as a simple string. If an Origin header contains this value, it will be allowed.

The second value, "r:https?://.\*.test2.domain.com:[0-9]+", contains a regular expression. The "r:" is not part of the regular expression. The actual regular expression used to match supplied Origin headers is "https?://.\*.test2.domain.com:[0-9]+".

The third value, "r:.\.[a-zA-Z]\*-int.domain.com", contains a regular expression. The "r:" is not part of the regular expression. The actual regular expression used to match supplied Origin headers is ".\.[a-zA-Z]\*-int.domain.com".

"Origin: http://test1.domain.com" will be allowed because it is equal to the first value.

"Origin: http://my.test2.domain.com:8080" will be allowed because it matches the second value.

"Origin: https://my.test2.domain.com:8088" will be allowed because it matches the second value.

"Origin: http://my.test2.domain.com" will not be allowed. If it had a port number, it would match the second value.

"Origin: nbps://example.prod-int.domain.com" will be allowed because it matches the third value.

"Origin: example.qa.staging-int.domain.com" will be allowed because it matches the third value.

"Origin: example.dev1-int.domain.com" will not be allowed. If the second token of the host name did not include any digits, it would have matched the third value.

watt.server.cors.allowedOrigins=\*

The simple wildcard "\*" continues to work as before. It indicates that any origin server will be allowed.

Regular expressions that match any host name, IP address and port (e.g. "r:+" and "r:.\*") will have the same effect as "\*".

Note that when CORS is enabled, Integration Server evaluates the list of regular expressions in watt.server.cors.allowedOrigins sequentially for every request. Integration Server performs a regular expression match operation on each regular expression until a match is found or all regular expressions in the list have been evaluated. Software AG recommends that you put the more frequently matched regular expressions at the beginning of the comma-separated list.

- PIE-41109

Swagger document and REST Resources tab for REST API descriptor does not represent service input correctly when the service signature includes one or more Document, Document List, Document Reference, or Document Reference List field and another type of field.

The Swagger document and REST Resources tab for a REST API descriptor that includes a REST resource (service) whose service signature includes one or more Document, Document List, Document Reference, or Document Reference List fields in addition to another type of field does not correctly represent the service signature. Integration Server places all of the input parameters for that resource into a REST Definition and sets the source to Body which is incorrect. Integration Server should place the Document, Document List, Document Reference, or Document Reference List fields in the REST Operation as Body parameters that reference the REST Definitions and place the parameters that are not documents in the REST Operation as Header parameters.

This issue is now resolved.

- PIE-41121  
Integration Server does not show reliable messaging sequence reports in certain situations. When Integration Server exchanges messages with a reliable messaging client where the web service operation uses In-Only Message Exchange Pattern (MEP), the reliable messaging sequence reports are not displayed on Integration Server.  
The issue is now resolved. The reliable messaging sequence reports specifying the Server Sequence ID are displayed on Integration Server in situations where the web service operation uses In-Only MEP.
- PIE-41147  
Integration Server Administrator returns a blank page when you run the `wm.server.query:getSettings` service from the `WmRoot` package.  
This issue is resolved.
- PIE-41152  
When `watt.net.http401.throwException` is set to false and the `pub.client:http` service receives a 401 error, the service does not include the body of the response in the output.  
If the `watt.net.http401.throwException` server configuration property is set to false, when the `pub.client:http` service receives a 401 error response, the service places the HTTP response header and body in the output pipeline. However, the `pub.client:http` service was not placing the response body in the output pipeline.  
This issue is now resolved.
- PIE-41155  
Integration Server fails to act as an FTP server. An attempt by an FTP client to connect to an FTP port on Integration Server fails with a `NullPointerException`.  
This issue is now resolved.
- PIE-41176  
Web service fails with a `RampartException` while handling a holder-of-key SAML 2.0 assertion. When handling a holder-of-key SAML 2.0 assertion, a web service fails with the following exception: `RampartException: No crypto property file supplied for decryption`.  
This issue is now resolved.
- PIE-41281  
Integration Server Administrator displays incorrect values for fields in Security > Ports. Integration Server Administrator displays incorrect values (default values) for "Use JSSE" and "Client Authentication" fields in the Security Configurations section of Security > Ports.  
This issue is now resolved.
- PIE-41315  
When Integration Server receives a request with a REST-style URL and an OAuth Bearer token, Integration Server rejects the request with a 403 HTTP status code.

This issue is now resolved. An OAuth Bearer token can be used to access a REST resource that is in the scope for which the token was issued.

Note: Because the service name does not appear in a REST-style URL, do not include the service name when defining the OAuth scope. A scope for an Integration Server REST resource must include the full name of the resource but not the name of the service.

- PIE-41320  
Memory leak in transaction manager.  
Transaction manager retains an association to `com.wm.app.b2b.server.ServerThread` which is not being removed during transaction manager cleanup. Consequently, the association between the transaction and the server thread is not being cleaned up, which prevents the transaction manager entry from being removed.  
This issue is now resolved.
- PIE-41324  
Integration Server Administrator displays a Package Load Error loading a package created on Integration Server 7.x or earlier.  
Using Integration Server Administrator to load a package created on Integration Server 7.x might result in a Package Load Error caused by a `NullPointerException`.  
This issue was originally resolved in fixes that included PIE-33326. Unfortunately, recent revisions of some Integration Server fixes introduced a regression that allowed the problem to reappear. This fix resolves the regression.
- PIE-41345  
The `pub.utils.messaging:migrateDocTypesTriggersToUM` service does not migrate filters with parentheses properly.  
When migrating a trigger filter condition that contains parentheses, the `pub.utils.messaging:migrateDocTypesTriggersToUM` service removes the parentheses from the filter. The `pub.utils.messaging:migrateDocTypesTriggersToUM` service now preserves parenthesis when migrating trigger filter conditions.
- PIE-41375  
Integration Server does not indicate when it is disconnected from a cluster.  
Integration Server does not log an error message when it is disconnected from a cluster, preventing automatic detection of the situation. Now, Integration Server logs the following error message when it is disconnected from the cluster.  
[ISS.0033.151] The cluster is now not operational,  
Additionally, Integration Server logs the following error message when it rejoins the cluster.  
[ISS.0033.152] The cluster is now operational.
- PIE-41444  
Integration Server throws a `NullPointerException` instead of logging trace level information when the HTTP Header (0038) server log facility is set to Trace and an incoming request does not contain any credentials.

This issue is now resolved.

- PIE-41464  
Exception handling for the pub.client:smtp service results in a ClassCastException being thrown for a SocketTimeoutException or a ConnectException.  
The pub.client:smtp incorrectly handles the exceptions java.net.SocketTimeoutException and java.net.ConnectException by throwing them as a java.lang.ClassCastException.  
This issue is now resolved.
- PIE-41497  
A request that includes a URL alias for a REST resource and includes an OAuth access token fails. When a URL alias exists for a REST resource and partial matching is enabled for URL aliases (watt.server.url.alias.partialMatching=true), the URL alias can be used with variable trailing tokens to create a request URL that invokes services for the REST resource and passes the \$resourceID, \$path, and custom variables to the services. (With the Bearer authorization scheme, the Authorization request header includes an OAuth access token instead of username and password.) However, if the request URL uses the Bearer authorization scheme, the request fails and Integration Server returns an HTTP 401 status code.  
This issue is now resolved. A request that uses the Bearer authorization scheme can also use a URL alias to request a REST resource.
- PIE-41502  
When acting as a web service client, Integration Server displays an error if the response from a web service provider contains the value of the content-encoding header as identity.  
When acting as a web service client, Integration Server displays the following error when the response from a web service provider contains the value of the content-encoding header as identity: "Received unsupported content-encoding: identity"  
This issue is now resolved.
- PIE-41529  
Info message is logged continuously in the server log.  
If you configure the email port to IMAP email server and select "Log out after each mail check" functionality, then the following Info message is continuously logged in the server log: "[ISP.0068.0029I]Logging out of IMAP Server"  
This issue is now resolved. Now, this message is moved to DEBUG level.
- PIE-41582  
Integration Server Administrator does not allow Username/Password as the Client Authentication method if Realm URL specifies nsps or nhps as the protocol.  
When creating a Universal Messaging Connection Alias, Integration Server Administrator performs a UI validation to check if Realm URL specifies nsps or nhps as the protocol. Integration Server Administrator displays the following message when you select Username/Password as the Client Authentication method. "Client authentication must be set to SSL if Realm URL specifies includes nsps or nhps."



This issue is resolved. The UI validation is now disabled which allows you to select Username/Password as the Client Authentication method if Realm URL specifies nsps or nhps as the protocol.

- **PIE-41611**  
Client side queue for webMethods messaging does not drain completely.  
When Integration Server drains the client side queue by publishing or delivering messages from the client side queue to the webMethods messaging provider, some failures may occur. Integration Server handles the failures based on the exception type. If the exception type is fatal, Integration Server writes the message to the audit log and removes it from the client side queue. If the exception type is transient, Integration Server retries publishing or delivering the message. However, if the client side queue contains published and delivered messages and fatal exception occurs during publish or delivery of a message, Integration Server might add the message back to the client side queue instead of writing it to the audit log. This prevents the client side queue from fully draining and may cause the queue to drain slowly.  
This issue is now resolved.
  
- **PIE-41677**  
Integration Server fails to clear the connections of failed remote service executions that were invoked using the pub.remote:invoke service.  
This issue is now resolved. Now, if a remote service execution fails, then the connection to remote server is closed completely.
  
- **PIE-41782**  
No option to select Java Secure Socket Extension (JSSE) socket factory for HTTPS outbound connections.  
When accessing a web service through HTTPS protocol using the pub.client:soapClient service, there is no option to select JSSE for HTTPS outbound connections. The server configuration property "watt.net.ssl.client:useJSSE" applies to all outbound HTTPS connections and hence, user cannot select JSSE for individual web services call.  
This issue is now resolved. Now, an optional input parameter "useJSSE" is added to the pub.client:soapClient service.  
If the value of "useJSSE" field is left empty or unspecified, then Integration Server uses JSSE for outbound web service call based on the server configuration property "watt.net.ssl.client:useJSSE".  
If the value of "useJSSE" field is set to "yes", then the Integration Server uses JSSE for the outbound web services call.  
If the value of "useJSSE" field is set to "no", then the Integration Server uses Entrust IAIK library for the outbound web services call.
  
- **PIE-41794**  
Changes to Integration Server to notify a caller that provides an expired session id.  
After applying a fix or installing a release that includes PIE-37166, Integration Server prompts users for credentials if no matching session object can be found for a given session ID stored in a cookie.  
This behavior is controlled by the watt.security.session.forceReauthOnExpiration server

configuration property. When set to true, the more secure behavior, Integration Server rejects requests that include a session id mapped to an expired or invalid session object and prompts the user for credentials. Setting the server configuration property to false instructs Integration Server to create a new session object, assuming the session id is valid and trusted. In case of the server configuration property value set to true (the default), Integration Server does not notify the caller that a valid session object no longer exists. Nor does Integration Server request that the caller deletes the cookie with the expired session.

Now, when Integration Server receives a request with a session id mapped to a session object that no longer exists, Integration Server notifies the caller and requests that the cookie containing the expired session id be deleted. It is then up to the caller, usually a browser, to react to the notification.

- **PIE-41806**  
Enhancement to allow loggers on multiple Integration Servers to share a Universal Messaging queue for logging across a Universal Messaging realm.  
The naming convention for the Universal Messaging queue used by a logger now includes the client prefix if the Share Client Prefix check box is selected for the Universal Messaging connection alias used by the logger. By including the client prefix in the namespace of the queue name, loggers for Integration Servers in a stateless or stateful cluster can share same Universal Messaging queue across a Universal Messaging realm. That is, loggers on multiple Integration Servers can write log entries to and read log entries from one Universal Messaging queue shared across a Universal Messaging realm.  
Previously, the Universal Messaging queue name did not include the client prefix as part of the queue namespace regardless of the state of the Share Client Prefix check box. If the Share Client Prefix check box is selected for the Universal Messaging connection alias, the Universal Messaging queue name uses the naming convention: `wm/is/audit/clientPrefix/logger_nameQueue` (for example, `wm/is/audit/myClientPrefix/SessionQueue`). If the Share Client Prefix check box is not selected for the Universal Messaging connection alias, the Universal Messaging queue name uses the naming convention: `wm/is/audit/logger_nameQueue` (for example, `wm/is/audit/SessionQueue`). If you change the state of the Share Client Prefix check box on the Universal Messaging connection alias is used by loggers, you must restart Integration Server for changes to the queue name to take effect. Additionally, you must make the same changes to other Integration Servers in the cluster that use the alias.
- **PIE-41825**  
Cookies not included in some HTTP requests.  
When the `pub.client:http` service is used to send requests to a remote server, and the server returns a cookie, in some cases the cookie is not included in subsequent calls to the server.  
With this fix, the cookies are used on subsequent calls.
- **PIE-41880**  
`webMethods Messaging` triggers do not recognize nested documents in a filter when parent and child documents have the same name.

The name of inline document fields are represented as "Message" names in the protobuf descriptors used by Universal Messaging filters. Because of the message name conflict, the filters are never satisfied and the triggers do not fire.

This fix corrects the problem by using the name of the parent plus the actual field as the protobuf message name. After you install this fix, edit and save the root document type, then sync it with the UM Provider. The filters will begin to work properly.

- PIE-41900

The `pub.client.http` fails to set the auth token.

If the 'auth' type is set to Bearer, then the `pub.client.http` service fails to set the auth token into the Authorization header while sending a request to the HTTP server.

This issue is now resolved.

- PIE-41986

After installing a fix or a release that includes PIE-37166, a dynamic server page (DSP) request that includes a service invoke of a stateless service prompts for credentials even though the service and DSP are secured with the Anonymous ACL.

The resolution for PIE-37166 introduced the server configuration parameter `watt.security.session.forceReauthOnExpiration`, which, when set to true, causes Integration Server to reject any request that includes a cookie identifying an expired or invalid session even if the request includes valid user credentials. That is, when set to true, Integration Server does not implicitly create a new session for an expired session and Integration Server deletes the session object for the expired session. A result of this change is that a sequence a DSP requests that includes a service invoke of a stateless service prompts for credentials even though the service and DSP are secured with the Anonymous ACL.

Note: This issue does not occur when `watt.security.session.forceReauthOnExpiration` is set to false. Keep in mind that setting `watt.security.session.forceReauthOnExpiration` to true, the default value, offers more secure behavior.

Now, Integration Server preserves the session object.

- PIE-42132

Enhancement to limit the number of server log files that Integration Server keeps on the file system. Integration Server writes its server log to a file named `server.log`. When this file is rotated, the existing contents of `server.log` are saved to a new file named `server.log_<current-date>_<current-time>`. Over time, the number of archived server log files increases and may consume large amounts of disk space.

To address this issue, Integration Server provides the `watt.server.serverlogFilesToKeep` server configuration parameter to control the number of server log files that Integration Server maintains on the file system, including the current server log file. When Integration Server reaches the limit for the number of server log files, Integration Server deletes the oldest archived server log file each time Integration Server rotates the server log.

If the parameter value is 30, for example, Integration Server keeps the current server log file and up to 29 previous server log files.

If the parameter value is less than 1, Integration Server keeps an unlimited number of server log

files.

If the parameter value is 1, Integration Server keeps the current server log file (server.log) and no previous (archived) server logs.

The default for `watt.server.serverlogFilesToKeep` is -1, which places no limit on the number of server log files kept on the file system.

You must restart Integration Server for changes to this parameter to take effect.

- PIE-42173

New parameter for existing service `pub.cache.serviceResults:resetServiceCache` and new service `pub.cache.serviceResults:addCacheEntry` are added to Integration Server as part of this fix.

`pub.cache.serviceResults:addCacheEntry`

`WmPublic`. Adds cached entry into service results for the service without executing the actual service. This service can be useful to perform bulk load of service results at Integration Server startup.

Input Parameters `<serviceName>` String Required. Name of the service for which to add the cache entry into cached service results.

`<input>` Document Required. An IData containing the key/value pairs for the cached service input.

`<output>` Document Required. An IData containing the key/value pairs for the cached service output.

Output Parameters None.

Usage Notes If `<serviceName>` does not exist in Integration Server, or it is not enabled to cache service results, Integration Server throws an exception.

`pub.cache.serviceResults:resetServiceCache` An optional input parameter is added to delete specific cached elements for a particular service.

`<input>` Document Optional. An IData containing key/value pairs that indicate the cached elements to remove.

- PIE-42308

Support for session caching for transacted JMS connection aliases.

Previously, Integration Server provided session caching for non-transacted JMS connection aliases. Now, Integration Server provides support for session caching for transacted JMS connection aliases when the JMS provider is Universal Messaging 9.10 or WebSphere MQ 7.5. The following paragraphs provide more information about this feature.

When sending a JMS message, Integration Server creates and closes a new JMS session object and a JMS MessageProducer object for each message. This can introduce overhead for some JMS providers. To improve performance when sending JMS messages using a transacted JMS connection alias, you can configure session caching for a JMS connection alias.

For each JMS connection alias, Integration Server can create the following session pools:

- A default session pool containing JMS Session objects. When a default session pool is defined for a JMS connection alias, Integration Server draws from a pool of open JMS Sessions for sending a JMS message instead of opening and closing a JMS Session for each JMS message. Integration Server uses the default session pool only when sending a message to a destination that does not have its own pool. Integration Server creates a new MessageProducer each time it sends a JMS message.
- Destination-specific session pools containing JMS Session objects for sending JMS messages to

identified destinations. Integration Server creates a pool for each specified destination. When sending a JMS message to one of the specified destinations, Integration Server uses a Session object from the pool instead of creating and closing a Session object for each JMS message. Integration Server creates a new MessageProducer each time it sends a JMS message.

Note: When using destination-specific session pools for a transacted JMS connection alias, Integration Server creates a new MessageProducer each time it sends a JMS message. This is different from the destination pools that Integration Server creates for a non-transacted JMS connection alias where each entry in the destination-specific pools contains a Session object and a Message Producer object.

Note: A transacted JMS connection alias specifies LOCAL\_TRANSACTION or XA\_TRANSACTION for the Transaction Type.

To configure session caching for a transacted JMS connection alias, do the following:

1. Using Integration Server Administrator, open the JMS connection alias for editing.
2. Under Producer caching, for Caching Mode, select ENABLED PER DESTINATION.
3. To configure the size of the default session pool for this alias, specify the following:
  - In the Minimum Pool Size field, specify the minimum number of entries in the default session pool for this alias. The default is 1.
  - In the Maximum Pool Size field, specify the maximum number of entries in the default session pool for this alias. The default is 30.
4. To configure the size of the session pools created for specific destinations, specify the following:
  - In the Minimum Pool Size Per Destination field, specify the minimum number of entries in each destination-specific pool.
  - In the Maximum Pool Size Per Destination field, specify the maximum number of entries in each destination-specific pool. A value of 0 (or blank) indicates that Integration Server does not create separate pools for any of the destinations associated with the JMS connection alias.

In the Destination Lookup Name List, specify a semicolon-delimited list of the lookup names for the destinations for which you want Integration Server to create separate session pools for this alias.

5. Click Save Changes.

This issue is now resolved.

- **PIEAR-799**

The threads which creates the connection and the threads which ends the connection from the connectionPool can go to blocked state.

To recover from such a situation, Connection pool now has a monitor thread which is a pool interrupter thread, to interrupt the server threads which are in blocked state while creating or ending the connection.

The following properties are introduced to configure the connection time outs:

1-> `watt.server.jca.connectionPool.threadInterrupter.sleepTime`. The default value of the `watt` property is 2000msec, which is the sleep time for the pool interrupter thread.

2-> `watt.server.jca.connectionPool.threadInterrupter.waitTime`. This property specifies the wait time, measured in milliseconds, that elapses before Integration Server Connection pool interrupts a connection creating or ending thread which is in a wait state. The pool interrupter thread will start monitoring the server threads, only if this property is set. There is no default value.

You must restart Integration Sever for changes to this parameter to take effect.

Use the following service to manage the connections which are hung:

pub.art.connection:getInterruptedThreadStatus. This service takes the connection alias name as input and lists the connection threads which are not responding even after interrupting by the connection pool interrupter. We recommend a manual intervention for the server threads which gets hung while creating or destroying the connections and also not responding to the interrupt mechanism.

## **Release 9.10**

- PIE-36529 (IS\_8.2\_SP2\_Core\_Fix18, IS\_9.0\_SP1\_Core\_Fix12, IS\_9.5\_SP1\_Core\_Fix9, IS\_9.6\_Core\_Fix8)  
An outbound web service request that used MTOM attachments causes out of memory issues if the attachments are large.  
An outbound web service request incorrectly used a memory-buffered output stream when requests with large MTOM attachments were made to external endpoints.  
Outbound web service requests that use MOTM attachments now use the correct output stream and chunk the large MTOM attachment.
- PIE-36506 (IS\_8.2\_SP2\_Core\_Fix19, IS\_9.0\_SP1\_Core\_Fix12, IS\_9.5\_SP1\_Core\_Fix10, IS\_9.6\_Core\_Fix9)  
The pub.security.keystore:setKeyAndChain service clears security parameters after each outbound call instead of when the pub.security.keystore:clearKeyAndChain service executes.  
In previous releases, Integration Server did not clear the security parameters configured for the outbound call by the pub.security.keystore:setKeyAndChain service until the pub.security.keystore:clearKeyAndChain executed. Now, Integration Server clears the security parameters after each outbound call. The new behavior is not backward compatible.  
Now, the security values configured by pub.security.keystore:setKeyAndChain stay in effect until pub.security.keystore:clearKeyAndChain gets invoked.
- PIE-37676 (IS\_8.2\_SP2\_Core\_Fix19, IS\_9.0\_SP1\_Core\_Fix12, IS\_9.5\_SP1\_Core\_Fix10, IS\_9.6\_Core\_Fix9)  
An attempt to authenticate a cache manager user fails with an IllegalStateException.  
When authenticating users of a cache manager, a race condition caused an IllegalStateException to be thrown.  
The race condition that caused the IllegalStateException is now resolved.
- PIE-36620 (IS\_8.2\_SP2\_Core\_Fix19, IS\_9.0\_SP1\_Core\_Fix13, IS\_9.5\_SP1\_Core\_Fix10, IS\_9.6\_Core\_Fix9)  
Integration Server returns an HTTP 500 error in response to successive requests made on persistent HTTP connections.  
When client reuses a persistent HTTP connection to send multiple requests, Integration Server should handle the request and send a response. However, Integration Server sometimes incorrectly returned a HTTP 500 error, which caused the request to fail.  
This issue is now resolved.
- PIE-37093 (IS\_8.2\_SP2\_Core\_Fix19, IS\_9.0\_SP1\_Core\_Fix13, IS\_9.5\_SP1\_Core\_Fix10, IS\_9.6\_Core\_Fix9)

When using the VCS Integration feature in Integration Server, delete and safe delete of a version-controlled node fails with an error.

This issue is now resolved.

- PIE-37325 (IS\_8.2\_SP2\_Core\_Fix19, IS\_9.0\_SP1\_Core\_Fix13, IS\_9.5\_SP1\_Core\_Fix10, IS\_9.6\_Core\_Fix9)  
Integration Server does not send HTTP cookies after a request is redirected.  
When the pub.client:http service sends a request to an HTTP server and the HTTP server responds with a redirection (a 300-level status code) and a Set-Cookie header, Integration Server includes the cookie in the request to the HTTP server to which the request is being redirected. However, subsequent requests to the second server do not include the cookie.  
Now, when a HTTP server includes a Set-Cookie header in a redirection response, Integration Server includes the cookie in the request and subsequent requests sent to the HTTP server to which the request is redirected.
- PIE-38245 (IS\_8.2\_SP2\_Core\_Fix19, IS\_9.0\_SP1\_Core\_Fix13)  
The pub.flow:transportInfo document type signature is incorrect as seen on the Input/Output tab. The signature for the pub.flow:transportInfo document type is missing 2 fields: filePolling/lastModified and filePolling/length.  
This issue is now resolved. The signature of the pub.flow:transportInfo document type now includes the filepolling/lastModified and filepolling/length parameters.
- PIE-38290 (IS\_8.2\_SP2\_Core\_Fix19, IS\_9.0\_SP1\_Core\_Fix13)  
Integration Server resets the central user management system when lookup for a user in the central user management fails with an error.  
The reset causes a failure of other operations on the central user management system.  
This issue is resolved.
- PIE-37898 (IS\_8.2\_SP2\_Core\_Fix19, IS\_9.6\_Core\_Fix9)  
Integration Server becomes unresponsive during startup.  
Integration Server sometimes became unresponsive at startup when initializing the scheduler. This occurred because of a database deadlock.  
This issue is now resolved and the deadlock will no longer occur.
- PIE-36477 (IS\_8.2\_SP2\_Core\_Fix19)  
After transitioning to or from daylight savings time, scheduled tasks run twice or not at all. Integration Server runs scheduled tasks based on the time relative to the time zone. This caused issues when entering and exiting daylight savings time, specifically tasks ran twice or not at all. Now, Integration Server runs scheduled tasks based on coordinated universal time (UTC). Because Integration Server runs the tasks without regard to the relative time zone, the start and end of daylight savings time does not affect the execution of scheduled tasks.
- PIE-36386 (IS\_9.0\_SP1\_Core\_Fix11, IS\_9.5\_SP1\_Core\_Fix10, IS\_9.6\_Core\_Fix8, IS\_9.7\_Core\_Fix5)  
When a flow service invokes a service that does not exist, Integration Server handles operations on the pipeline first before issuing a runtime exception.  
When a flow service invokes a service that does not exist, Integration Server performs operations on the pipeline, such as removing the dropped variables from the pipeline, before issuing a

com.wm.lang.flow.FlowException about the unknown service.

This issue is resolved. Integration Server now issues the runtime exception when a flow service invokes a service that does not exist and will not proceed with the pipeline operations.

- PIE-35990 (IS\_9.0\_SP1\_Core\_Fix12, IS\_9.5\_SP1\_Core\_Fix10, IS\_9.6\_Core\_Fix8)  
When using Oracle Streams Advanced Queuing (AQ) as the JMS provider, if the JMS connection alias is disabled due to an error from the JMS provider, the JMS connection continues to show the status as "in progress".  
If a JMS connection alias, when attempting to establish a connection with Oracle Streams Advanced Queuing (AQ) as the JMS provider, is disabled due to an error from the JMS provider, the JMS connection continues to show the status as "in progress" and cannot be enabled or disabled.  
This issue is resolved.
- PIE-37022 (IS\_9.0\_SP1\_Core\_Fix12, IS\_9.5\_SP1\_Core\_Fix10, IS\_9.6\_Core\_Fix8)  
Integration Server logs the following error twice for the same port in the server logs while shutting down:  
[ISP.0046.0011I] Disabling HTTP Listener on port <port number>  
This issue is resolved. Integration Server now logs this message only once while shutting down.
- PIE-35873 (IS\_9.0\_SP1\_Core\_Fix12, IS\_9.5\_SP1\_Core\_Fix9, IS\_9.6\_Core\_Fix8)  
Change to allow use of forward slash in a regular expression.  
Prior to this change, regular expressions used in BRANCH steps and trigger filters could not include a forward slash. Now, a forward slash can be used. However, the forward slash must be preceded by the backslash (\) escape character. For example, to use a regular expression to match a variable whose value contains the string "a/b", use the regular expression %variableName% = /a\b/
- PIE-37271 (IS\_9.0\_SP1\_Core\_Fix12, IS\_9.5\_SP1\_Core\_Fix9, IS\_9.6\_Core\_Fix8)  
In certain scenarios, invoking the pub.xml:getNextXMLNode service fails with an exception. Invoking the pub.xml:getNextXMLNode service fails with a NullPointerException if the specified NodeIterator is returned by the pub.xml:getXMLNodeIterator service that has the criteria input parameter set to a string value that matches an element node of the XML node.  
This issue is resolved.
- PIE-34881 (IS\_9.0\_SP1\_Core\_Fix12)  
Integration Server does not behave as expected when validating an XML document against a document type created from an XML schema definition containing <xs:restriction base="xs:anyType">.  
When using the pub.schema:validate service to validate an XML document against a document type created from an XML schema definition containing <xs:restriction base="xs:anyType">, the validation does not fail even if the target element contains attributes other than the attributes defined in the XML schema definition.  
This issue is resolved. Now, validation of XML fails if there are any attributes other than the defined attributes.
- PIE-36217 (IS\_9.0\_SP1\_Core\_Fix13, IS\_9.5\_SP1\_Core\_Fix10, IS\_9.6\_Core\_Fix9)  
An outbound HTTPS web service request fails when using JSSE.



If an outbound HTTPS web service request specifies the use of JSSE, the request fails because Integration Server does not send the client certificates to the endpoint.

This issue is now resolved.

- PIE-37071 (IS\_9.0\_SP1\_Core\_Fix13, IS\_9.5\_SP1\_Core\_Fix10, IS\_9.6\_Core\_Fix9)  
Integration Server error log does not include the names of the affected JDBC pools in the error messages.  
When issuing error messages such as, “java.sql.SQLException: Could not get connection”, Integration Server error log does not include the names of the JDBC pools to which the error message is referring.  
This issue is resolved. Integration Server error log now includes the name of the JDBC pools in its error messages.
- PIE-37551 (IS\_9.0\_SP1\_Core\_Fix13, IS\_9.5\_SP1\_Core\_Fix10, IS\_9.6\_Core\_Fix9)  
Processing of webMethods messaging triggers fails with a java.lang.ClassCastException if the watt.server.trigger.local.checkTTL server configuration parameter is set to true.  
Processing of webMethods messaging triggers fails with the following error if the watt.server.trigger.local.checkTTL server configuration parameter is set to true:  
Unable to check document ttl: java.lang.ClassCastException: [B cannot be cast to com.wm.data.IData  
This issue is now resolved.
- PIE-37645 (IS\_9.0\_SP1\_Core\_Fix13, IS\_9.5\_SP1\_Core\_Fix10, IS\_9.6\_Core\_Fix9)  
Incorrect logging level specified for error message.  
Integration Server gives the logging level of the following error message of Trace logging level incorrectly as Info:  
[ISC.0042.0001I] baseURL (Connection reset)  
This issue is now resolved. The logging level of the message is corrected to Trace.
- PIE-38560 (IS\_9.0\_SP1\_Core\_Fix13, IS\_9.5\_SP1\_Core\_Fix10)  
Integration Server logs a NullPointerException at one minute intervals.  
Once per minute, the Integration Server scheduler uses a background thread to check for scheduled tasks in an invalid state. If Integration Server is in a cluster and the watt.server.scheduler.logical.hostname property is not set, a NullPointerException occurs and is written to the error log.  
Now, the background thread used by the scheduler no longer throws a NullPointerException if Integration Server is in a cluster and the watt.server.scheduler.logical.hostname property is not set.
- PIE-35697 (IS\_9.0\_SP1\_Core\_Fix13)  
After refreshing a consumer web service descriptor, response services reference the backup folders.  
After refreshing a consumer web service descriptor, the response services contain references to the backup folders.  
This issue is now resolved.
- PIE-37921 (IS\_9.0\_SP1\_Core\_Fix13)  
The pub.client:http service does not include the supplied data in PUT requests.  
When using the PUT method with the pub.client:http service, the request transmitted to the remote

HTTP server does not include the value supplied for the data/args, data/string, data/table, data/bytes, data/stream or data/mimeStream input variables.

This issue is now resolved. When the PUT method is used with pub.client:http, the value of the data/args, data/string, data/table, data/bytes, data/stream or data/mimeStream input variables is now included as the HTTP entity of the transmitted request.

- PIE-37988 (IS\_9.0\_SP1\_Core\_Fix13)  
A NullPointerException occurs when SoftwareAG-IS-Services.xml configuration file is not present in the caching directory.  
When SoftwareAG-IS-Services.xml configuration file is not present in the directory location <Integration Server\_directory>\instances\<instance\_name>\config\Caching, Integration Server throws a NullPointerException.  
This issue is resolved. Integration Server now logs the following error message in the server logs to indicate that the configuration file is not present in the caching directory.  
Cannot cache "{0}" service. The cache manager SoftwareAG.IS.Services is not initialized.
- PIE-38019 (IS\_9.0\_SP1\_Core\_Fix13)  
Integration Server acting as an SFTP client faces issues while attempting to connect to an SFTP server.  
When attempting to connect to an SFTP server, Integration Server acting as an SFTP client issues the following error:  
[ISS.0147.9010] Cannot get host key from server [host\_X]:22.  
Details: com.jcraft.jsch.JSchException: Algorithm negotiation fail  
This issue occurs because there is no common key exchange algorithm between the SFTP client and SFTP server.  
This issue is now resolved by updating the jsch jar file from 0.1.51 version to 0.1.53 version. The 0.1.53 version supports most of the key exchange algorithms that are required to be present in the SFTP client to connect to SFTP server.
- PIE-38429 (IS\_9.0\_SP1\_Core\_Fix13)  
Integration Server logs an exception when a service is invoked through a JSSE-enabled HTTPS port with client authentication set to "Username/Password" or "Request Client Certificates".  
When a service is invoked through an HTTPS port that uses JSSE and has client authentication set to "Username/Password" or "Request Client Certificates", Integration Server logs the following exception in the error log:  
javax.net.ssl.SSLPeerUnverifiedException: peer not authenticated.  
The issue is now resolved. Integration Server does not log any exception upon invoking a service successfully through a JSSE-enabled HTTPS port with client authentication set to "Username/Password" or "Request Client Certificates".
- PIE-38599 (IS\_9.0\_SP1\_Core\_Fix13)  
The pub.client:http service does not honor the value set for the useJSSE parameter.  
The useJSSE parameter of the pub.client:http service indicates whether to enable the use of the Java Secure Socket Extension (JSSE) socket factory for creating outbound HTTPS connections. However, the pub.client:http service fails to consider the value set for the useJSSE parameter and does not use JSSE for SSL connection with proxy configuration even if the "useJSSE" parameter is set to yes.

This issue is now resolved. The `pub.client:http` service now honors the value set for the `useJSSE` parameter.

- If "useJSSE" is set to yes, Integration Server uses JSSE for HTTPS connection.
- If "useJSSE" is set to no, Integration Server uses Entrust IAIK library for HTTPS connection.

- PIE-39117 (IS\_9.0\_SP1\_Core\_Fix13)  
Subsequent HTTPS requests through proxy to the server fail.  
When you send repeated outbound HTTPS requests to a server using the `pub.client:http` service with `useJSSE=yes` and HTTPS proxy alias, the first request is sent successfully but the subsequent requests fail with exception.  
The issue is now resolved.
- PIE-37937 (IS\_9.5\_SP1\_Core\_Fix10, IS\_9.6\_Core\_Fix8)  
Publishing a document as a JMS message from Designer fails with a `NamingException`.  
Using Designer to publish an instance of an IS document type as a JMS message fails with a `NamingException`. This occurs because the `pub.jms:send` service, which is used by Designer to publish the JMS message, includes a new input parameter named `JMSMessage/header/replyTo` that Designer populates with an empty String. Integration Server attempts a JNDI lookup using the empty String, which results in the `NamingException`.  
Now, Integration Server verifies that `JMSMessage/header/replyTo` parameter is not empty before performing the JNDI lookup.
- PIE-34925 (IS\_9.5\_SP1\_Core\_Fix10, IS\_9.6\_Core\_Fix9)  
When executing a web service connector, Integration Server does not check the Execute ACL of the parent consumer web service descriptor.  
When executing a web service connector contained in a consumer web service descriptor that has a Pre-8.2 compatibility mode value of false, Integration Server did not check the Execute ACL of the consumer web service descriptor. The documented behavior is to always verify the Execute ACL for a web service descriptor, but it was not being done.  
Now, when executing a web service connector, Integration Server checks the Execute ACL of the parent consumer web service descriptor.
- PIE-37804 (IS\_9.5\_SP1\_Core\_Fix10, IS\_9.6\_Core\_Fix9)  
Integration Server KPI that Optimize uses to display lifetime statistics displays current statistics instead.  
The Integration Server KPI, `getNumCompletedRequests`, which Optimize uses to display the number of completed requests over the lifetime of the Integration Server, returns the number of requests in the last polling period instead.  
This issue is now resolved.
- PIE-37586 (IS\_9.5\_SP1\_Core\_Fix10)  
Integration Server deletes the parent task when all the servers in a cluster are shut down. When you schedule a task to run on all servers in a cluster, and when one server in the cluster is shut down, Integration Server deletes the corresponding child task. However, when all the servers in the cluster are shut down, Integration Server deletes all the child tasks as well as the parent task. As a result, the parent task information is lost upon restart of Integration Server.

This issue is resolved.

- PIE-38131 (IS\_9.5\_SP1\_Core\_Fix10)

Change to Integration Server to allow the `pub.client:http` service to return response headers and response entity when receiving a 501 to 599 level response from a remote HTTP server.

HTTP servers indicate success or failure by including a status code in the response. The `pub.client:http` service returns the status code, response headers, and response body. When the HTTP response includes a status code in the 501 to 599 range, the `pub.client:http` service throws a `ServiceException`. Some HTTP servers include useful information in the response headers and entity when returning a 501 to 599 level status code. However, this information is lost when `pub.client:http` throws a `ServiceException`.

To address this issue, Integration Server now includes a server configuration parameter, `watt.net.http501-599.throwException`, that you can use to indicate how the `pub.client:http` service handles a 501 to 599 level response.

`watt.net.http501-599.throwException`

Specifies whether or not the `pub.client:http` service throws a `ServiceException` when receiving a 501 to 599 level response from a remote HTTP server. When set to true, the `pub.client:http` service throws a `ServiceException` when it receives a 501 to 599 level response from a remote HTTP server. When set to false, the `pub.client:http` service does not throw a `ServiceException` when it receives a 501 to 599 level response from a remote HTTP server. Instead, when the `pub.client:http` service returns a status code in the 501 to 599 range, the service returns the status code, response headers, and response body. The default is true. You do not need to restart Integration Server for changes to this parameter to take effect.

Note: When the remote HTTP server returns a response code of 500, the `pub.client:http` service returns the status code, response headers, and response body.

- PIE-38442 (IS\_9.5\_SP1\_Core\_Fix10)

Integration Server does not handle an element with `xsi:nil=1` correctly.

If an IS document type used by the web service contains a field of type `Object` for which the `Allow null` property is set to true and the XML instance document contains a corresponding element with an `xsi:nil=1` and an `xmlns:xsi=` attribute, Integration Server does not properly convert the element. Instead, Integration Server incorrectly converts the element to a `Document` field with no children instead of converting the element to a field of type `Object` with a "null" value.

This issue can also occur when the `pub.xml:xmlNodeToDocument` service executes and all of the following are true:

- The `preserveUndeclaredNS` input parameter is set to true
- The IS document type in the `documentTypeName` field contains a field of type `Object` for which the `Allow null` property is set to true
- The supplied node contains a corresponding element with an `xsi:nil=1` and an `xmlns:xsi=`

Now, Integration Server properly converts the `xsi:nil=1` element to an field of type `Object` with a "null" value.

- PIE-36837 (IS\_9.5\_SP1\_Core\_Fix9, IS\_9.6\_Core\_Fix8)

Sessions are not being shared among Integration Servers in a cluster.

When a dynamic server page (DSP) is requested by a client, a session is created in Integration Server and a `Set-Cookie` response header is returned with the session ID. If a subsequent request

from the client includes the session ID but a different Integration Server in the cluster receives the request, the second server should find the session in the cluster's session store and then use the session to service the request. This was not happening. The first server did not save the session to the cluster's session store. As a result, the client's session was not available to the second server. This has been fixed. When a clustered Integration Server receives a request for a DSP, the server saves the session to the cluster's session store.

- PIE-36942 (IS\_9.5\_SP1\_Core\_Fix9, IS\_9.6\_Core\_Fix8)  
Integration Server may become unresponsive when processing concurrent requests to disable file polling ports in different packages.  
If Integration Server receives concurrent requests to disable a file polling port in a package and the ports are located in different packages, Integration Server may become unresponsive. Additionally, HTTP/S ports on Integration Server might become unavailable.  
This issue is now resolved.
- PIE-37005 (IS\_9.5\_SP1\_Core\_Fix9, IS\_9.6\_Core\_Fix8)  
Enhancement to `pub.jms:send` service to allow specifying a destination for the `JMSReplyTo` header. Currently, if you want to specify the `JMSReplyTo` header for a JMS message that you are sending, you must use the `pub.jms:sendAndWait` service. The `pub.jms:sendAndWait` service sends a request message and waits for a response. The act of waiting for a response message comes with extra overhead for Integration Server which is unnecessary if you merely want to specify a `JMSReplyTo` destination but do not want the sending service to wait for a reply.  
To address this issue, the `pub.jms:send` service has been enhanced to include a new input parameter for setting the `JMSReplyTo` header. When invoking the `pub.jms:send` service, you can set the `JMSMessage/header/replyTo` field which is an optional parameter of type String. Set this parameter to one of the following:
  - If the JMS connection alias used by the `pub.jms:send` service connects to the JMS provider using JNDI, set `JMSMessage/header/replyTo` to be the lookup name of the destination lookup object name.
  - If the JMS connection alias used by the `pub.jms:send` service connects to the JMS provider using a native Broker connection, set `JMSMessage/header/replyTo` to the Broker queue name. That is, if the JMS connection alias specifies the Broker as the JMS provider and uses the native `webMethods` API to connect directly to the `webMethods` Broker, specify the name of the queue on the Broker that should receive replies to the message.

Note: When using the native `webMethods` API to connect to the Broker, the `JMSMessage/header/replyTo` destination must be a queue. Topics are not supported.

When executing the `pub.jms:send` service with a valid value for the `JMSMessage/header/replyTo` parameter, Integration Server creates the `javax.jms.Destination` and maps it to the `JMSReplyTo` field within the message header. Integration Server sends the message and returns immediately. The service does not wait for the response message.

If `JMSMessage/header/replyTo` is empty, then Integration Server does not set the `JMSReplyTo` header for the JMS message. If `JMSMessage/header/replyTo` is invalid, then Integration Server throws a `ServiceException`.
- PIE-37261 (IS\_9.5\_SP1\_Core\_Fix9, IS\_9.6\_Core\_Fix8)  
Integration Server logs the message "[B cannot be cast to com.wm.util.Values" in `server.log` file".

If the ServiceResults cache has the Copy on Read and Copy on Write check boxes selected and the number of entries in the cache exceeds the value specified for Maximum Elements in Memory, Integration Server logs the following error message to the server log: [B cannot be cast to com.wm.util.Values

This issue is now resolved.

- PIE-37126 (IS\_9.5\_SP1\_Core\_Fix9, IS\_9.6\_Core\_Fix9)

In the Integration Server Administrator page, the Routing option under Adapters is not available in some cases.

After a successful installation of the OnRamp for Commerce One Marketplace Adapter, the Routing option under Adapters in the Integration Server Administrator page is not available. The Integration Server console is unable to add this option in the Integration Server Administrators page because an incorrect configuration in the Server Log Facilities page results in a failure in the initialization process for the adapter.

This issue is resolved. The Routing option is now available under the Adapters section in the Integration Server Administrator page.

- PIE-35036 (IS\_9.6\_Core\_Fix8, IS\_9.7\_Core\_Fix5)

Integration Server does not reflect the changes made to the Create Temporary Queue option after the JMS connection alias is created.

If the Create Temporary Queue option is selected while creating a JMS connection alias and if this selection is cleared later, Integration Server does not reflect this change. The setting of the Create Temporary Queue option that was chosen while creating a JMS connection alias is maintained.

This issue is resolved. Integration Server now reflects the changes made to the Create Temporary Queue option after the JMS connection alias is created.

- PIE-37419 (IS\_9.6\_Core\_Fix9)

File polling consumed server threads that were not terminated at the end of file polling process. The thread leak related to file polling ports is now resolved.

- PIE-37581 (IS\_9.6\_Core\_Fix9)

Integration Server erroneously logs a message about the connection pool threshold being exceeded.

Integration Server erroneously writes the following message to the server log:

```
[ISS.0096.0008I] JDBC Connection pool threshold exceeded, 0 available for pool
```

```
CentralUsers:CentralUsersPool
```

This issue is now resolved.

- PIE-37893 (IS\_9.6\_Core\_Fix9)

The FTP command PWD returns incorrect structure in certain situations

The FTP command PWD sometimes returns an incorrect directory path .

The PWD command now returns a valid directory path.

- PIE-37268 (IS\_9.6\_Core\_Fix9)

When JSSE is enabled for outbound HTTP connections from Integration Server, watt.security.ssl.client.ignoreEmptyAuthoritiesList does not work as expected.

When JSSE is enabled for outbound HTTP connections, Integration Server client accepts empty trusted authorities lists from the SSL server but does not return its CA certificate even if the

watt.security.ssl.client.ignoreEmptyAuthoritiesList is set to true.

This issue is resolved. Now, when JSSE is enabled for outbound HTTP connections, Integration Server client accepts empty trusted authorities lists from the SSL server and returns its CA certificate if the watt.security.ssl.client.ignoreEmptyAuthoritiesList property is set to true.

- PIE-36514  
Integration Server creates an exception when you invoke a flow service exposed as a web service. Integration Server creates the following exception when you try to invoke a flow service exposed as a web service:  
ServiceException: Fault returned by invoked service.  
This exception which is created in the stack before the service is executed is not logged in the Integration Server log but, monitoring tools like Dynatrace might interpret the exception as an error even though the service is successfully executed.  
This issue is resolved.
- PIE-37042  
When invoking the pub.client:http service with the useJSSE input parameter set to yes, a java.lang.ClassCastException error occurs if the server configuration parameter, watt.security.ssl.keypurposeverification is set to true.  
This issue is resolved.
- PIE-37056  
When the pub.client:http service sends an HTTPS request, the SSL handshake process fails when the useJSSE parameter is set to yes.  
When the pub.client:http service sends an HTTPS request and the useJSSE input parameter is set to yes, during the SSL handshake process Integration Server sends its certificate even though no matching CA certificate from the other endpoint server is found in the Certificate Authorities list for the SSL handshake.  
This issue is resolved. Integration Server now sends its CA certificate during the SSL handshake process only if a matching CA certificate is available from the other endpoint server.
- PIE-37178  
The watt.server.compile parameter is not set correctly if Integration Server instance is created through migration utility.  
When running the migration utility, selecting the option to create an Integration Server instance during migration results in an incorrect value for the watt.server.compile server configuration parameter, specifically: `{javac.exe} -classpath {0} -d {1} {2}`  
Now, the migration utility substitutes the value of `{javac.exe}` to point to javac executable located in the JDK shipped with Integration Server.
- PIE-37308  
At start up, Integration Server logs a warning message about audit logging even though no audit loggers are configured.  
At start up, Integration Server attempts to determine if there are sufficient JDBC connections in the JDBC connection pool even when audit loggers are not configured. If there are no connections, Integration Server logs the following message, which is erroneous if there are no configured audit

loggers:

[ISS.0095.0022W] Audit Logging Initialization: Unable to verify the Max Connections setting for the Audit Logging database.

Now, Integration Server does not check for JDBC connections at start up if there are no configured audit loggers.

- **PIE-37377**  
Update of scheduled tasks to use UTC fails.  
At startup, if Integration Server updates scheduled tasks to use UTC (Coordinated Universal Time) instead of local time, Integration Server writes the following message to the server.log:  
[ISS.0137.0035E] Migration of scheduled tasks to UTC timezone failed  
When Integration Server updates the tasks to UTC, Integration Server also validates the tasks, which, for a task scheduled to run on another Integration Server in a cluster, includes checking that the Integration Server is a member of the cluster. If the Integration Server is not in the cluster, task validation fails and the task timestamp is not updated to UTC. However, Integration Server incorrectly considers that the task that failed validation is now in UTC when, in fact, the task is still in local time.  
Now, the migration utility no longer validates the scheduled task during migration. Consequently a validation failure does not prevent the migration utility from updating the scheduled tasks.
- **PIE-37457**  
A webMethods messaging request-reply fails when the encoding type of the reply document type is protocol buffers.  
When encoding the reply message, Integration Server uses the encoding type specified for the publishable document type used as the reply. However, reply messages are sent to a dedicated reply-to channel on Universal Messaging. The channel is generic and is not associated with any specific document type. To receive a protocol buffer encoded message, a channel must be associated with a specific document type. Because the channel is generic, a reply message encoded as a protocol buffers cannot be processed.  
To address this issue, Integration Server now always encodes reply message as IData.
- **PIE-37560**  
Upgrade does not include layered products if the destination Integration Server does not have an instance with the same name as the source Integration Server.  
When upgrading to an Integration Server instances that does not have the same name as the source Integration Server instance, upgrade does not include layered products such as webMethods Mediator and webMethods Monitor.  
This issue is now resolved. Upgrade always includes layered products, regardless of whether or not the destination Integration Server instance is the same as the source Integration Server instance.
- **PIE-37825**  
When the logging level is set to Trace, upon invoking the pub.client:http service, Integration Server logs an entry for the HTTP Get method in the server log irrespective of the HTTP request type.  
This issue is resolved. Upon invoking the pub.client:http service, Integration Server now logs entries according to the HTTP request type.\



- PIE-37844  
 After a database outage, Integration Server can run out of threads.  
 When Integration Server cannot connect to the audit logging database, either due a problem in the database or a problem in the network, all threads requesting database connections can pause indefinitely. If this situation persists, all threads in the server thread pool will be paused. No new requests will be accepted.  
 This issue has been fixed. A point of thread contention in the JDBC pool implementation was removed. Threads requesting database connections after a database outage no longer experience lengthy pauses.
- PIE-36702 (IS\_9.8\_SPM\_Fix1)  
 Command Central cannot be used to set the all the JDBC connection pool alias properties.  
 When using Command Central to create or edit a JDBC connection pool, the Available Connections Warning Threshold and Waiting Thread Threshold Count properties cannot be specified.  
 The Available Connections Warning Threshold and Waiting Thread Threshold Count properties can now be set through Command Central.
- PIE-34577  
 Integration Server does not validate a certificate that uses the SHA-256 algorithm but should.  
 The certificate chain verifier in Integration Server validates the certificates presented by SSL clients.  
 The certificate chain verifier does not validate a certificate chain that uses the SHA-256 algorithm, but should. Instead Integration Server throws the following error:  
 [ISC.0009.9002] Error in certificate chain: Entrust cannot verify the certificate chain: [ISC.0009.9002]  
 Error in certificate chain  
 The certificate chain verifier in Integration Server now validates a certificate chain that uses the SHA-256 algorithm.
- PIE-35422  
 The jcode utility fails with a MalformedPatternException on Linux.  
 Execution of jcode.sh on Linux fails with the following error: Exception in thread "main"  
 java.lang.NoClassDefFoundError: org/apache/oro/text/regex/MalformedPatternException  
 The exception occurs because one of the required jar files in common/lib/ext is missing from the jcode utility classpath.  
 The jcode.sh file is now updated to include the required jars in the classpath. This issue is now resolved.
- PIE-35643  
 After upgrading to version 9.7, when a webMethods messaging trigger, which has join conditions that are dependent on two or more documents, does not start because Integration Server cannot locate the publishable document types, Integration Server does not reload and start the trigger when the publishable document types are later loaded.  
 Integration Server does not start a webMethods messaging trigger, which has join conditions that are dependent on two or more publishable document types, if it cannot find the document types specified in the join condition. However, Integration Server issues a PDT\_DOES\_NOT\_EXIST (InvalidDocumentException) exception stating the reason the trigger did not fully load and when Integration Server loads the package containing the publishable document types to which the

trigger subscribes, Integration Server reloads the trigger. But, after upgrading to version 9.7, instead of the PDT\_DOES\_NOT\_EXIST exception, Integration Server returns an INVALID (ServiceException) exception incorrectly. As a result, Integration Server fails to reload and start the trigger when the publishable document types are later loaded.

This issue is resolved. Integration Server now returns the PDT\_DOES\_NOT\_EXIST exception correctly if it cannot find the document types specified in the join condition. In addition, when Integration Server loads the package containing the publishable document types specified in the join condition, Integration Server reloads the trigger.

- PIE-35716

If the database associated with Integration Server is restarted abruptly, service invocations or database calls made through JDBC connection pool alias fail and do not return any records from the database.

When the database associated with Integration Server is restarted abruptly, Integration Server does not close and release the existing JDBC connections that are stale due to the abrupt database shutdown, and fails to return these connections to the JDBC connection pool. As a result, service invocations or database calls made through the JDBC connection pool alias fail and do not return any records from the database.

The issue is now resolved.

- PIE-35907

After migrating to Integration Server 9.5 or later, Integration Server displays an exception when calling a web service and using MTOM streaming.

After migrating 2 to Integration Server 9.5 or later, sending a web service request that uses MTOM streaming for which more than one chunk is sent, the following exception occurs:

"Exception --> org.apache.axis2.AxisFault: Connection reset by peer: socket write error"

This issue is now resolved.

- PIE-36224

When installed on Unix or Linux, scripts located in IntegrationServer/instances/<instanceName>/packages/<packageName> directory, such as IntegrationServer/instances/myInstance/packages/WmDeployer, do not have permission to execute. This issue is now resolved.

- PIE-36288

Executing the jcode.bat/sh utility removes the name of the output template assigned to a service.

Running the jcode.bat/sh utility removes the value of the Output template Name property for services in the package containing the Java service.

This issue is now resolved.

- PIE-36399

Using pub.schema:createXSD to create an XML Schema definition for a document type ends with a NullPointerException.

Using the pub.schema:createXSD service to create an XML Schema definition for a document type ends with a NullPointerException if the document type contains a field named \*body.

This issue is now resolved.

- PIE-36644  
Memory leak with JMS request-reply.  
Integration Server did not correctly close MessageProducer objects when invoking the pub.jms:reply service, resulting in a memory leak.  
This issue is now fixed.
- PIE-36824  
Users that are members of the Developers group cannot use Designer to build and upload processes.  
When a user that belongs to the Developers group uses Designer to build and upload a process, Designer throws the following exception:  
Error: Build of process <processName> failed.  
com.webmethods.process.connection.is.IntegrationServerConnectionException: [ISC.0064.9314] Authorization Required: [ISS.0084.9004] Access Denied  
at  
com.webmethods.process.generator.util.GeneratorUtils.getJMSProviderData(GeneratorUtils.java:934)  
at  
com.webmethods.process.generator.util.GeneratorUtils.createJNDIDestinations(GeneratorUtils.java:718)  
This issue is now resolved. Members of the Developers group can now use Designer to build and upload processes.
- PIE-36962  
Integration Server fails to enable email ports configured to use transport layer security.  
Upon creating an email port configured to use transport layer security, Integration Server fails to enable the email port and issues the following error message:  
Unsupported ciphersuite SSL\_DH\_DSS\_WITH\_3DES\_EDE\_CBC\_SHA  
This issue is resolved.
- PIE-36990  
Duplicate port aliases are assigned during upgrade.  
When upgrading Integration Server 9.5 or earlier to version 9.6 or later, Integration Server might assign the same port alias to multiple Internal Server ports. Upon startup of Integration Server, this may result in only one of the Internal Server ports becoming active and in the following warning: [ISS.0070.30] yyyy-mm-dd hh:mm:ss zone WARN: Duplicate alias protocolListener\_portNumber\_packageName encountered creating protocol listener on port portNumber.  
This occurs because the naming convention used to assign a port alias to an existing port creates a duplicate alias if more than one Internal Server ports connect to an Enterprise Gateway Server through the same Registration port.  
Now, to ensure that each port alias is unique, Integration Server includes the host name for the port in the port alias for migrated ports. The new naming convention is:  
protocolListener\_portNumber\_hostName\_packageName
- PIE-37004

Integration Server reloads packages more than once in a run-time-based deployment. When there are dependencies across different Integration Server packages in a run-time-based deployment, Integration Server reloads these packages more than once. Now, Integration Server reloads the packages just once.

- PIE-37041  
While converting an XML node to a document, Integration Server does not issue any validation errors upon receiving empty fields that are not included in the enumeration list. When converting an XML node to a document that contains fields with \*body attributes, the text specified in \*body represents the values of the document fields. These elements can have valid values specified in the enumeration fields. However, while converting, if Integration Server receives an empty value for a field and if the empty value is not included in the enumeration list, Integration Server should issue a validation error, but does not. This issue is resolved. Integration Server now issues the following validation error upon receiving an empty field that is not included in the enumeration list:  
No matching enumeration value.”
- PIE-37142  
On Windows, the script for creating a new instance of Integration Server does not use the JVM bundled with the product installation. The script for creating an Integration Server instance now uses the JVM bundled with the Integration Server product installation.
- PIE-37159  
Users can log in to Integration Server with old and new passwords. When central user management is configured for Integration Server and an authentication cache is enabled for Integration Server, users can log in with an old password even after successfully log in with the new password. This occurs because Integration Server does not remove the cached entry with the old password until after the time specified in `watt.server.auth.cache.timeout` elapses. Now, once a user logs in with a new password, Integration Server clears the cached password.
- PIE-37166  
Web browser users are not forced to supply credentials after their session expires. When Integration Server receives a request that includes a cookie that identifies a session and valid user credentials, Integration Server will do one of two things:
  - If the session identified by the cookie is valid, Integration Server will use the existing session for the request.
  - If the session identified by the cookie has expired, or is otherwise invalid, Integration Server will use the supplied credentials to authenticate the client and create a new session for the request.Modern web browsers cache user credentials and send them to servers with each request. For Integration Server Administrator users, this means a user's session may expire but because the browser sends the user's credentials every time, a new session is created and the user may continue to use Integration Server Administrator without re-entering their user name and password. The only way to force the re-entry of a user's credentials is to close the browser. This may be considered a security flaw. Integration Server addresses this situation by adding a new configuration parameter:

watt.security.session.forceReauthOnExpiration. When set to true, Integration Server rejects any request that includes a cookie identifying an expired or invalid session, even if the request includes valid user credentials. The rejection response directs the browser to clear its session identifier and to prompt the user for credentials. When set to false, Integration Server creates a new session using the credentials in the cookie. The default value for watt.security.session.forceReauthOnExpiration is false. A value of true offers more secure behavior. Changes to watt.security.session.forceReauthOnExpiration take effect immediately.

- PIE-37211  
The pub.flow:getLastError service does not return a lastError document.  
The pub.flow:getLastError service does not return a lastError document if a parent SEQUENCE step specifies a timeout value but a service called by an INVOKE step within the SEQUENCE causes the SEQUENCE to time out.  
This issue is now resolved.
- PIE-37222  
A signed XML document or a node in an XML document fails verification performed by the pub.security.xml:verifyXML service.  
If the pub.security.xml:signXML service signs an XML document or a node in an XML document and the service input specifies "true" for the includeCertChain parameter or a value other than the default value "X509\_CERTIFICATE" for the certData parameter, the resulting signed document fails verification performed by the pub.security.xml:verifyXML service.  
This issue is resolved.
- PIE-37276  
After migrating a consumer web service descriptor that uses Web Services Addressing (WS-Addressing) from Integration Server 8.2 to a later release, invoking a web service connector in the descriptor ends with SocketTimeoutException.  
If a consumer web service descriptor was created from a WSDL document that declared both the Web Services Addressing namespace as defined in the World Wide Web Consortium (W3C) Recommendation and the namespace from the earlier W3C Submission, after migration from Integration Server 8.2, execution of a web service connector fails with the following:  
java.net.SocketTimeoutException: Read timed out  
The timeout occurs because Integration Server incorrectly uses the WS-Addressing namespace from the earlier W3C Submission of WS-Addressing when executing the web service connector. As a result, the web service provider does not respond in the expected manner which causes the request to time out.  
Now, if a web service descriptor that uses WS-Addressing was created from a WSDL that declared namespace declarations for the WS-Address Recommendation and the Submission, Integration Server uses the namespace declarations defined in the Recommendation.
- PIE-37473  
Package deployment fails when the package contains a document type.  
Using Deployer to deploy a package that contains a publishable document type fails with the following error:  
[DEP.0005.0326] An error occurred while deploying package "packageName". Item

"documentTypeName" could not be loaded because of reason "[ISS.0026.9112] Document type documentTypeName has failed to load. Duplicate Broker document type name brokerDocumentTypName is also referenced by documentTypeName". The package may have partially loaded; please check your target server.

This issue is now resolved.

- PIE-37508  
Integration Server logs an erroneous exception when executing web services without an outbound callback service.  
When executing web service that is part of a provider web service descriptor for which an outbound callback service is not specified, Integration Server sometimes writes the following erroneous message to the error log:  
ISC.0088.9998E Exception --> null.  
This issue is now resolved. Integration Server no longer logs an exception when executing a web service that is part of a web service descriptor that does not specify an outbound callback service.
- PIE-37589  
XSLT services experience intermittent XSLT transformation errors or exhibit slow transformation performance.  
This fix addresses both issues.
- PIE-37790  
Enhancement to use Universal Messaging for audit logging queues.  
In asynchronous audit logging, Integration Server first writes a log entry to a queue and subsequently writes the log entry from the queue to the log destination. Previously, Integration Server provided only an internal queue, sometimes called the light-weight queue, to use as an audit logging queue. With this enhancement, Integration Server provides the option of using a Universal Messaging queue instead of the internal queue as the audit logging queue. Using Universal Messaging with audit logging offers increased performance for asynchronous and synchronous logging.
- PIE-37834  
When using the jcode utility to compile Java services, Integration Server generates wrong jcode utility classpath.  
When using the jcode utility to compile Java services, Integration Server generates wrong jcode utility classpath if the code or classes directory added to the classpath does not include path separator.  
This issue is now resolved.
- PIE-37977  
A web service connector throws a SOAPException about an invalid envelope.  
When executing a web service connector for an InOnly or InOnlyRobust operation for which the parent consumer web service descriptor has the Pre-8.2 compatibility mode property set to true, Integration Server may log the following extraneous error message indicating an invalid SOAP Envelope has been received even though the connector executed successfully.  
[ISS.0088.9155] this SOAPMessage does not contain a valid Envelope object

This fix eliminates the extraneous error message.

- **PIE-38099**  
A trigger with an AND join fails when receiving messages concurrently across a cluster of Integration Servers or a non-clustered group of Integration Servers.  
When a JMS trigger or a webMethods messaging trigger with an AND join receives messages at the same time on two different Integration Servers, one of the messages might be lost. The lost message will not be processed which prevents the AND join from being satisfied and causes the trigger to fail. This situation occurs when the trigger resides on Integration Servers in a cluster or on a group of non-clustered Integration Servers.  
This issue is now resolved.
- **PIE-38134**  
Enhancement to provide the ability to configure the allowed protocols for JSSE on a per port basis. In Integration Server, the `watt.net.jsse.server.enabledProtocols` server configuration parameter specifies the allowed protocols for all JSSE ports. However, there might be times where you wish to allow specific protocols for use with a particular JSSE port only. Integration Server now provides the ability to specify the allowed protocols for JSSE on a per port basis.  
Note: The 'jsseEnabledProtocols' value specified for the port record in the `listeners.cnf` file overrides the value set by `watt.net.jsse.server.enabledProtocols` server configuration parameter.  
Note: When the logging facility 0006 Server SSL Interface is set to the Debug logging level, Integration Server writes messages about protocols used for inbound and outbound ports to the server log. At the Trace logging level, Integration Server writes messages about the enabled cipher suites. You can use these server log messages to confirm the enabled protocols for any JSSE port.
- **PIE-38158**  
The `pub.utils.messaging:migrateDocTypesTriggersToUM` service incorrectly returns a message indicating a filter was successfully converted.  
When the `pub.utils.messaging:migrateDocTypesTriggersToUM` service cannot convert a filter for a webMethods messaging trigger because of a filter conversion error, the service returns the error message in the `failedTriggers/reason` parameter. However, the service also returns a message stating that the filter was successfully converted, which is not correct.  
If a filter cannot be converted successfully, the `pub.utils.messaging:migrateDocTypesTriggersToUM` no longer returns a message about successful conversion of the filter.
- **PIE-38244**  
Web service fails with a `RampartException` while handling a holder-of-key SAML assertion. When handling a holder-of-key SAML assertion, a web service fails with the following exception:  
`RampartException: Invalid signature algorithm for Asymmetric binding.`  
This issue is now resolved.
- **PIE-38300**  
A concurrent JMS trigger makes a retry attempt after Integration Server suspends the trigger because of a transient error.  
When a concurrent JMS trigger encounters a transient error when processing a message, the trigger

makes an extra retry attempt after the trigger is suspended. For example, if Max retry attempts is 3, Integration Server suspends the trigger after the third retry attempt fails. However, the trigger makes a fourth retry attempt.

This issue is resolved. When Integration Server suspends a concurrent JMS trigger because of a transient error, the trigger does not make an additional retry attempt.

- PIE-38391

In a clustered environment, Integration Server sometimes does not create child tasks when a new server is added to the cluster or when an existing server is restarted.

When a task is scheduled to run on all servers in a clustered environment, Integration Server creates a parent task and a child task for each server in the cluster. When a new server is added to the cluster or when an existing server in the cluster is restarted, Integration Server creates a corresponding child task upon server restart. However, Integration Server sometimes does not create the child task for the newly added server or for the server that was restarted. As a result, the complete information for all servers in the cluster is not available on the Scheduler screen.

This issue is resolved.

- PIE-38404

Integration Server resumes document retrieval and/or processing for webMethods messaging triggers after package reload or server restart even when the Apply Change Permanently option was selected.

When using the Integration Server Administrator or the built-in services for suspending document retrieval and/or processing for a webMethods messaging trigger that receives documents from Universal Messaging, Integration Server does not honor the value of the Apply Change Permanently check box. When selected, the Apply Change Permanently check box indicates that Integration Server persists the change in document retrieval or document processing across package reloads and server restart. However, Integration Server reverts the state and enables retrieval and/or processing of documents when Integration Server restarts or when a package is reloaded.

This issue is resolved.

- PIE-38473

While creating an Enterprise Gateway Server port that uses the HTTPS protocol, the 'Use JSSE' option is not available in the Edit Enterprise Gateway Server Configuration screen in Integration Server Administrator.

This issue is resolved. The 'Use JSSE' option is now available in the Edit Enterprise Gateway Server Configuration screen while creating an Enterprise Gateway Server port that uses the HTTPS protocol.

- PIE-38526

When creating an Internal Server port that uses the HTTPS protocol, the "Use JSSE" option is not available in the Edit Internal Server Configuration screen in Integration Server Administrator.

This issue is resolved. The Edit Internal Server Configuration screen now includes the "Use JSSE" option when the selected protocol is HTTPS.

- PIE-38530



An HTTPS port that uses JSSE fails to start when a keystore is specified.

If Use JSSE is set to Yes for an HTTPS port and the key alias password is different from the password used for the keystore, the port does not start.

This issue is now resolved.

- PIE-38536  
The `pub.client:smtp` service completes successfully even though the service finishes with errors. Improper exception handling allowed the `pub.client:smtp` service to execute successfully even though the service encountered errors. This could lead to missing MIME parts in the email sent by the service.  
Now, the `pub.client:smtp` service includes proper exception handling, which prevents successful completion of the service when the service encounters errors.
- PIE-38557  
When entering quiesce mode, Integration Server writes messages to the client-side queue because Integration Server disables connection aliases before disabling packages.  
When Integration Server enters quiesce mode, Integration Server disables the `webMethods` messaging connection aliases and JMS connection aliases before disabling packages. As a result, services that publish messages might execute after the needed connection alias is disabled, causing messages to be written to the client-side queue.  
Now, when entering quiesce mode, Integration Server disables packages before disabling connection aliases. This will prevent new messages from being written to the client-side queue as Integration Server enters quiesce mode.
- PIE-38660  
The `jcode` utility does not scan the jar files present in the static folders of the packages.  
The jar files present in the static folders of the packages (package's code \jars \static folders) were not being scanned and added to the classpath by the `jcode` utility.  
This issue is resolved.
- PIE-38881  
When migrating from Integration Server 8.2 or later to a newer version of Integration Server, the migration utility overwrites server configuration parameter values set during an earlier migration. If you migrated Integration Server from version 7.x to version 8.2 or later and the later version introduces new behavior for existing functionality, the migration utility prompts you to choose the new behavior or the existing behavior and then sets a server configuration parameters in the `server.cnf` accordingly. When you migrate Integration Server from 8.2 or later to a newer version of Integration Server, the migration utility prompts to use the new or existing behavior for existing functionality that was changed in the new version. However, the Integration Server migration utility incorrectly overwrites some of the settings that were already set during earlier migrations. This issue is now resolved. Integration Server migration utility retains previously selected behavior and sets server configuration parameters for behavior introduced in the new version only.
- PIE-38921  
Setting the `watt.server.db.connectionCache` server configuration parameter to `server` increases the number of database connections.

Setting the `watt.server.db.connectionCache` server configuration parameter to `server` tells Integration Server to maintain a pool of connections for each database. However, when a connection became stale, a new connection was getting created without the stale connection getting closed. This increased the number of connections even though the pool reached its maximum number of connections.

This issue is resolved. Integration Server now closes all the stale connections before creating new connections.

## **Release 9.9**

- PIEAR-616 (WAR\_9.5\_SP1\_Fix5, WAR\_9.7\_Fix1)  
The change in status of an adapter listener is not displayed in Integration Server Administrator if you query the listener using an existing search filter.  
In Integration Server Administrator, if you query an adapter listener using an existing search filter, the status of the listener is not refreshed and the current status of the listener is not displayed correctly.  
This issue is resolved. The status of an adapter listener is now refreshed on access to display the correct status using an existing search filter.

## **Release 9.8**

- PIE-31623 (IS\_7.1.2\_Core\_Fix47, IS\_7.1.3\_Core\_Fix27, IS\_9.0\_SP1\_Core\_Fix7, IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix1)  
Sessions on remote servers are reused by different users. When Integration Server is acting as an HTTP client, it retains the HTTP cookies from the remote server. If two users connect to the same remote server, they use the same set of cookies. Since the session ID is often stored in a cookie, this can result in the two users using the same session on the remote server. Each user should use a unique session when connecting to a remote server.  
This issue is resolved. HTTP cookies are now associated with a specific user as well as the remote server so that a separate set of cookies are used for each user.
- PIE-31372 (IS\_7.1.3\_Core\_Fix27, IS\_9.0\_SP1\_Core\_Fix7, IS\_9.0\_SP1\_Core\_Fix8, IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix2)  
Secure LDAP connections fail when running Integration Server on HP-UX.  
When running Integration Server on HP-UX, configuring LDAP connections using SSL fails because the default secure random algorithm in the Entrust library fails with an exception.  
This issue is resolved. Integration Server introduces the new `watt.net.ssl.randomAlgorithm` server configuration parameter to identify the random algorithm name. The default is `FIPS186_2usingSHA1`. If you change the setting of this parameter, you must restart Integration Server for the changes to take effect.
- PIE-34054 (IS\_7.1.3\_Core\_Fix27, IS\_9.0\_SP1\_Core\_Fix8, IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix2)  
Remove use of SSLv3 from any HTTPS or FTPS Integration Server ports.  
In order to protect against POODLE vulnerability (CVE-2014-3566), this fix exposes server configuration parameters that allow you to disable the use of SSLv3.0 on Integration Server HTTPS

and FTPS ports.

Depending on whether connections use the Entrust library (entoolkit.jar) or JSSE (where useJSSE=true), you use a different procedure to disable SSLv3.0. Follow the appropriate procedure as follows:

For connections that use Entrust (entoolkit.jar) library:

When Integration Server uses the Entrust library to handle inbound and outbound requests, you disable SSLv3.0 by setting the following server configuration parameters:

- watt.net.ssl.server.handshake.minVersion
- watt.net.ssl.server.handshake.maxVersion

Possible values for these server configuration parameters are "sslV3" and "tls" (the default). With this fix, these two parameters take the default value "tls", which indicates that all server side SSL listeners will support only TLSv1 and no longer accept SSLv3 connections.

When Integration Server acts as a client and makes an outbound request, it configures the allowed protocols using the following server configuration parameters:

- watt.net.ssl.client.handshake.minVersion=sslV2
- watt.net.ssl.client.handshake.maxVersion=tls

Possible values for these server configuration parameters are "sslV2", "sslV3", and "tls". If you want to disable the use of "sslV3", set watt.net.ssl.client.handshake.minVersion as follows:

```
watt.net.ssl.client.handshake.minVersion=tls
```

To change the values of the server configuration parameters, from Integration Server Administrator, navigate to Settings > Extended and add the parameters as follows:

```
watt.net.ssl.server.handshake.minVersion=tls  
watt.net.ssl.server.handshake.maxVersion=tls  
watt.net.ssl.client.handshake.minVersion=tls  
watt.net.ssl.client.handshake.maxVersion=tls
```

If any of your clients require SSLv3 to connect (the previous default), set

```
watt.net.ssl.server.handshake.minVersion
```

 as follows:

```
watt.net.ssl.server.handshake.minVersion=sslV3
```

When making outbound connections, you can configure Integration Server to first try to connect using sslV3 and, if that fails, to use tlsV1, set watt.net.ssl.client.handshake.minVersion as follows:

```
watt.net.ssl.client.handshake.minVersion=sslV3
```

This will allow Integration Server to use sslV3 with endpoints that do not support tlsV1.

For connections that use JSSE (where useJSSE=true):

When Integration Server uses JSSE to handle inbound and outbound requests, you disable SSLv3.0 by setting the following server configuration parameters:

- watt.net.jsse.server.enabledProtocols
- watt.net.jsse.client.enabledProtocols

Possible values for these server configuration parameters are a comma-separated values consisting of one or more of the following:

- SSLv2Hello
- SSLv3
- TLSv1
- TLSv1.1
- TLSv1.2

With this fix, `watt.net.jsse.server.enabledProtocols` and `watt.net.jsse.client.enabledProtocols` are set to the default value of "TLSv1,TLSv1.1,TLSv1.2", which indicates that all server side SSL listeners and client side outbound connections that use JSSE will not accept any SSLv3 or SSLv2 connections. To change the values of the parameters, from Integration Server Administrator, navigate to Settings > Extended and add the parameters as follows:-

```
watt.net.jsse.server.enabledProtocols=TLSv1,TLSv1.1,TLSv1.2
```

```
watt.net.jsse.client.enabledProtocols=TLSv1,TLSv1.1,TLSv1.2
```

Note: These values are case-sensitive. Specify the values exactly as shown.

If any of your clients need to connect using SSLv3, add SSLv3 to

```
watt.net.jsse.server.enabledProtocols, for example:
```

```
watt.net.jsse.server.enabledProtocols=TLSv1,TLSv1.1,TLSv1.2,SSLv3
```

When starting JSSE ports, at DEBUG level of logging facility 6 (Server SSL Interface), Integration Server logs a message to indicate what protocols are enabled for each JSSE port.

- PIE-34463 (IS\_7.1.3\_Core\_Fix27, IS\_9.0\_SP1\_Core\_Fix8, IS\_9.6\_Core\_Fix4, IS\_9.7\_Core\_Fix2)  
When you invoke the `pub.client:http` service, Integration Server does not create a new session when the `newSession` parameter is set to `yes`.  
This issue is resolved.
- PIE-33340 (IS\_9.0\_SP1\_Core\_Fix7, IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix1)  
While deploying BPM (ProcessModel) assets using `webMethods Deployer`, Integration Server issues an exception if a specified package does not exist in the source server.  
While creating a deployment map and adding it to the target group to deploy BPM (ProcessModel) assets using `webMethods Deployer`, Integration Server issues a `NullPointerException` if a specified package does not exist in the source Integration Server.  
This issue is resolved. In the above scenario, Integration Server now issues an error message stating that the specified package does not exist in the source server.
- PIE-32686 (IS\_9.0\_SP1\_Core\_Fix7, IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix2)  
Integration Server returns a 401 Unauthorized error when it receives a request with no authentication scheme specified in the Authorization header.  
Requests with no authentication scheme do not conform to the HTTP Authorization header specification. Integration Server versions prior to 8.2 CoreFix 12 did not strictly enforce the HTTP Authorization header specification, so requests from HTTP clients that did not conform to that standard still worked. However, starting with Integration Server version 8.2 CoreFix 12, Integration Server forces requests to have an authentication scheme in the Authorization header.  
This issue is resolved. Now, Integration Server treats requests with no authentication scheme in the Authorization header as BASIC authentication requests and performs authentication for valid credentials.
- PIE-32800 (IS\_9.0\_SP1\_Core\_Fix7, IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix2)  
In certain scenarios, SOAP fault that Integration Server generates includes the hostname and IP address of the endpoint reference.  
Upon invoking a web service that does not exist in the Integration Server, the SOAP fault that Integration Server generates includes the hostname and IP address of the endpoint reference in the values specified for fault reasons and actor/role attributes.

This issue is resolved. This fix introduces a new server configuration parameter, `watt.server.SOAP.hideEPRHostInFault`, to hide the endpoint reference host name and IP address details in the SOAP fault. When this parameter is set to true, Integration Server replaces the host name and IP address with `*:*` in the SOAP fault. When this parameter is set to false, Integration Server includes the host name and IP address details of the endpoint reference in the SOAP fault. The default value of this parameter is false.

Note: This parameter applies only when the Pre-8.2 compatibility mode property of the web service descriptor is set to false.

- PIE-32920 (IS\_9.0\_SP1\_Core\_Fix7, IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix2)  
Integration Server returns the wrong error information when the format of an incoming HTTP Authorization header value is invalid.  
When Integration Server receives a request whose HTTP Authorization header value is in an invalid format, it returns a 500 Internal Server Error. Integration Server should return a 401 Unauthorized Error.  
This issue is resolved.
- PIE-33354 (IS\_9.0\_SP1\_Core\_Fix7, IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix2) Integration Server logs an exception in the server logs while invoking web services that has no value set for the Outbound callback service property.  
While invoking certain web services, Integration Server logs following message in the server logs:  
ISC.0088.9998E Exception --> null.  
This issue occurs only if no value is set for the Outbound callback service property of the web service descriptor.  
This issue is now resolved. Integration Server no longer logs an exception if a value is not set for the Outbound callback service property of the web service descriptor.
- PIE-33421 (IS\_9.0\_SP1\_Core\_Fix7, IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix2) After applying IS\_9.0\_SP1\_Core\_Fix6, the Dynamic Server Pages in Integration Server Administrator are not cached.  
This issue is resolved. This fix introduces a new server configuration parameter, `watt.cachedirective.exclude.packages` that you can use to specify a comma-separated list of packages whose Dynamic Server Pages you want the browser to cache. You can specify the packages as regular expressions. The asterisk (\*) is the only wildcard character allowed in the regular expression. By default, the value of this parameter is empty, meaning none of the Dynamic Server Pages in the Integration Server Administrator are cached.  
Note: Software AG recommends that you use `watt.cachedirective.exclude.packages` to cache the Dynamic Server Pages that are related to custom packages only.  
Important: If you change the setting of this parameter, you must restart Integration Server for the changes to take effect.
- PIE-31376 (IS\_9.0\_SP1\_Core\_Fix7, IS\_9.6\_Core\_Fix3)  
Querying for a user in an LDAP directory results in a "size limit exceeded" error.  
When Integration Server is configured to use LDAP for external user management, and Integration Server Administrator is used to query LDAP for a specific LDAP user or group of users, Integration Server retrieves all users from the LDAP directory instead of retrieving only the specified user(s).

This behavior results in the following error in the Integration Server server log:

ISS.0002.0044E Error querying for user(s) on (LDAP server) with search root (LDAP: error code 4 - Sizelimit Exceeded)

This issue is resolved.

- PIE-32725 (IS\_9.0\_SP1\_Core\_Fix7, IS\_9.6\_Core\_Fix3)  
In certain scenarios, the entries in the stats.log file become corrupted.  
This issue is now resolved.
  
- PIE-33193 (IS\_9.0\_SP1\_Core\_Fix7, IS\_9.6\_Core\_Fix3)  
Even after modifying the database columns to make them wider, Integration Server truncates the length of data in the WMSERVICEACTIVITYLOG.FULLMESSAGE and WMSERVICECUSTOMFLDS.STRINGVALUE columns of the audit logging database. The WMSERVICEACTIVITYLOG.FULLMESSAGE and WMSERVICECUSTOMFLDS.STRINGVALUE columns of the audit logging database are hard-coded in Integration Server to be 1024 characters and 512 characters respectively. When you edit the width of the database columns to make them wider, Integration Server truncates the data to the hard-coded values before writing the data to the database table.  
This issue is resolved. You can now increase the widths of the WMSERVICEACTIVITYLOG.FULLMESSAGE and WMSERVICECUSTOMFLDS.STRINGVALUE columns in the audit logging database. Now, when the audit records corresponding to the WMSERVICEACTIVITYLOG and WMSERVICECUSTOMFLDS database tables are created during server initialization, Integration Server checks the database to determine the width of the WMSERVICEACTIVITYLOG.FULLMESSAGE and WMSERVICECUSTOMFLDS.STRINGVALUE columns, and sets the length accordingly.  
Keep the following points in mind when increasing the column widths:
  - The data written to these columns can contain multibyte characters. With multibyte characters, data can be truncated in the middle of a character, which could cause the last character written to the database column to be a character other than the intended character. To avoid this, Integration Server truncates the last character boundary before the maximum length of the field, meaning that the data might be slightly smaller than the maximum value set in the audit logging database.
  - Integration Server checks the database for column width by obtaining the metadata and examining the CHAR\_OCTET\_LENGTH field of the column. If the database vendor does not supply a CHAR\_OCTET\_LENGTH value for the column, Integration Server uses the hard-coded default lengths for the fields as follows:
    - WMSERVICEACTIVITYLOG.FULLMESSAGE = 1024
    - WMSERVICECUSTOMFLDS.STRINGVALUE = 512Integration Server introduces the following new server configuration properties:
  - The watt.server.audit.schemaName server configuration parameter specifies the user name of the ISCoreAudit JDBC functional alias. By default, Integration Server uses the user name from the ISCoreAudit JDBC functional alias.
  - The watt.server.audit.dbEncoding server configuration parameter specifies the character set that the audit logging database uses. The default is UTF-8. The value for this property must be a standard IANA-assigned character set name, as defined on <http://www.iana.org/assignments/character-sets>.If you change the setting of either of these server configuration parameters, you must restart

Integration Server for the changes to take effect.

- PIE-33250 (IS\_9.0\_SP1\_Core\_Fix7, IS\_9.6\_Core\_Fix3)  
Settings within a package's node.ndf files are changed after the package is compiled during a repository-based deployment.  
When a package is deployed to a target Integration Server using webMethods Deployer, and the Compile Package on Install global value is set to true, Integration Server performs a fragmentation step during compilation of the package. This step creates new node.ndf files for any Java services contained in the package. As a result, any settings previously defined in the node.ndf files are lost. This issue is resolved. This fix introduces a new global property - fragPackage (Fragment Package on Install), for package assets. A value of true indicates that you want to allow Integration Server to perform the fragmentation step and overwrite a package's node.ndf files when the package is compiled on the target server. A value of false indicates that you want to prevent the server from performing the fragmentation step, thereby preserving custom settings defined in the package's node.ndf files when the package is compiled on the target server. The default is true.
- PIE-33256 (IS\_9.0\_SP1\_Core\_Fix7, IS\_9.6\_Core\_Fix3) Integration Server gives the datatype of the returnCode output parameter of the pub.client.sftp\* services incorrectly as integer instead of correctly specifying it as string.  
This issue is now resolved. The returnCode output parameter of the pub.client.sftp\* services is now updated to string datatype.
- PIE-32235 (IS\_9.0\_SP1\_Core\_Fix7) Integration Server thread dump indicates a deadlock state between webMethods Broker polling and synchronization threads when Broker disconnects while a publishing event is in progress.  
The BrokerPoller thread, which determines Broker's connection status, and the BrokerSynchronizer thread, which synchronizes documents between Integration Server and Broker, may become deadlocked. This can happen when Broker disconnects and/or reconnects while Integration Server is publishing a document to Broker.  
This issue is resolved. Integration Server now prevents deadlocks from occurring between the two threads.
- PIE-32458 (IS\_9.0\_SP1\_Core\_Fix7)  
Integration Server support for using user-defined prefixes with the document types created when creating or refreshing a consumer web service descriptor or a WSDL first provider web service descriptor.  
This fix contains the server-side functionality required to support the Designer functionality described in WED-4598 which is available in a webMethods Service Development fix. Together, PIE-32458 and WED-4598 provide the ability to associate user-defined prefixes with the namespaces used in document types instead of the prefixes defined in the schema contained in or referenced by a WSDL document used as the source for a web service descriptor. For more information about this functionality, see the readme file for the webMethods Designer Service Development fix. For webMethods Service Development 9.6, WED-4598 is available in ESB\_9.6\_Fix2.  
Note: The ability to refresh a web service descriptor is available in Integration Server and webMethods Service Development versions 9.0 SP1 and later.

- PIE-32990 (IS\_9.0\_SP1\_Core\_Fix7)  
 Copying and pasting Integration Server packages from one server to another results in a "no such remote server" error.  
 When a package is copied from an Integration Server and pasted to a remote Integration Server using Software AG Designer, the following error message is displayed in the server log:(ISS.0085.9102) No such remote server  
 This occurs even when the target server is running normally and has a valid remote server alias.  
 This issue is resolved.
- PIE-32895 (IS\_9.0\_SP1\_Core\_Fix8, IS\_9.5\_SP1\_Migration\_Fix1, IS\_9.6\_Core\_Fix3, IS\_9.6\_Migration\_Fix2)  
 Integration Server issues a java.lang.NullPointerException error while migrating from Integration Server version 8.0 SP1 to Integration Server version 9.0 SP1 or 9.5 SP1 in a different installation directory.  
 This issue is now resolved.
- PIE-30419 (IS\_9.0\_SP1\_Core\_Fix8, IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix1)  
 Editing the connection details of a remote Integration Server does not work as expected.  
 After a remote Integration Server connection is created and a successful connection is established, if the remote server connection settings are changed (for example, if a different port number is specified), Integration Server does not create a new session when subsequent connection attempts are made. As a result, Integration Server Administrator indicates that subsequent connections are successful, even if the revised remote server settings are incorrect (for example, if the revised port number is not valid).  
 This issue is resolved.
- PIE-32999 (IS\_9.0\_SP1\_Core\_Fix8, IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix1)  
 After applying a fix containing PIE-30630 or when using Integration Server 9.7, if Platform Manager is in use, Integration Server can have a high number of active stateful sessions.  
 The number of active stateful sessions becomes high because sessions created by the Platform Manager were not being cleaned up upon disconnect but were not being removed from memory until the session time out limit elapsed. This issue was introduced by PIE-30630 which is included in Integration Server 9.7, IS\_8.2\_SP2\_Core\_Fix13, IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix1, and IS\_9.6\_Core\_Fix2.  
 Integration Server now removes a session created by the Platform Manager from memory at the time the Platform Manager disconnects.
- PIE-31474 (IS\_9.0\_SP1\_Core\_Fix8, IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix2)  
 Integration Server creates additional session threads while executing triggers and displays a misleading expiration value.  
 When watt.server.trigger.reuseSession (for Broker/local triggers in Integration Server version 9.0 SP1 and earlier or webMethods messaging triggers in version 9.5 SP1 and later) or watt.server.jms.trigger.reuseSession (for JMS triggers) is set to false, Integration Server displays an additional session thread for the trigger. In addition, regardless of the values set for watt.server.trigger.reuseSession and watt.server.jms.trigger.reuseSession server configuration parameters, Integration Server Administrator displays the session on the Server > Statistics >



Session screen with a Session Expires value of 9223372036854775807 and the session never expires. This issue is resolved. When either the `watt.server.trigger.reuseSession` or `watt.server.jms.trigger.reuseSession` server configuration parameter is set to false, Integration Server no longer creates extra sessions for the respective trigger. For these sessions, Integration Server Administrator displays “upon service completion” in the Session Expires column on the Server > Statistics > Sessions screen for trigger-related sessions. This indicates that the session will remain until the service executed by the trigger finishes. Once the service finishes, Integration Server removes the session.

When either the `watt.server.trigger.reuseSession` or `watt.server.jms.trigger.reuseSession` server configuration parameter is set to true, Integration Server shares one session for each execution of the trigger. In this case, Integration Server Administrator displays a value of "never" in the Session Expires column of the Server > Statistics > Sessions screen and the session does not expire.

- PIE-33336 (IS\_9.0\_SP1\_Core\_Fix8, IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix2)  
In case of web services, Integration Server does not keep the undeclared namespaces in the resulting document (IData), when the endpoint service is invoked.  
If an XML element that is part of a SOAP Message has elements with attributes containing undeclared namespaces, Integration Server does not keep the undeclared namespaces in the resulting document (IData), when the endpoint service is invoked.  
This issue is resolved. The generated IData now includes the undeclared namespace definitions.  
Note: In case of web services, the undeclared namespace functionality is available only if the datatype of the document is of type 'Object'.
- PIE-33632 (IS\_9.0\_SP1\_Core\_Fix8, IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix2)  
The service results cache does not delete expired elements from Ehcache.  
Expired service results remain in Ehcache even after the cache sweeper thread runs.  
This issue is resolved.
- PIE-33376 (IS\_9.0\_SP1\_Core\_Fix8, IS\_9.6\_Core\_Fix3)  
Integration Server issues a NullPointerException when it receives an HTTP request with no User-Agent header.  
This issue is resolved.
- PIE-33601 (IS\_9.0\_SP1\_Core\_Fix8, IS\_9.6\_Core\_Fix4, IS\_9.7\_Core\_Fix2)  
Integration Server is unable to process incoming XML files if the XML files contain non-English characters, such as Greek or Japanese.  
While processing an incoming XML file, Integration Server uses the charset encoding defined in the XML header. If the encoding is not defined in the XML header, Integration Server processes the XML file using the charset encoding of the request or the character encoding specified in the `watt.server.fileEncoding` server configuration parameter. However, after migrating to higher versions, using the character encoding specified in `watt.server.fileEncoding` parameter to process an incoming XML file causes Integration Server to return garbled messages.  
This issue is resolved. To resolve this issue, this fix introduces a new server configuration parameter, `watt.server.xml.encoding`, that specifies the encoding that Integration Server must use when processing incoming XML files.  
If an encoding is not defined in the XML header, Integration Server attempts to process the XML

file using the charset encoding of the http or ftp request. If charset encoding is not available in the request header, then Integration Server uses the character encoding specified in the `att.server.xml.encoding` server configuration parameter. There is no default value for this parameter. You must restart Integration Server for changes to this parameter to take effect. Note: If you have configured Integration Server to use the character encoding specified in the `watt.server.fileEncoding` parameter to process incoming XML files, after installing this fix or after upgrading to a higher version of Integration Server, ensure that the value of `watt.server.fileEncoding` parameter is set to the same value specified for `watt.server.xml.encoding`. If you have not configured `watt.server.fileEncoding` for processing XML files previously, after installing this fix or after upgrading to a higher version of Integration Server, you can configure `watt.server.xml.encoding` to process incoming XML files. You can use `watt.server.fileEncoding` to process all files other than incoming XML files.

- PIE-33615 (IS\_9.0\_SP1\_Core\_Fix8, IS\_9.6\_Core\_Fix4, IS\_9.7\_Core\_Fix2)  
Integration Server is unable to parse incoming XML files if the XML files contain non-English characters, such as Greek or Japanese.  
While processing an incoming XML file, Integration Server uses the charset encoding defined in the XML header. If the encoding is not defined in the XML header, Integration Server parses the XML file using the charset encoding of the request or the character encoding specified in the `watt.server.fileEncoding` server configuration parameter. However, after migrating to higher versions, using the character encoding specified in `watt.server.fileEncoding` parameter to process an incoming XML file causes Integration Server to return garbled messages.  
This issue is resolved. To resolve this issue, this fix introduces a new server configuration parameter, `watt.server.xml.encoding`, to specify the encoding that Integration Server must use when processing incoming XML files.  
If an encoding is not defined in the XML header, Integration Server attempts to process the XML file using the charset encoding of the http or ftp request. If charset encoding is not available in the request header, then Integration Server uses the character encoding specified in the `watt.server.xml.encoding` server configuration parameter. There is no default value for this parameter. You must restart Integration Server for changes to this parameter to take effect. Note: If you have configured Integration Server to use the character encoding specified in the `watt.server.fileEncoding` parameter to process incoming XML files, after installing this fix or after upgrading to a higher version of Integration Server, ensure that the value of `watt.server.fileEncoding` parameter is set to the same value specified for `watt.server.xml.encoding`.
- PIE-33637 (IS\_9.0\_SP1\_Core\_Fix8, IS\_9.6\_Core\_Fix4, IS\_9.7\_Core\_Fix2)  
Integration Server generates an invalid WSDL document if it encounters identically named elements that are declared to be of different types but belonging to the same target namespace. When generating the WSDL document, if Integration Server encounters identically named elements that are declared to be of different types but belonging to the same target namespace, Integration Server cannot correctly represent this in a WSDL document. Instead, when generating the WSDL document, Integration Server replaces the element declaration it creates for the identically named element first with the element declaration that it generates last.  
With this fix, when creating a service first web service descriptor, Integration Server issues a warning message stating that the element declaration it creates for the identically named element first is replaced with the element declaration that it generates last.

- PIE-33762 (IS\_9.0\_SP1\_Core\_Fix8, IS\_9.6\_Core\_Fix4, IS\_9.7\_Core\_Fix2)  
 The `pub.cache.atomic:putIfAbsent` and `pub.cache.atomic:replaceIfKeyExists` services show the incorrect data type for the `oldValue` output parameter.  
 The `pub.cache.atomic:putIfAbsent` and `pub.cache.atomic:replaceIfKeyExists` services display the `oldValue` output parameter as a `String` data type, but should display the data type as `Object`.  
 This issue is resolved.
- PIE-33799 (IS\_9.0\_SP1\_Core\_Fix8, IS\_9.6\_Core\_Fix4, IS\_9.7\_Core\_Fix2)  
 When running flow services in debug mode, Integration Server cannot retrieve parent service information from a calling child service.  
 Integration Server cannot retrieve the parent service information from a calling child service in debug mode.  
 This issue is resolved. Integration Server introduces the new public service `pub.flow:getCallingService` that can be invoked from the calling child service and returns the service and package name of the parent service. The `pub.flow:getCallingService` service returns the following output parameters:

  - `svcName` - `String` (optional) Fully qualified namespace name of the parent service.
  - `pkgName` - `String` (optional) Package name of the parent service.

If `pub.flow:getCallingService` is invoked from a service that does not have a parent service (for example, if the service is a top level service), Integration Server does not return the output parameters.
- PIE-33938 (IS\_9.0\_SP1\_Core\_Fix8, IS\_9.6\_Core\_Fix4, IS\_9.7\_Core\_Fix2)  
 Integration Server continues to execute a flow service even after global variable substitution fails.  
 When a flow service expects an input through global variable substitution and if the expected global variable does not exist, Integration Server displays an error message and continues executing the flow service instead of stopping the service execution.  
 The issue is resolved. If the global variable that a flow service expects does not exist, Integration Server displays an error message and stops the flow service execution.

- PIE-34080 (IS\_9.0\_SP1\_Core\_Fix8, IS\_9.6\_Core\_Fix4, IS\_9.7\_Core\_Fix2)  
 Adding an HTTP or HTTPS port in the Integration Server Administrator results in a blank Security > Ports screen.  
 When the server configuration parameter `watt.server.http.listRequestVars` is set to "error" and a new HTTP or HTTPS port is added, Integration Server returns a blank Security > Ports screen and writes the following message to the server log:  
 (ISC.0038.2) Duplicate query tokens found in URI: threadPool  
 This issue is resolved.
- PIE-33821 (IS\_9.0\_SP1\_Core\_Fix8)  
 The `watt.server.SOAP.hideEPRHostInFault` server configuration parameter is not available in the Extended Settings page in Integration Server Administrator.  
 This issue is resolved. The `watt.server.SOAP.hideEPRHostInFault` server configuration parameter now appears in the Extended Settings page.
- PIE-32771 (IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix1)  
 JMS provider connection attempts are refused during the processing of messages.  
 When a trigger service uses a transacted JMS connection alias, and that service sends JMS messages using the `pub.jms:send` service to a different transacted connection alias, the sessions on the JMS provider are not closed. As a result, connection attempts are refused because channel and process limits are reached.  
 This issue is resolved.
- PIE-33468 (IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix1)  
 Web service descriptor does not use user-defined prefixes for fault and handler document types.  
 When creating a consumer web service descriptor or a WSDL first provider web service descriptor, the user creating the web service descriptor can specify namespace prefixes to replace the prefixes used in the WSDL document. However, Integration Server was not using the user-defined prefixes for the IS document types generated for fault or handlers messages.  
 This issue is now resolved.
- PIE-33531 (IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix1)  
 After installing a newly generated license file for Terracotta, Integration Server disables editing for BigMemory settings.  
 The issue occurs because of a parsing error in the license file.  
 This issue is resolved.
- PIE-33660 (IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix1)  
 Integration Sever does not acknowledge all of the messages received in a batch by a JMS trigger.  
 When a standard JMS trigger receives and processes a batch of messages from the JMS provider, the JMS trigger should acknowledge the last message received in the batch. This results in acknowledgement of all the messages received in the batch. However, the JMS trigger currently acknowledges the first message received in a batch instead of the last which causes several messages to be unacknowledged.  
 Now, a JMS trigger that performs batch processing acknowledges the last message in the batch.

- PIE-33552 (IS\_9.6\_Core\_Fix3, IS\_9.7\_Core\_Fix2)  
 The pub.client:http service fails with an access denied HTTP response if the url input parameter contains special characters.  
 If the encoded value of the url input parameter of the pub.client:http service contains hexadecimal characters that are greater than 7f, the authorization information for the resource specified in the url parameter is not submitted by the http service. As a result, the pub.client:http service fails with the following error:  
 (ISC.0064.9314) Authorization Required: (ISS.0084.9004) Access Denied  
 This issue is resolved.
- PIE-33498 (IS\_9.6\_Core\_Fix4, IS\_9.7\_Core\_Fix2) Integration Server generates an invalid WSDL document if it encounters identically named elements that are declared to be of different types but belonging to the same target namespace.  
 When generating a WSDL document, if Integration Server encounters identically named elements that are declared to be of same type and belonging to the same target namespace, Integration Server issues a warning message stating that the element declaration it creates for the identically named element first is replaced with the element declaration that it generates last. Integration Server must do this only in case of identically named elements that are declared to be of different types but belonging to the same target namespace.  
 This issue is resolved. Integration Server now issues a warning message only if the identically named elements are declared to be of different types but belonging to the same target namespace.
- PIE-33539 (IS\_9.6\_Core\_Fix4, IS\_9.7\_Core\_Fix2)  
 Wrong message type identifier assigned to some messages of "0088 SOAP" server log facility. Integration Server assigns I (Info) as the message type identifier, instead of D (Debug), to some messages of "0088 SOAP" server log facility. As a result, there are discrepancies in the list of log messages displayed in the Logs > Server page of the Integration Server Administrator when Integration Server receives SOAP requests.  
 The issue is resolved. The log messages of "0088 SOAP" server log facility now have the correct message type identifier.
- PIE-33764 (IS\_9.6\_Core\_Fix4, IS\_9.7\_Core\_Fix2)  
 Wrong port shown in Mediator WSDL if multiple ports are configured in Integration Server. If a HTTP or HTTPS port is defined in Integration Server's Security > Ports page and added in the selected ports section in Solutions > Mediator > Administration > General page, the non-primary port with the lowest port number should be shown for the virtual service endpoint deployed in Mediator. However, Integration Server randomly chooses a port and makes the port available to the Mediator WSDL.  
 This issue is resolved. The virtual service WSDL in Mediator will now see the non-primary port with the lowest port number if multiple ports are configured for Mediator in Integration Server.
- PIE-33811 (IS\_9.6\_Core\_Fix4, IS\_9.7\_Core\_Fix2)  
 Integration Server becomes unresponsive while processing requests from a JMS provider. In certain circumstances, thread cleanup tasks performed during the processing of JMS messages fail to release the lock on an object. Other server threads that need that object go into a wait state, which eventually causes the server to become unresponsive.

This issue is resolved.

- PIE-33886 (IS\_9.6\_Core\_Fix4, IS\_9.7\_Core\_Fix2)  
The `pub.flow:getLastError` service does not return any results when the invoke step of a flow service reaches its timeout threshold.  
When a parent flow service (service A) invokes a child flow service (service B) with the Timeout parameter specified at the invoke step, and the child flow service invokes another flow service (service C), and timeout is triggered, `pub.flow:getLastError` in parent flow service (service A) returns no error information.  
This issue is resolved. When you invoke the `pub.flow:getLastError` service in the parent flow service (service A), the parent flow service returns the `lastError` output parameter as an `errorType` element with a value of "com.wm.lang.flow.FlowTimeoutException".
- PIE-34051 (IS\_9.6\_Core\_Fix4, IS\_9.7\_Core\_Fix2)  
Integration Server Administrator displays the number of completed requests over the lifetime of the Integration Server in the Current column on the Statistics screen.  
Integration Server Administrator displays the number of completed requests in two columns in the Requests area of the Statistics screen: Current and Lifetime. The Current column should display the number of requests in the last polling period, and the Lifetime column should display the number of completed requests over the lifetime of the Integration Server. Instead, the Current column displays the number of requests over the lifetime of the Integration Server, and the Lifetime column does not display any value. In addition, Integration Server Administrator does not properly display the Average Time row.  
This issue is resolved.
- PIE-34109 (IS\_9.6\_Core\_Fix4, IS\_9.7\_Core\_Fix2)  
Integration Server does not honor the `watt.server.control.triggerInputControl.delays` or `watt.server.control.triggerInputControl.delayIncrementInterval` values.  
When the values for `watt.server.control.triggerInputControl.delays` or `watt.server.control.triggerInputControl.delayIncrementInterval` are changed, Integration Server saves but does not use the specified values if an exception occurred when parsing the supplied values. Regardless of which parameter value caused the parsing error, Integration Server uses the default values for both parameters. However, there was no log message or other type of notification to inform the user that the default values would be used instead.  
Now, Integration Server logs the following message if it cannot parse the values of the `watt.server.control.triggerInputControl.delays` or `watt.server.control.triggerInputControl.delayIncrementInterval` parameters:  
ISS.0125.0015W  
The trigger input control parameters, `watt.server.control.triggerInputControl.delaysIncrementInterval` and `watt.server.control.triggerInputControl.delays`, were set to their default values because an exception occurred when parsing the supplied values.  
Cause  
Integration Server could not set the trigger input control configuration parameter `watt.server.control.triggerInputControl.delaysIncrementInterval` and/or `watt.server.control.triggerInputControl.delays` to the new value because an exception occurred

when parsing the new value. Integration Server reset both configuration parameters to the default values.

#### Action

Use a valid value for the `watt.server.control.triggerInputControl.delaysIncrementInterval` or `watt.server.control.triggerInputControl.delays` parameter.

- **PIE-32407 (IS\_9.7\_Core\_Fix2)**  
While using the `pub.schema:validate` service to validate an object, Integration Server considers a string ending with a decimal point to be a valid long data type.  
While validating an object using the `pub.schema:validate` service, Integration Server considers a string ending with a decimal point (for example, `<longType>5.</longType>`) to be a valid long data type.  
This issue is resolved. Integration Server no longer considers a string ending with a decimal point to be a valid long data type.
- **PIE-33458 (IS\_9.7\_Core\_Fix2)**  
Validation of web service request or response fails because of an extraneous `*body` field.  
When processing an inbound web service request or response that has an element that contains whitespace only and the associated field in the IS document types is defined as a document with optional children, Integration Server inserts a `*body` field to contain the whitespace. This is incorrect as Integration Server should ignore the whitespace. The presence of the extraneous `*body` field causes validation to fail because the associated IS document type does not contain a `*body` field.  
This issue is now resolved.
- **PIE-33583 (IS\_9.7\_Core\_Fix2)**  
A thread dump of Integration Server suggests a thread contention issue occurs during the creation of secure outbound connections.  
When Integration Server attempts to create multiple secure outbound connections at the same time, only one connection is created and other threads must wait.  
This issue is resolved.
- **PIE-33990 (IS\_9.7\_Core\_Fix2)**  
An inbound HTTP/S request that includes `access_token` in the query parameters or header fields is rejected and results in an error message in the `security.log` file.  
If an inbound HTTP/S request includes `access_token` in the query parameter or header fields, Integration Server performs OAuth authentication, denies the request, and logs the following message in the `security.log` file:  
SYSTEM AUTHENTICATION Integration Server rejected the request to access this resource. The access token is either invalid or expired.  
To address this issue, Integration Server now includes server parameters to enable or disable OAuth authentication by Integration Server when an inbound HTTP/S request `access_token` in the query parameters or header fields  
`watt.server.auth.oauth.accessToken.useHeaderFields`  
Specifies whether Integration Server performs OAuth authentication when an inbound HTTP/S request includes an `access_token` in the header fields. Specify `true` to perform OAuth

authentication. Specify false to skip OAuth authentication. The default is true.  
For changes to this parameter to take effect, you must restart Integration Server.

watt.server.auth.oauth.accessToken.useQueryParameters

Specifies whether Integration Server performs OAuth authentication when an inbound HTTP/S request includes an access\_token in the query parameter. Specify true to perform OAuth authentication. Specify false to skip OAuth authentication. The default is true.

For changes to this parameter to take effect, you must restart Integration Server.

- PIE-34248 (IS\_9.7\_Core\_Fix2)

While using the extended character sets, Integration Server issues a java.io.UnsupportedEncodingException error.

This issue occurs because the wm-converters.jar file, which is required to support extended character sets, is not present in the Integration Server classpath.

To resolve this issue in Integration Server version 9.5 SP1, do the following:

1. Shut down Integration Server.
2. Using a text editor, navigate to and open the following file:  
Software AG\_directory/profiles/configuration/custom\_wrapper.conf
3. Edit the custom\_wrapper.conf file by adding the following jar entry:  
wrapper.java.classpath.100=Software AG\_directory\common\lib\wm-converters.jar  
Where <Software AG\_Directory> is the installation directory for Software AG products.
4. Save your changes to the custom\_wrapper.conf file and then close the file.
5. Start Integration Server.

To resolve this issue in Integration Server versions 9.6 and 9.7, do the following:

1. Shut down Integration Server.
2. Using a text editor, navigate to and open the following file:  
Software AG\_directory/profiles/IS\_instance\_name/configuration/custom\_wrapper.conf
3. Edit the custom\_wrapper.conf file by adding the following jar entry:  
wrapper.java.classpath.100=Software AG\_directory\common\lib\wm-converters.jar  
Where <Software AG\_Directory> is the installation directory for Software AG products.
4. Save your changes to the custom\_wrapper.conf file and then close the file.
5. Start Integration Server.

- PIE-34323 (IS\_9.7\_Core\_Fix2)

While executing SQL queries, the Integration Server scheduler sometimes leaves the database cursor open, which causes the database cursor to reach its maximum limit.

The issue is now resolved.

- PIE-34330 (IS\_9.7\_Core\_Fix2)

Integration Server returns different results in debug and run modes when an input variable to a MAP step is mapped to an output variable of the same name.

When an input variable to a MAP step is mapped to an output variable of the same name, Integration Server returns different results in debug mode than it does in run mode.

This issue is resolved.



- PIE-34444 ( IS\_9.7\_Core\_Fix2)

The pub.client:http service does not consider the Content-Type headers if the data/args and data/table input parameter value is empty.

If the data/args and data/table input parameter value of the pub.client:http service is not null, but empty, Integration Server uses the "application/x-www-form-urlencoded" content type and ignores the specified Content-Type headers.

The issue is resolved, If the data/args and data/table input parameter value of the pub.client:http service is empty, Integration Server now uses the "application/x-www-form-urlencoded" content type only if no Content-Type is specified as the value of input field /headers/Content-Type.
- PIE-34481 (IS\_9.7\_Core\_Fix2)

Integration Server does not use service output templates for JSON requests.

When Integration Server receives a request containing the header "Accept: application/json" and the invoked service has an output template defined, Integration Server does not use the template to create the output.
- PIE-34482 (IS\_9.7\_Core\_Fix2)

Integration Server throws a NullPointerException followed by a SocketTimeoutException.

If Integration Server sends an outbound HTTP request and the request times out before a response is received, Integration Server may throw the following superfluous NullPointerException before throwing a SocketTimeoutException:

```
java.lang.NullPointerException: null
at com.wm.app.b2b.server.ServerThread.removeListener(ServerThread.java:272)
at com.wm.util.lifecycle.LifecycleManager.unregisterLifecycleListener(LifecycleManager.java:103)
at com.wm.app.b2b.server.HTTPMessageHandler.process(HTTPMessageHandler.java:266)
at com.wm.app.b2b.server.HTTPDispatch.handleRequest(HTTPDispatch.java:173)
```

This issue is now resolved.
- PIE-34503 (IS\_9.7\_Core\_Fix2)

The pub.string:bytesToString does not filter the byte order mark (BOM) characters while converting a byte array to string.

This issue is now resolved. This fix introduces a new optional input parameter, ignoreBOMChars, to the pub.string:bytesToString service.

If ignoreBOMChars is set to true and the value of the encoding input parameter is set to UTF-8, UTF-16, or UTF-32, Integration Server will remove the byte order mark (BOM) characters before converting the input byte array to string, if the byte array contains BOM characters.

If ignoreBOMChars is set to false and the value of the encoding input parameter is set to UTF-8, UTF-16, or UTF-32, Integration Server will include the byte order mark (BOM) characters while converting the input byte array to string, if the byte array contains BOM characters. The default is false.
- PIE-34661 (IS\_9.7\_Core\_Fix2)

Integration Server connects to an SFTP server directly while retrieving the public key of an SFTP server, even if the connection between Integration Server and the SFTP server is through a proxy. While defining an SFTP server alias, upon clicking the Get Host Key button to retrieve the public

key of the SFTP server, Integration Server connects to the SFTP server directly even if the connection between Integration Server and the SFTP server is through a proxy.

The issue is now resolved. If the connection between Integration Server and an SFTP server is through a proxy, Integration Server connects to the SFTP server through the proxy while retrieving the public key of the SFTP server.

- PIE-34662 (IS\_9.7\_Core\_Fix2)

When creating an IS schema from an XML document that does not reference a DTD, Integration Server throws a `NullPointerException`.

An IS schema can be created from an XML document only if the XML document references an existing DTD or contains a DTD inline. However, when creating an IS schema from an XML document that does not reference or contain an existing DTD, Integration Server throws a `NullPointerException` instead of a `ServiceError`.

This issue is now resolved.

- PIE-31363

Integration Server Administrator displays facility code 0090 as "Unknown".

On the View Server Logger Details Screen, Integration Server Administrator displays the facility name for code 0090 as "Unknown". The facility name for 0090 should be "pub Flow Services".

This issue is resolved.

- PIE-33148

When creating a WSDL first provider web service descriptor, the Addressing action property in the WSDL does not show up correctly in the web service descriptor.

Upon creating a WSDL first provider web service descriptor from a WSDL document containing the Addressing action property in the `prefix:namespace` format, Integration Server does not include the prefix in the Addressing action property of the newly created WSDL first provider web service descriptor.

The issue is now resolved. The same Addressing action property that is in the WSDL is included in the web service descriptor created from the WSDL.

- PIE-34287

Integration Server does not recycle the `stats.log` file at the correct time.

By default, Integration Server should recycle the `stats.log` file daily at midnight. However, the first time to recycle the `stats.log` file was incorrect. This caused the file to be recycled daily but at the wrong time.

This issue is now resolved. Integration Server now recycles the `stats.log` file daily at midnight.

- PIE-34509

After setting the server configuration property `watt.core.xml.expandGeneralEntities` to `false`, Integration Server does not encode the apostrophe properly.

This issue is now resolved.

- PIE-34627

Integration Server displays an error message when editing a JNDI provider alias if Integration Server Administrator is accessed via Mozilla Firefox or Google Chrome.

Integration Server displays the following error message when attempting to edit any field of a JNDI

provider alias using Integration Server Administrator: JNDI Alias Name must be specified. This issue occurs only if Integration Server Administrator is accessed via Mozilla Firefox or Google Chrome.

The issue is now resolved.

- PIE-34669  
When Integration Server is installed as a service, the service is not unregistered when it is uninstalled.  
While uninstalling Integration Server that is installed as a service on a Windows operating system, Integration Server does not uninstall the registered service.  
This issue is resolved.
- PIE-34898  
A scheduled task configured to run on any one of the Integration Servers connected to the same database does not run as expected and fails with an error.  
When a scheduled task is configured to run on any of the Integration Servers that are part of a non-clustered group of Integration Servers in which the ISInternal functional alias on each server points to the same database, the scheduled task fails with the following error:  
Could not complete last run  
This issue is resolved.
- PIE-34899  
The pub.client.ftp:get service does not consider files of 0 KB size to be large files even if the largefilethreshold input parameter is set to 0.  
If the largefilethreshold input parameter of the pub.client.ftp:get service is set to 0, Integration Server must consider all files to be large files. The output parameter islargefile must be true and the file content must be returned in the output parameter contentstream as a java.io.InputStream object. However, the pub.client.ftp:get service does not behave as expected. The pub.client.ftp:get service does not consider files of 0 KB size to be large files even if the largefilethreshold input parameter is set to 0. The service returns the islargefile parameter as false and the file content is returned in the output parameter content.  
This issue is resolved. The pub.client.ftp:get service now considers files of 0 KB size to be large files if the largefilethreshold input parameter is set to 0.
- PIE-35009  
Integration Server appears to become unresponsive because of blocked client requests.  
An internal component in Integration Server fails to release a lock when it should. Client threads wait indefinitely to acquire the lock, eventually causing requests to block. As result, Integration Server appears to be unresponsive.  
This issue has been resolved.
- PIE-35012  
At start up, Integration Server resets the persistence strategy of a cache to none.  
When Integration Server starts, it resets the default persistence strategy for a cache to “none”.  
Integration Server should change the default persistence strategy to “none” only when TerracottaConfiguration is set to “clustered”.

This issue is resolved.

- **PIE-35059**

Integration Server does not display an appropriate error message when an FTP client makes an active connection to the Integration Server FTP port, if there is a port in Integration Server with port number that is one less than the FTP port.

If the FTP port configured in Integration Server is running in active mode and if there is a port in Integration Server with port number that is one less than the FTP port, when the FTP client makes an active connection to the FTP port configured in Integration Server, the connection fails with a `NullPointerException` message.

The issue is resolved. Integration Server now issues the following error message to the FTP client: "Could not create data port <port number>. Try passive mode."
- **PIE-35143**

After applying `IS_8.2_SP2_Core_Fix13` or higher, deserialization of SOAP messages to `IData` does not work as expected.

After applying `IS_8.2_SP2_Core_Fix13` or higher, while deserializing SOAP messages to `IData`, Integration Server erroneously adds a default namespace prefix of "xmlns" to those fields that are contained in an implicit namespace declaration. This results in broken endpoint service field mappings. This issue occurs only when the Pre-8.2 compatibility mode property of the web service descriptor is set to true.

This issue is now resolved.
- **PIE-35151**

Integration Server logs an `SQLException` during startup.

When Integration Server starts, it uses the schema name to:

  - Access the audit logging database to determine the length of the `WMSERVICECUSTOMFLDS.STRINGVALUE` and `WMSERVICEACTIVITYLOG.FULLMESSAGE` columns. Integration Server uses the lengths to automatically adjust the size of the values inserted into these columns.
  - Retrieve the database metadata.

By default, Integration Server uses the User ID specified in the `ISCoreAudit` functional alias as the schema name for the audit logging database. You can override this value by specifying a value for the `watt.server.audit.schemaName` server configuration parameter. However, if the User ID does not match the schema name specified in `watt.server.audit.schemaName`, Integration Server logs a `SQLException` to the server log.

This issue is resolved. Integration Server no longer uses the User ID of the `ISCoreAudit` functional alias as the default schema name. Now, Integration Server requires that you specify a value for the `watt.server.audit.schemaName` parameter to retrieve the database metadata and resize the audit logging values in the `WMSERVICECUSTOMFLDS.STRINGVALUE` and `WMSERVICEACTIVITYLOG.FULLMESSAGE` columns. If `watt.server.audit.schemaName` is not set, Integration Server does not retrieve the metadata and assumes the lengths of the `WMSERVICECUSTOMFLDS.STRINGVALUE` and `WMSERVICEACTIVITYLOG.FULLMESSAGE` columns are 512 and 1024, respectively.

Note: Some databases are case-sensitive. When specifying the value for `watt.server.audit.schemaName`, you should match the case of the schema name with the schema

name required by the database.

- **PIE-32619**  
After fix IS\_8.2\_SP2\_Core\_Fix12 is installed, the SOAP response for a migrated web service contains a document instead of a document list.  
Before the fix is installed, data elements are formatted in the SOAP response in a document list, as expected. After the fix is installed, these data elements are formatted as separate documents. This change in output structure makes it difficult to map the documents in the flow.  
This issue is resolved. The SOAP response is formatted in the same way it was before fix IS\_8.2\_SP2\_Core\_Fix12 was installed.
- **PIE-32737**  
Deployer fails when deploying a package that contains a new trigger that does not exist in the earlier version of the package on the target Integration Server.  
When deploying a package that contains a trigger that does not exist in the same package on the target Integration Server, Deployer fails because the target Integration Server attempts to suspend the trigger that does not exist. Deployment might fail with one of the following messages:  
(ISS.0098.9067) Trigger not found for triggerName: "triggerName"  
(ISS.0098.9074) Unable to suspend document retrieval for Trigger "triggerName"  
Now, when a package containing triggers is deployed to a target Integration Server, the target Integration Server suspends a trigger only after first verifying that the trigger exists on the target Integration Server.
- **PIE-32873**  
It takes a long time for Integration Server to stop all JMS triggers once the triggers are disabled. All the JMS triggers on Integration Server can be disabled at the same time when Integration Server is shut down or when Integration Server Administrator is used to disable all JMS triggers. Once disabled, all of the JMS triggers stop receiving messages immediately. However, Integration Server closes the JMS Session and MessageConsumer objects sequentially. Some JMS providers, including WebSphere MQ, may take a second or two to close the objects for each JMS trigger. When many JMS triggers are disabled at once, closing the JMS Session and MessageConsumer objects can take a significant amount of time.  
Now, Integration Server stops closes JMS Session and MessageConsumer objects simultaneously instead of sequentially.
- **PIE-33279**  
Option to control how Integration Server decodes duplicates of nested elements in an element of type anyType in a SOAP request.  
If the input signature of an IS service exposed as a web service contains a document that has a child variable of type object, the object is represented as an element of type anyType. When decoding a SOAP request for the service, Integration Server places duplicate elements in line in the resulting IData. However, some users want Integration Server to create an array for the duplicate elements in the resulting IData.  
To accommodate this, Integration Server now includes a server configuration parameter that you can use to specify how Integration Server decodes duplicate elements nested in an anyType element.

watt.server.xml.xmlNodeToDocument.makeArrayforWS

Specifies how Integration Server decodes duplicate elements contained in an anyType Element.

- Set watt.server.xml.xmlNodeToDocument.makeArrayforWS to true if you want Integration Server to create an array for duplicate elements contained in an element of type anyType.

- Set this parameter to false if you want Integration Server to leave duplicate elements as separate, repeated elements in the element defined to be of type anyType. When set to false, Integration Server does not create an array for elements that appear more than once in the element defined to be of type anyType.

The default is false.

- PIE-33318  
Integration Server displays the wrong message in the server log.  
Integration Server logs the following message to the server log:  
(ISC.0088.9443W) Message not found for messageKey 88.9443  
This issue is resolved.
- PIE-33326  
After IS\_8.2\_SP2\_Core\_Fix14 is installed, Integration Server issues a NullPointerException while loading some custom services.  
This issue is resolved.
- PIE-33553  
Logging off the Integration Server Administrator fails with an error.  
Attempting to log off the Integration Server Administrator fails with the following error message:  
Logoff Failed.  
This issue is resolved. Upon clicking Log Off, Integration Server terminates the session and displays a message confirming that the session is terminated.
- PIE-33883  
Integration Server does not include the initial SOAP request message in the SOAP fault that is generated when an error occurs upon invoking a web service.  
Upon invoking a web service, in case of an error, the SOAP fault that Integration Server generates does not include the initial SOAP request even if the pub.soap.handler:getInitialSOAPMessage service is used to retrieve the initial SOAP request message in the outbound callback service.  
This issue is resolved. Integration Server now includes the initial SOAP request message in the SOAP fault that is generated when an error occurs upon invoking a web service.
- PIE-33895  
Enhancements to Integration Server to provide NTLM (Windows NT LAN Manager) authentication support to allow clients to access resources in web servers that support NTLM authentication.  
Prior to this fix, Integration Server could use Integrated Windows Authentication as a means of authenticating its identity while establishing connections between Integration Server and web servers on an intranet only if the Integration Server was running on a Windows platform. If Integration Server is running as an NT service, it uses the local system rights for authentication when responding to an Integrated Windows Authentication request. If you log on as a user, Integration Server uses the credentials associated with that session when responding to an

Integrated Windows Authentication request.

After installing this fix, when Integration Server is acting as a client to access resources in web servers, the authentication credentials must be provided by the user explicitly. You can specify NTLM as the authentication type while configuring the transport properties for web service endpoints to authenticate clients who are already logged into a domain using their existing credentials.

In addition, you can specify NTLM as the value for the `auth\` type parameter of `pub.client:http` or `pub.client:soapClient` services and web service connector. If you specify NTLM as the authentication type, you must specify the user name that the service will submit when requesting a protected resource in the following format: `domain_name/user_name`.

- **PIE-34213**  
Enabling a Salesforce.com Adapter connection results in a `javax.net.ssl.SSLHandshakeException`. If the Salesforce.com Adapter is installed on an Integration Server for which the `WmCloud` package is enabled, enabling a Salesforce.com Adapter connection results in the following exception:  
`javax.net.ssl.SSLHandshakeException: sun.security.validator.ValidatorException: PKIX path building failed: sun.security.provider.certpath.SunCertPathBuilderException: unable to find valid certification path to requested target`  
This issue is now resolved.
- **PIE-34311**  
The Polling Notifications page in localized versions of Integration Server Administrator displays an Adapter Runtime error if there are no scheduled tasks for polling notifications. When there are no scheduled tasks associated with adapter polling notifications, localized versions of Integration Server return a `SQLException` that cannot be verified by the Adapter Runtime causing the following message to be displayed in the Polling Notifications page:  
(ART.116.3020) Adapter Runtime (Notification): Unable to get list of notification types supported by node JDBCAdapter. `java.sql.SQLException: Invalid task ID`  
Now, when there are no scheduled tasks for polling notifications, a localized Integration Server returns a `SQLException` with a predefined error code that can be verified by the Adapter Runtime.
- **PIE-34373**  
Integration Server throws a `java.lang.NoClassDefFoundError` when a user defined in the central user management attempts to log in. A jar file required for central user management, specifically `jsf-api.jar`, is not present in the Integration Server classpath. To resolve this issue in Integration Server versions prior to 9.5 SP1 do the following:
  1. Shut down Integration Server.
  2. Using a text editor, navigate to and open the following file:  
`IntegrationServer_InstallDirectory/bin/ini.cnf`
  3. Edit the `ini.cnf` file by adding the following jar entry to the `application.classpath` parameter:  
`<Software AG_Directory>/common/lib/ext/jsf-api.jar`  
Where `<Software AG_Directory>` is the installation directory for Software AG products.  
Note: Make sure to use the appropriate directory separator for the operating system.
  4. Save your changes to the `ini.cnf` file and then close the file.
  5. Start Integration Server.

Note: For versions of Integration Server 9.5 SP1 and later, the Software AG Update Manager will handle updates to the ini.cnf.

- PIE-35015  
Updating webMethods Cloud account settings from Integration Server Administrator fails. Using Integration Server Administrator to update webMethods Cloud account settings results in the following error when changes to the account are saved:  
The following error occurred while saving account settings :  
com.wm.app.b2b.server.ServiceException:  
iaik.security.ssl.SSLException: Server certificate rejected by ChainVerifier. See the error log for the full stack trace.  
This issue is now resolved.
- PIEAR-625 (WAR\_9.5\_SP1\_Fix5)  
Exceptions thrown by adapter services are logged multiple times in the error log. The error log contains multiple entries of an exception thrown by an adapter service because the exception is logged by Adapter Runtime, Adapter Development Kit, and Integration Server.  
This issue is resolved. The following two server configuration parameters are introduced to prevent error logging by Adapter Runtime and Adapter Development Kit for exceptions in adapter services:
  - watt.art.adapterService.disable.errorlogging
  - watt.adk.adapterService.disable.errorloggingThe default value of each parameter is false.  
Add the new server configuration parameters to Extended Settings in Integration Server Administrator and set the parameters to true.

## **Release 9.7**

- PIE-31090 (IS\_8.0\_SP1\_Core\_Fix30, IS\_8.2\_SP1\_Core\_Fix13, IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix2)  
Outbound HTTP/HTTPS requests made from Integration Server intermittently fail. Outbound requests are failing while retrying failed requests. When an outbound HTTP/HTTPS request made from an Integration Server fails, Integration Server attempts to retry the request one time. The Integration Server usually uses a new connection to retry requests, but under heavy load situations the retry attempt does not always use a new connection, which causes the retry attempt to fail.  
This issue is resolved. Now, Integration Server forces retry attempts to use a new connection.
- PIE-28885 (IS\_8.0\_SP1\_Core\_Fix30, IS\_9.0\_SP1\_Core\_Fix4, IS\_9.5\_SP1\_Core\_Fix2)  
The pub.xml:documentToXMLString service ends with a ClassCastException or the xmldata output parameter is null.  
If the pipeline includes a variable named outputStream, the pub.xml:documentToXMLString service ends with a ClassCastException or with a null value for the xmldata output parameter.  
This issue is now resolved.



- PIE-31496 (IS\_8.0\_SP1\_Core\_Fix30, IS\_8.2\_SP1\_Core\_Fix13, IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix2)  
 Outbound HTTP/HTTPS requests made from Integration Server receive responses of HTTP 200 (success) even if the server receiving the request closes the connection prematurely.  
 When Integration Server makes an outbound call to another server, it is acting as a client. As a client, Integration Server should wait for a response from the server receiving the request. In some cases, the server receiving the request prematurely closes the connection, and the Integration Server client incorrectly returns an HTTP 200 (success).  
 This issue is resolved. Integration Server now issues a "Connection was closed during read" error instead of giving HTTP 200 when the server receiving the request closes prematurely.
- PIE-29966 (IS\_8.0\_SP1\_Core\_Fix30, IS\_9.5\_SP1\_Core\_Fix2)  
 When acting as an SSL client, Integration Server is too strict in enforcing SSL certificate chain ordering and linking.  
 When Integration Server performs an SSL handshake with another server, the server sends its certificates. While validating the server's certificate chain, Integration Server expects the server's certificate to be in the first position and its signer's certificate in the next position of the chain. Some servers improperly include either incorrect or misordered certificates. These certificates are not technically allowed, but browsers and other SSL clients typically just ignore them and proceed to the next in the chain. Integration Server was rejecting such chains as invalid.  
 This issue is resolved. Now, Integration Server validates certificates as long as the issuer's certificate in the chain can be validated to a trusted certificate on Integration Server.
- PIE-30493 (IS\_8.2\_SP1\_Core\_Fix13, IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix2)  
 WSDL generated for a provider web service descriptor is invalid because it contains references to missing elements.  
 If a provider web service descriptor uses an IS document type generated from an XML Schema definition that did not have a targetNamespace, Integration Server does not include the elements from the document type in the schema portion of the WSDL document for the descriptor. The resulting WSDL document is invalid if it contains references to the missing elements.  
 Now, if a provider web service descriptor uses an IS document type generated from an XML Schema definition with no targetNamespaces, Integration Server includes elements for the IS document type in the schema portion of the WSDL document generated for the provider web service descriptor.
- PIE-30700 (IS\_8.2\_SP1\_Core\_Fix13, IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix1)  
 Loading standard HTTP status codes for pub.flow:setResponseCode is not thread-safe.  
 This issue is now resolved.
- PIE-30123 (IS\_8.2\_SP2\_Core\_Fix12, IS\_9.5\_SP1\_Core\_Fix3)  
 Integration Server faces issues while handling multiple WWW-Authenticate attributes in HTTP Headers.  
 When a web service client executes a Mediator service, multiple WWW-Authenticate headers are added to the Mediator service. These headers have to be sent back to the client. However, Integration Server sends only one WWW-Authenticate header back to client and this results in

issues.

This issue is resolved. Integration Server now sends multiple WWW-Authenticate headers back to the web service client.

- PIE-29175 (IS\_9.0\_SP1\_Core\_Fix4, IS\_9.5\_SP1\_Core\_Fix2)  
Integration Server generates a WSDL document that does not pass WS-I compliance tests. When generating a WSDL document for a provider web service descriptor, the resulting WSDL document does not pass WS-I compliance tests. This can occur when a field that makes use of the prefix “xml” or the XML namespace is used in the service signature or in an IS document type used with the web service descriptor. The presence of the xml prefix or XML namespaces causes Integration Server to include an `xsd:import` element for the XML namespace. However, the `xsd:import` element does not contain the `schemaLocation` attribute. Now, when generating a WSDL document, whenever the `xsd:import` statement is for the XML namespace, Integration Server includes the `schemaLocation` attribute in the `xsd:import` element.
- PIE-29435 (IS\_9.0\_SP1\_Core\_Fix4, IS\_9.5\_SP1\_Core\_Fix2)  
The Integration Server diagnostic utility returns incorrect status for complex scheduled tasks. The Integration Server diagnostic utility, which an administrator can run by invoking the `wm.server.admin:getDiagnosticData` service, returns the `Scheduler.txt` file as part of its output. The statuses for complex scheduled tasks shown in this file are not consistent with the statuses shown on the Scheduler screen of Integration Server Administrator. This issue is resolved. The `Scheduler.txt` file now contains correct statuses for complex scheduled tasks.
- PIE-30079 (IS\_9.0\_SP1\_Core\_Fix4, IS\_9.5\_SP1\_Core\_Fix2)  
Document type created from XML Schema definition is missing fields. An IS document type generated from an XML Schema definition may be missing fields if the XML Schema definition had a target namespace and the schema contained a reference to an element that is not namespace qualified. The resulting IS document type might not contain a field that corresponds to the element that is not namespace qualified. This situation might also occur for IS document types that Integration Server creates as part of creating a web service descriptor from a WSDL document. This issues is now resolved.
- PIE-30150 (IS\_9.0\_SP1\_Core\_Fix4, IS\_9.5\_SP1\_Core\_Fix2)  
The `pub.sync:wait` service returns immediately instead of waiting. If the `pub.sync:notify` service executes and the notification times out (that is the value specified by `watt.server.sync.timeout` elapses) a subsequent invocation of `pub.sync:wait` executes to completion immediately if the `pub.sync:wait` and `pub.sync:notify` services specify the same key value. The `pub.sync:wait` service should wait until a new `pub.sync:notify` with the same key is issued or until the waiting time specified in the service elapses. This issue is now resolved.
- PIE-30172 (IS\_9.0\_SP1\_Core\_Fix4, IS\_9.5\_SP1\_Core\_Fix2)  
The `pub.mime:createMimeData` service prints unnecessary exceptions to the Integration Server console.

This issue is now resolved.

- PIE-30283 (IS\_9.0\_SP1\_Core\_Fix4, IS\_9.5\_SP1\_Core\_Fix2)  
Specifying an action to perform when an overdue scheduled task is more than 35000 minutes late results in a "numeric overflow" error.  
On the Create a Scheduled Task page in Integration Server Administrator, in the If the Task is Overdue section, the maximum number of minutes that the "if more than xxx minutes late" field can accept is 35000. However, Integration Server incorrectly accepts numbers larger than 35000, which results in a "numeric overflow" error that requires manual intervention in the database to correct the error.  
This issue is resolved. Integration Server now validates entries in the "if more than xxx minutes" field to ensure that a number larger than 35000 is not entered.
- PIE-28612 (IS\_9.0\_SP1\_Core\_Fix4, IS\_9.5\_SP1\_Core\_Fix3)  
Performance of `pub.xslt.Transformations:transformSerialXML` in a multithreaded scenario is slower in versions 8.2 and later.  
When compared to versions prior to 8.2, performance of the `pub.xslt.Transformations:transformSerialXML` service is slower in a multithreaded scenario. Performance decreases because in version 8.2 a synchronization point was added before Integration Server transforms the XML. This synchronization point causes one thread to perform the XML transformation while blocking the rest of the threads.  
This issue is now resolved.
- PIE-30500 (IS\_9.0\_SP1\_Core\_Fix4, IS\_9.5\_SP1\_Core\_Fix4, IS\_9.6\_Core\_Fix2)  
Changes to address security vulnerabilities found in Integration Server Administrator.  
This fix resolves several cross-site scripting (XSS) issues found during internal security testing.
- PIE-30603 (IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix2, IS\_9.6\_Core\_Fix2)  
When a pipeline variable is defined in a SEQUENCE step within a BRANCH step, the variable does not appear in the pipeline for subsequent steps that use that variable.  
In the flow implementation for a branch step, a pipeline variable that was defined in a SEQUENCE step was ignored in subsequent child steps within the BRANCH step. As a result, the variable did not appear in the pipeline for the subsequent child steps.  
This issue is resolved. Defined pipeline variables are now visible in the pipeline for all subsequent steps within the BRANCH step in which they were defined.
- PIE-30114 (IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix3)  
Enhancements to Integration Server to provide flexibility to add custom processing logic to SOAP requests in case of consumer web service descriptors and to SOAP responses in case of provider web service descriptors.  
To do this, this fix introduces outbound callback services, which are user-specified IS services that you can use to insert custom processing logic into a SOAP request message. Integration Server defines the outbound callback service signature in the `pub.soap.utils.callbackServiceSpec` specification. When you specify an IS service as an outbound callback service, Integration Server creates the message context and passes it to the outbound callback service. The message context of the outbound callback service contains the properties for the outbound SOAP message and

provides access to the SOAP message. You can use the various services that are located in the `pub.soap.handler` folder in the `WmPublic` package to manipulate the message within the IS service that is used as the outbound callback service. To specify outbound callback services for outbound SOAP messages, you use `Outbound Callback Service` web service descriptor property.

This fix also introduces a new built-in service, `pub.soap.handler:getInitialSOAPMessage`. This service gets the initial SOAP request message from a given message context. You can use the initial SOAP request message retrieved by this service in the outbound callback service.

- **PIE-30642 (IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix3)**  
If proxy server aliases are configured and Integration Server makes an outbound HTTP call using the `pub.client:http` service, Integration Server does not honor the `connectTimeout` parameter of the `pub.client:http` service.  
This issue is resolved. Integration Server now honors the time specified for the `connectTimeout` parameter when making an outbound HTTP call through a proxy server alias. If a value is not specified for the `connectTimeout` parameter, Integration Server uses the value specified for the `watt.net.timeout` server configuration parameter.
- **PIE-30630 (IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix1)**  
When Integration Server is clustered, Integration Server writes stateless sessions to the distributed session cache, causing unnecessary consumption of resources on the Terracotta Server Array. Integration Server creates stateless sessions to execute stateless services. Integration Server should discard these sessions as soon as the top-level service completes and should not write them to the distributed cache.  
This issue is resolved. Now, after the top-level service completes, Integration Server writes stateful sessions to the distributed cache and discards stateless sessions.
- **PIE-31142 (IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix1)**  
Integration Server does not parse the encoding attribute correctly if there are whitespace characters before or after the equals sign (=).  
If the prolog in an XML document contains one or more whitespace characters before or after the equals sign (=) in the encoding attribute, Integration Server did not parse the contents of the encoding attribute correctly.  
This issue is now resolved.
- **PIE-31397 (IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix1)**  
Attempts by external client applications to connect to an Integration Server using `TContext` fail with an exception.  
Attempts by external client applications to establish a connection with Integration Server via the guaranteed-delivery facility using the `connect()` method of the `TContext` class fail with the following exception:  
"Guaranteed Delivery Disabled - Please correct error and reinitialize."  
This issue is now resolved.
- **PIE-29757 (IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix2)**  
If a document is moved to a different location within the same package, and the document is referenced in a flow service that is being deployed to another Integration Server, unresolved

dependencies occur.

When a document used in the service signature of a flow service is moved from one location to another within the same package in Software AG Designer, the flow.xml file of that flow service was not updated to reflect the document's new location. As a result, webMethods Deployer considered the document as a missing asset and identified the document as an unresolved dependency.

This issue is resolved.

- PIE-30010 (IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix2)  
In certain scenarios, decoding of SOAP messages fails with a 'Dimension mismatch, List expected' error.  
If a web service descriptor is created using strict or lax content model compliance and if the generated IS document type contains a mix of attributes and child documents, the child documents are of type array. As a result of this, decoding of SOAP messages fails with the following error: 'Dimension mismatch, List expected'  
This issue is now resolved.
- PIE-30796 (IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix2)The debug message that Integration Server logs in the server log when hostname verification fails does not contain sufficient information.  
This issue is resolved. The debug message now contains sufficient information.
- PIE-30831 (IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix2)  
Installation of IS\_8.2\_SP1\_Core\_Fix11 causes mapping steps in flow services to fail.  
After fix IS\_8.2\_SP1\_Core\_Fix11 is installed, cached services that use the MBoolean class as input create multiple cache entries for the same input instead of creating just one cache entry. As a result, the MAP steps of flow services that call those cached services fail.  
This issue is resolved.
- PIE-31093 (IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix2)  
In case of web services, Integration Server does not keep the undeclared namespaces in the resulting document (IData), when the endpoint service is invoked.  
If an XML element that is part of a SOAP Message has undeclared namespace elements, Integration Server does not keep the undeclared namespaces in the resulting document (IData), when the endpoint service is invoked.  
This issue is resolved. The generated IData now includes the undeclared namespace definitions.  
Note: In case of web services, the undeclared namespace functionality will be available only if the datatype of the document is of type 'Object'.
- PIE-31108 (IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix2)  
When attempts are made to check unlocked elements out of Subversion by way of the Version Control System (VCS) Integration feature, the attempts fail with a message that the elements are already locked.  
When the VCS Integration feature is used with Subversion, some elements remain in a locked and modified state after they are checked in. In addition, these elements are shown to be unlocked in Software AG Designer. This occurs when packages are created in Designer because Designer does

not create the necessary /config directory associated with the package. As a result, the /config directory does not get checked in to the Subversion repository when the package is checked in, which leads to asset inconsistencies between the Integration Server file system and the Subversion repository.

This issue is resolved. Integration Server now creates the needed /config directory when a package is created in Designer.

- PIE-31328 (IS\_9.0\_SP1\_Core\_Fix6, IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix2)

The Service Usage screen in the Integration Server Administrator takes a long time to load in Internet Explorer if there are a large number of listed services.

This issue is now resolved.

- PIE-29888 (IS\_9.5\_SP1\_Core\_Fix2)

Deployer deploys packages even when service threads are still running on the target Integration Server.

Deployer should only deploy packages when none of the package's services are running on the target Integration Server. Deployer does not check to see if any of the packages services are executing on the Integration Server before performing the upgrade of the package. If a package is deployed while its services are running on the target Integration Server, the application's data can become corrupted.

To control whether Deployer deploys packages when service threads are running on the target Integration Server, Deployer has been modified to accept the following new global values for Integration Server package assets and composites:

- disallowActivePackage specifies whether you want to prevent deployment if the package being deployed is in an active state on the target. If set to False (the default), Deployer deploys the package even if the package is active on the target Integration Server.

- packageExecutionCheck specifies the length of time (in milliseconds) Deployer should wait if a service contained in the package being deployed is being executed on the target Integration Server. If this time expires and a service is still being executed, Deployer terminates the deployment job. The default value for this parameter is 0, which disables this feature.

- PIE-30151 (IS\_9.5\_SP1\_Core\_Fix2)

LDAP bind operations are logged twice for a single LDAP add, bind, delete, modify, or search operation.

Integration Server logs two LDAP bind operation entries in the server log each time one of the following LDAP operations is executed:

pub.client.ldap:add

pub.client.ldap:search

pub.client.ldap:modify

pub.client.ldap:bind

pub.client.ldap.delete

This issue is resolved. Integration Server now logs only one bind operation for add, bind, delete, modify, and search operations.

- PIE-30285 (IS\_9.5\_SP1\_Core\_Fix2) Changes to Integration Server because of updates to the wss4j.jar provided by Software AG Web Services Stack.

Integration Server makes use of the wss4j.jar provided by the Web Services Stack for various kinds of web services processing. A recent update to the wss4j.jar by Web Services Stack requires changes to Integration Server. Without these changes, web service descriptors that run in compatibility mode (the Pre-8.2 compatibility mode property is set to true) and use the Integration Server WS-Security facility may end with a Java RuntimeException.

- PIE-30611 (IS\_9.5\_SP1\_Core\_Fix2)  
When attaching a ws-policy to the Fault binding operation type, the policy is not properly reflected in the <wsdl:fault> element of the WSDL.  
When attaching a ws-policy to the Fault binding operation type, the policy is not properly reflected in the <wsdl:fault> element of the wsdl. Also when a ws-policy is attached to any combination of the Input, Output, and Fault binding operation types, the policy is not being enforced during runtime.  
The issue is resolved.
- PIE-31462 (IS\_9.5\_SP1\_Core\_Fix3, IS\_9.5\_SP1\_Core\_Fix4, IS\_9.6\_Core\_Fix1, IS\_9.6\_Core\_Fix2)  
Changes to address security vulnerabilities found in Integration Server Administrator.  
This fix resolves multiple cross-site scripting vulnerabilities found in different pages of Integration Server Administrator.
- PIE-29895 (IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix1)  
In a clustered environment, if an Integration Server on which a scheduled task is running is stopped, scheduled tasks that are running on other servers in the cluster stop responding.  
In a clustered environment, if an Integration Server on which a scheduled task is running is stopped, the status of the scheduled task is still shown as running and even tasks that are running on other servers in the cluster stop responding.  
This issue is resolved. Now, if an Integration Server on which a scheduled task is running is stopped, scheduled tasks that are running on other Integration Servers in the cluster are not affected.
- PIE-30612 (IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix1)  
When you simulate the deployment of a package to a target server on which a higher version of the package already exists, the package deployment succeeds.  
This issue is resolved. Integration Server issues an error during the simulation indicating that the version of the package on the target Integration Server is higher than that of the one being deployed.
- PIE-31056 (IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix1)  
Integration Server does not retain configuration parameters for JMS connection aliases after deployment.  
This issue is now resolved.
- PIE-31114 (IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix1) In Google Chrome, when the Show running services on top check box is selected in the Service Usage screen in Integration Server Administrator, Integration Server does not display the currently running services at the top of the screen.  
When Integration Server Administrator is accessed via Google Chrome, Integration Server does not

display all the currently running services together at the top of the screen, when the Show running services on top check box is selected.

This issue is now resolved.

- PIE-31140 (IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix1)  
Integration Server logs an access denied error in the server log when executing the pub.remote:invoke service even if CSRF guard is disabled.  
When the pub.remote:invoke service is executed by a user who is a member of a group that is assigned to the Anonymous ACL, Integration Server logs an "Access Denied" error in the server log. This issue occurs even if CSRF guard is disabled in Integration Server.  
The issue is now resolved.
- PIE-31256 (IS\_9.5\_SP1\_Core\_Fix3, IS\_9.6\_Core\_Fix1)  
Updates to audit logging.  
The following updates have been made to audit logging:
  - When the AuditConfig.xml file is created, the logging mode is now set to "Synchronous" by default. In previous versions, the default logging mode was "Asynchronous". In most cases, synchronous audit logging is faster.
  - Integration Server now writes a warning message to the server log when the AuditConfig.xml file is missing when the server starts. The message is as follows: "The AuditConfig.xml file was not found and is being created. The audit logging system is using default settings."
- PIE-30876 (IS\_9.5\_SP1\_Core\_Fix4)  
webMethods Mediator does not supply the correct SOAP action when it passes a web service request to Integration Server.  
When passing a SOAP over JMS web service request to Integration Server, Mediator does not pass on the SOAP action set in the request.  
This issue is resolved.
- PIE-20043  
When Integration Server acts as a passive mode FTP client, Integration Server cannot parse the response from the FTP server if the response contains two closing parentheses.  
When Integration Server acts as a passive mode FTP client it cannot parse a response from the FTP server such as the following because the response contains two closing parentheses:  
227 Entering Passive Mode (148,143,12,26,131,81))  
Integration Server can now parse responses with two closing parentheses properly.
- PIE-27241 Integration Server takes a long time to open the Support > webMethods Packages and Updates page.  
When you are logged on as a central user and click the View link on the About page, Integration Server takes a long time to open the Support > webMethods Packages and Updates page.  
This fix reduces the time it takes to load this page.



- PIE-28066

File system-based JNDI provider aliases cause errors when SonicMQ is used as the JMS provider. When using SonicMQ as a JMS provider, attempts to enable a JMS connection that uses a file system-based JNDI provider alias result in the following exception:  
 [ISS.0134.9025] Unable to retrieve JMS Connection Factory for JMS alias.

This issue occurs because SonicMQ stores object definitions in serializable Java object (.sjo) files, unlike other JMS providers that store configuration details in .bindings files.

This issue is resolved. When SonicMQ is used as the JMS provider, Integration Server now deserializes the .sjo files instead of processing .bindings files. When you create a JMS connection alias for SonicMQ, make sure that the Connection Factory Lookup Name includes the connection factory file extension ".sjo".
- PIE-29007

The pub.xml:xmlNodeToDocument service does not preserve the "xsi" namespace. The pub.xml:xmlNodeToDocument contains an input parameter named preserveUndeclaredNS that can be used to preserve undeclared namespaces in the output document. An undeclared namespace is one that is not specified as part of the nsDecls input parameter.

In the case of the namespace <http://www.w3.org/2001/XMLSchema-instance> which is commonly declared with "xsi" prefix, the namespace was not being preserved in the output document even when preserveUndeclaredNS was set to true and nsDecls did not include the namespace <http://www.w3.org/2001/XMLSchema-instance>.

This issue is now resolved.
- PIE-29304

When using pub.security.xml:signXML to digitally sign an outgoing XML node or document, you cannot place the signature in the proper position as required by the schema.

This issue is resolved. The input signature for pub.security.xml:signXML now includes the optional addSignatureAsLastElement parameter. When set to true, Integration Server adds the signature element as the last child of the root node. If set to false (the default), Integration Server adds the signature element as the first child of the root node.
- PIE-30518

Integration Server did not include the X-Frame-Options attribute in the response header to requests for pages. This made Integration Server implementations vulnerable to clickjacking attacks. This issue is resolved. Integration Server now includes the X-Frame-Options attribute in the response header to requests for pages, as defined in <http://www.rfc-editor.org/rfc/rfc7034.txt>. X-Frame-Options is not included in responses to requests for service invocation, such as those including the invoke, rest, or soap directives. It is only included in responses to requests for pages, for example, <https://my-server/MyPackage/my-page.html>. The value for the X-Frame-Options attribute can be controlled with the `watt.server.http.x-frame-options` system property. Valid values for this property include the following:

  - SAMEORIGIN

This is the default value. It directs the client's browser to allow Integration Server pages to be displayed in an HTML frame only if the frame is on a page from the same server.

  - ALLOW-FROM <other\_origin>

Set `watt.server.http.x-frame-options` to this value to direct the client's browser to allow Integration Server pages to be displayed in an HTML frame only if the frame is on a page from the same server or from one of the other servers listed in `<other_origin>`.

To list multiple origin servers, separate them with a space. For example:

```
watt.server.http.x-frame-options=ALLOW-FROM https://server1.com http://server2.org
```

Note: The value DENY is defined for the X-Frame-Options attribute but is not allowed for Integration Server. DENY means that the page can never appear in a frame, regardless of the frame's origin. This would cause Integration Server Administrator to be unusable. If `watt.server.http.x-frame-options` is set to DENY, the value is ignored and SAMEORIGIN is used instead.

If you do not want Integration Server to include the X-Frame-Options attribute in response headers, remove the value of the `watt.server.http.x-frame-options` property. For example:

```
watt.server.http.x-frame-options=
```

The property can be set on the Settings > Extended page of Integration Server Administrator. Changes to this property take effect immediately; the server does not need to be restarted. See <http://www.rfc-editor.org/rfc/rfc7034.txt> for more information about X-Frame-Options.

- PIE-30524  
Saving changes to flow services in Software AG Designer commits the changes in Subversion. When the Version Control System (VCS) Integration feature is used with Subversion, saving changes made to a flow service in Designer causes the changes to be pushed immediately to the Subversion repository.  
This issue is resolved. Integration Server now commits changes saved to a flow service in Designer only when the Check In command is issued.
- PIE-30560  
Integration Server displays the wrong error message in the error log.  
When an ACL check for a service fails, the following message is written to the error log:  
"ACLManager: allow check for user "local/Developer" on ACL "myFolder:mySvc" is returning false."  
The message should indicate the service and not the ACL.  
This issue is now resolved. The message now states the following:  
"ACLManager: allow check for user "local/Developer" on service "myFolder:mySvc" is returning false."
- PIE-31046  
Web service connectors always call only the default binder even when the consumer has multiple binders associated with it.  
A WSDL document for a virtual service contains two port definitions, one for the HTTP transport protocol and one for HTTPS, and specifies the same binding name for both definitions. When a consumer web service connector is generated using this WSDL document, the connector used only the default binder. This resulted in the execution of an endpoint service that did not always use the correct transport protocol.  
This issue is resolved.

- PIE-31163  
 Upon enabling clustering, the confirmation message displayed in the Settings -> Cluster page in Integration Server Administrator includes a <br> tag.  
 This issue is now resolved.
- PIE-31283  
 Integration Server ignores User-Agent header fields when executing pub.client:soapClient.  
 If a User-Agent header field is specified in the transportHeaders parameter of the pub.client:soapClient service, Integration Server ignores the value specified for that header field. Instead, Integration Server sets the value of the header field to the default value configured in the watt.net.userAgent parameter.  
 This issue is resolved.
- WFF-32 (WFF\_8.2\_SP2\_Fix4, WFF\_9.5.1\_Fix1, WFF\_9.6\_Fix1)  
 In webMethods EDI Module 8.0 SP1, the schemas generated for EDI transactions do not use the correct format service for some of the fields.  
 In webMethods EDI Module 8.0 SP1, the format service associated with some of the field types are not correct. For example, for a field of type N0, the associated format service must be wm.b2b.edi.util.formatServices:formatN0, and for a field of type N1, the associated format service must be wm.b2b.edi.util.formatServices:formatN1. Currently, all the fields of type N0 to N9 are incorrectly associated with the wm.b2b.edi.util.formatServices:formatN0 format service.  
 This issue is resolved. The correct format service is now associated with a field type.
- WFF-33 (WFF\_8.2\_SP2\_Fix4, WFF\_9.5.1\_Fix1, WFF\_9.6\_Fix1)  
 When using Flat File Module with webMethods Integration Server 8.2 SP2, the pub.flatFile:convertToValues service fails to validate the non-EDI document.  
 When using Flat File Module with Integration Server, the pub.flatFile:convertToValues service fails to validate the non-EDI document and returns an exception. This issue occurs even though the validate input parameter is set to true and the ffData parameter is a non-EDI document.  
 This issue is resolved.
- WFF-45 (WFF\_8.2\_SP2\_Fix5, WFF\_9.5.1\_Fix1, WFF\_9.6\_Fix1)  
 In webMethods Flat File 8.2.2, polling port processes the XML file incorrectly if file contains Chinese or Taiwanese characters.  
 This issue occurs because the flat file parser is using Windows default encoding (for example, CP1252) while parsing the XML file. The parser now has been modified to use UTF-8 as the default encoding for XML files. If you want to override the default encoding for XML files, you can do this by adding the following property into properties.cnf: filepollingport=encoding and providing the appropriate value for the new encoding. For example:  
 On a Windows machine:- C:\\\RemoteDrive\\Monitor=UTF-8  
 On Unix/Linux:- opt/monitor=UTF-8  
 This issue is resolved.

## **Release 9.6**

- **PIE-27597**  
Integration Server returns a numeric code when a user password is changed instead of returning a message.  
Integration Server returns a numeric code when a user password is changed from the Security > User Management > Change Password page in the Integration Server Administrator. This issue occurs intermittently.  
This issue is resolved. Integration Server now returns a message when the user password is changed.
- **PIE-27714**  
The pub.mime:createMimeData service does not honor the encoding type of the "charset" parameter in a MIME multipart header.  
When creating mime data, the pub.mime:createMimeData service ignores the "charset" parameter in a MIME multipart header. The encoding specified by the watt.server.netEncoding parameter is used instead.  
This issue is now resolved. The pub.mime:createMimeData parameter now uses the encoding type specified by the "charset" parameter in a multipart header.
- **PIE-28024**  
"UncaughtExceptionHandler in queue 'Session Queue'" error in the IS server log.  
This error occurs in clustered environments when Integration Server starts up or shuts down. The error is triggered if an unhandled null pointer exception occurs with the pinger thread, which is used to ping the server after a connection is established.  
This issue is now resolved.
- **PIE-28613**  
Email listener ports suddenly stop processing emails.  
Email listener ports stop processing emails when network issues arise. When the network issues are resolved, an Integration Server restart is needed to resume the processing of emails through those ports. Restarting Integration Server negatively affects other projects that share the same server.  
This issue is resolved. Email listener ports now automatically resume the processing of email after network issues are resolved.
- **PIE-28664**  
Integration Server handles document types that have defined XML namespace URIs but do not have prefixes associated with each namespace, differently in versions prior to 8.2 SP2.  
In Integration Server 8.2 SP2 and higher, if document types that have a defined XML namespace URI but do not have a prefix associated with each namespace are specified as inputs to services, the SOAP processor fails to recognize the document types at run time. This results in improper SOAP responses. However, in Integration Server versions prior to 8.2 SP2, SOAP processors recognized document types that have defined XML namespaces but do not have prefixes associated with each namespace. This difference in behavior results in backward compatibility issues when upgrading to Integration Server 8.2 SP2 or above.

This issue is resolved. To support backward compatibility, Integration Server supports the previous behavior at run time in case of web service descriptors created in Integration Server versions prior to 8.2 SP2. For web service descriptors created in Integration Server 8.2 SP2 onwards, you must associate a prefix with an XML namespace URI for fields in the service signature.

Additionally, this fix introduces the `watt.server.soap.decodeElementWithPrefix` server configuration parameter. You must set the `watt.server.soap.decodeElementWithPrefix` property to true if you want the SOAP processors to recognize document types that have a defined XML namespace but do not have a prefix associated with each namespace. The default is false. If you change the setting of this parameter, you must restart Integration Server for the changes to take effect.

- PIE-28885

The `pub.xml:documentToXMLString` service ends with a `ClassCastException` or the `xmldata` output parameter is null.

If the pipeline includes a variable named `outputStream`, the `pub.xml:documentToXMLString` service ends with a `ClassCastException` or with a null value for the `xmldata` output parameter. This issue is now resolved.

- PIE-28935

After upgrading to Integration Server 8.2 SP1 or later from an earlier version of Integration Server, if the input pipeline for the `pub.flow:setReponse` service includes a parameter named "string", the service uses the value of "string" in the response instead of the value of the "response" service input parameter.

Prior to Integration Server 8.2 SP1, the `pub.flow:setResponse` service had a "response" input parameter of type `String` used to specify the response returned to a calling process. In Integration Server 8.2 SP1, the "response" input parameter was deprecated and replaced by a "string" input parameter of type `String`. A "bytes" input parameter of type `byte[]` was also added. The `pub.flow:setResponse` service honored the value set for "response" but gave precedence to the "string" parameter if that was set or present in the input pipeline. Because the "string" parameter had precedence, the `pub.flow:setResponse` service used the value of "string" in the response instead of the value set for the "response" input parameter. This resulted in unexpected behavior in existing services that were migrated to Integration Server 8.2 SP1 and later. The likelihood of unexpected behavior was compounded by the using an input variable name, "string", that is commonplace.

To address this issue, the following changes have been made:

- The `pub.flow:setResponse` service now has input parameter names that are more unique and deprecates the old parameter names.

- A new server configuration parameter controls the order of precedence for the deprecated parameter names.

The `pub.flow:setResponse` service now has the following input signature:

`responseString` – Optional. A `String` that specifies the response.

`responseBytes` – Optional. A `byte[]` that specifies the response.

`response` – Deprecated. Use `responseString`. Optional. A `String` that specifies the response.

`string` – Deprecated. Use `responseString`. Optional. A `String` that specifies the response.

`bytes` – Deprecated. Use `responseBytes`. Optional. A `byte[]` that specifies the response.

contentType – Optional. A String specifying the MIME type of the response data.  
encoding – Optional. A String specifying the character set in which the response is encoded.  
Specify responseString or responseBytes, but not both. If you specify both, the pub.flow:setReponse service uses responseString and ignores responseBytes.

If neither responseString or responseBytes are specified, Integration Server uses the value of the server configuration parameter watt.server.setReponse.pre82Mode to determine the order in which to look for and use the deprecated fields.

When watt.server.setResponse.pre82Mode is set to “true”, Integration Server follows a precedence order similar to what was available in Integration Server 7.1x and 8.0x. Specifically, Integration Server looks for the deprecated parameters in the following order and uses the value of the first parameter that it finds:

1. response
2. string
3. bytes

When watt.server.setResponse.pre82Mode is set to “false”, Integration Server follows a precedence order similar to what was available in Integration Server 8.2 and later. Specifically, Integration Server looks for the deprecated parameters in the following order and uses the value of the first parameter that it finds:

1. string
2. bytes
3. response

The default value of the watt.server.setResponse.pre82Mode parameter is “false”.

If you want to set watt.server.setResponse.pre82Mode to true, you must use Integration Server Administrator to add the following to Extended Settings and then restart Integration Server:  
watt.server.setResponse.pre82Mode=true

- PIE-29175

Integration Server generates a WSDL document that does not pass WS-I compliance tests.

When generating a WSDL document for a provider web service descriptor, the resulting WSDL document does not pass WS-I compliance tests. This can occur when a field that makes use of the prefix “xml” or the XML namespace (<http://www.w3.org/XML/1998.namespaces>) is used in the service signature or in an IS document type used with the web service descriptor. The presence of the xml prefix or XML namespaces causes Integration Server to include an xsd:import element for the XML namespace. However, the xsd:import element does not contain the schemaLocation attribute.

Now, when generating a WSDL document, whenever the xsd:import statement is for the XML namespace, Integration Server includes the schemaLocation attribute in the xsd:import element.

- PIE-29193

Ports created with JSSE support enabled do not support TLS 1.1.

Ports created with the “Use JSSE” option enabled (or useJSSE=yes) do not support TLS 1.1 until Integration Server is restarted.

This issue is now resolved.

- PIE-29244

Few components are missing from the schema that Integration Server generates when the XSD includes types that are restricted by pattern.

When creating a consumer web service descriptor from a WSDL, few components are missing from the schema that Integration Server generates if the XSD contains types that are restrictions of an xsd:string with a pattern defined. This issue happens especially when there are cascaded restrictions.

This issue is now resolved.
- PIE-29345

Updates to documentation for using Universal Messaging with native publish/subscribe. The following PDF documentation has been updated to include additional information about using Integration Server and Designer to develop publish/subscribe solutions that use Universal Messaging as the messaging provider:

  - *webMethods Integration Server Administrator's Guide*
  - *webMethods Integration Server Built-In Services Reference*
  - *Publish-Subscribe Developer's Guide*
  - *webMethods Service Development Help*

Refreshed versions of the above guides are available by downloading the product documentation using the Software AG Installer or on the Software AG Documentation website <http://documentation.softwareag.com>.
- PIE-29401

When decoding a SOAP request, an element of type anyType is incorrectly decoded if it contains duplicate elements.

If the input signature of an IS service exposed as a web service contains a document that has a child variable of type object, the object is represented as an element of type anyType. When Integration Server decodes a SOAP request for the service, the contents of the element of type anyType should be represented as is in the resulting IData. However, if the element of type anyType contains duplicate elements, Integration Server created an array for the duplicate elements.

This issue is now resolved.
- PIE-29435

The Integration Server diagnostic utility returns incorrect status for complex scheduled tasks. The Integration Server diagnostic utility, which an administrator can run by invoking the `wm.server.admin:getDiagnosticData` service, returns the Scheduler.txt file as part of its output. The statuses for complex scheduled tasks shown in this file are not consistent with the statuses shown on the Scheduler screen of Integration Server Administrator.

This issue is resolved. The Scheduler.txt file now contains correct statuses for complex scheduled tasks.
- PIE-29482

Unable to update the master password after the master password and outbound passwords are reset.

After resetting the master password and outbound passwords using the Security > Outbound Passwords > Reset All Outbound Passwords option, updating the master password fails with "Verification of current master password failed." error.  
This issue is now resolved.

- PIE-29524  
Integration Server experiences blocked service threads when flow services contain BRANCH steps with "Evaluate label" enabled.  
This issue is now resolved.
- PIE-29616  
Integration Server issues a NullPointerException when the Event Manager triggers a service that expects a valid session.  
This issue is now resolved. When a service is triggered by the Event Manager, a valid session is now associated with the triggered service. The session that is created has a default timeout value of 60000 milliseconds. This timeout value can be controlled by the `watt.server.eventHandlerSessionTimeout` server configuration parameter, which is introduced in this fix. This fix also introduces the `watt.server.eventHandlerCreateSession` server configuration parameter. Use this parameter to control whether or not Integration Server is to create a session for the service that is triggered by the Event Manager. When set to "true", Integration Server creates a session for the service that is triggered by the Event Manager. When set to "false", Integration Server does not create a session for the service that is triggered by the Event Manager. The default is "true".
- PIE-29756  
Migrated Broker configuration is over-written with the default Broker configuration.  
If Broker configuration is migrated to Integration Server 9.5 SP1, when Integration Server starts for the first time, Integration Server replaces the migrated Broker configuration with the default Broker configuration.  
This issue is resolved. Integration Server does not overwrite the migrated Broker configuration with the default Broker configuration.
- PIE-29873  
The archive file returned by the `wm.server.admin:getDiagnosticData` service does not contain caching configuration files.  
In the `diagnostic_data.zip` file, the `config/caching` folder contains audit logging configuration files instead of caching configuration files.  
This issue is resolved. The `config/caching` folder now contains a copy of the files from the `IntegrationServer/instances/<instanceName>/config/Caching` directory.
- PIE-29887  
In Integration Server, attempting a JAAS login with message-level credentials for a consuming application with a SAML token in the SOAP header of the message fails with an error.  
When a web service provider with a security policy that does not require a SAML token receives a secured message with a SAML token in the security header, the JAAS login attempt with message-



level credentials fails. The issue occurs because the Web Services Stack security engine attempts to process and use the SAML token as a part of the message authentication credentials.

The issue is resolved. A new web service descriptor property, Filter Login Credentials, is added to configure the web service descriptor to use only the tokens required by the applied security policy as authentication credentials. When this property is set to true in Designer, Integration Server filters the login credentials in incoming SOAP requests and processes only those credentials that are provided in the WS-Security policy attached to the web service descriptor. When this property is set to false, Integration Server processes all the credentials that are available in the incoming SOAP request without verifying whether the credentials are also provided in the WS-Security policy attached to the web service descriptor. The default is true.

- PIE-29888

Deployer deploys packages even when service threads are still running on the target Integration Server.

Deployer should only deploy packages when none of the package's services are running on the target Integration Server. Deployer does not check to see if any of the packages services are executing on the Integration Server before performing the upgrade of the package. If a package is deployed while its services are running on the target Integration Server, the application's data can become corrupted.

To control whether Deployer deploys packages when service threads are running on the target Integration Server, Deployer has been modified to accept the following new global values for Integration Server package assets and composites:

- disallowActivePackage specifies whether you want to prevent deployment if the package being deployed is in an active state on the target. If set to False (the default), Deployer deploys the package even if the package is active on the target Integration Server.

- packageExecutionCheck specifies the length of time (in milliseconds) Deployer should wait if a service contained in the package being deployed is being executed on the target Integration Server. If this time expires and a service is still being executed, Deployer terminates the deployment job. The default value for this parameter is 0, which disables this feature.

- PIE-29889

An incorrect exception is returned when using the pub.client.ftp:get service with large files. When using pub.client.ftp:get service with files larger than the available tspace, the exception "java.io.IOException:Stream Closed" is returned instead of "java.io.IOException: Not enough storage in tspace".

This issue is resolved. When there is not enough tspace available, the exception "java.io.IOException: Not enough storage space in tspace" is now returned.

- PIE-29892

The pub.security.outboundPasswords:listKeys service does not return the keys for keystore and truststore aliases even if the watt.security.ope.AllowInternalPasswordAccess parameter is set to true.

This issue is now resolved.

- PIE-29936

Building any Integration Server package asset using the webMethods Asset Build Environment results in a `NoSuchElementException`.

For a repository-based deployment, when the Asset Build Environment is used to build a composite from any Integration Server package asset, the Asset Build Environment throws a `NoSuchElementException`. This occurs even if the package element is present. The Asset Build Environment then proceeds with the build.

This issue is resolved. The Asset Build Environment now correctly detects the presence of a package asset before determining whether to proceed with the build.
- PIE-29963

Creation of a web service descriptor from a WSDL with message parts succeeded in Integration server version 7.1.x or 8.x but fails in Integration Server 9.0 or later.

Using Designer to create a web service descriptor from a WSDL with message parts succeeded with Integration Server 7.1.x or 8.x but fails in Integration Server 9.0 and later with an error similar to the following:

[ISC.0081.9195] Invalid message part(s) defined in the wsdl: The header has a message part "partName" defined by the type "typeName". Message parts in a header must be defined by the element attribute instead of the type attribute.

According to the WSDL specification, message parts are to be treated as document/literal. This means that a message part must define the part using the element attribute and not the type attribute. Validation was added to Integration Server 9.0 to enforce this restriction.

This fix introduces a server configuration parameter that you can use to indicate that defining the message part using the type attribute instead of the element attribute should be treated as a warning and not an error. Set `watt.server.SOAP.warnOnPartValidation` to true to indicate that when creating a web service descriptor form a WSDL document that uses the type attribute to define message parts, Integration Server returns a warning and allows the web service descriptor to be created. Set `watt.server.SOAP.warnOnPartValidation` to false to indicate that when creating a web service descriptor form a WSDL document that uses the type attribute to define message parts, Integration Server returns an error and creation of the web service descriptor fails. The default is false.
- PIE-29977

Creating a consumer web service descriptor from a WSDL document fails with an error stating that the schema definition is not valid.

If the schema in a WSDL document contains complex type elements with the "mixed" attribute set to True, Integration Server incorrectly considers the schema to be invalid. Creation of a consumer web service descriptor fails with the following error:

[ISS.0092.9032] Error: Invalid schema definition for Input signature. Web Service Connector was not created.

This issue is resolved. Integration Server now processes schemas containing complex type elements with mixed content.
- PIE-30079

Document type created from XML Schema definition is missing fields.

An IS document type generated from an XML Schema definition may be missing fields if the XML Schema definition had a target namespace and the schema contained a reference to an element that is not namespace qualified. The resulting IS document type might not contain a field that corresponds to the element that is not namespace qualified. This situation might also occur for IS document types that Integration Server creates as part of creating a web service descriptor from a WSDL document.

This issues is now resolved.

- PIE-30087  
The `pub.soap.utils:removeBodyEntry` service prints data to the Integration Server console. When the `pub.soap.utils:removeBodyEntry` service is executed, Integration Server prints data contained in the SOAP body to the server console.  
This issue is now resolved.
- PIE-30123  
Integration Server faces issues while handling multiple `WWW-Authenticate` attributes in HTTP Headers. When a web service client executes a Mediator service, multiple `WWW-Authenticate` headers are added to the Mediator service. These headers have to be sent back to the client. However, Integration Server sends only one `WWW-Authenticate` header back to client and this results in issues.  
This issue is resolved. Integration Server now sends multiple `WWW-Authenticate` headers back to the web service client.
- PIE-30127  
The execution of `pub.xml:documentToXMLString` service fails with an `EmptyStackException` if a document with `'*body'` as a top-level element is given as the input.  
This issue is now resolved.
- PIE-30150  
The `pub.sync:wait` service returns immediately instead of waiting.  
If the `pub.sync:notify` service executes and the notification times out (that is the value specified by `watt.server.sync.timeout` elapses) a subsequent invocation of `pub.sync:wait` executes to completion immediately if the `pub.sync:wait` and `pub.sync:notify` services specify the same key value. The `pub.sync:wait` service should wait until a new `pub.sync:notify` with the same key is issued or until the waiting time specified in the service elapses.  
This issue is now resolved.
- PIE-30151  
LDAP bind operations are logged twice for a single LDAP add, bind, delete, modify, or search operation.  
Integration Server logs two LDAP bind operation entries in the server log each time one of the following LDAP operations is executed:  
`pub.client.ldap:add`  
`pub.client.ldap.search`  
`pub.client.ldap:modify`

pub.client.ldap.bind  
pub.client.ldap.delete

This issue is resolved. Integration Server now logs only one bind operation for add, bind, delete, modify, and search operations.

- PIE-30161  
When migrating from earlier versions of Integration Server, some parameters in the server.cnf file are not updated with the correct system paths.  
When migrating from earlier Integration Server using the migration utility, the values for watt.server.homeDir and watt.server.terracotta.license.path parameters are not migrated as expected.  
This issue is resolved. After migration, watt.server.homeDir now points to the correct system path. Also, if the value of watt.server.terracotta.license.path points to the default location of the license file, it now points to the correct system path after migration. However, if the watt.server.terracotta.license.path parameter does not point to the default location, the value is not changed during the migration process.
- PIE-30172  
The pub.mime:createMimeData service prints unnecessary exceptions to the Integration Server console.  
This issue is now resolved.
- PIE-30249  
The axis2.xml is updated to use ws-stack formatters instead of axis2 formatters.
- PIE-30250  
When debugging a flow service in Designer, unexpected input validation errors occur for Sequence flow steps.  
When Software AG Designer is used to debug a flow service that contains a Sequence flow step, the following input validation errors occur if the Sequence element is not the root element of the flow service: [ISC.0049.9005] Input validation for service 'xxx' failed  
[ISC.0082.9034] Field is absent, field must exist  
This issue is resolved. Integration Server now correctly handles flow services containing Sequence steps that are not root elements of the service.
- PIE-30283  
Specifying an action to perform when an overdue scheduled task is more than 35000 minutes late results in a "numeric overflow" error.  
On the Create a Scheduled Task page in Integration Server Administrator, in the If the Task is Overdue section, the maximum number of minutes that the "if more than xxx minutes late" field can accept is 35000. However, Integration Server incorrectly accepts numbers larger than 35000, which results in a "numeric overflow" error that requires manual intervention in the database to correct the error.  
This issue is resolved. Integration Server now validates entries in the "if more than xxx minutes" field to ensure that a number larger than 35000 is not entered.

- PIE-30285

Changes to Integration Server because of updates to the wss4j.jar provided by Software AG Web Services Stack.

Integration Server makes use of the wss4j.jar provided by the Web Services Stack for various kinds of web services processing. A recent update to the wss4j.jar by Web Services Stack requires changes to Integration Server. Without these changes, Web service descriptors that run in compatibility mode (the Pre-8.2 compatibility mode property is set to true) and use the Integration Server WS-Security facility may end with a Java RuntimeException.
- PIE-30390

Integration Server Administrator does not display webMethods messaging triggers deployed to the Integration Server if the messaging connection alias for the triggers does not exist.

If webMethods messaging triggers are deployed to an Integration Server and the messaging connection alias used by the triggers is not on the target Integration Server, the Integration Server Administrator does not display the triggers on the Settings > Messaging > webMethods Messaging Trigger Management page. When the messaging connection alias used by the triggers is created on the Integration Server, the triggers do not load properly. Integration Server must be restarted for the triggers to function correctly.

Now, when webMethods messaging triggers are deployed to an Integration Server that does not have the messaging connection alias used by the triggers, the Integration Server Administrator will display the triggers. Once the messaging connection alias used by the triggers is created, Integration Server reloads and starts the trigger automatically. A server restart is not required.

Note: After creating the messaging connection alias, you might need to synchronize the publishable document types that use the alias with the messaging provider.
- PIE-30424

When a webMethods messaging trigger does not start because Integration Server cannot locate a publishable document type to which the trigger subscribes, Integration Server does not reload and start the trigger if the publishable document type is later loaded.

Integration Server does not start a webMethods messaging trigger if it cannot find a publishable document type to which the trigger subscribes. For example, if a webMethods messaging trigger is in a different package from a publishable document type to which it subscribes and the package containing the trigger is loaded before the package containing the publishable document type, the trigger will not fully load. Furthermore, the trigger will not fully load even after Integration Server loads the package containing the publishable document type. When a webMethods messaging trigger does not fully load because Integration Server cannot locate the publishable document type, Integration Server Administrator does not list the trigger on the Settings > Messaging > webMethods Messaging Trigger Management page.

Now, if Integration Server does not fully load a webMethods messaging trigger because a publishable document type cannot be located, the trigger will appear on the Settings > Messaging > webMethods Messaging Trigger Management page. An exception stating the reason the trigger did not fully load will appear as well. In addition, when Integration Server loads the package containing the publishable document type to which the trigger subscribes, Integration Server reloads the trigger.

- PIE-30484  
Integration Server issues a `java.lang.NullPointerException` while executing the `pub.oauth:getAccessToken` service.  
This issue is now resolved.
- PIE-30523  
When a Designer session times out, Integration Server does not close the socket reserved to notify Designer of the Integration Server shutdown event.  
When Designer connects to an Integration Server, Integration Server reserves a socket to notify Designer of the Integration Server shutdown event. If the Designer session times out while still connected to Integration Server, the reserved socket is not closed.  
This issue is now resolved. When a Designer connection times out, Integration Server now releases the reserved sockets.
- PIE-30585  
The `pub.security.xml:signXML` service supports only SHA-1 for signing an XML node or document. To resolve this issue, the `pub.security.xml:signXML` service has been enhanced. You can now specify the `signatureAlgorithm` and `digestAlgorithm` to use when signing an XML node or document.  
Possible values for each field are as follows:

  - SHA1 (the default)
  - SHA256
  - SHA384
  - SHA512
- PIE-30611  
When attaching a `ws-policy` to the Fault binding operation type, the policy is not properly reflected in the `<wsdl:fault>` element of the `wsdl`.  
When attaching a `ws-policy` to the Fault binding operation type, the policy is not properly reflected in the `<wsdl:fault>` element of the `wsdl`. Also when a `ws-policy` is attached to any combination of the Input, Output, and Fault binding operation types, the policy is not being enforced during runtime.  
The issue is now resolved.
- PIE-30619  
Integration Server did not include the `X-Frame-Options` attribute in the response header to requests for pages. This made Integration Server implementations vulnerable to clickjacking attacks.  
This issue is resolved. Integration Server now includes the `X-Frame-Options` attribute in the response header to requests for pages, as defined in <http://www.rfc-editor.org/rfc/rfc7034.txt>. `X-Frame-Options` is not included in responses to requests for service invocation, such as those including the `invoke`, `rest`, or `soap` directives. It is only included in responses to requests for pages, for example, `https://my-server/MyPackage/my-page.html`. The value for the `X-Frame-Options` attribute can be controlled with the `watt.server.http.x-frame-options` system property. Valid values for this property include the following:

**SAMEORIGIN** This is the default value. It directs the client's browser to allow Integration Server pages to be displayed in an HTML frame only if the frame is on a page from the same server.

**ALLOW-FROM <other\_origin>** Set `watt.server.http.x-frame-options` to this value to direct the client's browser to allow Integration Server pages to be displayed in an HTML frame only if the frame is on a page from the same server or from one of the other servers listed in `<other_origin>`. To list multiple origin servers, separate them with a space. For example: `watt.server.http.x-frame-options=ALLOW-FROM https://server1.com http://server2.org`

Note: The value **DENY** is defined for the X-Frame-Options attribute but is not allowed for Integration Server. DENY means that the page can never appear in a frame, regardless of the frame's origin. This would cause Integration Server Administrator to be unusable. If `watt.server.http.x-frame-options` is set to DENY, the value is ignored and SAMEORIGIN is used instead. If you do not want Integration Server to include the X-Frame-Options attribute in response headers, remove the value of the `watt.server.http.x-frame-options` property. For example: `watt.server.http.x-frame-options=`

The property can be set on the Settings > Extended page of Integration Server Administrator. Changes to this property take effect immediately; the server does not need to be restarted. See <http://www.rfc-editor.org/rfc/rfc7034.txt> for more information about X-Frame-Options.

- PIE-30658

Change in the upper limit of unique tags that the enhanced XML parser can handle in a single XML document.

The upper limit of unique tags that the enhanced XML parser can handle in a single XML document is now 15,000,000. The previous upper limit was 30,000. When parsing an XML document with more than 15,000,000 unique tags, the enhanced XML parser ends with an error.

- PIE-30888

The `pub.xml:documentToXMLString` service behaves differently in Integration Server 8.0 SP1 and Integration Server 9.5 SP1.

In Integration Server 9.5 SP1, if a document (IData object) that contains multiple top-level elements is converted to an XML document using the `pub.xml:documentToXMLString` service, Integration Server does not add the namespace definition in the XML document correctly as shown in the example given below:

```
<xsd1:HEAD xmlns:xsd1="http://www.hello.com/hSoapMsg.xsd1">
  <xsd1:VAR1>1</xsd1:VAR1>
</xsd1:HEAD>
<xsd1:TAIL>
  <xsd1:VAR3 xmlns:xsd1="http://www.hello.com/hSoapMsg.xsd1">1</xsd1:VAR3>
</xsd1:TAIL>
```

This issue is now resolved. After this fix, Integration Server adds the namespace definitions in the XML document correctly as shown in the example below:

```
<xsd1:HEAD xmlns:xsd1="http://www.hello.com/hSoapMsg.xsd1">
  <xsd1:VAR2>1</xsd1:VAR2>
</xsd1:HEAD>
<xsd1:TAIL xmlns:xsd1="http://www.hello.com/hSoapMsg.xsd1">
```

```
<xsd1:VAR3>1</xsd1:VAR3>
</xsd1:TAIL>
```

- **PIE-30995**  
Integration Server takes a long time to parse large JSON documents.  
This issue is now resolved.
  
- **PIEAR-425**  
Using the Adapter Runtime to create a listener takes too long.  
Creating a listener using the Adapter Runtime takes too long when the system has a large number of existing notifications. The issue occurs because the Adapter Runtime attempts to update the listener with the list of all registered listener notifications.  
The issue is resolved. With the new watt property, `watt.art.notifications.disableImplicitUpdate`, you can disable the implicit update of registered notifications when creating a new listener.  
Adapter Configuration Parameter Reference:  
`watt.art.notifications.disableImplicitUpdate`  
Controls whether the Adapter Runtime updates the listener with the list of registered listener notifications when creating a new listener.  
Values are:
  - true. The adapter disables the implicit update of registered notifications.
  - false. (default) The adapter does not disable the implicit update of registered notifications.For more information about setting and working with extended configuration settings, see *webMethods Integration Server Administrator's Guide*.
  
- **PIEAR-450**  
Deploying Adapter Runtime adapter listeners fails with an "unrecognized parameter" error. When you try to deploy an ART-based adapter listener using webMethods Deployer, deployment fails with the following error:  
"Adapter Runtime (Metadata): Unrecognized parameter connDataNodeName specified".  
The error occurs because the validation of the listener settings fails.  
The issue is now resolved.
  
- **PIEAR-466**  
Accessing the DSP pages of the WmART package fails when webMethods Integration Server is using the CSRF guard feature.  
When you enable the Cross-Site Request Forgery (CSRF) guard in Integration Server, access to the dynamic server pages (DSP) of the WmART package is denied.  
This issue is now resolved.
  
- **PIEAR-486**  
After editing an adapter polling notification, the notification does not work.  
After you edit the parameters of an adapter polling notification in Software AG Designer and then enable the notification, it does not work and the system returns the following message:  
"[ART.0116.3527D] Adapter Runtime (Notification): Ignoring request to start notification".  
This issue is now resolved.



- **PIEAR-471**  
Adapter Runtime-based adapters version 8.2 and lower do not run on the Adapter Runtime 9.5.1. Building or using an adapter with version 8.2 and earlier on the Adapter Runtime 9.5.1 results in compile and run-time errors due to API changes in the ListenerNode class. The signature of the enable() and disable() methods has been altered, which causes the errors.  
This issue is now resolved.
- **WIR-6933**  
Integration Server loses the default character encoding.  
When starting Integration Server, the character set retrieved from the JVM is incorrectly set to: "US-ASCII".  
This issue is now resolved.

## **Release 9.5**

- **PIE-26728 (IS\_8.0\_SP1\_Core\_Fix28)**  
On the Settings > Cluster page, Integration Server Administrator displays the physical host name instead of the logical hostname.  
If the watt.net.localhost configuration parameter sets a logical host name for an Integration Server, when the Integration Server is a member of a cluster, the Settings > Cluster page should display the logical host name under Cluster Hosts.  
This issue is now resolved.
- **PIE-27619 (IS\_8.0\_SP1\_Core\_Fix28, IS\_8.2\_SP1\_Core\_Fix10, IS\_8.2\_SP2\_Core\_Fix9)**  
Designer and Developer do not handle password changes as expected.  
The following password issues are present in Designer and Developer:
  - You cannot change the password for Integration Server local users in Developer or Designer. This should be possible.
  - Even though neither Developer nor Designer support changing the passwords for central users, both should issue a message informing users of this limitation.
 This issue is resolved. Designer and Developer now:
  - Support changing passwords for Integration Server local users.
  - Display a message indicating that you cannot change the password for central users.
- **PIE-27965 (IS\_8.0\_SP1\_Core\_Fix28, IS\_8.2\_SP1\_Core\_Fix11)**  
If Integration Server is unable to write audit records to the audit logging database, administrators are not informed unless they monitor the database or the FailedAudit log.  
To resolve this issue, Integration Server introduces a new audit error event. To register an event handler service for this new type of event, invoke the pub.event:addSubscriber service, setting the <EventType> input variable to "Audit Error Event".  
If a SQLException is encountered while trying to insert an audit record into the audit logging database, your event handler will be notified. If the Service logger is configured to retry failed auditing attempts, the audit error event will be fired for each failure. The event is also fired while Integration Server is initializing if it cannot connect to the audit logging database.

The specification for audit error event handlers is `pub.event:auditError`. Its structure is as follows:  
Input Parameters:

`<time>` String Date and time that the event occurred, in the format `yyyy-MM-dd HH:mm:ss.SSS`.

For example, "2013-07-04 14:46:39.77".

`<destination>` String The audit logging destination.

`<message>` String The exception message.

`<stackTrace>` String The exception stack trace.

`<errorCode>` String Optional. The SQL error code returned with the exception.

Output Parameters:

None.

Usage Notes:

- When you subscribe to an audit error event, you can supply a filter to limit the events that your event handler receives. The filter applies to the concatenated values of the destination and `<errorCode>` fields. Surround your search term with wildcards (i.e. `*YourSearchTerm*`) to find the desired value in either field. If either field matches the filter, the event will be passed to the event handler. See the description of the `pub.event:addSubscriber` service in the Integration Server Built-In Services Reference for more information about event filters.

- Use the `watt.server.event.audit.async` server parameter to indicate whether event handlers for audit error events are invoked synchronously or asynchronously. When this parameter is set to "true", Integration Server invokes the event handlers that subscribe to audit error events asynchronously. When this parameter is set to "false", Integration Server invokes the event handlers that subscribe to audit error events synchronously. The default is "true" (asynchronous).

- PIE-27840 (IS\_8.2\_SP1\_Core\_Fix10)  
Integration Server throws an exception while creating a new scheduled task if the service does not have any input parameters.  
Integration Server throws a `java.lang.NullPointerException` while creating a new scheduled task if the service you want Integration Server to execute does not have any input parameters. Integration Server throws this exception when you attempt to assign inputs to the service.  
This issue is resolved. Integration Server now creates the scheduled task even if the service does not have any input parameters.
- PIE-26996 (IS\_8.2\_SP1\_Core\_Fix11, IS\_8.2\_SP2\_Core\_Fix9)  
When the vector passed into the `pub.list:vectorToArray` service contains two different `IData`, such as `com.wm.util.Values` and `com.wm.data.ISMemDataImpl`, the service throws the following exception:  
`java.lang.IllegalArgumentException: array element type mismatch`.  
This issue is resolved. Now the `pub.list:vectorToArray` service processes all types of `IData` types that appear in a vector.
- PIE-27013 (IS\_8.2\_SP1\_Core\_Fix11, IS\_8.2\_SP2\_Core\_Fix9)  
Integration Server returns an incorrect or an unusable SOAP Fault when processing a request that contains invalid UTF-8 data.  
When a SOAP request is sent to Integration Server using the `soap` directive and the SOAP request

contains a character that is not UTF-8, Integration Server returns a SOAP fault that contains a `NullPointerException`. As a result, the SOAP fault does not contain any information about the cause of the error.

This issue is now resolved. The SOAP fault will now contain information about the cause of the error.

- **PIE-27308 (IS\_8.2\_SP1\_Core\_Fix11)**  
Integration Server 8.2 SP2 and Integration Server 7.1.x produce different results if an operation in a provider web service descriptor references a missing document type.  
Integration Server 8.2 SP2 and Integration Server 7.1.x produce different results when a web service client invokes an operation in a provider web service descriptor and the flow service used as the operation:
  - Contains a document reference and the referenced document type is missing
  - Maps data to the fields in the missing document typeIn Integration Server 7.1.x, the web service output is properly encoded. In Integration Server 8.2 SP2, the service output is not properly encoded.  
Integration Server 8.2 SP2 now behaves in the same way as Integration Server 7.1.x.
  
- **PIE-27341 (IS\_8.2\_SP1\_Core\_Fix11)**  
Integration Server does not support the backslash (\) character in the User Name field for email ports.  
This issue is now resolved.
  
- **PIE-27858 (IS\_8.2\_SP1\_Core\_Fix11)**  
Integration Server considers an element to be invalid if it contains child elements and the IS schema declares it to be of type "anyType".  
When validating XML against an IS schema, if the IS schema contains an element declared to be of type "anyType" and the corresponding element in the document contains child elements, Integration Server considers the XML to be invalid. This is incorrect.  
This issue is now resolved.
  
- **PIE-27897 (IS\_8.2\_SP1\_Core\_Fix11)**  
Integration Server ignores the value of the `watt.server.jms.trigger.stopRequestTimeout` parameter if it is set to 5 seconds or less.  
This issue is resolved. Integration Server now honors a value of 5 seconds or less for the `watt.server.jms.trigger.stopRequestTimeout` parameter. The minimum value for this parameter is 0.  
Note: If you set the `watt.server.jms.trigger.stopRequestTimeout` parameter to 0 (zero), when a JMS trigger is disabled while it is processing messages, Integration Server stops the trigger immediately and does not wait for any processing to complete. This can result in a `javax.jms.IllegalStateException`.
  
- **PIE-28086 (IS\_8.2\_SP1\_Core\_Fix11)**  
Integration Server returns an incorrect or an unusable SOAP Fault when processing a request that contains invalid UTF-8 data.  
When a SOAP request is sent to Integration Server using the `soap` directive and the SOAP request

contains a UTF-16 character, Integration Server returns a SOAP fault that contains WmDocumentException. As a result, the SOAP fault does not contain any information about the actual cause of the error.

This issue is resolved. Now, if the SOAP request contains UTF-16 characters, Integration Server displays the UTF-16 characters as UTF-8 characters. Integration Server will not return a SOAP fault simply because the SOAP request contained UTF-16 characters.

- **PIE-28174 (IS\_8.2\_SP1\_Core\_Fix11)**  
Integration Server is unable to parse XML files available on a file polling port if the XML files do not have a charset encoding defined in the header.  
While parsing an XML file, Integration Server uses the charset encoding defined in the XML header. If the encoding is not defined in the XML header, Integration Server parses the XML file using the default encoding "UTF-8" instead of using the charset encoding of the request or the character encoding specified in the `watt.server.fileEncoding` server configuration parameter.  
This issue is resolved. If an encoding is not defined in the XML header, Integration Server attempts to parse the XML file using the charset encoding of the request. If charset encoding is not available in the request header, then Integration Server uses the character encoding specified in the `watt.server.fileEncoding` server configuration parameter.
- **PIE-26985 (IS\_8.2\_SP2\_Core\_Fix9)**  
During shut down, Integration Server issues an "Object Not Found" error for every service URL alias created in Developer or Designer.  
While Integration Server shuts down, it issues an "Object Not Found" error for URL aliases that were created in Developer or Designer. Integration Server does not issue an error if the URL alias has an association to a server or a package.  
This issue is now resolved.
- **PIE-27537 (IS\_8.2\_SP2\_Core\_Fix9)**  
Services executed from triggers are unable to query the current session.  
A trigger creates a session in order to execute a service, but the trigger's session cannot be queried by the service. Calling `InvokeState.getCurrentSession()` does not return the session in which the service was executing.  
This issue is resolved. Services that are invoked by either broker/local triggers or JMS triggers are now able to call `InvokeState.getCurrentSession()` to get the session in which they are executing. These sessions appear on the `Server > Statistics > Sessions` page in Integration Server Administrator and they count toward the maximum number of sessions allowed by the Integration Server license. All triggers that are executed create a non-expiring session. If the `watt.server.trigger.reuseSession` parameter is "false", an additional session is created for each execution of a broker/local trigger. The session is deleted immediately after the broker/local trigger's services are invoked. If the `watt.server.jms.trigger.reuseSession` parameter is "false", an additional session is created for each execution of a JMS trigger. The session is deleted immediately after the JMS trigger's services are invoked. See the `webMethods Integration Server Administrator's Guide` for more information about the `watt.server.trigger.reuseSession` and `watt.server.jms.trigger.reuseSession` parameters.
- **PIE-27636 (IS\_9.0\_SP1\_Core\_Fix1)**

While generating document types from XML Schema definitions, the namespace prefixes that Integration Server uses depend on the order in which the namespaces are specified.

While generating a document type from an XML Schema definition, if the XML Schema contains namespace prefix as well as default namespace pointing to the same namespace URI, the namespace prefix that Integration Server uses depends on the order in which the namespaces are specified in the XML Schema definition.

This issue is resolved. Integration Server now gives preference to the user-specified namespace prefixes over default namespace regardless of the order in which the namespaces are specified in the XML Schema definition.

- PIE-27939 (IS\_9.0\_SP1\_Core\_Fix1)

Integration Server functioning as an FTP server does not return any results when the FTP: dir command is executed with filename as the parameter.

When attempting to list the files by executing the FTP: dir command with filename as the parameter, Integration Server functioning as an FTP server does not return any results. The FTP: dir command works as expected if the filename parameter is specified as a regular expression.

This issue is now resolved.

- PIE-25410

Reverse Gateway Integration Server fails when handling requests that contain a 100-Continue HTTP header.

For requests that should be challenged with 401: Access Denied error, Reverse Gateway Integration Server does not return 401: Access Denied error if that request includes a 100-Continue HTTP header.

This issue is now resolved.

- PIE-25998

Under heavy load, the Reverse HTTP Gateway Server logs an error about a closed connected repeatedly.

When the Integration Server acting as the Reverse HTTP Gateway Server is under heavy load, it logs the following error repeatedly:

(ISS.0053.0010E) The Reverse Gateway Integration Server encountered an error: (ISC.0064.9306) Connection was closed during read while handling the request. It is unable to retry the request at this time. The retry count is 1.

An error on the Internal Server closes the connection to the Reverse HTTP Gateway Server, causing the above message to be logged repeatedly.

This issue is now resolved.

- PIE-26925

Decrease in performance when processing certain services.

Integration Server performance decreases when processing services that have a content type of text/xml.

This issue is now resolved. To resolve this issue, Integration Server no longer generates a default

template name when services are created. This change greatly increases performance when processing services with content type of text/xml.

- PIE-27035  
The following issues occur when using the AS2 restart capability of webMethods EDIInt solution:
  - When reusing a pooled connection, if there is a connection related failure, EDIInt automatically retries the transaction using the AS2 Restart capability.  
This issue is resolved. Now EDIInt can disable the retry to process the AS2 Restart.
  - Some EDIINT solutions experience interoperability issues when the request uses Transfer-Encoding (chunking). This occurs because the Content-Length header is included in the request, and chunked requests do not require Content-Length.  
This issue is resolved. Now Integration Server removes the Content-Length header when the request uses Transfer-Encoding.
  
- PIE-27241  
Integration Server takes a long time to open the Support > webMethods Packages and Updates page.  
When you are logged on as a central user and click the View link on the About page, Integration Server takes a long time to open the Support > webMethods Packages and Updates page.  
This issue is now resolved.
  
- PIE-27580  
After installing Integration Server 8.2 SP2 Core Fix 7, HTML script related to the CSRF guard feature is added to the DSP pages even if the CSRF guard feature is disabled.  
This issue is resolved. Integration Server now adds the HTML script related to the CSRF guard feature to the DSP pages only if the:
  - CSRF guard feature is enabled
  - DSP file contains the <html> tag.Note: Because Integration Server does not insert CSRF secure tokens in custom DSPs that use the JavaScripts Location object such as document.location and window.location.href, you must update these pages manually.  
For example, if you have the following code in your custom DSP:  

```
document.location="ldap-settings.dsp";
```

You must replace it with the following code:

```
if(is_csrf_guard_enabled && needToInsertToken) {  
    document.location="ldap-settings.dsp?"  
    + _csrfTokenNm_ + "=" + _csrfTokenVal_;  
} else {  
    document.location="ldap-settings.dsp";  
}
```

You do not have to define the JavaScript variables `_csrfTokenNm_`, `_csrfTokenVal_`, `is_csrf_guard_enabled`, and `needToInsertToken`. However, you must import `<IntegrationServer_directory>\packages\WmRoot\csrf-guard.js` to your DSP before using these variables.  
For more information about configuring CSRF guard in Integration Server, see webMethods

## Integration Server Administrator's Guide.

- **PIE-27628**  
Designer and Developer find document types located in deleted packages.  
When deleting a package, Integration Server did not properly delete document types if auditing was enabled. As a result, Designer or Developer would display the document types in search results.  
This issue is resolved. Integration Server now deletes document types correctly.
- **PIE-27648**  
ebXML acknowledgements fail due to intermittent SSL errors.  
The Integration Server HTTP client fails intermittently, causing outbound HTTPS requests delivering ebXML acknowledgements to fail.  
This issue is now resolved.
- **PIE-27713**  
The `pub.security.xml:signXML` service supports only SHA-1 for signing an XML node or document. To resolve this issue, the `pub.security.xml:signXML` service has been enhanced. You can now specify the `signatureAlgorithm` and `digestAlgorithm` to use when signing an XML node or document.  
Possible values for each field are as follows:
  - SHA1 (the default)
  - SHA256
  - SHA384
  - SHA512
- **PIE-27831**  
The `Settings > Messaging > Broker/Local Trigger Management` page in Integration Server Administrator shows the message "null" after suspending document retrieval for a trigger. If Integration Server Administrator is used to suspend document retrieval for a Broker/local trigger when Integration Server is not connected to the Broker, the `Settings > Messaging > Broker/Local Trigger Management` page displays the message "null" which is not informative.  
This issue is resolved. Now, when Integration Server Administrator is used to suspend a Broker/Local trigger when Integration Server is not connected to the Broker, Integration Server Administrator displays the following message:  
Unable to suspend document retrieval for Trigger "triggerName": Broker not connected.
- **PIE-27848**  
Designer and Developer do not show enumeration values for an element defined to be a union of a defined type and an in-line simple type with enumerated values.  
This issue is now resolved.
- **PIE-27880**  
WSDLs that Integration Server 8.2 SP2 generates from web services that are migrated from Integration Server 7.1.2 show broken schema references for the unresolved imports.

The WSDLs that Integration Server 8.2 SP2 generates from web services that are migrated from Integration Server version 7.1.2 to 8.2 SP2 show broken schema references for unresolved imports of web services. Integration Server 7.1.2 generated the WSDLs of web services with schema imports correctly even if the imports were unresolved.

This issue is now resolved. Integration Server 8.2 SP2 generates WSDLs without broken schema references for all web services migrated from version 7.1.2 even if the imports are unresolved.

- PIE-27966  
When using the webMethods Platform Manager to configure ports on Integration Server, some error messages might be returned that refer to Software AG Platform Manager. These messages should reference webMethods Platform Manager instead.  
This issue is resolved. The error messages now refer to webMethods Platform Manager.
- PIE-27972  
When you enable or disable security logging, Integration Server does not log the event to the audit logger.  
This issue is resolved. Now when you enable or disable security logging, Integration Server logs the event to the audit logger.
- PIE-28003  
Integration Server issues an error when creating a scheduled task without any inputs.  
When creating a new scheduled task that does not take any inputs, Integration Server creates the task successfully. However, Integration Server also writes the following message to the error log: (ISS.0137.0015E) Scheduler: Exception getting task from database: Invalid task ID  
The issue is now resolved.
- PIE-28032  
Deployment fails when deploying Integration Server assets to an Integration Server in a cluster. When deploying Integration Server assets to a target group that is part of an Integration Server cluster, deployment to the second Integration Server node fails with the following message:  
Unknown system type: "java.io.FileNotFoundException:  
<IntegrationServer\_directory>\replicate\deployer\out\isconfiguration.zip"..  
This issue is resolved.
- PIE-28064  
When the pub.storage services are used by multiple threads in the same session, the threads are not able to prevent one another from accessing the same items at the same time.  
This issue occurs because pub.storage locks are owned by the session. Multiple threads in the same session cannot lock each other out since their locks all have the same lock owner: the session itself.  
This issue is resolved. The pub.storage services now qualify the lock owner with the current thread. The owner of a pub.storage lock is now the current session AND the current thread.
- PIE-28075  
In Integration Server Administrator, displaying the error log entries from newest to oldest starting from the end fails with an exception.



In Integration Server Administrator, selecting the "Display Log Entries newest to oldest starting from the end" option to view the error log entries fail with an exception if the log file is UTF-8 encoded.

This issue is now resolved.

- **PIE-28104**  
When running in passive mode, the Integration Server FTP port does not switch to active mode when the FTP client sends a PORT command.  
This issue is now resolved.
  
- **PIE-28125**  
Integration Server does not interrupt a service thread when a timeout event is triggered or a flow service is cancelled.  
When timeout interval is specified for a flow step, and if the step invokes a long running Java service, the service continues to run even after the timeout interval is exceeded and the timeout is triggered or the service is cancelled.  
This issue is resolved. Integration Server introduces a new server configuration parameter that you can use to interrupt a service for which a timeout is triggered or is cancelled. If `watt.server.threadKill.interruptThread.enabled` is set to "true", when a timeout is triggered or the service is cancelled, Integration Server interrupts the service thread with an underlying service. The default is "false". If you change the setting of this parameter, you must restart Integration Server for the changes to take effect.
  
- **PIE-28190**  
After applying `IS_8.2_SP2_Core_Fix8`, Integration Server generates an invalid SOAP response. `IS_8.2_SP2_Core_Fix8` includes a fix for PIE-26504 which ensures that when converting between IData and XML the `xsi:type` attribute is generated for an element declared to be of `xsd:anyType` when it is declared in the `nsDecls` parameters. However, when Integration Server uses this same behavior while creating a SOAP response, the SOAP response contains the `xsi:type` attribute and its value but does not contain the prefix declaration for the value. For example, if `xsi:type = xs:string`, the `xs` prefix declaration is missing from the SOAP response. This behavior occurs when Integration Server creates a SOAP request as well.  
This issue is resolved. Integration Server provides a new server configuration parameter that indicates whether or not the SOAP request or response includes the `xsi:type` attribute and its value for an element of `xsd:anyType`. Set `watt.server.SOAP.encodeXSITypeValue` to "false" to omit the `xsi:type` attribute and its value for an element of `xsd:anyType`. Set the parameter to "true" to include the `xsi:type` attribute and its value for an element of `xsd:anyType`. The default is "true".  
Note: The server parameter `watt.server.SOAP.encodeXSITypeValue` affects SOAP requests and SOAP responses created by Integration Server only.
  
- **PIE-28260**  
While adding a SAML token issuer in Integration Server Administrator, Integration Server does not allow URIs to be entered in the Issuer Name field.  
After installing `IS_8.2_SP2_Core_Fix7`, Integration Server does not allow URIs to be entered in the Issuer Name field while adding a SAML token issuer in Integration Server Administrator. This

issue occurs because as part of the security fixes introduced in IS\_8.2\_SP2\_Core\_Fix7, characters such as `^!%*:$./\ \ `;``, among others are not permitted in the input fields. As a result, Integration Server does not allow adding a SAML token issuer name that contains a URI.

This issue is resolved. Integration Server now allows URIs to be entered in the Issuer Name field by permitting the period (`.`), forward slash (`/`), and colon (`:`) characters in the input fields.

- **PIE-28305**  
In Integration Server 9.0 SP1, pipeline variable substitution does not work as expected if the value of the pipeline variable is empty.  
This issue is resolved. Integration Server now generates the pipeline variables correctly upon performing the pipeline variable substitution.
- **PIE-28310**  
Server statistic page does not show the graph properly when Japanese language pack is installed with Integration Server.  
This issue is now resolved.
- **PIE-28332**  
While querying the database for scheduled tasks, Integration Server fails to retrieve the scheduled tasks at times.  
While querying the database for scheduled tasks, Integration Server does not retrieve the scheduled tasks at times. This issue occurs because Integration Server takes the target hostname as case sensitive. As a result, Integration Server does not return the scheduled tasks if there is a change of case in the target host name returned while querying the database for scheduled task.  
This issue is resolved. Integration Server does not take the target hostname as case sensitive while querying the database for scheduled tasks.
- **PIE-28386**  
When the "Show running services on top" check box is checked on the Service Usage page, and Integration Server refreshes the page, the running services are no longer shown on top of the screen.  
When the "Show running services on top" check box is checked on the Service Usage page, the Integration Server Administrator displays the running services at the top of the screen. However, when Integration Server refreshes the Service Usage page automatically (as it does every 90 seconds by default), the Integration Server Administrator no longer displays the running services on top of the screen.  
This issue is now resolved.
- **PIE-28420**  
A provider web service descriptor created from a WSDL document containing an XML Schema with `nillable="false"` returns an invalid response.  
Integration Server returns an invalid response when executing a provider web service descriptor created from a WSDL document containing an XML Schema with `nillable="false"`. The response contains `xsi:nil` attribute even though the element declaration in the XML Schema contains `nillable="false"`.

This issue is now resolved.

- PIE-28429

While refreshing the context for durable subscribers, Integration Server recreates durable subscribers with the incorrect shared state ordering, causing an error.

Integration Server logs an ISS.0134.0058E error to the Integration Server log while refreshing the context for a topic that is associated with durable subscribers that have different shared state ordering (None/Publisher).

This issue is now resolved.

- PIE-28441

The JSON content handler does not parse HTTP requests by default.

JSON content in HTTP requests is not automatically parsed. Instead, a `jsonStream` is placed in the pipeline and the application must use `pub.json:jsonStreamToDocument` to parse the JSON into pipeline variables. This prevents clients from using JSON to pass inputs to existing services without first wrapping them in top-level services that parse the incoming JSON.

This issue is resolved. Integration Server introduces a new server configuration parameter that you can use to specify how Integration Server handles JSON content in HTTP requests. If `watt.server.http.jsonFormat` is set to "parsed" (the default), Integration Server parses JSON content into pipeline variables automatically. When `watt.server.http.jsonFormat` is set to "parsed", clients can use JSON to compose pipelines and execute existing services, without having to call `pub.json:jsonStreamToDocument`. The following example shows an HTTP request that uses JSON to pass inputs to an existing Integration Server service:

```
GET /invoke/pub.cache/put HTTP/1.1
Host: localhost:5555
Content-type: application/json
Content-length: 114
{
  "cacheManagerName": "My_Cache_Manager",
  "cacheName": "My_Cache",
  "key": "testKey",
  "value": "testValue"
}
```

If `watt.server.http.jsonFormat` is set to "stream", Integration Server places a `jsonStream` variable in the pipeline whose value is an `InputStream` containing the JSON content. You can then use `pub.json:jsonStreamToDocument` to parse `jsonStream` into pipeline variables. This was the behavior prior to this fix.

If `watt.server.http.jsonFormat` is set to "bytes", the incoming stream of JSON content is read into a byte array.

You can override the behavior specified by `watt.server.http.jsonFormat` in individual requests by adding the `jsonFormat` query parameter to the request URI. For example, if `watt.server.http.jsonFormat` is set to "parsed", a client can override this setting and instead specify a value of "stream" for the request by entering a URI as follows:

```
/invoke/myfolder/myservice?jsonFormat=stream
```

This will result in the request being placed in a `jsonStream` variable in the pipeline as an

InputStream containing the JSON content.

Changes to `watt.server.http.jsonFormat` take effect immediately. A server restart is not required.

Note: This fix changes the default handling of incoming JSON content. Prior to this fix, Integration Server always placed a `jsonStream` variable in the pipeline. Now Integration Server parses the JSON content into pipeline variables by default. To restore the previous behavior, set the value of `watt.server.http.jsonFormat` to "stream".

- PIE-28462

The `pub.client.sftp:logout` service does not end the current SFTP session.

The `pub.client.sftp:logout` service logs off the user from the SFTP server, but does not end the current SFTP session. This results in a large number of open connections to the SFTP server.

This issue is resolved. Upon executing, the `pub.client.sftp:logout` service now logs off the user and ends the current SFTP session.

- PIE-28531

The service `pub.flow:getTransportInfo` does not return the client IP address.

The service `pub.flow:getTransportInfo` does not return the client IP address of the requests that come through the Enterprise Gateway Server.

This issue is resolved. When a request comes through the Enterprise Gateway Server, Integration Server now adds the "clientIp" and "clientPort" values to the output of `pub.flow:getTransportInfo` service.

- PIE-28526

Designer does not display the pick list choices of String and String list variables in the derived document from a consumer web service descriptor that is created from an external WSDL file that has got some enumeration in its schema for simpleType variables.

When a consumer web service descriptor is created from an external WSDL file that has got some enumeration in its schema for simpleType variables, Designer does not display the pick list choices of String and String list variables in the derived document. Designer displays the pick list choices only after the schema is manually refreshed or reloaded.

This issue is now resolved. The derived schema and variables in the document show the pick list choices that are available in the source WSDL for simpleType variables without manually refreshing or reloading the schema. Designer displays the pick list choices for String and String list variables in their Properties view as well as in the Run Configurations dialog boxes.

- PIE-28558

Creating a web service descriptor from a WSDL document fails with an error stating that the schema definition is not valid.

If the schema in a WSDL document did not declare a namespace prefix for the default namespace, Integration Server incorrectly considers the schema to be invalid. Creation of a web service descriptor fails with the following error:

```
[ISC.0082.9802] fileName: not a valid schema definition document
```

This issue is now resolved.

- PIE-28570

When the "quote TYPE" FTP command is executed without any arguments, Integration Server functioning as an FTP server throws a NullPointerException instead of issuing a meaningful error message.

This issue is resolved. Integration Server now issues a meaningful message when the "quote TYPE" FTP command is executed without any arguments.

- PIE-28615

Multiple invocations of stateful IS service through web services provider makes Integration Server unresponsive.

When stateful IS service is invoked multiple times through the web services provider, Integration Server does not handle the session correctly. This leads to a large number of sessions being created in Integration Server thereby making Integration Server unresponsive.

This issue is now resolved.

- PIE-28692

Option to determine how Integration Server decodes an xsd:anyType element with simple content in SOAP response.

If a WSDL document contains an element declared to be of xsd:anyType, the corresponding element in the SOAP response may be of complex type or simple type.

- If the element is of complex type, Integration Server always decodes the element into an IData with nested fields and an @xsi:type field to retain the xsi:type value.

- If the element is of simple type, you can use the new configuration parameter `watt.server.SOAP.useStringforAnyTypewithSimpleValue` to determine how Integration Server decodes the element.

When `watt.server.SOAP.useStringforAnyTypewithSimpleValue` is set to "false", Integration Server decodes the element into an IData with an @xsi:type field to retain the xsi:type value and a \*body field to contain the element value. This is the default behavior. When

`watt.server.SOAP.useStringforAnyTypewithSimpleValue` is set to "true", Integration Server decodes the element into a String type field that contains the element value. The element's xsi:type information will be gone.

If you want to set the parameter to true, after installing the current fix open Integration Server Administrator. Navigate to the Settings > Extended page. Click on "Edit Extended Settings" and add the following line:

```
watt.server.SOAP.useStringforAnyTypewithSimpleValue=true
```

Save your changes. Integration Server does not require a restart for changes to take effect.

Note: This fix is related to PIE-26101 in that it provides the option to revert Integration Server to the behavior provided prior to PIE-26101 in IS\_8.2\_SP2\_Core\_Fix8.

- PIE-28713

When using the `pub.xml:xmlNodeToDocument` service to create a document, the generated document sometimes does not contain the xsi:type attribute field.

This issue can occur after applying IS\_8.2\_SP2\_Core\_Fix8.

This issue is now resolved.

- PIE-28737

When Integration Server is not connected to a Broker Server, the resource monitor service for triggers is not scheduled.

This issue is now resolved.

- PIE-28894  
When Integration Server is installed with the Japanese language pack, two users cannot be created at the same time.  
This issue is now resolved.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 9.8**

- Software AG documentation is no longer available on the Software AG installer. You can access all Software AG documentation on the [Documentation website](#).

### **Release 9.6**

- Two new guides were added for webMethods Mobile Support: Developing Data Synchronization Solutions Using webMethods Mobile Support and webMethods Mobile Support Client Java API Reference.
- webMethods Integration Server Administrator's Guide includes a new chapter called "Running Multiple Integration Server Instances". This chapter provides an overview of the multi-instance feature and how to create and configure multiple Integration Server instances on a single host machine.
- The Web Services Developer's Guide includes a new chapter called "About Outbound Callback Services". This chapter provides information about using and invoking outbound callback services in outbound SOAP messages.
- The "Working with webMethods Messaging Triggers" section of the Service Development Help has been added as a new chapter to the Publish-Subscribe Developer's Guide.
- The "Working with JMS Triggers" section of the Service Development Help has been added as a new chapter to Using webMethods Integration Server to Build a Client for JMS.
- The "Working with Web Services" section of the Service Development Help has been added as a new chapter to the Web Services Developer's Guide.

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

### **Release 9.5**

#### **Old Term**

webMethods Nirvana

Broker/Local Trigger

#### **New Term**

webMethods Universal Messaging

webMethods Messaging Trigger

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

<b>Added Item</b>	<b>Description</b>
IS_DES_CONNECTION messaging connection alias	A predefined messaging connection alias used to establish a connection with a Universal Messaging server for purposes of sending and receiving events with Digital Event Services.
Kill All Sessions Except Your Session option in the Server > Statistics > Sessions screen	Use the Kill All Sessions Except Your Session option in the Current Sessions Screen to kill all the sessions except the session you are currently running.
is_container scripts to create Integration Server images for use in Docker containers	Use the is_container scripts, created by the Integration Server installation, to build Integration Server images for use in Docker containers. You can access the scripts from the following location: Integration Server_directory/docker.
Caches and cache managers can be edited while in quiesce mode	Public and system cache managers and caches can be edited when Integration Server runs in quiesce mode.
Public cache can be used for service results caching.	A local or distributed public cache can now be used for service results caching. Previously, Integration Server stored cached service results in the ServiceResults system cache which is part of the SoftwareAG.IS.Services system cache manager.

Changed Item	Description
<p>FTPS ports that use the HTTPS protocol can now be configured using the “Use JSSE” option.</p>	<p>FTPS ports that support TLS 1.1 or TLS 1.2 protocol can now be configured using the “Use JSSE” option in the Edit FTPS Port Configuration screen of Integration Server Administrator. Previously, this option was not available.</p>
<p>Allowed cipher suites can be specified in a file.</p>	<p>To make it easier to specify a long list of cipher suites for use with inbound and outbound SSL connections, Integration Server now allows specifying a file as the value for the cipher suite server configuration properties  watt.net.ssl.client.cipherSuiteList,  watt.net.ssl.server.cipherSuiteList,  watt.net.jsse.client.enabledCipherSuiteList,  watt.net.jsse.server.enabledCipherSuiteList.</p>



Changed Item	Description
Some screens in Integration Server Administrator are disabled if webMethods API Gateway is installed on Integration Server.	<p>The following screens under Security screens are disabled:</p> <ul style="list-style-type: none"> <li>• Enterprise Gateway Rules</li> <li>• Enterprise Gateway Rules &gt; Default Alert Options</li> <li>• Enterprise Gateway Rules &gt; Default Alert Options &gt; Edit</li> <li>• Enterprise Gateway Rules &gt; Denial of Service Options</li> <li>• Enterprise Gateway Rules &gt; Denial of Service Options &gt; Configure Global Denial of Service</li> <li>• Enterprise Gateway Rules &gt; Denial of Service Options &gt; Configure Denial of Service by IP Address</li> <li>• Enterprise Gateway Rules &gt; Mobile Application Protection Options</li> <li>• Enterprise Gateway Rules &gt; Mobile Application Protection Options &gt; Device Types &gt; Edit</li> <li>• Enterprise Gateway Rules &gt; Mobile Application Protection Options &gt; Mobile Applications &gt; Edit</li> <li>• Enterprise Gateway Rules &gt; Rules &gt; Create</li> </ul> <p>The following screens under Security &gt; Ports &gt; Add Port are disabled:</p> <ul style="list-style-type: none"> <li>• Edit Enterprise Gateway Server Configuration</li> <li>• Edit Internal Server Configuration</li> </ul>

## Release 9.10

Added Item	Description
Configure the allowed protocols for JSSE on a per port basis	Integration Server now provides the ability to specify the allowed protocols for JSSE on a per port basis.
Out of the box support for Content-Type application/xml.	Integration Server content handler named ContentHandler_XML now includes support for the content type application/xml.
Kerberos authentication for outbound service requests.	The pub.client:http service now includes Kerberos-related parameters that you can use to acquire a Kerberos ticket for inclusion in the outbound service request.
Java API Classes for working with XMLData in Java services	A set of classes in com.wm.data for manipulating XMLData in Java services. For a list of classes, see the Added APIs for the Release 9.10 in section 11.0 Added, Removed, Deprecated, or Changed APIs
Universal Messaging connection alias can now be configured to connect to an SSL-enabled port on a Universal Messaging realm server	When configuring a Universal Messaging connection alias, you can specify SSL as the client authentication and provide the truststore and keystore information needed for Integration Server to establish an SSL connection with the Universal Messaging realm server. Previously, to establish a secure connection to the Universal Messaging realm server, you needed to configure the javax.net.ssl properties in the JVM used by Integration Server.
A queue on Universal Messaging can be used as the audit logging queue	Integration Server provides the option of using a Universal Messaging queue instead of the internal queue as the audit logging queue on a per logger basis.
Follow the master for webMethods messaging connections to Universal Messaging server	Integration Server now uses the Universal Messaging client setting “follow the master” which indicates that the client session always connects to the master realm server. The follow the master behavior takes precedence over the behavior indicated through the use of a comma-separated or semicolon-separated list of realm servers in the Realm URL field for a Universal Messaging connection alias.

Removed Item	Replacement, if any
EventBus predefined JMS connection alias	The EventBus alias is no longer available as a predefined JMS connection alias. That is, new Integration Server installations will not include this predefined JMS connection alias. However, if you migrated to Integration Server version 9.10 or later from an earlier version, then you might still have the EventBus alias.
EventBusJndiProvider predefined JNDI provider alias	The EventBusJndiProvider alias is no longer available as a predefined JNDI provider alias. That is, new Integration Server installations will not include this predefined JNDI provider alias. However, if you migrated to Integration Server version 9.10 or later from an earlier version, then you might still have the EventBusJndiProvider alias.

Deprecated Item	Replacement, if any
WmTomcat Package	Existing web applications based on the WmTomcat package can be migrated to webMethods Application Platform.

Changed Item	Description
Client queue window size	The Universal Messaging window size for the client queue that corresponds to webMethods messaging trigger is now set to the sum of the Capacity and Max execution threads trigger properties. Previously, Universal Messaging determined the window size.

Changed Item	Description
<p>Filters in a webMethods messaging trigger must be identical if the conditions subscribe to the same publishable document type.</p>	<p>If more than one condition in the webMethods messaging trigger specifies the same publishable document type and the trigger receives messages from Universal Messaging, the provider filters must be identical in each condition but the local filters can be different. Specifically, the contents of the Provider Filter (UM) column must be identical for each condition that subscribes to the publishable document type. The contents of the Filter column can be different.</p> <p>When using <code>pub.trigger:createTrigger</code> to create a trigger, the contents of <code>conditions/messageTypeFilterPairs/providerFilter</code> must be the same for each condition. The contents of <code>conditions/messageTypeFilterPairs/filter</code> can be different for each condition.</p> <p>The filter requirement is unchanged for a webMethods messaging trigger that receives messages from Broker. That is, if more than one condition in the webMethods messaging trigger specifies the same publishable document type and the trigger receives messages from the Broker, the filters in the conditions must be the same.</p>
<p>Integration Server Administrator</p>	<p>The HTML-based utility used to administer the webMethods Integration Server has a new look and feel. Menu and screen locations have not changed.</p>
<p>Internal Server ports that use the HTTPS protocol can now be configured using the “Use JSSE” option.</p>	<p>Internal Server ports that support TLS 1.1 or TLS 1.2 protocol can now be configured using the “Use JSSE” option in the Edit Internal Server Configuration screen of Integration Server Administrator. Previously, this option was not available.</p>
<p>OAuth Errors now returned in the content type specified in the client request</p>	<p>Previously, Integration Server always returned OAuth errors as HTML. Now, Integration Server returns OAuth errors in the content type specified in the client request.</p>
<p>Reply messages for webMethods messaging routed through Universal Messaging.</p>	<p>Integration Server now always encodes reply message as IData even when the encoding type of the reply document type is protocol buffers.</p>

## Release 9.9

Added Item	Description
Cluster synchronization for webMethods messaging triggers that receive documents from Universal Messaging.	If a webMethods messaging trigger receives documents from Universal Messaging resides on Integration Servers that is a member of a cluster, changes that you make for document retrieval, document processing, and for trigger properties can be propagated to other servers in the cluster automatically. Previously, cluster synchronization was available for webMethods messaging triggers that received documents from webMethods Broker only.
CDATA block support to outbound SOAP processing	Integration Server now provides CDATA block support for processing of outbound SOAP messages only when Integration Server hosts the web service provider. When a service used as an operation in a web service provider returns String values containing CDATA blocks, when encoding the IData into a SOAP message, Integration Server places the CDATA text in the outbound SOAP message in a CDATA section and does not url-encode special characters in the delimiters or text block. Previously, Integration Server ignored CDATA delimiters in String fields and treated text in a CDATA block as regular text.
Dedicated MessageConsumer for receiving synchronous replies per JMS connection alias	When a JMS connection alias has the Create Temporary Queue check box and the Enable Request-Reply Listener for Temporary Queue check box selected, Integration Server uses a dedicated consumer to retrieve replies to all requests sent using that JMS connection alias.
Default instance name can be defined by the user	The default instance of Integration Server can now be specified during the installation process. Previously, the default instance was always named "default".
Fail-fast mode for a JDBC functional alias.	A JDBC functional alias can now be configured to enter fail-fast mode when a transient error caused by an unavailable database prevents the connection pool alias used by the JDBC functional alias from establishing a connection to the database.

Added Item	Description
Instances of Integration Server can be started and stopped from the Windows Start menu.	Any instance of Integration Server can be started or stopped from the Windows Start menu. The Integration Server Administrator can also be started from the Windows Start menu for any instance of Integration Server. Previously, you could start, stop, or launch Integration Server Administrator for the default instance only.
IS_LOCAL_CONNECTION messaging connection alias	A predefined messaging connection alias for use with publishable document types that will be published locally only.
New filter added to the Enterprise Gateway rule	Custom filter added to the list of filter that can be included in an Enterprise Gateway rule. You can use this filter to customize and invoke services in the Enterprise Gateway Server.
URL aliases can now have specific destinations per port and for the empty path	A URL alias can now identify a port-specific destination for the alias. Additionally, an alias can now be created for the empty path for a port.
XMLData and XML document types	XMLData is a new data type that more faithfully represents XML content. This enables Integration Server to support XML Schema constructs such a substitution groups, nested model groups, the any wildcard, and the anyAttribute wildcard. XMLData also provides improvements with regards to handling of XML namespaces. XMLData is surfaced in Integration Server and Designer through XML document types which are created from XML Schema definitions.

Removed Item	Replacement, if any
startup.bat/sh and shutdown.bat/sh scripts contained in the following directory: <i>Integration Server_directory\bin</i>	The startup.bat/sh and shutdown.bat/sh scripts contained in and <i>Integration Server_directory\bin</i> directory have been removed. These scripts are replaced by the startup.bat/sh and shutdown.bat/sh scripts respectively in the following directory: <i>Software</i> <i>AG_directory\profiles\IS_instance_name\bin</i>

Removed Item	Replacement, if any
<p>server.bat/sh scripts contained in the following directory:  <i>Integration Server_directory</i>\bin</p>	<p>The server.bat/sh scripts contained in the <i>Integration Server_directory</i>\bin directory have been removed. These scripts are replaced by the startup.bat/sh scripts in the following directory:  <i>Software</i>  <i>AG_directory</i>\profiles\IS_instance_name\bin</p>
Deprecated Item	Replacement, if any
<p>WmVCS and VCS Integration feature</p>	<p>Use the local service development feature (Local Version Control Integration) to check package elements and their supporting files into and out of a version control system (VCS) directly from Designer.</p>
Changed Item	Description
<p>Destination List parameter renamed to Destination Lookup Name List</p>	<p>On the Create JMS Connection Alias, Edit JMS Connection Alias, and JMS Connection Alias details screens available under Settings &gt; Messaging in Integration Server Administrator, the Destination List parameter was renamed to Destination Lookup Name List to clarify that the destination lookup names must be provided.</p>
<p>Default messaging connection alias</p>	<p>Previously, you did not have to select a default messaging connection alias for use with webMethods messaging. You could select [LOCAL ONLY] which would indicated that publishable document types that specified the DEFAULT messaging connection alias could be published locally only. Now, you must select a messaging connection alias as the default. If you want the default to be local publishing, specify IS_LOCAL_CONNECTION as the default messaging connection alias in Integration Server Administrator.</p>
<p>WmTomcat package</p>	<p>The WmTomcat package is still installed by default, but is no longer enabled by default. The WmTomcat must be disabled if you want to use webMethods Application Platform with Integration Server.</p>

Changed Item	Description
Client Principal and Client Principal Password fields renamed to Principal and Principal Password	On the Create, Edit, or View Web Services Consumer Endpoint Alias details screens available under Settings > Web Services > Create Web Service Endpoint Alias in Integration Server Administrator, under the Kerberos Properties section, the Client Principal and Client Principal Password fields were renamed to Principal and Principal Password.
Use Subject Credentials field renamed to Use Subject Credentials Only	On the Security > Kerberos and Security > Kerberos > Edit screens, the Use Subject Credentials field has been renamed to Use Subject Credentials Only.
Serial webMethods messaging triggers that receive documents from Universal Messaging now process documents from a publisher publication order.	Previously, a webMethods messaging trigger with serial processing corresponded to a shared named object on a channel on Universal Messaging server. Now, a serial webMethods messaging trigger corresponds to a priority named object. This provides processing in publishing order for a serial trigger in a cluster or a non-clustered group of Integration Server
Transient error handling during trigger preprocessing.	<p>The following changes were made to improve transient error handling during trigger preprocessing:</p> <p>If the <code>ISRuntimeException</code> occurs during trigger preprocessing, Integration Server checks the values of the <code>watt.server.trigger.preprocess.suspendAndRetryOnError</code> parameter and the <code>On Retry Failure</code> trigger property. If <code>watt.server.trigger.preprocess.suspendAndRetryOnError</code> is set to <code>true</code> or <code>On Retry Failure</code> is set to "Suspend and retry later", then Integration Server suspends the trigger.</p> <p>Previously, Integration Server checked the <code>watt.server.trigger.preprocess.suspendAndRetryOnError</code> server configuration property only for webMethods messaging triggers that received messages from webMethods Broker. Also previously, Integration Server checked the <code>On retry failure</code> property only for JMS triggers and webMethods messaging triggers that received</p>



Changed Item	Description
	<p>messages from Universal Messaging.</p> <p>The <code>watt.server.trigger.preprocess.suspendAndRetryOnError</code> parameter now applies to all trigger types and messaging providers. Previously, the behavior provided by this property applied only to <code>webMethods</code> messaging triggers that received messages from <code>webMethods</code> Broker. Now, this property also works with <code>webMethods</code> messaging triggers that receive messages from Universal Messaging as well as JMS triggers.</p> <p>Integration Server now includes a server configuration property, <code>watt.server.trigger.preprocess.monitorDatabaseOnConnectionException</code>, that determines how Integration Server handles a <code>ConnectionException</code> that causes a transient error. A <code>ConnectionException</code> occurs when the document history database is not enabled or is configured incorrectly.</p> <p>Typically, transient errors that occur during preprocessing occur during exactly-once processing.</p>
<p>Naming convention for port aliases for migrated ports</p>	<p>To ensure that each port alias is unique, Integration Server now includes the host name for the port in the port alias for migrated ports. The new naming convention is:  <code>protocolListener_portNumber_hostName_packageName</code></p>
<p>Port number used while generating XIDs</p>	<p>Previously, Integration Server used the default Integration Server primary port number while generating the unique XIDs that are used to persist the state of XA transactions. Now, Integration Server uses the configured primary port number while generating the XIDs.</p>
<p>URL Path field renamed to Default URL Path</p>	<p>On the Settings &gt; URL Alias &gt; Create and Settings &gt; URL Alias page, the URL Path field had been renamed to Default URL Path.</p>

## Release 9.8

Added Item	Description
Basic client authentication performed when connecting Integration Server to a Universal Messaging realm server	When Universal Messaging is the webMethods messaging provider, connections between Integration Server and Universal Messaging servers can now be authenticated using user names and passwords. This authentication is specified in the Client Authentication Settings section on the Settings > Messaging > webMethods Messaging Settings > Universal Messaging Connection Alias > Create screen.
Use Secure Socket Layers to connect to a port on a Universal Messaging realm server	When Universal Messaging is the webMethods messaging provider, connections between Integration Server and Universal Messaging servers can now use one-way or two-way SSL once client-side parameters are configured on Integration Server.
Action on Startup Error option for clustering configuration	When configuring a cluster, you can now specify what action Integration Server takes when an error prevents the server from joining a cluster at startup. Previously, Integration Server would shut down if it could not connect to the cluster at start up. Now, you can start Integration Server as a standalone Integration Server, shut down Integration Server, or start the Integration Server in quiesce mode.
Security > Ports > Enterprise Gateway Registration Port Connections screen	The new Enterprise Gateway Registration Port Connections screen lists the connections from Internal Servers to the Enterprise Gateway registration port. To access this screen, go to the Ports Screen and click the port number of an Enterprise Gateway registration port. On the Security > Ports > View Enterprise Gateway Server Details screen, click Display Connections to Enterprise Gateway Registration Port.

Removed Item	Replacement, if any
WmPKI package	The WmPKI package which provides functionality for using PKI profiles in conjunction with Integration Server has been removed from the product. There is no replacement for the WmPKI package.
Changed Item	Description
JMS Trigger Management page	In Integration Server Administrator, the Settings > Messaging > JMS Trigger Management page now expands the Individual Standard JMS Trigger Controls and Individual SOAP JMS Trigger Controls tables by default. Previously, the tables were collapsed. Additionally, the page now includes links that you can use to jump from the top of one table to the other. This improves page navigation when there are a large number of JMS triggers.
Handling of undeclared namespaces in the resulting document (IData), when an endpoint service is invoked.	When an endpoint service is invoked, Integration Server now includes the undeclared namespace definitions in the resulting document (IData).
Realm URL parameter	<p>The Realm URL parameter on the on Settings &gt; Messaging &gt; webMethods Messaging Settings &gt; Universal Messaging Connection Alias &gt; Create and Edit pages now accepts a semicolon-separated list of URLs to the servers in a Universal Messaging cluster. Previously, the field accepted a comma-separated list only. Use a comma-separated list for Integration Server to always attempt to connect to the first Universal Messaging server in the list, trying the second server and so forth only if the first server becomes unavailable. Use a semicolon-separated list for Integration Server to connect to a randomly chosen URL from the list.</p> <p>You can now specify realm URLs that use the protocol nsps or nhps.</p>
Handling of HTTP requests with no authentication scheme specified in the Authorization header	Integration Server treats HTTP requests with no authentication scheme in the Authorization header as BASIC authentication requests and performs authentication for valid credentials. Previously, Integration Server did not force requests to have an

## Changed Item

## Description

User Names parameter

authentication scheme in the Authorization header.

The User Names field on the Security > User Management > Add and Remove Users screen no longer allows specifying a *username ;password* combination per line. Passwords cannot be supplied in the User Names field.

JSON text with an array at the root

Integration Server now accepts JSON text containing an array at its root. If the supplied JSON text contains an array at its root and that array does not have a name, Integration Server uses a fixed name of "\$rootArray" for the array value.

## Release 9.7

## Added Item

## Description

Maximum Entries in Cache field

This field is added to the Settings > Caching > *cache\_manager* > Add Cache and Settings > Caching > *cache\_manager* > *cache\_name* > Edit screens and the configuration files to capture the maximum size (in number of elements) that the cache can grow on the Terracotta Server Array.

Encoding published documents as protocol buffers

Documents published as part of webMethods messaging can be encoded and decoded as protocol buffers in addition to IData. When a document is encoded as a protocol buffer, Universal Messaging can filter on the header and body contents. When the document is encoded as IData, Universal Messaging can filter on the header contents only.

Exactly-once support when using webMethods Universal Messaging as the webMethods messaging provider.

Exactly-once processing can now be configured and performed from webMethods messaging triggers that receive documents from Universal Messaging.

Publish and wait when using webMethods Universal Messaging as the webMethods messaging provider.

Publish and wait, also called request-reply, can now be accomplished when Universal Messaging is the webMethods messaging provider. Previously, publish and wait functionality was only available when using webMethods Broker as the webMethods messaging provider or when publishing documents locally.

Removed Item	Replacement, if any
setenv.bat/sh	Integration Server no longer obtains settings from <i>Integration Server_directory</i> \instances\instance_name\bin\setenv.bat/sh. At startup, Integration Server obtains all configuration settings from wrapper.conf and custom_wrapper.conf.
Statistics field	The <b>Statistics</b> field is removed from the <b>Settings &gt; Caching &gt; cache_manager &gt; Add Cache</b> and <b>Settings &gt; Caching &gt; cache_manager &gt; cache_name &gt; Edit</b> screens and the configuration file. Now, the Ehcache Monitor automatically collects statistics.
Support for webMethods Nirvana 7.x as a JMS Provider	Integration Server no longer supports using webMethods Nirvana as a JMS provider. For a list of supported JMS providers, see the <i>webMethods Integration Server Administrator's Guide</i> .

Deprecated Item	Replacement, if any
WmPKI package	The WmPKI package which provides functionality for using PKI profiles in conjunction with Integration Server has been deprecated. There is no replacement for the WmPKI package.
startup.bat/sh and shutdown.bat/sh scripts contained in the following directories: <i>Integration Server_directory</i> \instances\instance_name\bin and <i>Integration Server_directory</i> \bin	The startup.bat/sh and shutdown.bat/sh scripts contained in the <i>Integration Server_directory</i> \instances\instance_name\bin and <i>Integration Server_directory</i> \bin directories are deprecated. These scripts are replaced by the startup.bat/sh and shutdown.bat/sh scripts respectively in the following directory: <i>Software</i> <i>AG_directory</i> \profiles\IS_instance_name\bin
installSvc.bat script located in the following directory: <i>Integration Server_directory</i> \instances\instance_name\support\win32	The installSvc.bat script located in the <i>Integration Server_directory</i> \instances\instance_name\support\win32 directory is deprecated. This is replaced by the service.bat file located in the following directory: <i>Software</i> <i>AG_directory</i> \profiles\IS_instance_name\bin

Deprecated Item	Replacement, if any
<p>server.bat/sh scripts contained in the following directories:  <i>Integration Server_directory</i>\instances\<i>instance_name</i>\bin and <i>Integration Server_directory</i>\bin</p>	<p>The server.bat/sh scripts contained in the <i>Integration Server_directory</i>\instances\<i>instance_name</i>\bin and <i>Integration Server_directory</i>\bin directories are deprecated. These scripts are replaced by the startup.bat/sh scripts in the following directory:  <i>Software AG_directory</i>\profiles\IS_<i>instance_name</i>\bin</p>

Changed Item	Description
Use JSSE default setting	When you create a new HTTPS or HTTPS diagnostic port, the <b>Use JSSE</b> setting is set to <b>Yes</b> by default. For Integration Server version 9.6 and earlier, this was set to <b>No</b> by default. When upgrading to Integration Server version 9.7, existing ports are unaffected: If <b>Use JSSE</b> for the existing port is set to <b>No</b> , that port maintains its setting.
Maximum Elements on Disk field	The Maximum Elements on Disk field on the Settings > Caching > <i>cache_manager</i> > Add Cache and Settings > Caching > <i>cache_manager</i> > <i>cache_name</i> > Edit screens and configuration files is now called Maximum Entries Local Disk. When upgrading to Integration Server version 9.7, the value for Maximum Elements on Disk is transferred to Maximum Entries Local Disk.
Default logging mode	When the AuditConfig.xml file is created, the logging mode is now set to "Synchronous" by default. In previous versions of Integration Server, the default logging mode was "Asynchronous". In most cases, synchronous audit logging is faster.

## 9.0 Added, Removed, Deprecated, or Changed Built-In Services

A release is listed in this section only if changes occurred in that release.

## Release 9.12

Added Service	Description
pub.cache.serviceResults:addCacheEntry	Adds cached entry into service results for the service without executing the actual service. This service can be useful to perform bulk load of service results at Integration Server startup.
pub.cache.serviceResults:listServiceCache	Returns a list of the cached service results for a particular service.
pub.cache.serviceResults:resetServerCache	Resets the cache for all services in the service results cache, resulting in the removal of all cached service results for all services from the service results cache.
pub.cache.serviceResults:resetServiceCache	Resets the cache for specific service, resulting in the removal of cached service results for the service.

  

Changed Service	Description
pub.client:http	<p>The default value of the <i>useJSSE</i> parameter is now null, which allows the <i>watt.net.ssl.client.useJSSE</i> server configuration property to determine the default behavior for outbound HTTPS connections.</p> <p>Added input parameter <i>delegation</i> to allow a user to execute a service on behalf of other user.</p> <p>Added input parameter <i>requestDelegatableToken</i> to specify if you want to request for a forwardable ticket granting ticket to send to the intermediary. The intermediary can use this forwardable ticket granting ticket for Kerberos delegation.Integration Server, which the server can use for delegation</p>
pub.client.ldap:search	Added input parameter <i>pageSize</i> to set the number of entries to return in a page. Added input and output parameter <i>ldapCookie</i> which contains the index of the page count for the search.
pub.client.ftp:login	Added input parameter <i>useJSSE</i> to allow use of JSSE for creating outbound FTPS connections.
pub.client:soapClient	Added input parameter <i>useJSSE</i> to allow use of JSSE for outbound web service invocation.

Changed Service	Description
pub.date*	Previously, if a value was not specified for the locale input parameter, Integration Server used the locale from the session used by the client that invoked the service. Now, Integration Server uses the value of the <code>watt.server.session.locale.ignore</code> server configuration parameter to determine whether the locale is obtained from the session used by the client that invoked the service or if the locale is the locale of Integration Server.
pub.flow:setResponse2	Added input variable <code>responseStreamTransferEncoding</code> to use chunked transfer encoding for the response and include the "Transfer-Encoding: chunked" response header.
pub.json:jsonStreamToDocument	Added input parameter <code>decodeRealAsString</code> to converts real numbers in the <code>jsonStream</code> to <code>String</code> .
pub.json:jsonStringToDocument	Added input parameter <code>decodeRealAsString</code> to converts real numbers in the <code>jsonStream</code> to <code>String</code> .
pub.security:userInfoSpec	The error input parameter is now named <code>userInfoError</code> .

## ***Release 9.10***

Added Service	Description
pub.date:compareDates	Compares two dates.
pub.date:incrementDate	Increments a date by a specified period.
pub.event.routing:eventAcknowledgement	Defines the input signature for a callback service that processes acknowledgments sent by the Event Routing framework.
pub.security:userInfoSpec	Specification for <code>UserInfo</code> service that performs custom processing based on the personally identifiable information in the OpenID Connect <code>UserInfo</code> token.
pub.string:compareStrings	Performs a case-sensitive comparison of two strings, and indicates whether the strings are identical.
pub.string:isAlphanumeric	Determines whether a string consists entirely of alphanumeric characters (in the ranges A–Z, a–z, or 0–9).



Added Service	Description
pub.string:isDate	Determines whether a string follows a specified date pattern.
pub.string:isNullOrBlank	Checks a string for a null or a blank value.
pub.string:isNumber	Determines whether the contents of a string can be converted to a float value.
pub.string:substitutePipelineVariables	Replaces a pipeline variable with its corresponding value.

Changed Service	Description
pub.client:http	<p>The <i>method</i> input parameter now supports the patch method.</p> <p>The pub.client:http service now includes fields for supplying Kerberos information that Integration Server uses to acquire a Kerberos ticket to include in the outbound service request. Specifically, the <i>auth</i> input parameter now contains a <i>kerberos</i> document in which you can specify <i>jaasContext</i>, <i>clientPrincipal</i>, <i>clientPassword</i>, <i>servicePrincipal</i>, and <i>servicePrincipalForm</i>.</p> <p>If the remote server redirected pub.client:http to a different location, <i>encodedURL</i> contain the URL that pub.client:http submitted to the server to which it was redirected.</p>
pub.event.routing:send	New input parameters <i>isAsync</i> , <i>service Name</i> , and <i>runAsUser</i> .
pub.jms:send	Added the <i>JMSMessage/header/replyTo</i> input parameter which can be used to specify a destination for replies without actually needing to wait for replies.
pub.security.keystore.pkcs7:sign	New input parameters <i>dataAsStream</i> and <i>signatureAsStream</i> .
pub.security.pkcs7:verify	New input parameters <i>signatureAsStream</i> and <i>dataAsStream</i> .
	New output parameter <i>contentAsStream</i> .
pub.security.util:createMessageDigest	New input parameter <i>inputAsStream</i> .
	New output parameter <i>outputAsStream</i>

## Release 9.9

Added Service	Description
pub.assets:getChecksums	Retrieves the checksums for assets, specifically namespace elements, on Integration Server.
pub.event.routing:send	Sends events to the messaging provider using Software AG Event Routing.
pub.event.routing:subscribe	Creates a subscription to a particular type of event using Software AG Event Routing.
pub.event.routing:unsubscribe	Removes a subscription to an event type previously subscribed to using the pub.event.routing:subscribe service.
pub.security.enterpriseGateway:customFilterSpec	Specification for services that can be invoked by the custom filter in Enterprise Gateway rules.
pub.xmldata:domNodeToXMLData	Converts a DOM node to a document (XMLData object).
pub.xmldata:getAttributes	Retrieves the attribute values from an XMLData object.
pub.xmldata:getInstanceTag	Retrieves the instance (xsi) tag values from an XMLData object.
pub.xmldata:getNamespaceTag	Retrieves the namespace tags values from an XMLData object.
pub.xmldata:setAttribute	Sets the value of an attribute in an XMLData object.
pub.xmldata:setInstanceTag	Sets an instance tag value in an XMLData object.
pub.xmldata.setNamespaceTag	Sets a namespace tag value in an XMLData object.
pub.xmldata:xmlDataToXMLString	Converts a document (XMLData object) to an XML String.
Deprecated Service	Replacement, if any
pub.event.nerv:eventToDocument	No replacement service because the pub.event.routing:subscribe service, which replaces the deprecated pub.event.nerv:subscribe service, handles the conversion of the incoming JMS message into an IS document (IData) now.
pub.event.nerv:send	pub.event.routing:send
pub.event.nerv:subscribe	pub.event.routing:subscribe
pub.event.nerv:unsubscribe	pub.event.routing:unsubscribe

Changed Service	Description
pub.client.ftp:getCompletedNotification	The publishable document type now specifies the IS_LOCAL_CONNECTION alias as the connection alias used to publish and retrieve instances of this document type.
pub.client.ftp:putCompletedNotification	The publishable document type now specifies the IS_LOCAL_CONNECTION alias as the connection alias used to publish and retrieve instances of this document type.
pub.schema:validate	The service can now validate XMLData against an XML document type.
pub.remote:invoke	Integration Server now ignores the value of the \$close input parameter when a trigger service for a webMethods messaging trigger executes the pub.remote:invoke service, if the watt.server.trigger.reuseSession server configuration parameter is set to true.
pub.trigger:resumeProcessing	The <i>applyChangeAcrossCluster</i> input parameter now applies to webMethods messaging triggers that receive documents from Universal Messaging. Previously, the <i>applyChangeAcrossCluster</i> input parameter applied only to triggers that received documents from Broker.
pub.trigger:resumeRetrieval	The <i>applyChangeAcrossCluster</i> input parameter now applies to webMethods messaging triggers that receive documents from Universal Messaging. Previously, the <i>applyChangeAcrossCluster</i> input parameter applied only to triggers that received documents from Broker.
pub.trigger:suspendProcessing	The <i>applyChangeAcrossCluster</i> input parameter now applies to webMethods messaging triggers that receive documents from Universal Messaging. Previously, the <i>applyChangeAcrossCluster</i> input parameter applied only to triggers that received documents from Broker.

Changed Service	Description
pub.trigger:suspendRetrieval	The <i>applyChangeAcrossCluster</i> input parameter now applies to webMethods messaging triggers that receive documents from Universal Messaging. Previously, the <i>applyChangeAcrossCluster</i> input parameter applied only to triggers that received documents from Broker.

## Release 9.8

Added Service	Description
pub.cache:getAll	Retrieves the values of the cached elements for the specified keys.
pub.cache:putAll	Populates a collection of elements in the cache with the specified key-value pairs.
pub.cache:removeAll	Removes the cached elements associated with a list of keys or, if no keys are specified, removes all elements from the cache.
pub.flow:getCallingService	Retrieves the service name and package name of the parent of the calling child service.
pub.event.nerv:subscribe	Subscribes to a particular type of event on the Network for Event Routing and Variation (NERV) and identifies the service that will act as the event handler.
pub.event.nerv:unsubscribe	Unsubscribes from an event type previously subscribed to using the pub.event.nerv:subscribe service.
pub.utils.messaging:migrateDocTypesTriggersToUM	Migrates the messaging provider for publishable document types and webMethods messaging triggers from webMethods Broker to webMethods Universal Messaging.
pub.utils:transcode	Transcodes data from one encoding to another.

Removed Service	Replacement, if any
pub.pki.pkcs7:sign	
pub.pki.pkcs7:verify	
pub.pki.smime:createSignedAndEncryptedData	

Removed Service	Replacement, if any
pub.pki.smime:createSignedData	
pub.pki.smime:processEncryptedData	
pub.pki.smime:processSignedData	

Changed Service	Description
pub.cache:remove	Added <i>useWriter</i> input parameter.
pub.flow:savePipelineToFile	Before writing the pipeline to a file, Integration Server verifies whether the provided path is specified in the <i>allowedWritePaths</i> parameter of the file access control configuration file ( <i>fileAccessControl.cnf</i> ). If it is not, Integration Server does not write the pipeline to a file.
pub.publish:deliver	Added the ability to deliver documents with <i>webMethods Universal Messaging</i> .
pub.publish:deliverAndWait	Added the ability to publish documents with <i>webMethods Universal Messaging</i> .
pub.publish:envelope	<i>webMethods Universal Messaging</i> now supports the read-only parameter <i>destID</i> .
pub.string:bytesToString	Added <i>ignoreBOMChars</i> input parameter.

## Release 9.7

Added Service	Description
pub.publish:syncToProvider	Synchronizes one or more publishable document types with their associated provider definitions by pushing the publishable document types to the associated message provider.

Removed Service	Replacement, if any
pub.event.eda:send	pub.event.nerv:send

Deprecated Service	Replacement, if any
pub.event.eda:eventToDocument	pub.event.nerv:eventToDocument
pub.publish:syncToBroker	pub.publish:syncToProvider

Deprecated Service	Replacement, if any
pub.pki.pkcs7:sign	
pub.pki.pkcs7:verify	
pub.pki.smime:createSignedAndEncryptedData	
pub.pki.smime:createSignedData	
pub.pki.smime:processEncryptedData	
pub.pki.smime:processSignedData	

Changed Service	Description
pub.event.nerv:send	Added new <i>encode</i> input parameter.
pub.flow:getTransportInfo	Service can now return transport information for services invoked by webMethods messaging triggers because the document reference output parameter uses pub.flow:transportInfo which has been updated to include webMethods messaging transport information.
pub.flow:transportInfo	Added new <i>messaging</i> field to contain transport information for webMethods messaging triggers.
pub.publish:publishAndWait	Added the ability to publish documents to webMethods Universal Messaging.
pub.publish:reply	Added the ability to reply to documents via webMethods Universal Messaging.
pub.publish:waitForReply	Added the ability to wait for reply documents routed through webMethods Universal Messaging.
pub.trigger:createTrigger	Modified the service so that it can be used to create webMethods messaging triggers that subscribe to documents routed through webMethods Universal Messaging. Added the new input parameters <i>properties\executeUser</i> and <i>conditions\messageTypeFilterPairs\providerFilter</i> .

## Release 9.6

Added Service	Description
pub.cache:search	Searches through an indexed cache and returns the results.
pub.flow:invokeService	Dynamically invokes any Integration Server public

Added Service	Description
pub.flow:invokeService	service and optionally returns the output from the invoked service in the pipeline for pub.flow:invokeService.
pub.flow:setResponse2	Forces a specified response to be returned by the Integration Server to a calling process (such as a browser or application server). Replaces pub.flow:setResponse.
pub.security.xml:signXML	New <i>addSignatureAsLastElement</i> input parameter to indicate whether Integration Server should add the signature element as the last child of the root.
pub.soap.handler:getInitialSoapMessage	Gets the initial SOAP request message from a given message context.
pub.soap.utils:callbackServiceSpec	Defines the input signature for an outbound callback service.

Removed Service	Replacement, if any
pub.event.eda:send	pub.event.nerv:send

Deprecated Service	Replacement, if any
pub.flow:setResponse	pub.flow:setResponse2

Changed Service	Description
pub.client:http	Added new key <i>Digest</i> to the <i>auth \ type</i> parameter.  If a value for <i>connectTimeout</i> is not specified, Integration Server uses the value specified for the <i>watt.net.timeout</i> server configuration parameter. If no value is specified for <i>watt.net.timeout</i> , the server will wait for the timeout value defined by the operating system before terminating the connection request.
pub.client:soapClient	Added new key <i>Digest</i> to the <i>auth \ transport \ type</i> parameter.
pub.flow:setResponse	Added new parameters <i>responseString</i> and <i>responseBytes</i> . Deprecated parameters <i>response</i> , <i>string</i> , and <i>bytes</i> .

**Changed Service****Description**

pub.soap.wsrn:createSequence

Both the *auth > message* input parameter and *sequenceKey* output parameter were removed.**Release 9.5****Added Service****Description**

pub.event:auditError

Specification for audit error event handlers.

pub.soap.wsrn:createSequence

Both the *auth > message* input parameter and *sequenceKey* output parameter were removed.**Changed Service****Description**

pub.client.oauth.executeRequest

Removed Google, Facebook, and Twitter as options for the *provider* parameter. Possible options for the *provider* parameter are now IntegrationServer and Other.

pub.flow:transportInfo

Added new keys *clientIP* and *clientPort* to the *HTTP ipInfo* parameter.

pub.publish:publish

Added the ability to publish documents to webMethods Universal Messaging.

pub.security.xml.signXML

Added *signatureAlgorithm* and *digestAlgorithm* as new input parameters. Possible values for each field are SHA1 (the default), SHA256, SHA384, and SHA512.**10.0 Added, Removed, Deprecated, or Changed Parameters**

A release is listed in this section only if changes occurred in that release.

**Release 9.12****Added Parameter****Description**

watt.core.validation.skipAbsentStarBody

Specifies whether to skip a validation that Integration Server performs when decoding mixed content elements that have an enumeration restriction.



Added Parameter	Description
watt.server.apiportal.url	<p>Specifies the URL for establishing a connection to API Portal and publishing a REST API descriptor. This parameter derives the API Portal URL from the following:</p> <ul style="list-style-type: none"> <li>• Host name and port number for the API Portal connection.</li> <li>• Tenant for which the REST API descriptor is to be published.</li> <li>• Specifications of the REST API descriptor.</li> </ul>
watt.server.jca.connectionPool.threadInterrupt.waitTime	<p>Specifies the maximum number of milliseconds that a thread can take while creating or closing a connection before the pool interrupter thread interrupts the thread. After the specified time elapses, the pool interrupter thread considers the thread to be blocked and interrupts it.</p>
watt.server.jca.connectionPool.threadInterrupter.sleepTime	<p>Specifies the number of milliseconds the pool interrupter thread sleeps between sweeps for server threads that became blocked while creating or closing a connection.</p>
watt.server.json.decodeRealAsString	<p>Converts a real number that Integration Server retrieves from JSON content to String.</p>
watt.server.log.maxEntries	<p>Specifies the default number of log entries to be displayed in the log viewing utility.</p>
watt.server.mediator.directives	<p>Specifies a comma-separated list of Mediator directives.</p>
watt.server.messaging.debugTrace	<p>Enables an extra level of verbose logging for webMethods messaging triggers that receive messages from Universal Messaging or through Digital Event Services. You can configure the additional logging globally or at the individual webMethods messaging trigger level.</p>

Added Parameter	Description
watt.server.ns.decodeJavaService	Enables Integration Server to display non-ASCII Unicode characters in the body of a Java service.
watt.server.ns.logDuplicateDocTypeRegistrationAsError	<p>Indicates whether to suppress or continue logging of error messages related to registration of duplicate universal names for a document type. Set the value of the parameter to false to suppress the logging of the error messages and true to resume the logging. The default value of this parameter is true.</p> <p>Note: Setting the parameter value to false suppresses the error messages about duplicate universal names only. It does not resolve the duplicate names.</p>
watt.server.returnCurrentDateTimeString	Returns the current date and time for an Object field that is not of type java.util.Date and has the format "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'".
watt.server.serverlogFilesToKeep	Specifies the number of server log files that Integration Server keeps on the file system, including the current server log file.
watt.server.session.locale.ignore	Specifies whether the default locale for the pub.date* services is the server locale or the locale from the session used by the client that invoked the service.
watt.server.SOAP.pre82WSD.ignoreVersionMismatch	For a web service provider that was created in an Integration Server release earlier than 8.2.2 and for which the Pre-8.2 compatibility mode property is set to true, specifies whether to emulate pre-8.2 behavior for process SOAP requests.

Added Parameter	Description
watt.server.sftp.dateStampFmt	Specifies the format of date to be used in the SFTP client public services, specifically the pub.client.sftp* services in the WmPublic package. To specify the date format to use, you can use any format that is supported by the Java class java.text.SimpleDateFormat. For example, to display the date with the format 08-12-02 14:44:33:1235, specify dd-MM-yy HH:mm:ss:SSSS. If the watt.server.sftp.dateStampFmt property is not set, Integration Server uses the default format, which is yyyy-MM-dd HH:mm:ss z.
watt.server.transaction.xastore.maxTxnPerFile	Specifies the maximum number of unique XA transactions in an XA recovery log file. When the XA recovery log file reaches the maximum number of transactions, Integration Server creates a new file.
watt.server.transaction.xastore.performXALogging	Specifies whether or not Integration Server writes transaction information to the XA recovery store. Set to true to instruct Integration Server to log information about the state and progress of each XA transaction. Set to false to instruct Integration Server to skip logging XA transaction information. The default is true.
watt.server.um.producer.transaction.commitRetryCount	Specifies the number of attempts made by Integration Server in publishing a guaranteed document to a Universal Messaging server, after the initial attempt at publishing fails because of a transaction failure.
watt.um.clientLog.level	Determines the information that is written to the Universal Messaging client log file, called umClient.log. Each level outputs log entries with that level or higher. Valid values are trace, debug, info, warn, error, fatal, and off. The default is error.

Added Parameter	Description
watt.um.clientLog.size	Maximum size, in MB, of the Universal Messaging client log file. When this size is reached, Integration Server rolls the file over to a backup called umClient (number).log and creates a new file.
watt.um.clientLog.fileDepth	Number of backup log files to keep on disk when using log rolling for the Universal Messaging client log file.

Changed Parameter	Description
watt.net.ftpDataConn	Now, when this parameter is set to true, Integration Server allows parallel downloads from multiple FTP sessions. When this parameter is set to false, Integration Server does not allow parallel downloads and reuses the same FTP session. The default is false.
watt.net.jsse.client.enabledCipherSuiteList	To make it easier to specify a long list of allowed cipher suites, Integration Server now allows specifying a file as the value for this parameter.
watt.net.jsse.server.enabledCipherSuiteList	To make it easier to specify a long list of allowed cipher suites, Integration Server now allows specifying a file as the value for this parameter.
watt.net.ssl.client.cipherSuiteList	To make it easier to specify a long list of allowed cipher suites, Integration Server now allows specifying a file as the value for this parameter.
watt.net.ssl.server.cipherSuiteList	To make it easier to specify a long list of allowed cipher suites, Integration Server now allows specifying a file as the value for this parameter.
watt.server.cors.allowedOrigins	Now supports the use of regular expressions in the comma-separated list of allowed origin servers. Integration Server treats any value in the comma-separated list that begins with "r:" as a regular expression.

## Release 9.10

Added Parameter	Description
watt.net.http401.throwException	Specifies whether the pub.client:http service throws a NetException when receiving a 401 error response or, instead, places the HTTP response header and body in the pipeline.
watt.net.http501-599.throwException	Specifies whether the pub.client:http service throws a ServiceException or returns response headers and response body when receiving a 501 to 599 level response from a remote HTTP server.
watt.security.openid.logExceptions	Specifies whether Integration Server writes OpenID errors to the error log.
watt.security.session.forceReauthOnExpiration	Specifies whether Integration Server accepts or rejects a request that includes an expired or invalid session.
watt.server.audit.um.sessionPool.max	Specifies the maximum number of sessions in the Universal Messaging session pool for each Universal Messaging connection alias used by an audit logger.
watt.server.audit.um.sessionPool.min	Specifies the minimum number of sessions in the Universal Messaging session pool for each Universal Messaging connection alias used by an audit logger.
watt.server.audit.um.sessionPool.retryInterval	Specifies the number of seconds Integration Server waits between attempts to re-establish a session on the Universal Messaging server after an audit logger enters queue fail-fast mode.
watt.server.jca.connectionPool.createConnection.interrupt.waitForTime	Specifies the wait time, measured in milliseconds, that elapses before Integration Server interrupts a connection creation thread that is in a wait state

Added Parameter	Description
watt.server.package.pre82WSD.loadExternalResources	Specifies whether, at package load time, Integration Server loads external resources for a consumer web service descriptor or a WSDL first web descriptor created on a version of Integration Server prior to version 8.2 and for which the Pre-8.2 compatibility mode property is set to true.

Changed Parameter	Description
watt.server.oauth.custom.responseHeader	Specifies whether the OpenID redirection endpoint for Integration Server include a brief description of the error in the response header when an OpenID error or Integration Server exception occurs during authentication. Previously, this parameter applied to OAuth authorization server only.
watt.server.stats.pollTime	Restrictions for the value for the parameter. For a stand-alone Integration Server, the watt.server.stats.pollTime must be an integer greater than or equal to 0 (zero). For an Integration Server in a cluster, the watt.server.stats.pollTime must be an integer greater than 0 (zero) but less than or equal to 60.

## **Release 9.9**

Added Parameter	Description
watt.core.validation.skipNoNamespaceReference	Indicates whether or not Integration Server skips validation of references to elements that are not namespace qualified made from within a namespace qualified element during XML validation against a schema.
watt.net.jsse.client.enabled CipherSuiteList	Specifies, using a comma-separated list, the cipher suites used on JSSE sockets that are used while making outbound HTTPS requests.
watt.net.ssl.client.useJSSE	Controls the use of JSSE for all of the outbound HTTPS connections from Integration Server.

Added Parameter	Description
watt.net.jsse.server.enabled CipherSuiteList	Specifies, using a comma-separated list, the cipher suites used on Integration Server ports that use JSSE and handle inbound requests.
watt.server.audit.failFastLoggers	Specifies a comma-separated list of the loggers that can enter into fail-fast mode. If this parameter is empty and fail-fast is enabled in the ISCoreAudit functional alias, all synchronous audit loggers with a database destination will have fail-fast capability.
watt.server.serverlogRotateSize	Specifies the file size at which Integration Server rolls over the server.log file.
watt.server.SOAP.ignoreMissing ResponseHeader	Determines whether missing required headers in a SOAP response results in an error.
watt.server.SOAP.treatNilAsNull	Indicates whether or not Integration Server generates an @xsi:nil field for an element for which the xsi:nil attribute is set to true.
watt.server.trigger.preprocess. monitorDatabaseOnConnectionException	Indicates whether Integration Server schedules a system task to monitor the document history database when a ConnectionException causes a transient error occurs during trigger preprocessing.

Changed Parameter	Description
watt.net.jsse.server.enabledProtocols	Modified to include “SSLv2Hello” as a default value.
watt.server.soap.decodeElementWithPrefix	Extended to work with the decoding of SOAP response messages received by a web service connector and with the pub.xml:xmlNodeToDocument service Previously, this parameter affected the decoding of SOAP request message received by a web service provider only.
watt.server.trigger.preprocess. suspendAndRetryOnError	This server configuration parameter now applies to all trigger types and messaging providers. Previously, the behavior provided by this property applied only to webMethods messaging triggers that received messages from webMethods Broker. Now, this property also works with webMethods messaging triggers that receive messages from Universal Messaging as well as JMS triggers.

## Release 9.8

Added Parameter	Description
watt.cachedirective.exclude.packages	Specifies a comma-separated list of packages whose Dynamic Server Pages you want the browser to cache.
watt.debug.warnOnClasspathError	Specifies whether or not a warning message about a missing classpath entry will be written to standard out.
watt.net.jsse.client.enabledProtocols	Specifies the SSL protocol versions that Integration Server supports when acting as a client making outbound requests.
watt.net.jsse.server.enabledProtocols	Specifies the SSL protocol versions that Integration Server supports when acting as a server handling inbound requests.
watt.net.ssl.randomAlgorithm	Identifies the random algorithm name used by Integration Server on HP-UX.
watt.net.ssl.server.handshake. maxVersion	Specifies the maximum version of the SSL protocol that Integration Server supports when acting as the server handling inbound requests.
watt.net.ssl.server.handshake. minVersion	Specifies the minimum version of the SSL protocol that Integration Server supports when acting as the server handling inbound requests.
watt.server.cluster.action.errorOnStartup	Specifies how Integration Server responds when an error at start up prevents Integration Server from joining the cluster.
watt.server.auth.oauth.accessToken. useHeaderFields	Specifies whether Integration Server performs OAuth authentication when an inbound HTTP/S request includes an access_token in the header fields.
watt.server.auth.oauth.accessToken. useQueryParameters	Specifies whether Integration Server performs OAuth authentication when an inbound HTTP/S request includes an access_token in the query parameter
watt.server.enableHotDeployment	This is an internal property.
watt.server.event.nerv. subscribeService.user	Specifies the default user who will invoke the service specified in the pub.event.nerv:subscribe built-in service when an event is received for a subscribed event type.
watt.server.hotDeploymentTimeout	This is an internal property.
watt.server.hotDeployment AutoRecover	This is an internal property.



Added Parameter	Description
watt.server.json.allowUnquotedFieldNames	Specifies whether or not unquoted field names are allowed in JSON text sent to the pub.json:jsonStringToDocument and pub.json:jsonStreamToDocument services. This parameter also determines whether document types created from JSON text contains fields that correspond to unquoted fields as well as quoted fields
watt.server.json.quoteFieldNames	Specifies whether or not the pub.json:documentToJSONString service encloses all generated JSON field names in double quotes.
watt.server.SOAP.generateRequiredTags	Specifies whether or not a SOAP message generated by Integration Server includes empty element tags for required parameters for which a value was not supplied at run time.
watt.server.SOAP.hideEPRHostInFault	Hides the endpoint reference host name and IP address details in the SOAP fault.
watt.server.xml.encoding	Specifies the encoding that Integration Server must use when processing incoming XML files.
watt.server.xml.xmlNodeToDocument.makeArrayforWS	Specifies how Integration Server decodes duplicate elements contained in an anyType element.

Removed Parameter	Replacement, if any
watt.security.pki.jnditimeout	
watt.security.pki.performSync	

## **Release 9.7**

Added Parameter	Description
watt.server.audit.dbEncoding	Specifies the character set used by the audit logging database.
watt.server.audit.schemaName	Specifies the user name of the ISCoreAudit JDBC functional alias that Integration Server should use while requesting metadata for the audit logging database.
watt.server.auth.session.retainJaasSubject	Specifies whether Integration Server should retain authentication credentials as part of a session.

Added Parameter	Description
watt.server.http.preserveUriReservedChars	Specifies whether Integration Server should decode percent-encoded URI paths in requests before evaluating URI paths.
watt.server.ssl.keyStoreAlias	Name of the keystore alias for the Integration Server keystore that contains the information needed to establish an SSL connection with the JMS provider.
watt.server.ssl.trustStoreAlias	Name of the truststore alias for the Integration Server truststore that contains the information needed to establish an SSL connection with the JMS provider.
watt.server.statsLogRotateInterval	Specifies the length of the log recycle interval (in minutes) for the stats.log file.
watt.ssh.jsch.ciphers	Specifies a list of ciphers that JSch supports by default.
watt.ssh.jsch.logging	Enables JSch logging.

Removed Parameter	Replacement, if any
watt.server.logRotateInterval	<p>watt.server.statsLogRotateInterval</p> <p><b>Note:</b> The watt.server.logRotateInterval server configuration parameter was reintroduced for the following fixes. When reintroduced, the scope of the parameter changed so that it affected only the stats.log:</p> <ul style="list-style-type: none"> <li>- IS_9.0_SP1_Core_Fix6</li> <li>- IS_9.5_SP1_Core_Fix3</li> <li>- IS_9.6_Core_Fix2</li> </ul>

Changed Parameter	Description
watt.server.jms.trigger.concurrent.primaryThread.pollingInterval	Modified to remove the upper limit of 10000 milliseconds.
watt.server.jms.trigger.serial.primaryThread.pollingInterval	Modified to remove the upper limit of 10000 milliseconds.
wm.mobile.datasync:synchronize	Added new <i>filter</i> input parameter to filter the data that Mobile Support returns to the requesting mobile application.

## Release 9.6

Added Parameter	Description
watt.server.diagnostic.tabular	Specifies whether Integration Server should generate diagnostic files in tabular format.
watt.server.http.x-frame-options	Controls how Integration Server is to handle the X-Frame-Options attribute in response headers.
watt.server.jdbc.datadirect.snoop.default	Specifies the default settings for the DataDirect Snoop tool for DataDirect Connect JDBC drivers.
watt.server.jdbc.datadirect.spy.default	Specifies the default settings for the DataDirect Spy diagnostic feature for DataDirect Connect JDBC drivers.
watt.server.json.optimizeForUniqueKeys	Changes to watt.server.json.optimizeForUniqueKeys no longer go into effect immediately. You must restart Integration Server in order for changes to this property to take effect.
watt.server.setResponse.pre82Mode	Specifies the order in which the pub.flow:setResponse service looks for and uses the deprecated input parameters when neither of the input parameters <i>responseString</i> or <i>responseBytes</i> are provided.
watt.server.soap.decodeElementWithPrefix	Specifies whether Integration Server recognizes document types that have defined XML namespace URIs but do not have prefixes associated with each namespace.
watt.server.SOAP.setNamespaceURIsToRoot	Specifies how Integration Server declares XML namespaces in a SOAP response.
watt.server.SOAP.warnOnPartValidation	When creating a web service descriptor from a WSDL document, indicates whether Integration Server should treat message parts that are defined by the type attribute instead of the element attribute as a warning and not an error.
wm.mobile.datasync.specs:downloadSpec	Specification for the flow service used to send data from a backend database to a mobile device in a webMethods Mobile Support data synchronization solution.
wm.mobile.datasync.specs:uploadSpec	Specification for the flow service used to send data to webMethods Mobile Support in a mobile data synchronization solution.

Added Parameter	Description
wm.mobile.datasync:synchronize	Synchronizes data received from mobile devices and backend applications in a webMethods Mobile Support data synchronization solution.

Changed Parameter	Description
watt.server.centralusers.shutdownOnError	Changed default setting to false.
watt.server.http.returnException	Changed default setting to false.

## **Release 9.5**

Added Parameter	Description
watt.server.http.jsonFormat	Specifies how Integration Server handles JSON content in HTTP client requests.
watt.server.json.optimizeForUniqueKeys	Controls how Integration Server parses JSON documents based on whether the document has unique keys or duplicate keys.
watt.server.SOAP.encodeXSITypeValue	Indicates whether Integration Server should include the xsi:type attribute and its value for an element of xsd:anyType in SOAP requests and responses.
watt.server.SOAP. useStringforAnyTypewithSimpleValue	Specifies how Integration Server decodes an xsd:anyType element with simple content in SOAP responses.
watt.server.threadKill. interruptThread.enabled	Specifies whether Integration Server should interrupt a service for which a timeout is triggered.
watt.server.thread.aging.limit	Specifies the length of time, in minutes, a thread can remain in the thread pool. Note that the value for watt.server.thread.usage.limit must also be reached before the thread is removed from the pool.
watt.server.thread.usage.limit	Specifies the maximum number of times a pooled thread can be used. Note that the value for watt.server.thread.aging.limit must also be reached before the thread is removed from the pool.

## 11.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

Added API	Description
<code>com.wm.data.obsolete.XmlData</code>	Contains the 9.10 version of the <code>com.wm.data.XMLData</code> class. The <code>com.wm.data.XMLData</code> has been revised and simplified in 9.12.
<code>com.wm.data.obsolete.XmlDataCursor</code>	Contains the 9.10 version of the <code>com.wm.data.XMLDataCursor</code> class. The <code>com.wm.data.XMLDataCursor</code> has been revised and simplified in 9.12.

  

Changed API	Description
<code>com.wm.data.XMLData</code>	<p>Revised to present a more consistent programming interface in which there are clearer distinctions between the underlying <code>IData</code> implementation of <code>XmlData</code> and the logical <code>XmlData</code> model as viewed by a typical application. Additionally, the API formalizes aspects of the <code>IData</code> implementation of <code>XMLData</code> to reduce the knowledge of the underlying <code>XMLData</code> implementation that is required to use the methods in the class.</p> <p>For a detailed list of changes to this class, see the <a href="#">webMethods Integration Server Java API Reference</a>.</p> <p>Note: If you have any existing Java classes that use this class, you must modify your Java classes to either use new APIs introduced in <code>com.wm.data.XMLData</code> or change the Java imports in to reference the 9.10 version of the class which is now contained in <code>com.wm.data.obsolete.XmlData</code>.</p>

## Changed API

com.wm.data.XMLDataCursor

## Description

Revised to present a more consistent programming interface in which there are clearer distinctions between the underlying IData implementation of XmlData and the logical XmlData model as viewed by a typical application. Additionally, the API formalizes aspects of the IData implementation of XMLData to reduce the knowledge of the underlying XMLData implementation that is required to use the methods in the class.

For a detailed list of changes to this class, see the [webMethods Integration Server Java API Reference](#).

Note: If you have any existing Java classes that use this class, you must modify your Java classes to either use new APIs introduced in com.wm.data.XMLDataCursor or change the Java imports in to reference the 9.10 version of the class which is now contained in com.wm.data.obsolete.XmlDataCursor.

## Release 9.10

### Added API

com.wm.data.XMLData

### Description

Class for creating, getting, and setting XMLData content.

com.wm.data.XMLDataAnyTag

Class for creating keys that are used as XmlData \*any element wildcards.

com.wm.data.XMLDataAttributeTag

Class for creating XmlDataTags for use as attribute names.

com.wm.data.XMLDataContentTag

Class that is a common superclass for the XmlDataTags that may appear in content models.

com.wm.data.XMLDataCursor

Class for navigating and manipulating the XMLData element content.

com.wm.data.XMLDataElementTag

Class for creating keys that are used as XmlData element names

com.wm.data.XMLDataException

Class that serves as the base class for all exceptions thrown by the XMLData feature.

Added API	Description
com.wm.data.XMLDataGroupTag	Class for constructing an XmlData key for group models.
com.wm.data.XMLDataSubstitutionTag	Class for creating specialized element tags that are the heads of substitution groups.

## Release 9.7

Added API	Description
com.softwareag.mobile.data.sync.Filter	Defines filter criteria for Mobile Support to use in mobile data synchronization requests to download and synchronize a subset of data.
com.softwareag.mobile.data.client.Context	Added new <i>getDeviceType</i> method to return the type of mobile device for use by the Mobile Support Client.
com.wm.app.b2b.client.JSONClient	Extends com.wm.app.b2b.client.Context with <i>invoke</i> and <i>invokeThreaded</i> methods that accept JSON text.

Changed API	Description
com.softwareag.mobile.data.sync.DataSynchronization	Added new <i>filter</i> parameter to the <i>download()</i> method to filter the data that Mobile Support returns to the Mobile Support Client.
com.softwareag.mobile.data.client.Context	Added new <i>conProtocolType</i> parameter to the <i>setInitializeConf()</i> method to specify the type of communication protocol (HTTP or HTTPS) that the Mobile Support Client should use to connect to the Integration Server that hosts Mobile Support.

## Release 9.6

Added API	Description
com.softwareag.mobile.data.client.Context	Creates a context for mobile applications that use the webMethods Mobile Support Client to synchronize data with a backend database.
com.softwareag.mobile.data.sync.DataSynchronization	Synchronizes data between mobile applications and a backend database in a webMethods Mobile Support data synchronization solution.

Added API	Description
com.softwareag.mobile.data.sync. ResponseSet	Encapsulates a response to a mobile data synchronization request.
com.softwareag.mobile.data.sync. RowStructure	Defines the structure of the data to be synchronized in a mobile data synchronization solution.

## 12.0 Copyright Information

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Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

IS-RM-912-20161018



# Software AG MashZone NextGen Business Analytics 9.12 Readme

## October 2016

This file contains important information you must read before using Software AG MashZone NextGen Business Analytics 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

- JBP-4727  
Migration of dashboard permissions from 9.10 to 9.12 does not work under Oracle.  
When using Oracle persistence certain permissions assigned to a dashboard created with MashZone NG version 9.10 are not migrated to version 9.12.  
There is currently no workaround for this issue.

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- JBP- 4744  
Dashboard grid crashes Chrome Browser.  
Using the developer tools in chrome browser version 53 and moving a just created widget around causes a console error and slows down or crashes chrome browser.  
There is currently no workaround for this issue.
- JBP- 4738  
X-Axis labels are improper.  
The number of bars and label texts in a bar chart may be different for certain cases.  
There is currently no workaround for this issue.
- JBP- 4736  
Arithmetic operator - result is rounded for multiply operation.  
If the result of a multiplication exceeds the internal number range the result may be rounded in same way.  
Workaround: Try to use the division with the reciprocal e.g. division by 0.001 instead of multiplication with 1000.
- JBP- 4719  
X-Axis labels are not showing properly for small labels when we trim x-axis ticks.  
When small labels of the x-axis were trimmed, basically 2 digits, only dots were displayed instead of the actual x-axis label.  
There is currently no workaround for this issue.
- JBP-4693  
For a POST REST mashable, when input document type is given as "application/json", on saving MZNG is adding double quotes for input.  
When input document type is given as "application/json" for a POST REST mashable filled with JSON text and running that mashable an error occurs due to auto-generated double quotes.  
Workaround: Remove the auto-generated double quotes to execute the service successfully.

- JBP-4280  
REST Mashable with repeating input parameter not working.  
Running a REST mashable using an URL with multiple values for the same key e.g. ...?key=1&key=2 leads to an error message.  
There is currently no workaround for this issue.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

### ***Business Analytics Server***

- New Dashboard does not support clustering on Business Analytics instances.
- If the Business Analytics server is running behind a firewall both TCP ports specified during installation (Business Analytics server and internal UM server, default 8080 and 9009) have to be open in the firewall.
- The <storeto> element in RAQL has changed syntax significantly, which may affect any existing mashups created with 3.6. See <http://documentation.softwareag.com/presto/v99/webhelp/index.html#page/presto-onlinehelp%2FstoreExtStmt.html%23> for details.
- The <loadfrom> element in RAQL has changed syntax significantly, which may affect any existing mashups created with 3.6. See <http://documentation.softwareag.com/presto/v99/webhelp/index.html#page/presto-onlinehelp%2FloadExtStmt.html%23> for details.
- The interfaces for user-defined analytic functions in RAQL have been changed, which may affect existing aggregate or window analytic function implementations. Plain functions are not affected by those changes. For sample implementations, deployment and usage instructions please see <http://documentation.softwareag.com/presto/v99/webhelp/index.html#page/presto-onlinehelp/userDefinedFunctions.html>.
- Metadata repository configuration is now done via JNDI in the tomee.xml file. Because of this change, the Metadata repository configuration screen is no longer available in Admin Console. See <http://documentation.softwareag.com/presto/v99/webhelp/index.html#page/presto-onlinehelp/moveRepository2NewDB.html> for links to the specific procedure to configure the Presto Repository for this release.

### ***Browsers***

- If Chrome browser is used it's recommended to use Chrome browser version 53 or later. Previous

version may cause some unexpected results using Business Analytics.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

- JBP-3218  
REST service access errors when REALLOADING a dashboard.  
Reloading a dashboard while the transition from EDIT to VIEW is still in progress leads to unexpected REST access error.
- JBP-3402  
Business Analytics system allows to create mashables with special characters.  
Creating a Mashup or App using a service which name contains special characters results in an error message.
- JBP- 4078  
Documentation for enabling MashZone datafeeds in Business Analytics is incorrect.  
The Business Analytics documentaion names the configuration file presto.conf instead of presto.config.
- JBP-4051  
Date conversion error in Dashboard data configuration  
Importing a date string with milliseconds (format yyyy-MM-dd hh:mm:ss.S) and converting it to date results in an error.

### ***Release 9.10***

- JBP-3245  
<invoke> using stream=true has wrong semantics when used with CSV source  
EMML <invoke/> on csv sources with stream=true was causing non-application of RAQL scheme semantics on the datasource. Also this was internally building XML DOM from source, instead of streaming data from source to RAQL engine.
- JBP-3242

RAQL date parsing accepts before reaching the end of the field

Several fixes concerning RAQL date parsing may lead to changed behavior concerning the actual datatype that is guessed from a data source without an explicit scheme. Now date can be guessed where previously string was used, because of added support for date formats. Also string can be guessed where it was date before, because parsing is more strict than it was before (e.g. does not terminate before the end of a value has been reached).

In order to avoid this type of problem, it is highly recommended to use explicit schemes, rather than relying on data type guessing for production systems.

- JBP-2799  
Mashup JSON responses are not cast to XML when output is of document type  
In EMMML, assigning JSON value to XML variable type within a Javascript block will now trigger implicit conversion from JSON to XML. In previous versions, no such implicit data conversion happens and users manually had to convert by typically calling a Java API.
- JBP-2769  
Several label texts / items weren't localized in Dashboard editor.
- JBP-2762  
Paged Layout of a workspace was not working correctly when logged in using Japanese language.
- JBP-2725  
XML Source couldn't handle XML sources based on XML attributes exclusively.
- JBP-2676  
The Audit Logs window didn't display the dates in Japanese format using Japanese language.
- JBP-2373  
EDA Event Sources lose "connection" to UM  
The size of internal UM events to handle results of queries greater than 3MB can be specified in key `um-server.maxBufferSize` of file `um.properties` (folder `<installDir>\um`), default value is 3145728 (3MB).
- JBP-2372  
If input value is more than Max value defined in Color Ranges field of Gauge Set View, the pointer was pointing to 0 Which is minimum value.
- JBP-2370  
Missing the upper limit value in Color Ranges field of Gauge Set View no color for palette was displayed.
- JBP-2351  
Wiring of an App was not working for Map View, the according icon was shown but when clicked it was showing nothing and wasn't able to do wiring with other apps.
- JBP-2323  
If the network connection got broken for any reason running a Mashup or App successfully and this Mashup or App was opened again an unclear message was displayed.

- JBP-2322  
A mashable based on a CSV file didn't show complete data in Tree View by default.
- JBP-2152  
Under certain circumstances adding an element to favorites didn't show any message in the info box.
- JBP-2107  
Date selection Mashup / Mashable snapshot allowed to specify future dates of Presto system date.
- JBP-1332  
The required authentication to upload files to MashZone NG server has been improved.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

Old Term	New Term
MashZone NextGen	MashZone NextGen Business Analytics where Business Analytics is the product name and MashZone NextGen is the name of the product node (brand).

### ***Release 9.10***

Old Term	New Term
Presto	MashZone NextGen Presto has been renamed to MashZone NextGen. This affects only the UI and documentation (Online help).
Speedometer chart	The Speedometer chart has been renamed to Circular Gauge chart.
Freeform	Dashboard editor

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists features, functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

Added Item	Description
Dashboarding: new data sources	<ul style="list-style-type: none"><li>• PPM enables analyzing of any PPM data based on PPM aliases.</li><li>• Excel XLS as well as XSLX files can be read.</li><li>• Data feed any data feed created with the new feed editor can visualize its data.</li></ul>
Widgets across multiple tabs	A widget configured to be displayed on multiple tabs can be used as a filter or to trigger selection events across multiple tabs.
Feed-editor	A new feed-editor has been implemented to edit and save MashZone data feeds.
Direct file access for data sources	An Administrator can configure a list of file aliases to enable direct access to source file located in the file system of Business Analytics server.
Import / export data feeds	The administration tool <b>padmin</b> has been enabled to import and export data feeds.

Added Item	Description
Migration	<p>Data feeds of legacy Mashzone can be imported using the new migration tool. Option –migration is required to import and migrate MZP files actually.</p> <p>There are some restrictions migrating legacy MashZone feeds: migration is canceled if the feed contains one of the following legacy MashZone features:</p> <ul style="list-style-type: none"> <li>• Operators <ul style="list-style-type: none"> <li>○ Data sources <ul style="list-style-type: none"> <li>▪ Manual data</li> <li>▪ Old PPM operator (URL based)</li> <li>▪ wmOptimize</li> <li>▪ BigMemory</li> </ul> </li> <li>○ Preprocessing in XML operator</li> <li>○ Text <ul style="list-style-type: none"> <li>▪ Create URL</li> </ul> </li> <li>○ Date <ul style="list-style-type: none"> <li>▪ Move single date</li> <li>▪ Replace date fields</li> </ul> </li> <li>○ Geolocation <ul style="list-style-type: none"> <li>▪ Aggregate geolocations</li> <li>▪ Retrieve geolocations</li> </ul> </li> </ul> </li> <li>• Source locations <ul style="list-style-type: none"> <li>○ ARIS Design Server</li> <li>○ Google DOCS</li> <li>○ Uploaded files</li> </ul> </li> </ul>
Removed Item	Replacement, if any
Legacy MashZone feed-editor (flash based)	New html5 based feed-editor



Added Item	Description
The legacy MashZone importtool.bat and exporttool.bat (folder .\MashZoneNG\mashzone\tools\runtool) have been removed.	Existing administration tool <b>padmin</b> has been enabled to import and export data feeds now.

Deprecated Item	Replacement, if any
-----------------	---------------------

Changed Item	Description
Business analytics start page	The start page displayed right after login has been redesigned. E.G. the controls of legacy Presto stuff (EMML, RAQL) have been moved to sub-menus.

## ***Release 9.10***

Added Item	Description
Runtime	MashZone NextGen provides scripts to run the server in Docker environment.
CSV / XML source	The handling of MashZone NextGen CSV and XML sources used in Dashboard Editor, RAQL and MZ feeds has been unified.
RAQL enhancement	The RAQL interface has been improved: <ul style="list-style-type: none"> <li>▪ Added support for Outer Joins (left, right, full) as specified in SQL standard</li> <li>▪ Within RTM the physical query has been optimized by using hash based Difference and hash based Intersection.</li> </ul>
Pie chart labels	The ability to display labels outside a pie chart has been added by selecting option Value Position outside.
Data source	The following source operators have been added: <ul style="list-style-type: none"> <li>▪ CSV</li> <li>▪ JDBC</li> <li>▪ ARIS table</li> </ul>
XML source operator	The current column configuration can be copied to the clipboard. Also, white spaces for column names are supported.

Added Item	Description
Data calculation	<p>The following calculation operators have been added:</p> <ul style="list-style-type: none"> <li>▪ Arithmetic</li> <li>▪ Aggregate</li> <li>▪ Condition replace</li> <li>▪ Filter rows</li> <li>▪ Processing columns: Insert, Delete, Rename, Duplicate</li> <li>▪ Move date</li> <li>▪ Round up/down</li> </ul>
Chart types	<p>The following types of charts have been added:</p> <ul style="list-style-type: none"> <li>▪ Bar chart</li> <li>▪ Horizontal and vertical Gauge chart</li> <li>▪ Traffic lights</li> <li>▪ Thresholds and traffic lights in grid</li> <li>▪ Enhanced styling features in the container and header of widgets. The following items can be specified for Y-axis of a chart: title, common format, and data range.</li> </ul>
Dashboard editor	<p>The Dashboard editor has been enhanced:</p> <ul style="list-style-type: none"> <li>▪ Access a MashZone NextGen Dashboard/App from an external application e.g. MWS using an URL where parameters can be provided and accepted by the MashZone NextGen Dashboard/App</li> <li>▪ Certain actions (change tab, set selection, call URL) can be triggered by selecting, clicking or hovering over a widget</li> <li>▪ Dashboard only mode: the dashboard header can be hidden by URL parameter</li> <li>▪ Dashboards can be opened from the hub</li> <li>▪ Dashboards based on non EDA sources can be refreshed automatically in a regular manner.</li> </ul>

Removed Item	Replacement, if any
Grid options	The grid option “Negative values in red” is no longer supported. The user can use thresholds instead.
XML source operator	The ability of the XML source operator to switch back and forth between grid and text mode has been removed.

Deprecated Item	Replacement, if any
Sharepoint connector	
Portal connector	Embedded using iFrames
RAQL Explorer	

Changed Item	Description
Data points of a line chart	The look of data point of a line chart can be set. Options are none, small and big.
Dashboard editor masthead	The Dashbord editor masthead has been aligned with the MashZone NextGen one.
Selection Dashboard editor source	All operators of Dashboard editor are listed on the right side and can be added by one click.

## 9.0 Added, Removed, Deprecated, or Changed Built-In Services

A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

Changed Service	Description
MashZoneNextGen910	The service was renamed from MashZoneNextGen910 to MashZoneNextGen912.

## 10.0 Copyright Information

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JBP-RM-912-20161018

# Software AG MashZone NextGen Visual Analytics 9.12 Readme

## October 2016

This file contains important information you must read before using Software AG MashZone NextGen Visual Analytics 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

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## 1.0 Critical Information

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## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- VAN-175  
Severe performance issue when computing distinct aggregates for historic data sources.  
Fix will be available in 9.10.0.2.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- Visual Analytics runs on port 9002 by default. Please refer to the [Online Documentation](#) on how to change this port.
- Please refer to the [Online Documentation](#) on how to configure the connection of Terracotta Server Array.
- Secure HTTPS protocol is currently not supported.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

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This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

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Old Term	New Term
----------	----------

## 8.0 Added, Removed, Deprecated, or Changed Items

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Added Item	Description
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Removed Item	Replacement, if any
--------------	---------------------

Deprecated Item	Replacement, if any
-----------------	---------------------

Changed Item	Description
--------------	-------------

## 9.0 Copyright Information

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VAN-RM-912-20161018



# webMethods Mediator 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods Mediator 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find the suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- SMGME-5570  
Mediator migration utility is incorrectly printing '{0}' in the migration log.  
Mediator migration log prints, {0} for the file name and path.  
There is currently no workaround for this issue.
- SMGME-5510  
Unable to delete a property in Extended Settings.  
Mediator configured properties cannot be removed through the Extended Settings page.  
The removed property gets added again on Save.  
Workaround for this issue is to remove the property in the pg-config.properties file.
- SMGME-4903  
When Mediator package with Metrics to CentraSite is enabled, the following exception occurs after package reload:  
Configure Mediator with Publish Metrics interval to CentraSite. Reload WmMediator package.  
Server log is logged with classcast exception and Metrics are not sent to CentraSite.  
There is currently no workaround for this issue.
- SMGME-5615  
Kerberos delegation is not supported for SOAP services at message level.  
Virtual service with Kerberos Outbound policy configured for delegation, does not support delegation for SOAP messages at message level.  
There is currently no workaround for this issue.
- SMGME-5612  
Cross version deployment fails while configuring Kerberos Inbound policy. If the virtual service is configured with Kerberos policy from CentraSite version 9.10 or earlier, it is not published successfully to Mediator 9.12.  
There is currently no workaround for this issue.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.10***

- XB\_9.10\_Fix4

### ***Release 9.9***

- XB\_9.9\_Fix8

### ***Release 9.8***

- XB\_9.8\_Fix11

### ***Release 9.7***

- XB\_9.7\_Fix13

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

- SMGME-5242  
Password type input with auto-complete enabled.  
An attacker with local access could obtain the cleartext password from the browser cache. The password auto-complete must be disabled in sensitive applications.  
This issue is resolved.

## **Release 9.10**

- SMGME-4814  
Unable to retrieve images that are available on the internal server through virtual services.  
When a Custom Content type of type Binary is defined in Mediator for requests from the client and responses from the native service with the above Content type, Mediator modifies the Content type header to application/octet-stream. Due to this, the custom content type defined by the provider is masked.  
This issue is resolved.
- SMGME-4788  
Allow Anonymous Access Action does not work.  
Virtual service configured with policy Allow Anonymous access set to False, should not be available for anonymous users. Irrespective of the policy configuration, anonymous users are allowed to access virtual services.  
This issue is resolved.
- SMGME-4611  
Mediator returns an empty response when Version 1 certificate is used for Signature.  
Mediator sends empty response to client when a request signed with version 1 certificate is passed. Error message, version 3 certificate has to be used for signature, should be sent to client instead of empty response.  
This issue is resolved.
- SMGME-4367  
Set Media Type policy action not working for Request after Versioning.  
Set Media Type policy action is enforced on a virtual service request. Once the virtual service is versioned, the policy action enforcement is not done.  
This issue is resolved.
- SMGME-4366  
Unpublish of alias fails when associated to virtual service.  
Associate alias to 2 virtual services. Publish and unpublish one of the virtual services. Alias which is published during virtual service publish cannot be unpublished even none of the associated virtual services are in deployed state.  
This issue is resolved.
- SMGME-4361  
Mediator returns status code 500 on breaching throttling hard limit.  
On breaching the throttling hard limit, Mediator is expected to send a status code of 503 but instead status code 500 and response code 503 are sent.  
This issue is resolved.

## Release 9.9

- SMGME-3157 (PIE-33557)  
Integration Server error occurs when you try to delete an OAuth2 access token if Mediator is in clustered mode.  
When you try to delete an OAuth2 access token of a virtual alias in any one of the Mediator nodes that are in Integration Server cluster mode, you are not allowed to delete the OAuth2 access token. Due to this, an error is logged in the Integration Server log.  
This issue is resolved.
- SMGME-4256  
The "com.ctc.wstx.exc.WstxParsingException: Undeclared namespace prefix "wsse"" exception is displayed in the ESB service. This service is configured to add a SAML Sender Voucher in the outbound call to the native service. The exception occurs after Mediator receives the SAML Assertion from STS.  
A WS security policy is added by the Client to the incoming SOAP request to Mediator virtual service. If this virtual service is also configured with an ESB service to add a SAML Sender Voucher to the Client request, then Mediator 'OnBehalf' of the client requests a Token from the STS that is configured. After receiving the response from STS, the following exception is displayed:  
"com.ctc.wstx.exc.WstxParsingException: Undeclared namespace prefix "wsse""  
This issue is resolved.
- SMGME-4251  
The following fields in the Edit Security Token Service (STS) Configuration screen in Mediator (Mediator > STS > Add new STS configuration screen) do not accept the "@", "\", "/", "-", and "\_" characters on performing a client side validation:
  - 1) Endpoint field of the Configuration section
  - 2) Username field of the HTTP Basic Authentication
  - 3) Username field of the WS-Security Username Token sectionThis issue is resolved. The "@", "\", "/", "-", and "\_" characters are removed from the validation and are accepted in the fields mentioned above.
- SMGME-4189  
The "Unable to find Bean named:aliasServiceAssociationManager" error is displayed when Mediator package is shutdown.  
The "aliasServiceAssociationManager" bean is shutdown before shutting down the "PGConfiguration" bean. Due to this, the "Unable to find Bean named:aliasServiceAssociationManager" error is displayed when Mediator package is shutdown.  
This issue is resolved.  
The dependency of the "aliasServiceAssociationManager" bean has been added to the "PGConfiguration" bean.
- SMGME-4157  
An error is displayed by Mediator when an invocation with Custom content type having a semicolon (;) occurs.

Mediator considers the content after a semicolon (;) as a character set or a boundary information and removes them. Due to this, an error is displayed by Mediator when an invocation with Custom content type having a semicolon (;) occurs.

This issue is resolved.

Custom content types can have multiple parts separated by ';'.  
Note: This is applicable only for the Custom content types and not the Standard content types.

- SMGME-4068  
"Unable to convert the json to xml" error is displayed by Mediator when a "\$" value is available in the json data of the request sent to Mediator.  
This issue is resolved.
- SMGME-4063  
Mediator removes the security header from the SOAP request when sent to a native service. When the security policy is not applied, the endpoint properties are configured with "Remove processed security headers" option, and the mustUnderstand attribute in the SOAP request security headers is set to 1, Mediator removes the security header from the SOAP request sent to a native service.  
This issue is resolved. Mediator does not remove the security header from the SOAP request sent to a native service even when the security policy is not applied, the endpoint properties are configured with "Remove processed security headers" option, and the mustUnderstand attribute in the SOAP request security headers is set to 1.
- SMGME-4053  
When a "GET" request is sent from a Client to Mediator with the accept header value set to \*/\* and when a response is sent to Mediator from native service with no Content-Type Header defined, an error message is sent in the response from Mediator to the Client.  
This issue is resolved. If the Content-Type Header value is missing in the native service response sent to Mediator, Mediator sends the response to the Client with "application/xml" Content-Type which is the default Content-Type for GET method.
- SMGME-4036  
In case of an invalid API Key, The API Key and the Authorization Header values are not removed in a service invocation response message.  
When a virtual service asset is configured for API key authentication, Mediator does not remove the values for API Key and Authorization Header fields in the service invocation response message before sending to the Client. This occurs only if an invalid API key or an expired API key, is specified for invoking the asset.  
This issue is resolved. The API Key and the Authorization Header values are now removed from the service invocation response message if the API key is invalid.
- SMGME-4005  
When migrating from earlier versions of webMethods Mediator, Error Messaging step of a virtual service does not work as expected.

After migrating webMethods Mediator from previous versions to version 9.7, if the Error Messaging Step of a virtual service contains both the Pre-Processing and Post-Processing steps configured with webMethods IS Service, Mediator returns SOAP request content as EnvelopeString to the IS Service instead of the expected fault response.

This issue is resolved. In the above scenario, Mediator now returns only the fault response in Post-Processing.

- SMGME-3996

The data displayed in the MED\_EVENT\_TXN.log file contains large number of trailing whitespaces.

When a Log Invocation run-time policy action is used with or without logging the request or response payloads, the data displayed in the MED\_EVENT\_TXN.log file generated by Mediator 9.7 version contains large number of unwanted trailing whitespaces as compared to the data displayed in the MED\_EVENT\_TXN.log file generated by Mediator 9.5 version. This is due to the new attribute, native service endpoint URL introduced in Mediator 9.7 version.

This issue is resolved. The additional whitespaces are now removed from the data displayed in the MED\_EVENT\_TXN.log file generated by Mediator 9.7 version.

- SMGME-3960

Mediator does not allow you to change the HTTPS URL of the load balancer after you migrate the Mediator assets from a previous version to 9.7, using the migration tool. After migrating to Mediator 9.7, if you try to modify the port or URL settings in the Mediator Administration page when no HTTPS port is available for selection, the following error is displayed:

For input string: "".

The server.log file shows the following entry:

```
[MED.0010.0066E] Error while persisting properties to file  
pg-config.properties
```

This issue is resolved.

- SMGME-3943

Mediator logs an error in the Integration Server log during server start-up or when the WmMediator package is reloaded, if you have configured SNMP in the Mediator Administration page.

Mediator logs the following error in the Integration Server server.log file:

```
[MED.0205.0010E] No formatter for destination configuration type .There is however no error in  
Mediator. This stale log entry is misleading and must be removed.
```

This issue is resolved. Mediator no longer logs this message in the server log.

- SMGME-3919

Mediator responds with a null pointer exception, if the Accept header of an existing service for which caching is enabled, is changed from application/json or no header to application/xml.

Mediator should not change the response when retrieving the information from a cache even if the Accept header for the service is changed before the second invocation of the service.

After the result of the first invocation of a service is stored in the cache, responses to all subsequent invocations should be retrieved from the cache.

This issue is resolved.

- SMGME-3913

Mediator logs an error in the Integration Server log when it finds malformed XML in the Runtime Alias doctype.

The following error is logged in the server.log file in Integration Server when Mediator comes across a malformed XML in the Runtime Alias doctype:

[ISS.0028.0010E] Unknown service type (null) in mediator

This error however is not known to cause issues in the Mediator production scenarios.

This issue is resolved. The malformed XML is now rectified and hence the error is not logged in the server log.

- SMGME-3862

Issues with respect to pre-processing and post-processing XSLT transformations for SOAP and REST services are resolved.

- SMGME-3848

In CentraSite and Mediator you can pass on the API key value only using the header, x-CentraSite-APIKey.

The name of API key header, x-CentraSite-APIKey is not customizable. There should be a way to define the name of the API key header because this header discloses the name of the product used to manage the API.

This issue is resolved. You can now define the API Key header name in the pg-config.properties file using the pg.apikey.header property. The API key value can be passed using the new header thereafter.

Note: You must restart Mediator for the updates in the pg-config.properties file to take effect.

- SMGME-3821

Mediator sends a fault response in XML format even when the Accept header is set to application/json.

When an error occurs in a virtual REST service with a HTTP GET method, Mediator sends a response in XML when no Content-Type header is specified, although the Accept header is set to application/json.

This issue is resolved.

- SMGME-3811

The provider roundtrip time value logged in the CentraSite log differs from the value logged in other logs. In the events logged in CentraSite, the provider roundtrip time is different from the one logged in the database and from the value in other logging destinations such as audit log, Integration Server Logger, email. The value for the provider roundtrip time must be the same



across all logs.

This issue is resolved.

- SMGME-3800

Mediator Services page shows an incorrect link to the service WSDL if you configure a HTTPS port as the primary port in the Integration Server Administration page.

This issue is resolved.

## ***Release 9.7***

- SMGME-3146

The HTTP headers in a Mediator requests are case sensitive.

RFC2616 protocol requires that all HTTP header fields should not be case sensitive. The HTTP headers in a Mediator request are case sensitive and should be changed as per the RFC2616 protocol.

This issue is resolved.

## Release 9.6

- SMGME-2099  
Deploying a virtual service with an invalid password for a valid user can also result in failures of valid service invocations.  
This issue occurs with virtual services whose Routing Protocol step use either HTTP Basic authentication or NTLM authentication and with the “Use credentials from incoming request” option selected. If such a virtual service is deployed to Mediator with an invalid password for a valid user, the password gets updated in the passman. As a result, valid service invocations will fail as well. Note that in Mediator, the password for the user to authenticate to back-end services is shared through the passman infrastructure.  
This issue is resolved.
- SMGME-2017  
Mediator mistakenly closes the connection with a WCF client after a long pause.  
When a WCF client makes a request after a long pause to access a virtual service which is configured to run in NTLM Transparent mode, Mediator closes the connection which is supposed to be kept alive.  
This issue is resolved.
- SMGME-2181  
Mediator does not properly handle requests with the Accept header set to multiple Content-Types. When handling requests with an Accept header set to multiple Content-Types (for example, Accept:application/soap+xml, multipart/related, text/html,image/gif, image/jpeg, \*, q=.2, \*/\*; q=.2), Mediator encounters issues while parsing native service responses.  
This issue is resolved.
- SMGME-2277  
EnvelopeString is not passed when watt.server.SOAP.MTOMStreaming is set to true.  
When virtual services invoke IS services, EnvelopeString is not passed if the IS property watt.server.SOAP.MTOMStreaming.enable property is set to true. This occurs for both MTOM and non-MTOM requests.  
With this fix applied, when watt.server.SOAP.MTOMStreaming.enable is set to true, EnvelopeString will be passed for non-MTOM requests.  
Limitation: EnvelopeString will not be sent to IS services if a request uses the "MTOM" SOAP Optimization Method and if the Integration Server property watt.server.SOAP.MTOMStreaming.enable is set to true.

- SMGME-2449

For a virtual REST service request with multi-root node JSON content, Mediator incorrectly logs the requests and responses.

This issue occurred when both of the following conditions were met:

- a) The "Log Invocation" run-time action is configured to log both requests and responses.
- b) A virtual REST service request contains multi-root node JSON content such as this:

```
{  
  { node1 }  
  { node2 }  
}
```

Then Mediator incorrectly logs only the first node:

```
{  
  { node1 }  
}
```

This issue is resolved. Mediator now logs all nodes of the JSON content.

- SMGME-2364

Mediator changes the Content-Type of REST service responses to application/octet-stream in case of an error or fault.

When an error or fault occurs for a REST service invocation, Mediator always changes the Content-Type of responses sent by the native service to application/octet-stream.

With this fix applied, Mediator retains the Content-Type of the responses sent by the native service.

- SMGME-2206

Mediator's NTLM authentication support in "Transparent" mode is not stable.

Mediator's NTLM authentication support in "Transparent" mode is not stable when tried with clients that use a connection pool.

This issue is resolved. Users who have clients that use connection pools are advised to instead configure Mediator's NTLM "Transparent" mode so that it enables Kerberos authentication. To do this, set the property `watt.pg.disableNtlmAuthHandler` to true. Thus, if you select "NTLM" authentication in "Transparent" mode, Mediator will perform the Kerberos Windows authentication (and not NTLM Windows authentication).

- SMGME-2317

Performance metrics are sometimes not communicated properly between Mediator and CentraSite due to a "connection closed" exception.

Performance metrics are published from Mediator to CentraSite using UDDI. A UDDI authToken is required to save the performance metrics. If CentraSite is restarted, or if CentraSite and Mediator are disconnected, this authToken expires. Refetching this authToken throws a "connection closed" exception in CentraSite.

This issue is resolved. If the authToken expires or if a disconnect occurs, Mediator will fetch the authToken again and publish the Performance metrics in CentraSite. In CentraSite, this issue was fixed by properly handling the closed connection so that refetching the authToken will not cause a “connection closed” exception.

- SMGME-2558  
Audit records containing Mediator transaction events are lost.  
When an exception occurs during audit logging, the audit records should be written to the failed audit log. However, Mediator does not write to the failed audit log in this scenario, thus resulting in the loss of audit records.  
This issue is resolved.
  
- SMGME-2181  
Mediator does not properly handle request with an Accept header set to multiple Content-Types. When handling requests with an Accept header set to multiple Content-Types (for example, Accept: application/soap+xml, multipart/related, text/html, image/gif, image/jpeg, \*, q=.2, \*/\*; q=.2), Mediator encounters issues while parsing native service responses.  
This issue is resolved.
  
- SMGME-2553  
For a virtual REST service request with JSON content, Mediator improperly sends a null value of a parameter as a "null" string to the native service.  
If a virtual REST service request contains JSON content with a null value as follows:  

```
{  
  "_id": "2e572eb7aa7358324cfa0b96bb001a7c",  
  "_rev": "1-d13e06d7d560a7395dc240c90858da30",  
  "Data": {  
    "name": "JoeSmith",  
    "age": null  
  }  
}
```

  
Then Mediator considers the null value as a String and, while sending it to native service, it converts null to “null”, which is not acceptable.  
This issue is resolved.

## **Release 9.5**

- SMGME-1936  
The WSDL for a virtual service deployed to Mediator contains the virtual service name twice in the <soap:address location>. This issue occurs when both HTTP and HTTPS are selected in the service’s Entry Protocol Step. (When only HTTP or only HTTPS is selected, the value for <soap:address location> is generated correctly).  
This issue is resolved so that Mediator’s <soap:address location> is unique from CentraSite’s. With

this fix, if a WSDL has a multiple-port endpoint (e.g., both HTTP and HTTPS), Mediator will generate the WSDL so that the <soap:address location> will update the endpoint with the port name, and the WSDL that appears in CentraSite will not contain the port name.

- SMGME-2086  
Web service with “WS-Security” header and “Content-Based” routing returns a SOAP fault. If a SOAP request contains a “WS-Security” header, Mediator passes it to the native service. When you have configured a virtual service for “Content-based” or “Context-based” routing, Mediator passes the “WS-Security” header in the SOAP request to the native service.  
This issue is resolved. However, Software AG recommends that you redeploy the virtual services that are configured for “Content-based” routing or “Context-based” routing.
- SMGME-1935 (Fix 14)  
Mediator keeps all virtual service application references, even when the application is removed from the virtual service and is redeployed. When changing the consumer application definitions for a deployed virtual service, Mediator retains the old application definitions and uses them for run-time governance.  
This issue is resolved.
- SMGME-1821 (Fix 14)  
Mediator Administration page is not accepting the URL without a port. When setting the HTTP Load Balancer URL, the port is mandatory. Some users would like that the default, standard port (80) not to be present there. With this fix, the user can configure a load balancer URL without specifying a port.
- SMGME-1681 (Fix 13)  
Protocol violation exception reported by WCF client when running Mediator in transparent mode. Please see the related issue SMGME-1679. Please note that this issue is fixed only in the Windows environment.  
This issue is resolved.
- SMGME-1679 (Fix 13)  
Mediator does not support Kerberos when a virtual service is configured to use NTLM in Transparent mode. A virtual service does not support a Kerberos handshake when it is configured for NTLM authentication scheme in transparent mode. Mediator now supports Kerberos in Transparent mode.

## **6.0 Documentation Changes**

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

## **7.0 Terminology Changes**

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

Added Item	Description
Mediator support for Outbound SAML Authentication	<p>Mediator supported Outbound SAML authentication through a new policy action SAML Authentication, available in the Outbound Authentication section of CentraSite.</p> <p>Mediator can act as a client using policy configuration for Outbound SAML authentication. Mediator can also Act as delegation for the incoming SAML credentials.</p>
Mediator support for Kerberos over Transport	<p>Mediator supported Kerberos Authentication over Transport for both Inbound and Outbound.</p> <p>Kerberos support over transport will enable REST services also to be secured with Kerberos. REST services can be implemented with Inbound, Outbound, or delegation scenarios of Kerberos.</p>
Axis free mediation support	<p>Mediation of REST services is with or without the Axis framework. This is controlled by a CentraSite configuration parameter. Once this parameter is set to not to use Axis for REST services, all newly deployed services do not use not use it. Existing services continue using Axis until and unless it's manually changed by publishing and republishing the service.</p>
HTTP Verbs Support	<p>Mediator supports HTTP PATCH verb for REST services when performing Axis free mediation.</p>

## Release 9.10

Added Item	Description
Mediator support for Kerberos Outbound Authentication	<p>Mediator supported Kerberos outbound via Outbound Authentication policy action.</p> <p>Three scenarios can be achieved via this policy:</p> <ul style="list-style-type: none"><li>• Use Existing Credentials - Client Credentials should be passed by client and Service Principal is configured in policy. On Successful invocation of inbound policies, Mediator routes the request with Kerberos configuration as part of message level settings.</li><li>• Custom Credentials - Client Credentials and Service Principal are configured in policy. On Successful invocation of inbound policies, Mediator routes the request with Kerberos configuration as part of message level settings.</li><li>• Secure Alias - Define Secure Alias of Kerberos type with Client Credentials and Service Principal. Configure alias in Kerberos outbound policy. On Successful invocation of inbound policies, Mediator routes the request with Kerberos configuration as part of message level settings.</li></ul>
Mediator support for Dynamic Routing	<p>Mediator provides a configurable HTTP Header parameter and a new routing action "dynamic routing" to enable dynamic routing. The purpose of the explicit "dynamic routing" action is to allow a user specifically enable dynamic routing for a given service.</p> <p>The client will populate the HTTP header parameter value with the URL where the request is expected to be routed by Mediator.</p> <p>Mediator introduces a new predefined context variable ROUTING_ENDPOINT. Users can dynamically set the context variable in IS or Java based Request Processing Steps based on their own criteria and custom logic.</p>



Added Item	Description
Mediator support for Elastic Search as Events and Metrics destination	Mediator needs to be able to send Metrics and Events to elastic search so that the standalone usage of elastic search or kibana is possible.
Mediator support for API Portal as Events and Metrics destination	Mediator needs to be able to send Metrics and Events to API Portal so that API Portal users can use Dashboards to visualize runtime data.
Mediator SAML Audience element validation	Mediator supports Audience element validation via policy action validate SAML Audience URIs. This action can be configured for the validation to be done as Exact Match or Allow Sublevels. Mediator validates the Audience URI in the conditions section of the SAML assertion against policy configuration.
OData Support	In addition to REST and SOAP services, Mediator also supports Open Data Protocol (OData) services. The mediation capabilities applicable to native OData services correspond to ones applicable to REST services. The support covers OData version 2 and version 4 and is only available after applying the XB_9.10_Fix1.

## **Release 9.9**

Changed Item	Description
Custom API key header	<p>The name of API key header, x-CentraSite-APIKey was not customizable.</p> <p>Custom API Key header name can be configured as property pg.apikey.header in Mediator pg-config.properties. The same can be done via CentraSite command set APIKey header name.</p>

Changed Item	Description
Virtual Service naming restrictions	<p>Virtual service names were nc name validated in the UI during virtual service creation.</p> <p>This is now changed to validate during deployment and if the virtual service name contains any non-conformant character, upon</p>

deploying the virtual service to any gateway, the non-conformant characters are replaced with the underscore character (\_).

## Release 9.8

Added Item	Description
The results of service invocations can be cached in Mediator.	<p>Mediator supports caching of the results of native service invocations for incoming requests based on the caching criteria that you specify. The caching criteria can be based on one of following:</p> <ul style="list-style-type: none"><li>• HTTP Header</li><li>• Path</li><li>• XPath Expression</li></ul> <p>You can use this option to store and retrieve results for services which do not require state values and live data.</p> <p>Caching the service results helps in reducing the overall response time and bridges any temporary network failures when Mediator invokes a native service.</p>
Mediator supports REST to SOAP conversion of a REST request to invoke a SOAP service.	<p>Mediator clients can now invoke SOAP APIs using a REST request as well as a SOAP request. This functionality enables you to expose the existing SOAP based services as REST services to the new API scenarios. You no longer have to write new REST services for this purpose.</p> <p>Restful invocation of SOAP APIs is enabled by default in CentraSite using the Enable REST Support policy action. You can disable the support by deleting the Enable REST Support policy action for the service.</p> <p>If the REST support is enabled, Mediator converts SOAP services to REST services during runtime invocation of the services.</p>

Added Item	Description
Mediator Logging enhancements	<p>New Mediator components added in the Integration Server Logging page. These logging facilities are listed under Mediator in the Server Logger Configuration list and cover among other things monitoring and event logging, service deployment, CentraSite communication, Mediator policies and runtime, alerts, cache management. You can set the log level for each of these facilities.</p> <p>Mediator Listener is the component added newly to enable logging of incoming messages before Mediator processes a request.</p> <p>Incoming Messages is another component added newly to enable logging of incoming messages after Mediator receives a request.</p> <p>For additional details, see <i>webMethods Integration Server Administrator's Guide</i>.</p>
Cross-platform NTLM Support	<p>Added NTLM Authentication support for virtual services in UNIX platforms like Linux.</p> <p>A virtual service deployed on Mediator running on a Linux system can be enabled with NTLM authentication.</p>
Set default message type for REST request and response messages	<p>A default message type can be defined for Request and Response messages. This message type is used if no Content-Type is set by the client.</p> <p>Mediator will use the Content-Type set in the Set Media Type policy action configured for the request and response steps in CentraSite if the client sends a request without the Content-Type and Accept headers.</p>

Added Item	Description
<p>pg.rampartdeploymenthandler.responseTimeToLive property</p>	<p>Added to allow Mediator to set the Time to Live (TTL) value of a SOAP response sent to client. The TTL value set using this property can be used to include timestamp along with the assertions: WS-Security username token, X509 certificate token, Encryption, or Signature.</p> <p>A timestamp assertion is used to indicate the expiry of a message initiated by Mediator. The response message becomes invalid if the timestamp has expired.</p> <p>To change the default TTL value (300 seconds), include this property in the pg-config.properties file at Integration Server_directory \instances\instance_name \packages\WmMediator\config\resources\</p> <p>as follows:</p> <pre>pg.rampartdeploymenthandler.responseTimeToLive = 120</pre> <p>Reload the WmMediator package in Integration Server. In the example above, the TTL value is set to 2 minutes (120 seconds).</p> <p>This value applies to all virtual services deployed to Mediator.</p>

Changed Item	Description
<p>Dependency on Win32 package is removed</p>	<p>When NTLM authentication was supported only on the Windows platform, it was necessary to enable the Win32 package. Starting with this version, the dependency on the Win32 package is removed and it is no longer necessary for NTLM authentication.</p>

## ***Release 9.7***

<b>Added Item</b>	<b>Description</b>
Multiple resources can be defined for virtual REST APIs.	<p>The enhanced REST framework in CentraSite allows you to explicitly define multiple resources for a RESTful API. You can use the resource path tokenizer to handle the multiple resources at run-time. The tokenizer for substituting a resource path is automatically appended to the API's endpoint (base URL) by a path variable <code>#{sys:resource_path}</code>.</p> <p>If you have defined multiple resources for an API, Mediator replaces the resource path tokenizer at run-time with the appropriate resource path that is defined for the particular resource call.</p> <p>If you have defined an XSLT transformation or webMethods Integration Server services in the request or response processing step of a REST service, then you need to append the resource name to the method name in order to refer to that resource. For example, if you have defined a resource "phones" for the GET method, you will refer to the resource using GET_phones.</p>

## ***Release 9.6***

<b>Added Item</b>	<b>Description</b>
The <code>watt.pg.disableNtlmAuthHandler</code> property.	Added to support Kerberos Transparent mode support (see "Kerberos Transparent mode support" below).

Changed Item	Description
Kerberos Transparent mode support.	In the Routing Protocols processing step of a virtual service, if you select the HTTP Authentication mode “NTLM” in “Transparent” mode, Mediator performs the Kerberos Windows authentication (and not NTLM Windows authentication) if the property <code>watt.pg.disableNtlmAuthHandler</code> is set to true. If the property is set to false (the default), Mediator performs the NTLM Windows authentication.

## 9.0 Added, Removed, Deprecated, or Changed Built-In Services

A release is listed in this section only if changes occurred in that release.

### **Release 9.10**

Added Service	Description
<code>pub.mediator.security.utils:getSamlClaims</code>	A Java service which reads incoming SAML attributes and return them as Claims class instance. Service constructs a ClaimsIdentity class which has methods to be used to get list of claims given claim type and it also has methods to get Actor.

## 10.0 Added, Removed, Deprecated, or Changed Parameters

A release is listed in this section only if changes occurred in that release.

## 11.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

### **Release 9.10**

Added API	Description
<code>com.softwareag.pg.security.saml.Claim</code>	This class file can be used to read incoming SAML attributes and return them as Claims class instance.

Added API	Description
com.softwareag.pg.security.saml.ClaimsIdentity	This class can be used to construct a ClaimsIdentity class which has methods to be used to get list of claims given claim type and it also has methods to get Actor.

## 12.0 Copyright Information

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SMG-RM-912-20161018

# webMethods Mobile Suite 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods Mobile Suite 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

### ***Mobile Designer***

MOBILE-2586

Codesign fails when packaging iOS app for App Store build using Mobile Administrator.

When doing App Store release builds on Mobile Administrator build nodes running Mac OS X 10.10+, the build job might fail with the following error message:

```
> /usr/bin/codesign --force --preserve-metadata=identifier,entitlements,resource-rules --sign [...]
--resource-rules=/var/folders/[...].app/ResourceRules.plist --entitlements [...]
failed with error 1. Output: Warning: usage of --preserve-metadata with option "resource-rules"
```



(deprecated in Mac OS X >= 10.10)!

This is related to a bug in Xcode command line tools used to build and package the app. There are two known workarounds to address this issue. First, for App Store builds you can use Multibuild locally, second is to remove the "--resource-rules=\$destApp/ResourceRules.plist" argument for *codesign*, in `./Xcode.app/Contents/Developer/Platforms/iPhoneOS.platform/Developer/usr/bin/PackageApplication`

Please contact support in case you experience any related problems.

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

### ***Mobile Designer***

- MOBILE-2552  
Info.plist contains invalid key: CFBundleResourceSpecification.  
When building and packaging iOS apps, there might be warnings/errors depending on Mac OS X and Xcode versions being used related to CFBundleResourceSpecification key in Info.plist. As workaround do local Multibuild and fix the setting manually in Xcode.
- MOBILE-2570  
ClassCastException in TabViews on iOS.  
After registering ITabListener, a ClassCastException might be thrown on tab selection. There is currently no workaround.
- MOBILE-2572  
ClassCastException in TabViews on Android.  
ActionBarItemView to android.view.ViewGroup ClassCastException might happen in some setups. There is currently no workaround.

### ***Mobile Development***

- MOBILE-2545  
ListView will not show in TabViews view property.  
It is not possible to select a ListView in the new TabView's view property. Only Views and WebViews can be selected. As workaround the AML source file must be edited.
- MOBILE-2545  
isRunningOnTablet() returns true for iPhone6+.  
`com.softwareag.mobile.runtime.toolkit.util.AppUtility.isRunningOnTablet()` does return true on an iPhone6+. Make sure to check for iPhone6+ separately.
- MOBILE-2578  
Wrong validation messages for TabViews.  
In some cases Outline Editor will provide wrong validation messages.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- With `nUITabView` a new type of control (or better a new type of view) was introduced. A `TabView` provides a high level navigation pattern, where a user may switch between different Subviews using a swipe gesture or by selecting Tabs representing each of the subviews. A tab can contain a label or an icon to describe the Tab's content. `nUITabView` itself is a subclass of `nUIViewControllerAnimated` and can be used in the same way as a regular `nUIViewControllerAnimated`. Outline Editor does support `TabViews` and `Tabs` including all properties.
- In Outline Editor we are introducing Styles. A Style allows the grouping of UI properties and its values in reusable elements. Now each UI element in your AML Outline can be assigned one Style element, enabling inheritance of all property values defined in the Style of the UI element. By changing values in the UI element, the according property of the Style will be overwritten for the particular UI element. Create new custom Styles in the new `UserInterface > Styles` category. As special type of Style, `ApplicationStyle` offers an advanced capability to define Themes for your Android project. Please refer to the documentation for more information. With Styles it is now also possible to define and reference custom Colors, Sizes and Font Sizes.
- EML (Entity Modeling Language) for defining custom data models and classes, does now support operations and opposite references. Use opposite references for cross references of 2 entities. Operations provide a way for adding dynamic properties to EML entities. This is useful if you need to determine the properties value at runtime.
- For `nUIObjects` the new property "tag" has been added. Tags simply contain some context information about the `nUIObject` instance to be used for example in callbacks and delegates. Of course users can access Tags in `nUIObject` API from the Outline Editor.
- A new way of accessing Mobile Designer sample apps was added. By using an Example Wizard, the new ARIS Picture 2 Model sample app can be added into the current workspace. To add the new sample app select the `File > New > Example` menu item from the Software AG Designer main menu. This opens a new dialog and wizard to select the sample app and to configure available settings. ARIS Picture 2 Model highlights ARIS API integration, data modeling using EML, camera integration and advanced native code injection for iOS, Android and Phoney.
- In the Outline Editor two new UI Templates were added for most frequent List View templates.
- The Outline Editor now supports new union type "DP" to represent density independent pixels for dimensional properties, like "x", "y", "innerX", "innerY". A DP represents a virtual pixel unit to express dimensions or position in a density-independent way. In addition to specify DP values in the Outline Editor, you can also use DP programmatically to set dimensions or position via new `com.softwareag.mobile.runtime.toolkit.util.AppUtility.convertDpToPixel(int)`.
- A new API was introduced for setting background on all `nUIDisplayObjects` via the new `IBackgroundDrawable` interface.

- To store sensitive data securely on the device, such as usernames, passwords, settings, etc. a new API was added in `com.softwareag.mobile.md.io`, along with a sample application to demonstrate its use. The new sample app `_NativeUICredentialStore_` can be found in the Mobile Designer Samples directory.
- A new permissions API was introduced. Use `com.softwareag.mobile.md.permissions.*` to check for permissions of the app at runtime, including access to camera, location, etc.
- On iOS, to close the keyboard in all releases prior to 9.12 a "Cancel" dismiss button was displayed in the top left corner instead of the back button to close the keyboard. This behavior of the native UI runtime now changed to close the keyboard automatically as common to iOS runtime. No dismiss button will be shown anymore.
- Deprecated MDM related features of Mobile Administrator have been removed.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Mobile Designer***

#### *Release 9.10*

- WWW\_9.10\_MobileDesigner\_Fix1

### ***Mobile Development***

#### *Release 9.10*

- WWG\_9.10\_MobileDevelopment\_Fix1

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Mobile Designer***

#### *Release 9.12*

- MOBILE-2507  
WebView requests were executed twice on iOS.  
When loading an URL in a WebView, the request was executed twice. The issue has now been

resolved.

## **Mobile Development**

### *Release 9.12*

All released with WWG\_9.10\_MobileDevelopment\_Fix1.

## **6.0 Documentation Changes**

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Mobile Designer**

#### *Release 9.12*

- The documentation has been updated.

### **Mobile Development**

#### *Release 9.12*

- The documentation has been updated.

## **7.0 Added, Removed, Deprecated, or Changed Parameters**

A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

#### *Mobile Designer*

Deprecated Parameter	Replacement, if any
mobiledesigner.runtime.core.class.sound	

## 8.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

### Release 9.12

#### Mobile Designer

Added API	Description
<b>com.softwareag.mobile.runtime.nui.nUITabView</b>	New nUITabView API to create and manage tab views and its tabs.
<b>com.softwareag.mobile.runtime.nui.nUITabElement</b>	
<i>com.softwareag.mobile.runtime.nui.ITabViewListener</i>	
<i>com.softwareag.mobile.runtime.nui.ITabViewProvider</i>	
<b>com.softwareag.mobile.md.imagetools.ImageScaler</b>	New API for much improved image scaling.
<b>com.softwareag.mobile.md.io.Credentials</b>	New security API to securely store credentials and make use of isolated storage
<i>com.softwareag.mobile.md.io.ICredentialStorage</i>	
<b>com.softwareag.mobile.md.io.CredentialStore</b>	
<i>com.softwareag.mobile.md.io.IsolatedKeyValueStore</i>	
<i>com.softwareag.mobile.runtime.nui.background.IBackgroundDrawable</i>	New API to customize backgrounds for nUIDisplayObjects
<b>com.softwareag.mobile.runtime.nui.background.PatternImage</b>	
<b>com.softwareag.mobile.runtime.nui.background.ColorBackground</b>	
<b>com.softwareag.mobile.runtime.nui.background.PatternImage</b>	
<i>com.softwareag.mobile.md.permissions.IPermissionsCallback</i>	New API to check for runtime permissions of the app
<b>com.softwareag.mobile.md.permissions.PermissionsManager</b>	
<b>com.softwareag.mobile.runtime.nui.nUIConstants</b>	Added new events used by nUIDatePicker.
nUIConstants.EVT_PICKER_OK	
nUIConstants.EVT_PICKER_CANCEL	
<b>com.softwareag.mobile.runtime.nui.nUIDisplayObject</b>	Added new method to nUIDisplayObject to notify the object when being removed from super view
public void onRemoved()	
<b>com.softwareag.mobile.runtime.comms.HttpConnectionHandler</b>	Added url decoding to HttpConnectionHandler
public String urlDecode(final String url)	

Added API	Description
<b>com.softwareag.mobile.runtime.nui.nUIViewDisplay</b> public void syncUI()	Added method to nUIViewDisplay to trigger view synchronization and updating.
<b>com.softwareag.mobile.runtime.nui.nUIObject</b> public void setTag(final Object tag) public Object getTag()	Added tags to nUIObjects to store context information about the control
<b>com.softwareag.mobile.runtime.nui.nUIObject</b> boolean checkFlags(final int flags) boolean checkAndClearFlags(final int flags) int getFlags() void setFlags(final int flags) void clearFlags(final int flags) void orFlags(final int flags)	
Deprecated API	Replacement, if any
<b>com.softwareag.mobile.runtime.nui.nUIObject.update_flags</b>	Will be private. Use new nUIObject API.
Nokia UI (com.nokia.*) API compatibility.	Migrate to MIDP 2.0 API.
VSCL (com.vodafone.v10.*) API compatibility.	Migrate to MIDP 2.0 API.
Samsung APIs (com.samsung.util.*)	Migrate to MIDP 2.0 API.
Sprint APIs (com.sprintpcs.media.* and com.sprintpcs.util.*)	Migrate to MIDP 2.0 API.
OpenGL/ES APIs in javax.microedition.khronos.* and runtime branches	
JSR 75 File Connection classes - javax.microedition.io.file.*	New API will be available in 10.x
Mobile3D and Micro3D - javax.microedition.m3g.* and com.mascotcapsule.micro3d.v3.* resp.	
Support for original WMA 1.0 runtime and APIs.	Use WMA 2.0.5 runtime and APIs instead.
Support for LCDUI Forms - specifically javax.microedition.lcdui.Alert, AlertType, Choice, ChoiceElement, ChoiceGroup, CustomItem, DateField, Form, Gauge, ImageItem, Item, ItemCommandListener, ItemStateListener, List, Screen, Spacer, StringItem, TextBox, TextField, TextInterface, Ticker	Use NativeUI API instead

Added API	Description
Support for CLDC 1.0 only APIs and runtime branches	Migrate to CLDC 1.1 API
Support for MIDP 1.0 only APIs and runtime branches	Migrate to MIDP 2.0 API
BlackBerry APIs in net.rim.blackberry.*, net.rim.device.*, net.rim.tid.*, net.rim.vm.* and runtime branches	Migrate to MIDP2.0 / CLDC 1.1 and JSR 135

### *Mobile Development*

Added API	Description
<b>com.softwareag.mobile.runtime.toolkit.ui.styles.Style</b>	New API to create new Styles and apply to nUIDisplayObjects
<b>com.softwareag.mobile.runtime.toolkit.util.AppUtility</b> int convertDpToPixel(final int dp)	Added helper method for dp conversion to AppUtility class

Deprecated API	Replacement, if any
<b>com.softwareag.mobile.runtime.toolkit.ui.controller.AbstractViewController</b> boolean setVisible(final nUIObject object, final boolean isVisible) boolean void forceHide(final nUIObject object)	

## 9.0 Copyright Information

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MOB-RM-912-20161018



# webMethods Monitor 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods Monitor 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

- webMethods Monitor 9.12 requires that the program files and user interface are the same version. When installing webMethods Monitor 9.12, you must install webMethods Monitor 9.12 Program

Files along with the 9.12 version of the Monitor User Interface located under My webMethods Server User Interfaces on the install tree.

- webMethods Monitor 9.12 requires My webMethods Server 9.12.  
Before you can use webMethods Monitor, you must configure My webMethods connection parameters from the WmMonitor Home page. To access the configuration page, on the Package Management page in Integration Server Administrator, click the Home icon for the WmMonitor package. For complete information about configuring My webMethods connection parameters, see webMethods Monitor User's Guide.
- webMethods Monitor 9.12 is compatible only with the 9.12 version of Optimize for Process and Optimize for Infrastructure. However, Monitor 9.12 is compatible with the latest version of these products in the 8.x versions of all other webMethods products.
- webMethods Monitor 9.12 lists process instances from the current day's activity by default. When you use Monitor to view process instances, Monitor lists only process instances from the current day's activity. To retrieve other process instances, you can specify an alternate date range in the Advanced tab on the Process Instances page.
- When you use Microsoft SQL Server and you create Process Audit Log database objects, a warning message is displayed stating that the index is too large. You can ignore this message.
- To use the archive feature, if the schema for the archive tables does not exist on the same database instance as the schemas for Process Audit Log and IS Core Audit Log, you must configure additional database properties:
  - *For Oracle:* Set up a DBLINK for the Process Audit Log and IS Core Audit Log databases. The DBLINK must contain the username and password for those databases. The parameters in the OPERATION\_PARAMETER table on the archive database must match those in the DBLINKs created for the Process Audit Log and IS Core Audit Log databases.
  - *For SQL Server:* Add a linked server from the archive database to the Process Audit Log and IS Core Audit Log databases. The username and password must be identical on both database servers when using two different servers. In other words, the username and password that you use to log on to the archive database must be the same as the username and password on the target database to be archived. If you are using two different SQL Server databases, the Microsoft Distributed Transaction Coordinator (MSDTC) must be running on both servers. For more information, see the [Knowledge Base article](#) on the Microsoft Help and Support website and this [linked servers article](#) on the Experts Exchange website.
  - *For IBM DB2:* Archiving across database instances is not supported.

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- WMN-3970  
With Internet Explorer 11, process model images may not render in Google Widget Toolkit.  
When viewing process diagrams with Internet Explorer 11, process model images may not render.  
Workaround: Clear the browser history and browser cache.
- WMN-3976  
Process model images may not be rendered completely after upgrading the model to version 9.x.  
After upgrading a process model, steps or transitions that are in negative canvas space will be cut off in the Google Widget Toolkit process diagram.  
There is currently no workaround for this issue.
- WMN-4092  
Process diagram step labels and transitions may not render in Google Widget Toolkit.  
Step labels and transitions extending into negative coordinates will not be rendered.  
There is currently no workaround for this issue.
- WMN-4119  
Under Internet Explorer 11, external pools are rendered with solid lines in Google Widget Toolkit.  
When viewing process diagrams with Internet Explorer 11, process models containing external pools are rendered with solid lines rather than dashed lines.  
There is currently no workaround for this issue.
- WMN-4124  
Swimlanes may contain horizontal lines in Google Widget Toolkit rendering.  
Pools that overlap in Designer may paint in a different order in a Monitor process diagram rendered with Google Widget Toolkit.  
Workaround: Ensure that pools do not overlap when drawing pools in Designer.
- WMN-4457  
Processes defined with a custom ID cannot be triggered with logging levels 1 or 2.  
If a process model uses the service `pub.prt.log:logCustomId` to define a custom ID, the process cannot be triggered if logging levels are set to 1 or 2.  
There is currently no workaround for this issue.
- WMN-5003  
Business Process page displays exception “No result set was produced.” when using SQL Server.  
Under certain configurations, the Business Process page may display the exception “No result set was produced” when a list of process models is displayed under a SQL Server configuration.  
There is currently no workaround for this issue.

- WMN-5241  
Creating and saving a stage definition in the Edit Process page will cause the Business Processes page to be displayed rather than the Edit Process page.  
There is currently no workaround for this issue.
- WMN-5246  
Searching process instances using a custom date range may display incorrect results.  
When searching for process instances using a custom date range, the resulting list of process instances do not take into account the local time of the browser and may include processes outside of the date range.  
There is currently no workaround for this issue.
- WMN-5821  
Execution status of a DBO process in “BAM and BPM” view may show incorrect status.  
In the Business Processes “BAM and BPM” page, if a DBO process is enabled or disabled for execution, the execution status may remain unchanged. The correct execution status will be displayed and can be modified in the “Edit Process” page if the process is subsequently edited or in the “BPM only” view.  
The workaround is to use “BPM only” view or “Edit process” view to view and modify the execution enablement for the DBO models.
- WMN-5831  
Processes with a status of Revised cannot be stopped or suspended in the Process Instance Detail page.  
For processes with a status of Revised, the Stop or Suspend buttons are not displayed in the Process Instance Detail page.  
Workaround: To stop or suspend a process in Revised status, use the `pub.prt.admin:changeProcessStatus` service.

### **3.0 Usage Notes**

This section provides any additional information you need to work with the current release of this product.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.12***

- MON\_8.2\_SP1\_Fix22
- MON\_9.5\_SP1\_MWS\_Fix8
- MON\_9.6\_Fix8
- MON\_9.7\_MWS\_Fix6
- MON\_9.7\_Fix9
- MON\_9.8\_Fix7
- MON\_9.10\_Fix1

### ***Release 9.10***

- MON\_9.5\_SP1\_MWS\_Fix7
- MON\_9.6\_MWS\_Fix10
- MON\_9.7\_MWS\_Fix7
- MON\_9.8\_MWS\_Fix2

### ***Release 9.9***

- MON\_9.0\_SP1\_Fix6
- MON\_9.0\_SP1\_MWS\_Fix5
- MON\_9.6\_Fix7
- MON\_9.7\_MWS\_Fix4
- MON\_9.7\_Fix5

- MON\_9.8\_Fix1
- MON\_9.8\_MWS\_Fix2

### ***Release 9.8***

- MON\_8.2\_SP1\_MWS\_Fix7
- MON\_9.5\_SP1\_MWS\_Fix2
- MON\_9.5\_SP1\_Fix3
- MON\_9.6\_Fix5
- MON\_9.6\_MWS\_Fix7
- MON\_9.7\_Fix1
- MON\_9.7\_MWS\_Fix1

### ***Release 9.7***

- MON\_9.6\_MWS\_Fix3

### ***Release 9.6***

- MON\_8.2\_SP1\_Fix16
- MON\_9.5\_SP1\_Fix1

### ***Release 9.5***

- MON\_7.1.2\_Fix17
- MON\_8.0\_SP3\_Fix13
- MON\_8.2\_SP1\_Fix14
- MON\_8.2\_SP1\_MWS\_Fix14
- MON\_9.0\_SP1\_Fix1

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### **Release 9.10**

- WMN-5242  
Defining a stage where the End Milestone is defined as a Start operation will cause the milestone to be displayed with a Completed operation.  
The issue is resolved.

### **Release 9.8**

- WMN-4529  
Process models are not displayed in the Process Instance page and Business Process Edit Process page when those pages are opened with Internet Explorer 9 (IE9).  
Newly developed process models do not display when Monitor is run under Internet Explorer 9.  
This issue is now resolved.
- WMN-4525  
The Date and Time fields in the Process Stage Timeline window always appear in English.  
This issue is now resolved.
- WMN-4672  
Enable/ disable process works only with "Modify and Resubmit" privilege.  
This issue is now resolved. A new functional privilege is added to the Business Process.  
It is "Configure and Enable" - This is used to configure/edit business processes models in the Administration page.  
By default, the page/user has the grant permission.  
"Resubmit and Modify" Functional privilege will no longer affect the administration page.  
This requires that both MON\_9.6\_Fix5 & MON\_9.6\_MWS\_Fix7 be installed, and IS must be restarted after any permission changes.
- WMN-4661  
When "pub.monitor.process.instanceControl:resubmitAllFailed" is run, it may result in  
MonitorException: Failed in trying to resubmit all: java.lang.NumberFormatException  
This issue is now resolved.
- WMN-4524  
BAM only process may always show as Used=No in the MWS/Monitor UI.  
This issue is now resolved.
- WMN-4182  
Process Archiving for DB2 may produce errors if invoked from IS/MWS.

This could be caused due to compatibility with DataDirect driver update.  
This issue is now resolved.

- WMN-2932

In the process instance detail page, download buttons are disabled after saving a pipeline to a file.  
This issue is now resolved.

- WMN-4442

Process image may not display consistently in IE9 despite setting the response header to IE=9 as mentioned in the Monitor 9.6 User's Guide.

This could be caused due to a developer option which forced the use of F12 Developer Tools mode in IE9 to enable the process diagram.

This issue is now resolved. After installing the fix, the browser cache may need to be cleared on IE9 in order for the fix to be effective.

Other notes: For IE9 and IE10 the MWS host needs to be added as a Trusted site in Internet Explorer > Internet Options > Security tab

For the ability to run mixed versions of IE, a Response Header such as "IE=9, IE=10" or "IE=Edge" can be used.

- WMN-4546

Business Process page may display "Unknown Exception" after migration from previous release.  
This issue is now resolved.

- WMN-3956

A NullPointerException is raised when doing any archiving from MWS UI (Data Management > Archive Audit Data page) if there were no process models present.  
This issue is now resolved.

- WMN-4567

Process instance detail page results in NPE when process minimum log level is lower than 4.  
This issue is now resolved.

- WMN-4551

Transition lines within a subprocess are not rendered properly.

When a subprocess inside a swimlane is expanded in the process diagram in Monitor, the transition lines are not rendered properly.

This issue is now resolved.

- WMN-4510

Viewing a process diagram on the Business Process Administration page causes an error.

Clicking on the process in Monitor Business Process Administration page causes the following error: [MON.0119.0016E] Could not create process image: java.lang.NullPointerException.

This issue is now resolved.



## **Release 9.7**

- WMN-4368 (MON\_9.6\_MWS\_Fix3)  
Transition lines may be misplaced when upgrading process model database from 8.2. This issue can be caused due to the new GWT rendering applied to 8.2 process models. This issue is now resolved. 8.2 process models would continue to use Flash rendering.

## **Release 9.5**

- RGHWPE-2327  
Process instances cannot be archived by model ID. A user might want to archive process instances by process model ID, which is not possible in version 9.0 SP1 and earlier. This issue is now resolved. The user can now archive process instances by process model ID by specifying one or more model IDs when using the Monitor archiving interface in My webMethods, or with the PROCESS\_ARCHIVE\_START\_PROCESSARCHIVE stored procedure. If no model ID is specified, all process model instances are archived. For more information, see the webMethods Monitor User's Guide.
- RGHWPE-2319  
Process instance archiving can take a long time. The process instance archiving process can be monolithic and take a long time to execute. This issue is now resolved. Process instance archiving can now be executed on Oracle databases using a database partitioning method, which can significantly enhance performance. Archiving by partitioning cannot be used with stored procedure archiving. For more information, see the webMethods Monitor User's Guide.

## **6.0 Documentation Changes**

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

## **7.0 Terminology Changes**

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### Release 9.7

Changed Item	Description
The “Enable JDBC Archive” check box in the WmMonitor Home Page is re-enabled, and the label is changed to “Enable JDBC Archive for Server, Service, Activation, Document”.	It is now possible to enable JDBC archiving for servers, services, activation, and documents. For process archiving, JDBC archiving is not supported, only stored procedure or database partitioning archiving is supported. See the <i>Monitor User’s Guide</i> for more information about archiving process data.

### Release 9.6

Changed Item	Description
The “Enable JDBC Archive” check box in the Monitor Home Page is permanently disabled.	It is not possible to enable JDBC archiving.

### Release 9.5

Deprecated Item	Replacement, if any
webMethods Reporting functionality.	All webMethods Reporting features and functionality have been deprecated and are no longer supported.

Changed Item	Description
Restriction on the maximum number of rows returned when “No Maximum” option is selected in the Monitor Process Instance page.	In the earlier versions, the "No Maximum" option returned all the rows of the database. This was causing performance issues. In 9.5 SP1, if you select the “No Maximum” option in the Option tab of the process instances, Monitor returns a maximum of 10000 rows.

## 9.0 Added, Removed, Deprecated, or Changed Built-In Services

A release is listed in this section only if changes occurred in that release.

### **Release 9.7**

<b>Deprecated Service</b>	<b>Replacement, if any</b>
---------------------------	----------------------------

pub.monitor.process:getInstanceServices	
---	--

<b>Removed Service</b>	<b>Replacement, if any</b>
------------------------	----------------------------

pub.monitor.activation:exists	
-------------------------------	--

pub.monitor.activation:getActivityLogs	
--	--

pub.monitor.activation:getCustomData	
--------------------------------------	--

pub.monitor.activation:getDetails	
-----------------------------------	--

pub.monitor.activation:getErrors	
----------------------------------	--

pub.monitor.activation:getHistory	
-----------------------------------	--

pub.monitor.activation:getList	
--------------------------------	--

pub.monitor.activation:getListByQueryName	
---	--

pub.monitor.activation:getQueryList	
-------------------------------------	--

pub.monitor.activationControl:resubmit	
--	--

pub.monitor.archive:activationArchive	
---------------------------------------	--

pub.monitor.document:getListByQueryName	
---	--

pub.monitor.document:getQueryList	
-----------------------------------	--

pub.monitor.process.instance:getInstanceListByQueryName	
---	--

pub.monitor.process.instance:getInstanceQueryList	
---	--

pub.monitor.reporting.processDataMart:aggregateDay	
--	--

pub.monitor.reporting.processDataMart:extract	
---	--

pub.monitor.reporting.processDataMart:populateProcessDataMart	
---	--

pub.monitor.reporting.processDataMart:transform AndLoad	
---	--

pub.monitor.service:getListByQueryName	
--	--

pub.monitor.service:getQueryList	
----------------------------------	--

## 10.0 Copyright Information

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## 11.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

MON-RM-912-20161018

# My webMethods Server 9.12 Readme

October 2016

This file contains important information you must read before using My webMethods Server 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- **MWS-19314**  
Upgrading My webMethods Server with a cloned database fails when using silent upgrade.  
When upgrading My webMethods Server in silent mode, the My webMethods Server migration utility ignores the user input for database parameters, and the upgrade fails with the following error message: "The database of the destination server "default" has not been updated. Expected version 55 but found version 45. Please run the DB Configurator to update the destination database." The issue occurs when using a cloned database.  
There is currently no workaround for this issue.
- **MWS-18848**  
In My webMethods, disabling the directory service cache causes search results to list a single item per page for some LDAPs.  
When you disable the cache for certain LDAP directory services and then navigate to User Management in My webMethods, a search using such a directory service returns only one item per page. Clicking each page number or "Next" in the search results increases the results count by 20 each time.  
There is currently no workaround for this issue.
- **MWS-17035**  
After migration to version 9.10, when you initialize My webMethods Server, the server throws the following error: "java.io.IOException: Exception in opening zip file".  
There is currently no workaround for this issue.
- **MWS-16536**  
When working with business rules in My webMethods, opening an event rule results in JavaScript errors and the rule is not rendered correctly.  
When you open an event rule after a decision table is already open, the browser throws JavaScript errors and the event rule is not rendered correctly.  
There is currently no workaround for this issue.
- **MWS-16408**  
After migration to My webMethods Server 9.10, when you add a custom parameter to the custom\_wrapper.conf file and then initialize the server, My webMethods Server throws the following error: "(Framework:FATAL) - failed to create object, class is null".  
There is currently no workaround for this issue.
- **MWSSOF-1395**  
When using My webMethods in Mozilla Firefox, the Auth URL field of the OAuth Configuration Properties panel is disabled for copying.  
Workaround: Use the Firefox Developer Tools to copy the Auth URL from the page source.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.12***

- MWS\_9.10\_Fix2
- MWS\_9.10\_SPM\_Fix1
- MWS\_9.10\_SPM\_IS\_Fix1
- MWS\_9.9\_Fix5
- MWS\_9.9\_GLUE\_Fix2
- MWS\_9.9\_SPM\_Fix1
- MWS\_9.8\_Fix12
- MWS\_9.8\_SPM\_Fix4
- MWS\_9.7\_Fix16
- MWS\_9.6\_Fix16
- MWS\_9.6\_SPM\_Fix3
- MWS\_9.5\_SP1\_Fix22
- MWS\_9.0\_SP1\_Fix13
- MWS\_8.2\_SP1\_Fix28
- TE\_9.8\_TC\_Fix1
- TE\_9.6\_Fix1
- TE\_9.5\_SP1\_TC\_Fix3

## ***Release 9.10***

- MWS\_9.9\_Fix2
- MWS\_9.9\_GLUE\_Fix1
- MWS\_9.8\_Fix8
- MWS\_9.8\_GLUE\_Fix1
- MWS\_9.7\_Fix12
- MWS\_9.6\_Fix10
- MWS\_9.6\_GLUE\_Fix1
- MWS\_9.5\_SP1\_Fix15
- MWS\_9.0\_SP1\_Fix9
- MWS\_8.2\_SP1\_Fix26
- TE\_9.7\_TC\_Fix1
- TE\_8.2\_SP1\_TC\_Fix7

## ***Release 9.9***

- MWS\_9.8\_Fix3
- MWS\_9.7\_Fix7
- MWS\_9.6\_Fix8
- MWS\_9.5\_SP1\_Fix11
- MWS\_9.0\_SP1\_Fix7
- MWS\_8.2\_SP1\_Fix24

## ***Release 9.8***

- MWS\_9.7\_Fix3
- MWS\_9.6\_Fix5
- MWS\_9.5\_SP1\_Fix6
- MWS\_9.0\_SP1\_Fix5



- MWS\_8.2\_SP1\_Fix19
- MWS\_8.0\_SP2\_Fix20

### **Release 9.7**

- MWS 9.6 Fix2
- MWS 9.5 SP1 Fix3
- MWS 9.0 SP1 Fix3
- MWS 8.2 SP1 Fix18
- TE\_9.5\_SP1\_Fix2

### **Release 9.6**

- MWS 8.2 SP1 Fix15
- MWS 9.0 SP1 Fix1

### **Release 9.5**

- MWS 8.2 SP1 Fix13

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

- MWS-17522  
Upgrading My webMethods Server to version 9.10 using a .zip file fails.  
When you attempt to upgrade a My webMethods Server installation to version 9.10 using a .zip file as a source, the upgrade fails with multiple "ERROR: Missing file in source installation." errors. The issue occurs because the files in the *Software AG\_directory/profiles/MWS\_instanceName/configuration* directory are not included in the .zip file.  
The issue is resolved.
- MWS-15586  
My webMethods Server returns an exception when connecting to webMethods Integration Server via a web application view.  
When a My webMethods Server web application attempts to connect to Integration Server using a

web service connector with a basic or hybrid connection, the system returns an “unable to create user context” exception.

The issue is resolved.

- WTN-3684

On the Business Data page in My webMethods, the Intrinsic Task Metrics event maps are improperly set as user-defined.

When you expand the Intrinsic Task Metrics node on the Administration > Analytics > KPIs >

Business Data page in My webMethods, the DEFINED BY column for the Intrinsic Task Metrics event maps displays the value of "User". However, intrinsic event map and KPI definitions should be system-defined to prevent users from deleting or modifying the definitions.

The issue is resolved. The DEFINED BY column for the Intrinsic Task Metrics event maps now has a value of "System".

## **Release 9.10**

- MWS-16198

After migration, the About page of My webMethods Server does not show the correct version.

On the About page in My webMethods, when you click the My webMethods Server tab under Licensed Product, the tab still shows the old version instead of the current one.

The issue is resolved.

- MWS-15647

Web Services Stack logs multiple error messages in the My webMethods Server `_server.log` during asset deployment.

When you deploy assets to My webMethods Server using webMethods Deployer, Web Services Stack logs multiple "No 'endpoint' property set and serverSide=true, cannot uniquely identify endpoint for service" error messages in the `_server.log`.

The issue is resolved.

- MWS-15122

The SOAP Monitor portlet fails to communicate with My webMethods Server.

When you attempt to use the SOAP Monitor portlet in My webMethods Server, the SOAP monitor applet starts but shows the following error: "The SOAP Monitor is unable to communicate with the server".

The issue is resolved.

## **Release 9.9**

- MWS-14666

After converting a Task List Management CAF portlet to OpenCAF, clicking the Return button on the Task List Management page in My webMethods results in a `javax.portlet.PortletException` with the following message: "Cannot remove the same component twice".

This issue is now resolved.

- MWS-13158

The Principal Picker in webMethods Business Console does not display a scroll bar in the dialog box to scroll down and select users in the list.

While using Business Console in My webMethods Server, if a user attempts to assign a task instance using Assign To or Accept For on the Task List Management page, the Principal Picker does not display a scroll bar in the dialog box to scroll down and select users in the list.

This issue is now resolved.

## **Release 9.8**

- MWS-13401  
Integration Server sometimes throws a “cannot start CDS library” error when My webMethods Server and Integration Server are migrated together but Integration Server is started first. When My webMethods Server and Integration Server are both migrated to the latest release, but Integration Server is started first after migration, the following error is displayed during Integration Server startup: “[POP.005.0040] Cannot start CDS library because MWS upgrade did not complete yet”.  
This issue is now resolved.
- MWS-13432  
Some nodes remain in temporary maintenance mode after being restarted together with the default My webMethods Server node.  
Some My webMethods Server cluster nodes still remain in temporary maintenance mode, even though they have been taken out of temporary maintenance and My webMethods Server has been restarted.  
This issue is now resolved.
- MWS-13448 / MWS-13447  
Maintenance mode is not in synch on all My webMethods Server nodes when the Universal Messaging Server is unavailable.  
When My webMethods Server is configured to use Universal Messaging Server as a JMS provider and the Universal Messaging Server is unavailable, not all My webMethods Server nodes go into maintenance mode, which is the expected behavior.  
This issue is now resolved.
- MWS-13453  
When a role is granted only custom task permissions such as View Task: Data, Info and Audit, View Comments, the Security Realm > View Item permission for a task is automatically set to Deny. As a result, a role member cannot access the task instance details on the Task List Management page.  
This issue is now resolved.
- MWS-13286  
My webMethods Server login page is not localized.  
When My webMethods Server is set to maintenance mode, the login page for the server administrator is not localized.  
This issue is now resolved.

- MWS-13316  
A NullPointerException occurs while editing the Administration portlet.  
When a system administrator logs into My webMethods Server and attempts to edit the Administration portlet under Folders > System > Portlets, a NullPointerException error is displayed in the My webMethods Server user interface or the server logs, or in both.  
This issue is now resolved.

## **Release 9.7**

- MWS-12120  
The My webMethods Server migration utility is not getting invoked in Solaris-10 (x86-64).  
When the My webMethods Server migration utility is invoked by using the `./migrate.sh` command in a Solaris-10 environment, the following error is encountered: "syntax error at line 11: `MWS\_DIR=\$' unexpected".  
The workaround is to edit the migrate.sh file in the MWS/bin/migrate directory and modify the path of MWS\_DIR variable by entering the full path to the My webMethods Server directory.  
This issue is now resolved.
- MWS-10361 / OBE-6315  
A user with all webMethods Application permissions cannot create a role.  
A "[POP.003.0153] <user\_name> cannot add a query object to My webMethods Security Data." error is displayed.  
This issue is now resolved.
- MWS-11450  
The My webMethods Server plug-in does not return KPIs.  
My webMethods Server plug-in for Command Central does not return KPIs for the MWS\_default component.  
This issue is now resolved.
- MWS-11874  
A remote shutdown request should be ignored if the My webMethods Server profile is not configured to handle it.  
A remote shutdown operation is always executing if a valid host/port is given, even though the profile itself might not be configured to handle any such command (because neither the "osgi.console" nor the "com.softwareag.platform.shutdown.port" properties are specified in the profile's config.ini file). Since the installation is not able to detect port conflicts across different profiles and suite installations, the result is that it is possible the remote shutdown operation accidentally shuts down another profile.  
This issue is now resolved.
- MWS-11796  
A uninstall of the source My webMethods Server after a Side-by-Side migration results in errors during startup for the target My webMethods Server.  
When a Side-by-Side migration to My webMethods Server 9.6 uses the same database as the source My webMethods Server, a uninstall of the source My webMethods Server disables the nodes in the

cluster.xml file, which causes errors during startup of the target My webMethods Server.  
The workaround is to edit the cluster.xml file in the target My webMethods Server and re-enable each of the server instance nodes listed in the cluster.xml file.  
This issue is now resolved.

- WS-20830  
JSF core components and renderers are being overridden by My webMethods Server custom implementations.  
My webMethods Server overrides basic JSF component classes and renderers. This results in the usage of certain base JSF tags to render and behave like My webMethods Server-specific components instead.  
This issue is now resolved.

## **Release 9.6**

- MWS-7768  
It is not possible to view more than 50 users in the Edit Role Membership principal picker.  
When attempting to add members to a Role, a maximum of 50 users display in the "Available" List box in the Principal Picker even though "No Maximum" is selected in the Principal Picker Options tab.  
This issue is now resolved.
- MWS-9186  
My webMethods Server roles are not retrieved while creating a Deployer build. While creating a Deployer build, when My webMethods Server Roles are selected as a dependency, the following error is returned: "Failed to retrieve object from source MWS: id=PortalRole, type=uid=roe, error=null". However, if "roles" are ignored during the build process, the build is created successfully.  
This issue is now resolved.
- MWS-11253  
Deployed My webMethods Server system groups cannot be added to Integration Server ACLs and cannot be deleted from the My webMethods Server System directory.  
A "com.webmethods.portal.PortalException: [POP.003.0119] Unable to locate mechanics" error message occurs when you attempt to delete a My webMethods Server system group that has been deployed from another My webMethods Server. In addition, the system group cannot be added to an Integration Server ACL.  
This issue is now resolved.
- MWS-11240  
Using My webMethods Server APIs to retrieve users from roles causes performance degradation. When attempting to retrieve users from roles using the Common Directory Service API, the response time is longer in some instances.  
This issue is now resolved.

- MWS-11234

My webMethods Server throws an error when refreshing a WS-Stack web service client. This problem can occur when My webMethods Server is installed on Unix/Linux, and a web service client, generated with the WS-Stack SOAP library, is uploaded on it. When trying to execute a refresh on the client, the operation fails with an exception. This issue is now resolved.
- MWS-11232

A "java.lang.ArrayIndexOutOfBoundsException" error occurs when users configured to use an LDAP Directory Service attempt to log in to My webMethods Server. When a user pointing to an LDAP Directory Service logs in to My webMethods Server, a blank page displays with the following error:  
[POP.001.0002] arose "java.lang.ArrayIndexOutOfBoundsException" with the message "<No Location Found>". This issue is now resolved.
- MWS-11160

An invalid session token is detected  
The following error message occurs when navigating to Territory Topology in My webMethods Server: "[POP.016.0056] Invalid session token detected. Please reload the page". This issue is now resolved.
- MWS-10944

My webMethods Server forces Internet Explorer 9 or later to display its web pages in compatibility mode for Internet Explorer 8. My webMethods Server has fixed the value of the web page parameter "X-UA-Compatible" to "IE=8". This causes Internet Explorer to display My webMethods Server pages in compatibility mode for Internet Explorer 8. If a web developer wants the My webMethods Server pages to be displayed in the standard Internet Explorer mode, it is necessary make some workarounds to My webMethods Server behavior. This issue is now resolved by allowing the parameter "X-UA-Compatible" to be configured on the Manage Response Header Rules page in the My webMethods Server administration interface.
- MWS-10897

My webMethods Server initialization takes a long time when all My webMethods products and language packs are installed. If you are going to install the My webMethods Server on a UNIX system, the workaround is to make sure you have set sufficient user limits for the shell you use to start the installation and the product daemons. For example, if you have multiple language packs installed for My webMethods Server, or if there are multiple webMethods products on the machine, the daemons for the My webMethods Server will run out of memory if they are started from the shell with a low user limit for data. If your system policy allows it, Software AG recommends setting the value for core dump, data, file, memory, and threads to at least 32768, and the value of nofiles to 8192. For more information about setting and displaying the ulimits, read the man page or ask your system

administrator.

This issue is now resolved.

- MWS-11263  
My webMethods Server migrator doesn't update the Process Audit data source.  
When migrating using a cloned database, the default data source is updated to use the new Database URL, however the Process Audit data source continues to point to the previous database URL.  
The My webMethods Server migration tool should update the Process Audit data source URL if it matches the default Database URL.  
The workaround is to edit the Process Audit data source URL to match the default data source.  
This issue is now resolved.
- MWS-11174  
Indexed Search does not work with the operators "is null" and "is not null".  
When using the "searchTaskIndexed" method in the Task API and if the operators "is null" or "is not null" are used, the operators are not added to the query.  
This issue is now resolved.
- MWS-11079  
An LDAP user encounters an error when trying to save "Private" searches in My webMethods Server.  
When an LDAP (Active Directory) user is trying to Save a Private Search in My webMethods Server, the following error is returned: "[POP.002.0108] User UID cannot be found in MWS directories" This error only occurs with "Private" Searches and does not occur while saving "Public" searches.  
This issue is now resolved.
- MWS-10908  
For page setup in the Power Drill Shell, flaws occur while editing pages in IE9 mode.  
When editing pages in My webMethods Server using Internet Explorer 9, rows are missing portlet headers, and Drag'n'Drop does not work.  
This issue is now resolved.

## **Release 9.5**

- MWS-10922  
Problems result when a full-page refresh is not performed.  
Page-loading performance issues and rendering problems can occur when a full-page refresh is not performed.  
This issue is now resolved.
- MWS-10642  
The Memory Monitor portlet does not support setting memory threshold values as a percentage.

The My webMethods Server Memory Monitor portlet (wm\_mws\_diagnostics) enables the user to specify values for the notification parameters ThresholdWarn, ThresholdError, and ThresholdFatal. These values are set as megabytes of memory, which means that the values must be reset each time the available memory is increased or decreased. To address this issue, it would be convenient to specify the threshold values as a percentage of the available Java Virtual Machine memory. This issue is now resolved. A new field is provided on the memory threshold configuration page, "thresholdPercent". Set this field to true to interpret the threshold setting values as percentages; set this field to false to interpret the threshold setting values as megabytes. When set to true, the thresholdWarn, thresholdError, and thresholdFatal values must be between 1 and 100. The default setting is false.

- MWS-10437  
"Search For" and "Directory" options are missing for the "Delegate To" option in the "Add Delegation" principal picker from the Task List Management Page.  
The "Search For" and "Directory" options are not available in the Add Delegation principal picker.  
This issue is now resolved.
  
- MWS-10402  
An mws update command fails to run when My webMethods Server is pointing to an Oracle database.  
A "FAILED to update default server instance." error message is displayed. This issue is usually due to a problem with the My webMethods Server profile:
  1. (Optional) Back up the old profile folder (usually c:\softwareag\profiles\MWS\_default).
  2. Open a command prompt and navigate to the c:\softwareag\MWS\bin folder.
  3. Remove the old profile folder by running this command: mws.bat delete-osgi-profile.
  4. Create the new profile folder by running this command: mws.bat create-osgi-profile.This issue is now resolved.
  
- MWS-10076  
An invalid session token error is displayed occasionally after forwarding to the Optimize Process Analytics page.  
A "[POP.016.0056] Invalid session token detected. Please reload the page." message is displayed.  
This issue is now resolved.
  
- MWS-9936  
It is not possible to retrieve Data Level Security settings for a user.  
The Data Level Security (DLS) web service that retrieves the DLS query for a given user is returning empty DLS settings.  
This issue is now resolved.
  
- MWS-7697  
Invalid or unavailable LDAP server connections cause performance problems in My webMethods Server.  
When My webMethods Server is configured with an unavailable LDAP server, or the LDAP server has invalid credentials, it severely impacts My webMethods Server performance.



This issue is now resolved.

- MWS-9995  
The My webMethods Server import utility does not execute if the path to the info.properties file for the import contains spaces.  
My webMethods Server import utility returns a "<path to info.properties file> was unexpected at this time" message if the path to the info.properties file contains a space.  
This issue is now resolved with a new My webMethods Server migration utility.
- MWS-9313  
There are significant delays during logins when users have a large number of roles (200+).  
During login, My webMethods Server performs rule processing that can cause unnecessary role calculation at login time.  
This issue is now resolved. The server delays unneeded rule processing and strategically caches more information needed to calculate roles. Also, there is now a group cache that can be leveraged during login.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

A new chapter, "Using Command Central to Manage My webMethods Server", has been added to the PDF guide *Administering My webMethods Server*. The chapter contains information about how you use the Software AG Command Central web user interface and command line interface to manage My webMethods Server.

### ***Release 9.10***

A new chapter, "Configuring the Time Zone in My webMethods", has been added to the PDF guide *Working with My webMethods*.

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### Release 9.12

Added Item	Description
Option to configure universally unique identifier (UUID) for My webMethods Server users accessed through an external user directory service.	<p>A utility is required to update the universally unique identifier (UUID) for My webMethods Server users accessed through an external user directory service. Additionally, an option is required to remove invalid users from My webMethods Server.</p> <p>By default, the external directory service configured with My webMethods Server uses distinguished names (DNs) to identify users. In this case, if a user is transferred from one organization unit to another, My webMethods Server cannot recognize that user because of a change in the user's DN. Moreover, My webMethods Server cannot recognize users who are deleted from a directory service or moved in a directory service, and such users are regarded as invalid users.</p> <p>You can configure My webMethods Server to use UUID, so that users are identified when the DN changes. You can run the <code>UserDirectory_UpdateUUID</code> utility to update the UUID for My webMethods Server users accessed through an external user directory service. To remove invalid users, you can run the <code>Cleanup_InvalidUsers</code> utility.</p> <p>For more information about those utilities, see <i>Administering My webMethods Server</i> and <i>My webMethods Server Portlet Reference</i>.</p>
Expose the Jetty JMX MBeans in the embedded Jetty container.	Enable all of the <code>org.eclipse.jetty.*</code> MBeans in the JMX console for My webMethods Server.

Deprecated Item	Replacement, if any
Support for Axis 1.x, which is used for exposing web services from My webMethods Server, is deprecated.	
Support for webMethods Glue	
Using the database as a JMS provider for My webMethods Server clusters is deprecated.	webMethods Universal Messaging

Changed Item	Description
Improved My webMethods Server logging	The width of log messages is shortened by using an enhanced pattern layout from <code>org.apache.log4j.EnhancedPatternLayout</code> .
My webMethods Server uses Apache Jackrabbit 2.x.	My webMethods Server now uses Apache Jackrabbit 2.x. The previous Apache Jackrabbit version that the server was using is no longer supported and contains security vulnerabilities.

## **Release 9.10**

Added Item	Description
SAML 2.0 authentication	If you select the Hybrid authentication mode, SAML 2.0 is used by default. To use SAML Artifact Profile, set the <code>wsclient.hybrid.use.samlartifact</code> property to true in the <code>custom_wrapper.conf</code> file in the following My webMethods Server directory: <i>Software AG_directory/profiles/MWS_instanceName/</i> configuration.

Removed Item	Replacement, if any
SOAP Monitor portlet communication port	The SOAP Monitor portlet no longer uses the SOAP Monitor applet that communicated with My webMethods Server over a custom socket. For this reason, the SOAP Monitor portlet communication port (5001 by default) is no longer required or opened. If a My webMethods Administrator has the port open in their firewall, they can remove this configuration.

Changed Item	Description
The SOAP Monitor, Color Picker, and File Attachment applets have been converted to CAF components.	In more recent versions of Chrome and Firefox applets are disabled by default and must be manually enabled. They represent security risks.
Redirecting of URLs	A redirect to a URL starting with // should not be used for a relative redirect URL.

## Release 9.9

Added Item	Description
The following CSS properties of the Noodle skin for customizing the default login page of My webMethods Server, using the skin editor.	
align/login-remember-me	Defaults the "Remember me" text of the check box for remembering the login credentials to the left.
fonts/login-defaults	Allows editing the font style for labels, error messages, remember-me and placeholder text.
colors/login-input-border	Defines the color of the login page border.
colors/login-text-button	Defines the text color of the login button.
colors/login-button-top	Defines complex gradient colors for the login button.
colors/login-button-top-hover	Defines complex gradient colors for the login button.
colors/login-button-bottom	Defines complex gradient colors for the login button.
colors/login-button-bottom-hover	Defines complex gradient colors for the login button.
fonts/login-errors	Specifies changes to error message text.
fonts/login-button	Allows editing the font style of the login button text.

Removed Item	Replacement, if any
The following CSS properties of the Noodle skin for customizing the default login page of My webMethods Server:	

Removed Item	Replacement, if any
colors/login-title	
colors/login-title-bg	
fonts/login-title	
colors/login-description-bg	

Deprecated Item	Replacement, if any
The legacy approach for customizing the My webMethods Server Login page that entails using the skin editor to edit the CSS properties of the <code>wm_login</code> portlet.	In addition to the legacy customization approach, you can use the OpenCAF Shell Login template in Software AG Designer to customize the Login page of My webMethods Server. For more information about using OpenCAF, see <i>webMethods CAF Development Help</i> .

Changed Item	Description
The following CSS properties of the Noodle skin for customizing the default login page of My webMethods Server, using the skin editor:	
colors/login	The new default value is '#A9A9BB'. The old value was '#747d86'.
colors/login-bg	The new default value is '#f0f0f0'. The old value was '#E2E4D7'.
colors/login-border	The new default value is '#d9d9d9'. The old value was '#c3c8cc'.
fonts/login	The new default value is 'font-size: 18px'. The old value was 'line-height: 1; font-weight: normal;'.
fonts/login-link	Fonts/login-link is now fonts/login-remember-me. It defaults to empty.

Changed Item	Description
The internal structure of the Import Template View CAF control	Instead of being direct children of the Import Template View control, the controls loaded from the imported view are now held in a new "__viewLoaded" facet. However, because a facet can contain only one component, the imported controls are wrapped in a UIPanel control. As a result, the direct parent of the imported controls is the UIPanel wrapper, and the Import Template View control, in turn, is the parent of the UIPanel wrapper.

## **Release 9.8**

Added Item	Description
Jetty 9	My webMethods Server has upgraded to using Jetty 9.

Removed Item	Replacement, if any
File Content Migration Portlet (Wm_content_migration.war) and related Deployer component. The My webMethods Server File Content Migration portlet was deprecated in a previous release and is removed in this release.	
MWS start "-m" option. The "-m" command line option is now obsolete in all My webMethods Server 9.x versions.	

## **Release 9.7**

Added Item	Description
Set Publish Constraints	Add configuration to the Content Service portlet to supply the allowed file extensions that may be published to folders.

Deprecated Item	Replacement, if any
wm_infrastructure.cdp. The build information provided by shared components overlaps information displayed by My webMethods Server and Task Engine.	

Changed Item	Description
Jetty version 8.1.11.v20130520 to Jetty version 8.1.15.v20140411	My webMethods Server now embeds Jetty version 8.1.15.v20140411

## Release 9.6

Deprecated Item	Replacement, if any
The AJP13 protocol to link Apache to My webMethods Server instances is now deprecated.	
Wm_content_migration.war. My webMethods Server File Content Migration portlet is now deprecated.	
Wm_jazzy.pdp. The Java Spell Checker, Jazzy, included with the HTML Text Portlet in My webMethods Server is now deprecated.	The HTML Text Portlet now uses the browser default Spell Checker.

## Release 9.5

My webMethods Server Diagnostic Tools were deprecated in release 9.0.

## 9.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

### Release 9.12

Added API	Description
com.webmethods.caf.common.thread.NamedThreadFactory	Method 'public NamedThreadFactory(java.lang.String, boolean)' has been added
com.webmethods.caf.faces.bean.mws_ui.HtmlHead	Method 'public java.lang.String getEffectsJS()' has been added
com.webmethods.caf.faces.convert.FormattedDateTimeConverter	Added protected field dateFormatDefault
com.webmethods.caf.faces.data.object.DateRange	Added protected field controlCalendar
com.webmethods.caf.faces.data.object.DateRange	Method 'protected java.util.Calendar getControlCalendar(javax.faces.context.FacesContext)' has been added
com.webmethods.caf.faces.data.object.DateRange	Method 'public void setControlCalendar(java.util.Calendar)' has been added

Added API	Description
com.webmethods.caf.mobile.notify.IMobileNotificationConstants: Class com.webmethods.caf.mobile.notify.IMobileNotificationConstants added	
com.webmethods.caf.mobile.notify.IMobileNotificationProvider: Class com.webmethods.caf.mobile.notify.IMobileNotificationProvider added	
com.webmethods.caf.mobile.notify.IMobileNotifierComponent: Class com.webmethods.caf.mobile.notify.IMobileNotifierComponent added	
com.webmethods.caf.mobile.notify.activator.MobileNotificationActivator: Class com.webmethods.caf.mobile.notify.activator.MobileNotificationActivator added	
com.webmethods.caf.mobile.notify.impl.MobileNotificationProvider: Class com.webmethods.caf.mobile.notify.impl.MobileNotificationProvider added	
com.webmethods.caf.mobile.notify.impl.MobileNotifierComponent: Class com.webmethods.caf.mobile.notify.impl.MobileNotifierComponent added	
com.webmethods.caf.mobile.notify.impl.TaskEventsHandler: Class com.webmethods.caf.mobile.notify.impl.TaskEventsHandler added	
com.webmethods.caf.mobile.notify.task.Message: Class com.webmethods.caf.mobile.notify.task.Message added	
com.webmethods.caf.mobile.notify.task.MonitorPendingNotificationMessages: Class com.webmethods.caf.mobile.notify.task.MonitorPendingNotificationMessages added	
com.webmethods.caf.mobile.notify.task.NotificationSender: Class com.webmethods.caf.mobile.notify.task.NotificationSender added	
com.webmethods.caf.mobile.notify.util.MobileNotifierUtil: Class com.webmethods.caf.mobile.notify.util.MobileNotifierUtil added	
com.webmethods.caf.wsserver.auth.saml.SamlUtils: Method 'public org.w3c.dom.Element marshallSamlObject(org.opensaml.xml.XMLObject)' has been added	
com.webmethods.caf.wsserver.auth.saml.SamlUtils: Method 'public org.opensaml.xml.XMLObject unmarshallElement(org.w3c.dom.Element)' has been added	
com.webmethods.portal.bizPolicy.biz.dir.IGroupBizPolicy: Added com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy to the set of implemented interfaces	
com.webmethods.portal.bizPolicy.biz.dir.IPrincipalBizPolicy: Added com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy to the set of implemented interfaces	
com.webmethods.portal.bizPolicy.biz.dir.IUserBizPolicy: Added com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy to the set of implemented interfaces	



**Added API****Description**

com.webmethods.portal.bizPolicy.biz.dir.impl.GroupBizPolicy: Added  
com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy to the set of implemented interfaces

com.webmethods.portal.bizPolicy.biz.dir.impl.GroupBizPolicy: Added  
com.webmethods.portal.bizPolicy.biz.view.impl.ViewableContainerPolicy to the list of superclasses

com.webmethods.portal.bizPolicy.biz.dir.impl.PrincipalBizPolicy: Added  
com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy to the set of implemented interfaces

com.webmethods.portal.bizPolicy.biz.dir.impl.PrincipalBizPolicy: Added  
com.webmethods.portal.bizPolicy.biz.view.impl.ViewableContainerPolicy to the list of superclasses

com.webmethods.portal.bizPolicy.biz.dir.impl.UserBizPolicy: Added  
com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy to the set of implemented interfaces

com.webmethods.portal.bizPolicy.biz.dir.impl.UserBizPolicy: Added  
com.webmethods.portal.bizPolicy.biz.view.impl.ViewableContainerPolicy to the list of superclasses

com.webmethods.portal.bizPolicy.biz.task.impl.TaskInfo: Added java.io.Serializable to the set of implemented interfaces

com.webmethods.portal.bizPolicy.biz.task.impl.TaskInfoExtended: Added java.io.Serializable to the set of implemented interfaces

com.webmethods.portal.bizPolicy.command.ICommandManager: Method 'public  
com.webmethods.portal.bizPolicy.command.IRemoteCommandTransport  
getRemoteCommandTransport(java.lang.String)' has been added to an interface

com.webmethods.portal.bizPolicy.command.ICommandManager: Method 'public java.util.List  
invokeClusterCommand(com.webmethods.portal.bizPolicy.IContext,  
com.webmethods.portal.bizPolicy.command.ICommand,  
com.webmethods.portal.bizPolicy.command.ICommandBean)' has been added to an interface

com.webmethods.portal.bizPolicy.command.ICommandResponseEntry: Class  
com.webmethods.portal.bizPolicy.command.ICommandResponseEntry added

com.webmethods.portal.bizPolicy.command.dir.GetPortalStyle: Method 'protected void  
checkAccess(com.webmethods.portal.bizPolicy.IContext,  
com.webmethods.portal.mech.dir.IPrincipalMechanics, com.webmethods.portal.system.IURI)' has  
been added

com.webmethods.portal.bizPolicy.command.dir.SearchDirectory: Method 'protected void  
checkAccess(com.webmethods.portal.bizPolicy.IContext,  
com.webmethods.portal.mech.dir.IDirServiceMechanics,  
com.webmethods.portal.service.meta2.thing.IThingID)' has been added

Added API	Description
com.webmethods.portal.bizPolicy.command.dir.SearchDirectoryEx: Method 'protected void checkAccess(com.webmethods.portal.bizPolicy.IContext, com.webmethods.portal.mech.dir.IDirServiceMechanics, com.webmethods.portal.service.meta2.thing.IThingID)' has been added	
com.webmethods.portal.bizPolicy.command.dir.SearchDirectoryRefined: Method 'protected void checkAccess(com.webmethods.portal.bizPolicy.IContext, com.webmethods.portal.mech.dir.IDirServiceMechanics, com.webmethods.portal.service.meta2.thing.IThingID)' has been added	
com.webmethods.portal.bizPolicy.command.dir.SearchDirectoryRefinedPaged: Method 'protected void checkAccess(com.webmethods.portal.bizPolicy.IContext, com.webmethods.portal.mech.dir.IDirServiceMechanics, com.webmethods.portal.service.meta2.thing.IThingID)' has been added	
com.webmethods.portal.bizPolicy.command.impl.CommandManager: Method 'public com.webmethods.portal.bizPolicy.command.IRemoteCommandTransport getRemoteCommandTransport(java.lang.String)' has been added	
com.webmethods.portal.bizPolicy.command.impl.CommandManager: Method 'public java.util.List invokeClusterCommand(com.webmethods.portal.bizPolicy.IContext, com.webmethods.portal.bizPolicy.command.ICommand, com.webmethods.portal.bizPolicy.command.ICommandBean)' has been added	
com.webmethods.portal.bizPolicy.command.remote.RemoteCommand: Class com.webmethods.portal.bizPolicy.command.remote.RemoteCommand added	
com.webmethods.portal.bizPolicy.command.remote.RemoteCommandBean: Class com.webmethods.portal.bizPolicy.command.remote.RemoteCommandBean added	
com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteCommandTransport: Class com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteCommandTransport added	
com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteCommandTransport\$RemoteJmsException: Class	
com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteCommandTransport\$RemoteJmsException added	
com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteTransaction: Class com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteTransaction added	
com.webmethods.portal.bizPolicy.command.system.JndiRefreshCluster: Class com.webmethods.portal.bizPolicy.command.system.JndiRefreshCluster added	
com.webmethods.portal.bizPolicy.command.task.jms.AbstractTaskCommand: Class com.webmethods.portal.bizPolicy.command.task.jms.AbstractTaskCommand added	

**Added API****Description**

com.webmethods.portal.bizPolicy.command.task.jms.AbstractTaskCommandBean: Class  
com.webmethods.portal.bizPolicy.command.task.jms.AbstractTaskCommandBean added

com.webmethods.portal.bizPolicy.command.task.jms.AddTaskAttachmentJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.AddTaskAttachmentJMS added

com.webmethods.portal.bizPolicy.command.task.jms.AddTaskCommentJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.AddTaskCommentJMS added

com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskAttachmentJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskAttachmentJMS added

com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskCommentJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskCommentJMS added

com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskJMS added

com.webmethods.portal.bizPolicy.command.task.jms.GetTaskAttachmentsJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.GetTaskAttachmentsJMS added

com.webmethods.portal.bizPolicy.command.task.jms.GetTaskAuditJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.GetTaskAuditJMS added

com.webmethods.portal.bizPolicy.command.task.jms.GetTaskCommentsJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.GetTaskCommentsJMS added

com.webmethods.portal.bizPolicy.command.task.jms.GetTaskJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.GetTaskJMS added

com.webmethods.portal.bizPolicy.command.task.jms.QueueTaskJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.QueueTaskJMS added

com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksFieldsJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksFieldsJMS added

com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksJMS added

com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksPagedJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksPagedJMS added

com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksTotalCountJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksTotalCountJMS added

com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskAttachmentJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskAttachmentJMS added

com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskCommentJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskCommentJMS added

com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskJMS: Class

Added API	Description
com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskJMS	added
com.webmethods.portal.bizPolicy.command.task.jms.impl.TaskJMSUtils	Class
com.webmethods.portal.bizPolicy.command.task.jms.impl.TaskJMSUtils	added
com.webmethods.portal.bizPolicy.command.task.rs.MWSCustomDispatchProvider	Class
com.webmethods.portal.bizPolicy.command.task.rs.MWSCustomDispatchProvider	added
com.webmethods.portal.bizPolicy.command.task.rs.MWSRequestDispatcher	Class
com.webmethods.portal.bizPolicy.command.task.rs.MWSRequestDispatcher	added
com.webmethods.portal.bizPolicy.command.task.webservice.SearchTasksFieldsWS	Added
java.io.Serializable	to the set of implemented interfaces
com.webmethods.portal.bizPolicy.command.task.webservice.SearchTasksWS	Added
java.io.Serializable	to the set of implemented interfaces
com.webmethods.portal.bizPolicy.command.task.webservice.Task	Added
java.io.Serializable	to the set of implemented interfaces
com.webmethods.portal.bizPolicy.command.task.webservice.dotnet.SearchTasksDotNetWS	Added
java.io.Serializable	to the set of implemented interfaces
com.webmethods.portal.bizPolicy.command.task.webservice.dotnet.SearchTasksFieldsDotNetWS	Added
java.io.Serializable	to the set of implemented interfaces
com.webmethods.portal.bizPolicy.impl.upgrade.MoveVersionSystemComponentData	Class
com.webmethods.portal.bizPolicy.impl.upgrade.MoveVersionSystemComponentData	added
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent	Class
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent	added
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$IListener	Class
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$IListener	added
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$ISynchronousListener	Class
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$ISynchronousListener	added
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$Listeners	Class
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$Listeners	added
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$QueueListeners	Class
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$QueueListeners	added
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$SynchronousListeners	Class
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$SynchronousListeners	added
com.webmethods.portal.event.dir.impl.DirPrincipalDNUpdateEvent	Class
com.webmethods.portal.event.dir.impl.DirPrincipalDNUpdateEvent	added
com.webmethods.portal.event.sso.ISSODataChangeEvent	Class
com.webmethods.portal.event.sso.ISSODataChangeEvent	added

Added API	Description
com.webmethods.portal.event.sso.ISSODataChangeEvent\$IListener: Class	
com.webmethods.portal.event.sso.ISSODataChangeEvent\$IListener added	
com.webmethods.portal.event.sso.ISSODataChangeEvent\$ISynchronousListener: Class	
com.webmethods.portal.event.sso.ISSODataChangeEvent\$ISynchronousListener added	
com.webmethods.portal.event.sso.ISSODataChangeEvent\$Listeners: Class	
com.webmethods.portal.event.sso.ISSODataChangeEvent\$Listeners added	
com.webmethods.portal.event.sso.ISSODataChangeEvent\$QueueListeners: Class	
com.webmethods.portal.event.sso.ISSODataChangeEvent\$QueueListeners added	
com.webmethods.portal.event.sso.ISSODataChangeEvent\$SynchronousListeners: Class	
com.webmethods.portal.event.sso.ISSODataChangeEvent\$SynchronousListeners added	
com.webmethods.portal.event.sso.impl.SSODataChangeEvent: Class	
com.webmethods.portal.event.sso.impl.SSODataChangeEvent added	
com.webmethods.portal.framework.dispatch.handlers.system.SAMLSSOHandler: Class	
com.webmethods.portal.framework.dispatch.handlers.system.SAMLSSOHandler added	
com.webmethods.portal.framework.dispatch.preProcessors.OpenRedirectCheck: Class	
com.webmethods.portal.framework.dispatch.preProcessors.OpenRedirectCheck added	
com.webmethods.portal.framework.dispatch.resolvers.SAMLAuthReqResolver: Class	
com.webmethods.portal.framework.dispatch.resolvers.SAMLAuthReqResolver added	
com.webmethods.portal.framework.impl.PortalServlet: Added public field	
PORTAL_SERVLET_LOCK_OBJ	
com.webmethods.portal.framework.portletcontainer.servlet.JettyPortletRequestWrapper: Method	
'public org.eclipse.jetty.util.MultiMap getParameterMultiMap()' has been added	
com.webmethods.portal.framework.portletcontainer.servlet.JettyPortletRequestWrapper: Method	
'public java.util.Map getParameters()' has been added	
com.webmethods.portal.jms.JMSPhaseProvider: Added com.webmethods.portal.system.IComponent	
to the set of implemented interfaces	
com.webmethods.portal.jms.JMSPhaseProvider: Added com.webmethods.portal.system.IConstants to	
the set of implemented interfaces	
com.webmethods.portal.jms.JMSPhaseProvider: Added	
com.webmethods.portal.system.impl.BaseComponent to the list of superclasses	
com.webmethods.portal.jms.JMSPhaseProvider: Added public field COMPONENT_NAME	
com.webmethods.portal.jms.um.UmJMSClient: Added abstract modifier to class	
com.webmethods.portal.jms.um.UmJMSClient: Added	
com.webmethods.portal.system.init.IInitializable to the set of implemented interfaces	

Added API	Description
com.webmethods.portal.jms.um.UmJMSClient:	Added com.webmethods.rtl.msg.jms.IJMSPProvider to the set of implemented interfaces
com.webmethods.portal.jms.um.UmJMSClient:	Added com.webmethods.rtl.msg.jms.JMSPProvider to the list of superclasses
com.webmethods.portal.jms.um.UmJMSClient:	Added com.webmethods.rtl.msg.jms.JMSStdConnProvider to the list of superclasses
com.webmethods.portal.jms.um.UmJMSClient:	Method 'protected boolean createInitialContext()' has been added
com.webmethods.portal.jms.um.UmJMSClient:	Method 'protected void registerFactory(org.w3c.dom.Element)' has been added
com.webmethods.portal.jms.um.UmJMSClient:	Method 'protected void registerQueue(org.w3c.dom.Element)' has been added
com.webmethods.portal.jms.um.UmJMSClient:	Method 'protected void registerTopic(org.w3c.dom.Element)' has been added
com.webmethods.portal.jms.um.UmJMSClient:	Method 'protected void resetContext()' has been added
com.webmethods.portal.jms.um.UmJMSConnProvider:	Added
com.webmethods.portal.jms.um.UmJMSClient:	to the list of superclasses
com.webmethods.portal.jms.um.UmJMSConnProvider:	Method 'protected void onDisconnect(boolean)' has been added
com.webmethods.portal.jms.um.UmJMSConnProvider:	Method 'public void onShutdown()' has been added
com.webmethods.portal.mech.dir.IDirServiceMechanics:	Method 'public java.util.List updatePrincipalUUID(int)' has been added to an interface
com.webmethods.portal.mech.dir.IGroupMechanics:	Added
com.webmethods.portal.mech.view.IViewableContainerMechanics:	to the set of implemented interfaces
com.webmethods.portal.mech.dir.IPrincipalMechanics:	Added
com.webmethods.portal.mech.view.IViewableContainerMechanics:	to the set of implemented interfaces
com.webmethods.portal.mech.dir.IRoleMechanics:	Added
com.webmethods.portal.mech.view.IViewableContainerMechanics:	to the set of implemented interfaces
com.webmethods.portal.mech.dir.IUserMechanics:	Added
com.webmethods.portal.mech.view.IViewableContainerMechanics:	to the set of implemented interfaces
com.webmethods.portal.mech.dir.impl.DirMechanicsUtils:	Method 'public java.lang.String generateUUIDQuery(com.webmethods.portal.service.dir.IDirService, java.lang.String, int)' has been added
com.webmethods.portal.mech.dir.impl.DirServiceMechanics:	Method 'public java.util.List

**Added API****Description**

updatePrincipalUUID(int)' has been added

com.webmethods.portal.mech.dir.impl.GroupMechanics: Added  
com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces

com.webmethods.portal.mech.dir.impl.GroupMechanics: Added  
com.webmethods.portal.mech.view.impl.ViewableContainerMechanics to the list of superclasses

com.webmethods.portal.mech.dir.impl.PrincipalMechanics: Added  
com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces

com.webmethods.portal.mech.dir.impl.PrincipalMechanics: Added  
com.webmethods.portal.mech.view.impl.ViewableContainerMechanics to the list of superclasses

com.webmethods.portal.mech.dir.impl.RoleMechanics: Added  
com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces

com.webmethods.portal.mech.dir.impl.RoleMechanics: Added  
com.webmethods.portal.mech.view.impl.ViewableContainerMechanics to the list of superclasses

com.webmethods.portal.mech.dir.impl.UserMechanics: Added  
com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces

com.webmethods.portal.mech.dir.impl.UserMechanics: Added  
com.webmethods.portal.mech.view.impl.ViewableContainerMechanics to the list of superclasses

com.webmethods.portal.mech.task.impl.RefreshTaskHandler: Class  
com.webmethods.portal.mech.task.impl.RefreshTaskHandler added

com.webmethods.portal.mech.task.impl.TaskHelper: Method 'public java.lang.ClassLoader  
getClassLoaderIfExists(com.webmethods.portal.service.task.ITaskDefinition)' has been added

com.webmethods.portal.mech.view.impl.ViewableContainerMechanics: Method 'protected  
com.webmethods.portal.service.view.IPagingCookie  
createPagingCookie(com.webmethods.portal.service.meta2.thing.IThingID)' has been added

com.webmethods.portal.service.access.IAccessPrivilegeConfiguration: Class  
com.webmethods.portal.service.access.IAccessPrivilegeConfiguration added

com.webmethods.portal.service.access.impl.DashboardAclManager: Class  
com.webmethods.portal.service.access.impl.DashboardAclManager added

com.webmethods.portal.service.access.impl.DashboardAclManager\$DashboardAclResource: Class  
com.webmethods.portal.service.access.impl.DashboardAclManager\$DashboardAclResource added

com.webmethods.portal.service.access.impl.DashboardContainerAclManager: Class  
com.webmethods.portal.service.access.impl.DashboardContainerAclManager added

com.webmethods.portal.service.access.impl.DashboardContainerAclManager\$DashboardContainerAcl  
Resource: Class

com.webmethods.portal.service.access.impl.DashboardContainerAclManager\$DashboardContainerAcl

Added API	Description
Resource added	
com.webmethods.portal.service.access.impl.GadgetsAclManager:	Method 'public java.util.Map getResultColumnMetadata()' has been added
com.webmethods.portal.service.access.impl.GadgetsAclManager:	Method 'public java.util.List searchResources(com.webmethods.caf.faces.search.query.ISearchQuery)' has been added
com.webmethods.portal.service.access.impl.GadgetsAclManager\$GadgetAclResource:	Method 'public java.lang.Object getValue(java.lang.Object)' has been added
com.webmethods.portal.service.access.impl.WMAppsAclManager:	Method 'public void addServiceTracker(org.osgi.framework.BundleContext)' has been added
com.webmethods.portal.service.access.impl.WMAppsAclManager:	Method 'public void stopServiceTracker()' has been added
com.webmethods.portal.service.cache.impl.AliasCache:	Added
com.webmethods.portal.event.remove.IDeleteEvent\$ISynchronousListener	to the set of implemented interfaces
com.webmethods.portal.service.cache.impl.AliasCache:	Method 'public void onSynchronousEvent(com.webmethods.portal.event.remove.IDeleteEvent)' has been added
com.webmethods.portal.service.dir.DirectoryTools:	Added public field UUIDUserResolution
com.webmethods.portal.service.dir.DirectoryTools:	Added protected field UUID_CONFIG
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public
com.webmethods.portal.service.dir.IDirService	getDirectoryService(com.webmethods.portal.system.IURI)' has been added
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public java.util.List
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public java.lang.Boolean
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public java.lang.String
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public void
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public
com.webmethods.portal.service.meta2.thing.IThingID	resolveUserByUUID(com.webmethods.portal.service.dir.init.IinitializableUser)' has been added
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public java.util.List
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public java.util.List
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public java.util.List
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public java.util.List
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public java.util.List



Added API	Description
com.webmethods.portal.service.dir.IDirConstants:	Added public field USER_UUID
com.webmethods.portal.service.dir.IDirQueryProvider:	Method 'public com.webmethods.portal.service.dir.IDirPrincipal lookupByUUID(int, java.lang.String)' has been added to an interface
com.webmethods.portal.service.dir.impl.DirServicePortletBean:	Method 'public boolean isSirNameFirst(com.webmethods.portal.bizPolicy.IContext)' has been added
com.webmethods.portal.service.dir.init.IInitializablePrincipal:	Method 'public java.lang.String getUUID()' has been added to an interface
com.webmethods.portal.service.dir.init.impl.InitializablePrincipal:	Method 'public java.lang.String getUUID()' has been added
com.webmethods.portal.service.meta2.IUserService:	Method 'public java.util.List getEmptyUUIDUsers()' has been added to an interface
com.webmethods.portal.service.meta2.IUserService:	Method 'public java.util.Map getUserDetailsByURI(com.webmethods.portal.system.IURI)' has been added to an interface
com.webmethods.portal.service.meta2.IUserService:	Method 'public java.util.Map getUserDetailsByUUID(java.lang.String)' has been added to an interface
com.webmethods.portal.service.meta2.IUserService:	Method 'public void invalidateUserUUID()' has been added to an interface
com.webmethods.portal.service.meta2.IUserService:	Method 'public void updateDistinguishedName(java.lang.String, java.lang.String, int)' has been added to an interface
com.webmethods.portal.service.meta2.IUserService:	Method 'public void updateUUID(java.lang.String, java.lang.String, int)' has been added to an interface
com.webmethods.portal.service.meta2.directory.IUserInfo:	Method 'public java.lang.String getUUID()' has been added to an interface
com.webmethods.portal.service.meta2.directory.impl.User:	Method 'public java.lang.String getUUID()' has been added
com.webmethods.portal.service.meta2.directory.impl.UserInfo:	Added protected field uuid
com.webmethods.portal.service.meta2.directory.impl.UserInfo:	Method 'public java.lang.String getUUID()' has been added
com.webmethods.portal.service.meta2.impl.UserService:	Method 'public java.util.List getEmptyUUIDUsers()' has been added
com.webmethods.portal.service.meta2.impl.UserService:	Method 'public java.util.Map getUserDetailsByURI(com.webmethods.portal.system.IURI)' has been added
com.webmethods.portal.service.meta2.impl.UserService:	Method 'public java.util.Map getUserDetailsByUUID(java.lang.String)' has been added

Added API	Description
com.webmethods.portal.service.meta2.impl.UserService:	Method 'public void invalidateUserUUID()' has been added
com.webmethods.portal.service.meta2.impl.UserService:	Method 'public void updateDistinguishedName(java.lang.String, java.lang.String, int)' has been added
com.webmethods.portal.service.meta2.impl.UserService:	Method 'public void updateUUID(java.lang.String, java.lang.String, int)' has been added
com.webmethods.portal.service.socialbpm.chart.impl.ChartData:	Method 'public java.lang.String getTaskTypeID()' has been added
com.webmethods.portal.service.socialbpm.chart.impl.ChartData:	Method 'public void setTaskTypeID(java.lang.String)' has been added
com.webmethods.portal.service.socialbpm.chart.impl.ChartService:	Method 'protected java.lang.String getTaskTypeID(java.lang.String)' has been added
com.webmethods.portal.service.sql.runtime.base.EmptyUUIDUserList:	Class com.webmethods.portal.service.sql.runtime.base.EmptyUUIDUserList added
com.webmethods.portal.service.sql.runtime.base.InvalidateUserUUID:	Class com.webmethods.portal.service.sql.runtime.base.InvalidateUserUUID added
com.webmethods.portal.service.sql.runtime.base.SetUserGroupUUID:	Class com.webmethods.portal.service.sql.runtime.base.SetUserGroupUUID added
com.webmethods.portal.service.sql.runtime.base.TaskLockSetNew:	Class com.webmethods.portal.service.sql.runtime.base.TaskLockSetNew added
com.webmethods.portal.service.sql.runtime.base.UserDetailsByURI:	Class com.webmethods.portal.service.sql.runtime.base.UserDetailsByURI added
com.webmethods.portal.service.sql.runtime.base.UserDetailsByUUID:	Class com.webmethods.portal.service.sql.runtime.base.UserDetailsByUUID added
com.webmethods.portal.service.task.ITaskLockingService:	Method 'public com.webmethods.portal.service.task.ITaskLock acquireLock(com.webmethods.portal.system.IURI, com.webmethods.portal.system.IURI, long, long, boolean)' has been added to an interface
com.webmethods.portal.service.task.event.RefreshTaskEvent:	Class com.webmethods.portal.service.task.event.RefreshTaskEvent added
com.webmethods.portal.service.task.event.RefreshTaskEvent\$ISynchronousListener:	Class com.webmethods.portal.service.task.event.RefreshTaskEvent\$ISynchronousListener added
com.webmethods.portal.service.task.event.RefreshTaskEvent\$SynchronousListeners:	Class com.webmethods.portal.service.task.event.RefreshTaskEvent\$SynchronousListeners added
com.webmethods.portal.service.task.event.RefreshTaskEvent\$SynchronousListeners\$SynchronousListener:	Class

Added API	Description
com.webmethods.portal.service.task.event.RefreshTaskEvent\$SynchronousListeners\$SynchronousListener added	
com.webmethods.portal.service.task.event.TaskChangedEventRetry: Class com.webmethods.portal.service.task.event.TaskChangedEventRetry added	
com.webmethods.portal.service.task.event.impl.RefreshTaskEvent: Class com.webmethods.portal.service.task.event.impl.RefreshTaskEvent added	
com.webmethods.portal.service.task.impl.TaskLockingService: Method 'public com.webmethods.portal.service.task.ITaskLock acquireLock(com.webmethods.portal.system.IURI, com.webmethods.portal.system.IURI, long, long, boolean)' has been added	
com.webmethods.portal.system.ISAMLSSOConstants: Class com.webmethods.portal.system.ISAMLSSOConstants added	
com.webmethods.portal.system.cluster.IClusterProvider: Method 'public java.lang.String getClusterId()' has been added to an interface	
com.webmethods.portal.system.cluster.IClusterProvider: Method 'public boolean isCurrentServer(com.webmethods.portal.system.cluster.IServer)' has been added to an interface	
com.webmethods.portal.system.cluster.IClusterProvider: Method 'public void recreateJNDIConnection()' has been added to an interface	
com.webmethods.portal.system.cluster.IClusterProvider: Method 'public boolean reloadJNDIProviderURL()' has been added to an interface	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Added public field CLUSTER_ID_PROP_KEY	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Added public field s_logCategory	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Method 'public java.lang.String getClusterId()' has been added	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Method 'public boolean isCurrentServer(com.webmethods.portal.system.cluster.IServer)' has been added	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Method 'public void recreateJNDIConnection()' has been added	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Method 'public boolean reloadJNDIProviderURL()' has been added	
com.webmethods.portal.system.sso.saml.idp.SAMLIdentityProvider: Class com.webmethods.portal.system.sso.saml.idp.SAMLIdentityProvider added	
com.webmethods.portal.system.sso.saml.idp.SAMLSSODataChangeListener: Class com.webmethods.portal.system.sso.saml.idp.SAMLSSODataChangeListener added	
com.webmethods.portal.system.sso.saml.idp.SAMLServiceProvider: Class	

Added API	Description
com.webmethods.portal.system.sso.saml.idp.SAMLServiceProvider	added
com.webmethods.portal.system.sso.saml.idp.SSOIDPConfiguration	Class
com.webmethods.portal.system.sso.saml.idp.SSOIDPConfiguration	added
com.webmethods.portal.system.sso.saml.idp.WebSSOPropsUtil	Class
com.webmethods.portal.system.sso.saml.idp.WebSSOPropsUtil	added
com.webmethods.portal.taglib.TaglibUtil	Method 'public java.lang.String generateUniqueID()' has been added
com.webmethods.portal.webservices.wsclient.PortalArtifactFactory	Method 'public org.opensaml.saml2.core.AuthnRequest getAuthnRequest(java.lang.String)' has been added
com.webmethods.portal.webservices.wsclient.PortalArtifactFactory	Method 'public java.lang.String getResponse(java.net.URL, java.lang.String, java.util.Map, java.lang.String[], java.util.Map, org.opensaml.saml2.core.AuthnRequest)' has been added
com.webmethods.portal.webservices.wsclient.PortalArtifactFactory	Method 'public void reInitSecurityTokenService()' has been added
com.webmethods.rtl.event.DeliveryService	Method 'public java.lang.String addClusterIdPrefix(java.lang.String)' has been added
com.webmethods.rtl.event.DeliveryService	Method 'public void setClusterId(java.lang.String)' has been added
com.webmethods.rtl.event.DeliveryService	Method 'public void startRemoteDelivery()' has been added
com.webmethods.rtl.event.DeliveryService	Method 'public void stopRemoteDelivery()' has been added
com.webmethods.rtl.event.Event	Method 'public java.lang.String getJcrSessionUserData()' has been added
com.webmethods.rtl.event.IEvent	Method 'public java.lang.String getJcrSessionUserData()' has been added to an interface
com.webmethods.rtl.jms.PortalClientOverJMS	Class com.webmethods.rtl.jms.PortalClientOverJMS added
com.webmethods.rtl.logging.EnhancedPatternLayout	Class
com.webmethods.rtl.logging.EnhancedPatternLayout	added
com.webmethods.rtl.msg.jms.IJMSPProvider	Method 'public java.lang.String getEndpointAddress()' has been added to an interface
com.webmethods.rtl.msg.jms.IJMSPProvider	Method 'public boolean isConnected()' has been added to an interface
com.webmethods.rtl.msg.jms.JMSProvider	Added protected field m_endpointAddress

Added API	Description
com.webmethods.rtl.msg.jms.JMSProvider:	Added protected field m_isConnected
com.webmethods.rtl.msg.jms.JMSProvider:	Method 'public java.lang.String getEndpointAddress()' has been added
com.webmethods.rtl.msg.jms.JMSProvider:	Method 'public boolean isConnected()' has been added
com.webmethods.rtl.msg.jms.JMSProvider:	Abstract method 'protected void stopConnections()' has been added
com.webmethods.rtl.msg.jms.JMSStdConnProvider:	Method 'protected void stopConnections()' has been added
com.webmethods.rtl.script.JspC:	Method 'public java.lang.String getExcludes()' has been added
com.webmethods.rtl.script.JspC:	Method 'public void setExcludes(java.lang.String)' has been added
com.webmethods.rtl.util.xml.XMLUtil:	Method 'protected org.w3c.dom.Document _loadDocumentUncaught(org.xml.sax.InputSource)' has been added
com.webmethods.rtl.util.xml.XMLUtil:	Method 'public org.w3c.dom.Document loadDocumentFromInputStreamUncaught(java.io.InputStream)' has been added
com.webmethods.rtl.util.xml.XMLUtil:	Method 'public org.w3c.dom.Document loadDocumentFromReaderUncaught(java.io.Reader)' has been added
com.webmethods.rtl.util.xml.XMLUtil:	Method 'public org.w3c.dom.Document loadDocumentFromXMLUncaught(java.lang.String)' has been added
com.webmethods.rtl.util.xml.XMLUtil:	Method 'public org.w3c.dom.Document loadDocumentUncaught(java.lang.String)' has been added

Removed API	Replacement, if any
com.webmethods.caf.jcr.rmi.IRMITunnelHttpPortAware:	Class com.webmethods.caf.jcr.rmi.IRMITunnelHttpPortAware removed
com.webmethods.caf.jcr.rmi.JcrRMHttpToCGISocketFactory:	Class com.webmethods.caf.jcr.rmi.JcrRMHttpToCGISocketFactory removed
com.webmethods.caf.jcr.rmi.JcrRMIMasterSocketFactory:	Class com.webmethods.caf.jcr.rmi.JcrRMIMasterSocketFactory removed
com.webmethods.jackrabbit.server.io.DefaultHandler:	Class com.webmethods.jackrabbit.server.io.DefaultHandler removed
com.webmethods.jackrabbit.servlet.JCRWebdavServerServlet:	Class com.webmethods.jackrabbit.servlet.JCRWebdavServerServlet removed
com.webmethods.jackrabbit.servlet.SimpleWebdavServlet:	Class com.webmethods.jackrabbit.servlet.SimpleWebdavServlet removed

**Removed API****Replacement, if any**

com.webmethods.portal.jms.um.UmJMSClient: Field DEFAULT\_UM\_REALM has been removed, but it was previously a constant

com.webmethods.portal.jms.um.UmJMSClient: Method 'public void init()' has been removed

com.webmethods.portal.schema.bcgadget.GadgetDefinition: Removed field gadgetExternalScripts

com.webmethods.portal.schema.bcgadget.GadgetDefinition: Method 'public com.webmethods.portal.schema.bcgadget.GadgetDefinition\$GadgetExternalScripts getGadgetExternalScripts()' has been removed

com.webmethods.portal.schema.bcgadget.GadgetDefinition: Method 'public void setGadgetExternalScripts(com.webmethods.portal.schema.bcgadget.GadgetDefinition\$GadgetExternalScripts)' has been removed

com.webmethods.portal.schema.bcgadget.GadgetDefinition\$GadgetExternalScripts: Class com.webmethods.portal.schema.bcgadget.GadgetDefinition\$GadgetExternalScripts removed

com.webmethods.portal.schema.bcgadget.ObjectFactory: Method 'public com.webmethods.portal.schema.bcgadget.GadgetDefinition\$GadgetExternalScripts createGadgetDefinitionGadgetExternalScripts()' has been removed

com.webmethods.portal.service.access.impl.GadgetsAclManager: Method 'protected java.lang.String buildXPathQuery(java.util.Map)' has been removed, but an inherited definition exists.

com.webmethods.portal.service.access.impl.GadgetsAclManager\$GadgetAclResource: Method 'public GadgetsAclManager\$GadgetAclResource(javax.jcr.Node, java.lang.String)' has been removed

com.webmethods.rtl.msg.jms.JMSProvider: Method 'public void enableMessageDelivery()' has been removed

com.webmethods.rtl.msg.jms.JMSProvider: Method 'public boolean hasInitialized()' has been removed

com.webmethods.rtl.msg.jms.JMSProvider: Method 'protected void setInstance(com.webmethods.rtl.msg.jms.JMSProvider)' has been removed

com.webmethods.rtl.msg.jms.JMSProvider: Method 'protected void startConnections()' has been removed

com.webmethods.rtl.msg.jms.JMSStdConnProvider: Method 'protected void startConnections()' has been removed

**Changed API****Description**

com.webmethods.caf.common.bnd.PortletXmlAnalyzer: Parameter 1 of 'public boolean analyzeJar(aQute.lib.osgi.Analyzer)' has changed its type to aQute.bnd.osgi.Analyzer

com.webmethods.caf.common.bnd.WebXmlAnalyzer: Parameter 1 of 'public boolean analyzeJar(aQute.lib.osgi.Analyzer)' has changed its type to aQute.bnd.osgi.Analyzer

**Changed API****Description**

com.webmethods.caf.wsserver.auth.saml.SamlUtils: Parameter 2 of 'public void displayAssertion(java.io.PrintWriter, org.opensaml.SAMLAssertion)' has changed its type to org.opensaml.saml1.core.Assertion

com.webmethods.caf.wsserver.auth.saml.SamlUtils: Parameter 1 of 'public java.lang.String getLoginName(org.opensaml.SAMLAssertion)' has changed its type to org.opensaml.saml1.core.Assertion

com.webmethods.caf.wsserver.auth.saml.SamlUtils: Return type of method 'public org.opensaml.SAMLAssertion getSamlAssertion(java.lang.String, java.lang.String)' has been changed to org.opensaml.saml1.core.Assertion

com.webmethods.caf.wsserver.auth.saml.SamlUtils: Parameter 1 of 'public org.opensaml.SAMLAssertion getSamlAssertion(org.opensaml.SAMLResponse)' has changed its type to org.opensaml.saml1.core.Response

com.webmethods.caf.wsserver.auth.saml.SamlUtils: Return type of method 'public org.opensaml.SAMLAssertion getSamlAssertion(org.opensaml.SAMLResponse)' has been changed to org.opensaml.saml1.core.Assertion

com.webmethods.caf.wsserver.auth.saml.SamlUtils: Return type of method 'public org.opensaml.SAMLResponse getSamlResponse(java.lang.String, java.lang.String)' has been changed to org.opensaml.saml1.core.Response

com.webmethods.caf.wsserver.auth.saml.SamlUtils: Parameter 1 of 'public java.lang.String verifyAssertion(org.opensaml.SAMLAssertion)' has changed its type to org.opensaml.saml1.core.Assertion

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public UmJMSClient()' has been decreased from public to protected

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public void closeUMSession(com.pcbSYS.nirvana.client.nSession)' has been decreased from public to private

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public void createConnectionFactory(java.lang.String)' has been decreased from public to protected

com.webmethods.portal.jms.um.UmJMSClient: Return type of method 'public javax.naming.Context createJNDIContext()' has been changed to void

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public javax.naming.Context createJNDIContext()' has been decreased from public to private

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public void createQueue(java.lang.String, boolean, int)' has been decreased from public to protected

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public void createQueueConnectionFactory(java.lang.String)' has been decreased from public to protected

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public void

**Changed API****Description**

`createStringVal(java.lang.String, java.lang.String)` has been decreased from public to package

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public void `createTopic(java.lang.String, boolean, int)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public void `createTopicConnectionFactory(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public void `createXAConnectionFactory(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public void `deleteConnectionFactory(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public void `deleteQueue(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public void `deleteQueueConnectionFactory(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public void `deleteTopic(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public void `deleteTopicConnectionFactory(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public `javax.naming.Context` `getJNDIContext()`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public `com.pcbsys.nirvana.client.nSession` `getUMSession()`' has been decreased from public to private

`com.webmethods.portal.service.bcgadget.IBCGadgetProvider`: Return type of method 'public `java.util.List` `getAccessibleGadgets(com.webmethods.portal.service.meta2.thing.IThingID)`' has been changed to `java.util.Map`

`com.webmethods.portal.service.bcgadget.impl.BCGadgetProvider`: Return type of method 'public `java.util.List` `getAccessibleGadgets(com.webmethods.portal.service.meta2.thing.IThingID)`' has been changed to `java.util.Map`

`com.webmethods.portal.service.task.impl.TaskLockingService`: Accessibility of field `TASK_LOCK_MAX_TIME` has been increased from private to public

`com.webmethods.portal.service.task.impl.TaskLockingService`: Accessibility of field `TASK_LOCK_MAX_WAIT_TIME` has been increased from private to public

`com.webmethods.portal.service.task.impl.TaskLockingService`: In method 'protected `com.webmethods.portal.service.task.ITaskLock`

`createDbLock(com.webmethods.portal.service.sql.ISqlWorker, com.webmethods.portal.service.meta2.thing.IThingID, java.util.Date, java.util.Date)`' the number of arguments has changed



**Changed API****Description**

com.webmethods.portal.system.PortalSystem: Accessibility of method 'private void initGuestUser()' has been increased from private to public

com.webmethods.rtl.msg.jms.JMSProvider: Accessibility of method 'public void onShutdown()' has been decreased from public to protected

com.webmethods.rtl.msg.jms.JMSProvider: Accessibility of method 'private void setMaintenanceMode(boolean)' has been increased from private to protected

com.webmethods.rtl.msg.jms.JMSStdConnProvider: Accessibility of method 'public JMSStdConnProvider()' has been decreased from public to protected

com.webmethods.portal.service.version.impl.dcv.DCVersionService: Value of compile-time constant VERSION\_SERVICES\_ROOT has been changed

## Release 9.10

### Added API/ Description

com.webmethods.portal.bizPolicy.biz.access.IAccessPolicy: Method 'public

com.webmethods.portal.service.view.IListView

listSecurityRealmObjects(com.webmethods.portal.bizPolicy.IContext,

com.webmethods.portal.service.meta2.thing.IThingID)' has been added to an interface

com.webmethods.portal.mech.subscription.ISubscribableMechanics: Method 'public void

checkViewSubscription(com.webmethods.portal.system.IURI,

com.webmethods.portal.service.meta2.thing.IThingID, java.util.Map,

com.webmethods.portal.service.meta2.thing.IThingID)' has been added to an interface

com.webmethods.portal.bizPolicy.biz.IBizPolicyResolver: Method 'public

com.webmethods.portal.bizPolicy.biz.IBizPolicy getBizPolicyByType(java.lang.String, java.util.Map)'

has been added to an interface

com.webmethods.caf.wsclient.saml.IArtifactFactory: Method 'public java.lang.String

getAssertion(java.lang.String, java.lang.String[], java.util.Map)' has been added to an interface

com.webmethods.caf.wsclient.saml.IArtifactFactory: Method 'public java.lang.String

getAssertion(java.lang.String, java.lang.String[], java.util.Map, java.util.Map)' has been added to an

interface

com.webmethods.caf.wsclient.session.IWSClientSession: Method 'public java.util.Map

getSessionCookieMap()' has been added to an interface

com.webmethods.caf.wsclient.session.IWSClientSession: Method 'public void

setSessionCookieMap(java.util.Map)' has been added to an interface

com.webmethods.caf.wsclient.session.IWSClientSessionManager: Method 'public

com.webmethods.caf.wsclient.session.IWSClientSessionPool

getSessionPool(com.webmethods.caf.wsclient.proxy.IWSClientProxy, java.lang.String)' has been added

to an interface

com.webmethods.caf.faces.data.task.ITaskInfo: Method 'public java.util.Date getTaskScheduleDate()'

has been added to an interface

com.webmethods.caf.faces.data.task.ITaskInfo: Method 'public void setCreatedDate(java.util.Date)' has

been added to an interface

com.webmethods.caf.faces.data.task.ITaskInfo: Method 'public void

setTaskScheduleDate(java.util.Date)' has been added to an interface

com.webmethods.portal.service.task.ITask: Method 'public java.util.Date getTaskScheduleDate()' has

been added to an interface

### Changed API/ Description

com.webmethods.portal.event.system.ICriterionEvent\$IListener: Parameter 1 of 'public void onEvent(com.webmethods.portal.event.system.ISubscriptionEvent)' has changed its type to com.webmethods.portal.event.system.ICriterionEvent

com.webmethods.portal.event.system.ICriterionEvent\$ISynchronousListener: Parameter 1 of 'public void onSynchronousEvent(com.webmethods.portal.event.system.ISubscriptionEvent)' has changed its type to com.webmethods.portal.event.system.ICriterionEvent

com.webmethods.portal.service.access.impl.MwsObjectAclManager: In method 'protected int countAceProperties(java.util.List)' the number of arguments has changed

com.webmethods.caf.wsclient.session.impl.WSClientSessionManager: Parameter 2 of 'protected java.lang.String getSessionPoolID(com.webmethods.caf.wsclient.proxy.IWSClientProxy, com.webmethods.caf.wsclient.AuthCredentials)' has changed its type to java.lang.String

### Removed API/ Description

com.webmethods.portal.mech.system.ISystemMechanics: Removed  
com.webmethods.portal.mech.access.IAccessMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed  
com.webmethods.portal.mech.clipboard.IClipboardMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed  
com.webmethods.portal.mech.storage.IBasicMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed  
com.webmethods.portal.mech.subscription.ISubscribableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed  
com.webmethods.portal.mech.view.IViewableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.access.IAccessMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.clipboard.IClipboardMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.storage.IBasicMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.subscription.ISubscribableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.view.IViewableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.clipboard.impl.ClipboardMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.storage.impl.BasicMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.subscription.impl.SubscribableMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.view.impl.ViewableMechanics from the list of superclasses

com.webmethods.portal.webapp.jetty7.WebApplicationInstallService: Removed field  
COMPONENT\_DELETE\_RETRIES

com.webmethods.portal.service.global.impl.LanguagePackManager: Field QUERY\_STRING has been  
removed, but it was previously a constant

com.webmethods.caf.faces.convert.FormattedDateTimeConverter: Method 'protected  
java.text.DateFormat setupGMTDateTimeFormatter(javax.faces.context.FacesContext)' has been  
removed

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public  
java.util.List getTaskCommentsByProcessModelId(java.lang.String, int, int, int)' has been added to an  
interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public java.util.List  
getPaginatedTaskCommentsByProcessModelId(java.lang.String, int, int, int)' has been added to an  
interface

com.webmethods.portal.service.dir.IRoleSystem: Method 'public void  
clearCache(com.webmethods.portal.service.dir.IDirPrincipal)' has been added to an interface

com.webmethods.portal.mech.dir.IPrincipalMechanics: Method 'public void  
fireRoleMembershipEvent(com.webmethods.portal.service.meta2.thing.IThingID,  
com.webmethods.portal.system.IURI, com.webmethods.portal.service.dir.IDirPrincipalList,  
com.webmethods.portal.service.dir.IDirPrincipalList, int)' has been added to an interface

move the com.webmethods.jms.\*\* packages from caf-server bundle to a unique package name

com.webmethods.jms.JMSPhaseProvider: Class com.webmethods.jms.JMSPhaseProvider removed

com.webmethods.jms.db.DbJMSClient: Class com.webmethods.jms.db.DbJMSClient removed

com.webmethods.jms.db.DbJMSConnProvider: Class com.webmethods.jms.db.DbJMSConnProvider  
removed

com.webmethods.jms.db.impl.JMSConnection: Class com.webmethods.jms.db.impl.JMSConnection  
removed

com.webmethods.jms.db.impl.JMSConnection\$CompressedObject: Class  
com.webmethods.jms.db.impl.JMSConnection\$CompressedObject removed

com.webmethods.jms.db.impl.JMSDestination: Class com.webmethods.jms.db.impl.JMSDestination  
removed

com.webmethods.jms.db.impl.JMSDispatcherThread: Class  
com.webmethods.jms.db.impl.JMSDispatcherThread removed

com.webmethods.jms.db.impl.JMSEvent: Class com.webmethods.jms.db.impl.JMSEvent removed

com.webmethods.jms.db.impl.JMSMessage: Class com.webmethods.jms.db.impl.JMSMessage removed

com.webmethods.jms.db.impl.JMSMessageConsumer: Class  
com.webmethods.jms.db.impl.JMSMessageConsumer removed

com.webmethods.jms.db.impl.JMSMessageProducer: Class  
com.webmethods.jms.db.impl.JMSMessageProducer removed

com.webmethods.jms.db.impl.JMSObjectMessage: Class  
com.webmethods.jms.db.impl.JMSObjectMessage removed

com.webmethods.jms.db.impl.JMSPollThread: Class com.webmethods.jms.db.impl.JMSPollThread removed

com.webmethods.jms.db.impl.JMSQueue: Class com.webmethods.jms.db.impl.JMSQueue removed

com.webmethods.jms.db.impl.JMSQueuePollThread: Class  
com.webmethods.jms.db.impl.JMSQueuePollThread removed

com.webmethods.jms.db.impl.JMSQueueReceiver: Class  
com.webmethods.jms.db.impl.JMSQueueReceiver removed

com.webmethods.jms.db.impl.JMSQueueSender: Class  
com.webmethods.jms.db.impl.JMSQueueSender removed

com.webmethods.jms.db.impl.JMSQueueSession: Class  
com.webmethods.jms.db.impl.JMSQueueSession removed

com.webmethods.jms.db.impl.JMSSession: Class com.webmethods.jms.db.impl.JMSSession removed

com.webmethods.jms.db.impl.JMSTopic: Class com.webmethods.jms.db.impl.JMSTopic removed

com.webmethods.jms.db.impl.JMSTopicBatchMessage: Class  
com.webmethods.jms.db.impl.JMSTopicBatchMessage removed

com.webmethods.jms.db.impl.JMSTopicPublisher: Class  
com.webmethods.jms.db.impl.JMSTopicPublisher removed

com.webmethods.jms.db.impl.JMSTopicSession: Class com.webmethods.jms.db.impl.JMSTopicSession removed

com.webmethods.jms.db.impl.JMSTopicSubscriber: Class  
com.webmethods.jms.db.impl.JMSTopicSubscriber removed

com.webmethods.jms.db.impl.QueueFactory: Class com.webmethods.jms.db.impl.QueueFactory removed

com.webmethods.jms.db.impl.TopicFactory: Class com.webmethods.jms.db.impl.TopicFactory removed

com.webmethods.jms.db.impl.db2.EventDelivered: Class  
com.webmethods.jms.db.impl.db2.EventDelivered removed

com.webmethods.jms.db.impl.db2.EventPoll: Class com.webmethods.jms.db.impl.db2.EventPoll  
removed

com.webmethods.jms.db.impl.db2.EventSave: Class com.webmethods.jms.db.impl.db2.EventSave  
removed

com.webmethods.jms.db.impl.db2.GetSqlTime: Class com.webmethods.jms.db.impl.db2.GetSqlTime  
removed

com.webmethods.jms.db.impl.db2.PublishQueue: Class  
com.webmethods.jms.db.impl.db2.PublishQueue removed

com.webmethods.jms.db.impl.db2.PurgeEvents: Class com.webmethods.jms.db.impl.db2.PurgeEvents  
removed

com.webmethods.jms.db.impl.db2.PurgeInactiveSubscriptions: Class  
com.webmethods.jms.db.impl.db2.PurgeInactiveSubscriptions removed

com.webmethods.jms.db.impl.db2.RegisterDestination: Class  
com.webmethods.jms.db.impl.db2.RegisterDestination removed

com.webmethods.jms.db.impl.db2.RegisterSubscription: Class  
com.webmethods.jms.db.impl.db2.RegisterSubscription removed

com.webmethods.jms.db.impl.db2.UnregisterSubscription: Class  
com.webmethods.jms.db.impl.db2.UnregisterSubscription removed

com.webmethods.jms.db.impl.db2.UpdateSubscriptions: Class  
com.webmethods.jms.db.impl.db2.UpdateSubscriptions removed

com.webmethods.jms.db.impl.mssql.EventDelivered: Class  
com.webmethods.jms.db.impl.mssql.EventDelivered removed

com.webmethods.jms.db.impl.mssql.EventPoll: Class com.webmethods.jms.db.impl.mssql.EventPoll  
removed

com.webmethods.jms.db.impl.mssql.EventSave: Class com.webmethods.jms.db.impl.mssql.EventSave  
removed

com.webmethods.jms.db.impl.mssql.GetSqlTime: Class  
com.webmethods.jms.db.impl.mssql.GetSqlTime removed

com.webmethods.jms.db.impl.mssql.PublishQueue: Class  
com.webmethods.jms.db.impl.mssql.PublishQueue removed

com.webmethods.jms.db.impl.mssql.PurgeEvents: Class  
com.webmethods.jms.db.impl.mssql.PurgeEvents removed

com.webmethods.jms.db.impl.mssql.PurgeInactiveSubscriptions: Class  
com.webmethods.jms.db.impl.mssql.PurgeInactiveSubscriptions removed

com.webmethods.jms.db.impl.mssql.RegisterDestination: Class  
com.webmethods.jms.db.impl.mssql.RegisterDestination removed

com.webmethods.jms.db.impl.mssql.RegisterSubscription: Class  
com.webmethods.jms.db.impl.mssql.RegisterSubscription removed

com.webmethods.jms.db.impl.mssql.UnregisterSubscription: Class  
com.webmethods.jms.db.impl.mssql.UnregisterSubscription removed

com.webmethods.jms.db.impl.mssql.UpdateSubscriptions: Class  
com.webmethods.jms.db.impl.mssql.UpdateSubscriptions removed

com.webmethods.jms.db.impl.mysql.EventDelivered: Class  
com.webmethods.jms.db.impl.mysql.EventDelivered removed

com.webmethods.jms.db.impl.mysql.EventPoll: Class com.webmethods.jms.db.impl.mysql.EventPoll  
removed

com.webmethods.jms.db.impl.mysql.EventSave: Class com.webmethods.jms.db.impl.mysql.EventSave  
removed

com.webmethods.jms.db.impl.mysql.GetSqlTime: Class  
com.webmethods.jms.db.impl.mysql.GetSqlTime removed

com.webmethods.jms.db.impl.mysql.PublishQueue: Class  
com.webmethods.jms.db.impl.mysql.PublishQueue removed

com.webmethods.jms.db.impl.mysql.PurgeEvents: Class  
com.webmethods.jms.db.impl.mysql.PurgeEvents removed

com.webmethods.jms.db.impl.mysql.PurgeInactiveSubscriptions: Class  
com.webmethods.jms.db.impl.mysql.PurgeInactiveSubscriptions removed

com.webmethods.jms.db.impl.mysql.RegisterDestination: Class  
com.webmethods.jms.db.impl.mysql.RegisterDestination removed

com.webmethods.jms.db.impl.mysql.RegisterSubscription: Class  
com.webmethods.jms.db.impl.mysql.RegisterSubscription removed

com.webmethods.jms.db.impl.mysql.UnregisterSubscription: Class  
com.webmethods.jms.db.impl.mysql.UnregisterSubscription removed

com.webmethods.jms.db.impl.mysql.UpdateSubscriptions: Class  
com.webmethods.jms.db.impl.mysql.UpdateSubscriptions removed

com.webmethods.jms.db.impl.oracle.EventDelivered: Class  
com.webmethods.jms.db.impl.oracle.EventDelivered removed

com.webmethods.jms.db.impl.oracle.EventPoll: Class com.webmethods.jms.db.impl.oracle.EventPoll  
removed

com.webmethods.jms.db.impl.oracle.EventSave: Class com.webmethods.jms.db.impl.oracle.EventSave  
removed

com.webmethods.jms.db.impl.oracle.GetSqlTime: Class  
com.webmethods.jms.db.impl.oracle.GetSqlTime removed

com.webmethods.jms.db.impl.oracle.PublishQueue: Class  
com.webmethods.jms.db.impl.oracle.PublishQueue removed

com.webmethods.jms.db.impl.oracle.PurgeEvents: Class  
com.webmethods.jms.db.impl.oracle.PurgeEvents removed

com.webmethods.jms.db.impl.oracle.PurgeInactiveSubscriptions: Class  
com.webmethods.jms.db.impl.oracle.PurgeInactiveSubscriptions removed

com.webmethods.jms.db.impl.oracle.RegisterDestination: Class  
com.webmethods.jms.db.impl.oracle.RegisterDestination removed

com.webmethods.jms.db.impl.oracle.RegisterSubscription: Class  
com.webmethods.jms.db.impl.oracle.RegisterSubscription removed

com.webmethods.jms.db.impl.oracle.UnregisterSubscription: Class  
com.webmethods.jms.db.impl.oracle.UnregisterSubscription removed

com.webmethods.jms.db.impl.oracle.UpdateSubscriptions: Class  
com.webmethods.jms.db.impl.oracle.UpdateSubscriptions removed

com.webmethods.jms.db.impl.sybase.EventPoll: Class com.webmethods.jms.db.impl.sybase.EventPoll  
removed

com.webmethods.jms.db.impl.sybase.PublishQueue: Class  
com.webmethods.jms.db.impl.sybase.PublishQueue removed

com.webmethods.jms.db.impl.sybase.PurgeEvents: Class  
com.webmethods.jms.db.impl.sybase.PurgeEvents removed

com.webmethods.jms.um.UmJMSClient: Class com.webmethods.jms.um.UmJMSClient removed

com.webmethods.jms.um.UmJMSConnProvider: Class  
com.webmethods.jms.um.UmJMSConnProvider removed

electric.util.holder.ArrayOfbyteInOut: Class electric.util.holder.ArrayOfbyteInOut removed

electric.util.holder.ArrayOfbyteOut: Class electric.util.holder.ArrayOfbyteOut removed

com.webmethods.portal.bizPolicy.command.system.xml.XMLImport: Field  
OVERWRITE\_PERMISSIONS\_KEY has been removed, but it was previously a constant

com.webmethods.portal.service.dir.IDirService: Method 'public boolean supportsNestedGroups()' has  
been added to an interface

com.webmethods.caf.faces.application.CAFStateManager: Class  
com.webmethods.caf.faces.application.CAFStateManager removed

com.webmethods.caf.faces.application.CAFStateManager\$TreeStructure: Class  
com.webmethods.caf.faces.application.CAFStateManager\$TreeStructure removed



com.webmethods.caf.faces.portlet.PortletViewFragmentPhaseListener: Class  
com.webmethods.caf.faces.portlet.PortletViewFragmentPhaseListener removed

com.webmethods.caf.faces.portlet.PortletViewFragmentPhaseListenerWrapper: Class  
com.webmethods.caf.faces.portlet.PortletViewFragmentPhaseListenerWrapper removed

com.webmethods.caf.faces.portlet.PortletViewHandler: Method 'protected void  
initResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been removed

com.webmethods.caf.faces.portlet.PortletViewHandler: Method 'protected void  
renderResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been  
removed

com.webmethods.caf.faces.render.html.command.CommandFormRenderer: In method 'protected  
java.lang.String getTagName()' the number of arguments has changed

com.webmethods.caf.faces.render.html.command.DisjointFormRenderer: In method 'protected  
java.lang.String getTagName()' the number of arguments has changed

com.webmethods.caf.faces.view.BaseViewHandler: Field STATE\_KEY has been removed, but it was  
previously a constant

com.webmethods.caf.faces.view.BaseViewHandler: Method 'protected void  
initResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been removed

com.webmethods.caf.faces.view.BaseViewHandler: Method 'protected void  
renderResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been  
removed

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Field INJECT\_STATE has been  
removed, but it was previously a constant

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Field NO\_RENDER has been removed,  
but it was previously a constant

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Field STATE\_KEY has been removed,  
but it was previously a constant

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Field VIEW\_FRAGMENT has been  
removed, but it was previously a constant

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Field VIEW\_FRAGMENT\_CLIENT\_ID  
has been removed, but it was previously a constant

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Return type of method 'protected void  
initResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been changed  
to javax.faces.context.ResponseWriter

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Method 'protected void  
renderResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been  
removed

com.webmethods.caf.faces.view.ViewFragmentPhaseListener: Class  
com.webmethods.caf.faces.view.ViewFragmentPhaseListener removed

## **Release 9.9**

### **Added API/ Description**

com.webmethods.caf.faces.data.task.ITaskInfo: Method 'public java.lang.Integer getIsMandatory()' has been added to an interface

com.webmethods.caf.faces.data.task.ITaskInfo: Method 'public void setIsMandatory(java.lang.Integer)' has been added to an interface

com.webmethods.caf.wsclient.saml.IArtifactFactory: Method 'public java.lang.String validateSAMLResponse(javax.servlet.http.HttpServletRequest, java.lang.String)' has been added to an interface

com.webmethods.portal.bizPolicy.biz.access.IAccessPolicy: Method 'public  
com.webmethods.portal.service.view.IListView  
listSecurityRealmObjects(com.webmethods.portal.bizPolicy.IContext,  
com.webmethods.portal.service.meta2.thing.IThingID)' has been added to an interface

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public  
java.util.List getAllTaskAttachments(java.lang.String, int, int)' has been added to an interface

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public  
java.lang.Integer getAllTaskAttachmentsCount(java.lang.String)' has been added to an interface

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public  
java.util.List getTaskComments(java.lang.String, int, int)' has been added to an interface

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public  
java.lang.Integer getTaskCommentsCount(int)' has been added to an interface

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public  
java.lang.Integer getTaskCommentsCount(java.lang.String)' has been added to an interface

com.webmethods.portal.mech.subscription.ISubscribableMechanics: Method 'public void  
checkViewSubscription(com.webmethods.portal.system.IURI,  
com.webmethods.portal.service.meta2.thing.IThingID, java.util.Map,  
com.webmethods.portal.service.meta2.thing.IThingID)' has been added to an interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public java.util.List  
getAllTaskAttachments(java.lang.String, int, int)' has been added to an interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public  
java.lang.Integer getAllTaskAttachmentsCount(java.lang.String)' has been added to an interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public java.util.List  
getTaskComments(java.lang.String, int, int)' has been added to an interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public

### Added API/ Description

java.lang.Integer getTaskCommentsCount(int)' has been added to an interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public java.lang.Integer getTaskCommentsCount(java.lang.String)' has been added to an interface

com.webmethods.portal.service.task.ITask: Method 'public java.lang.Integer getIsMandatory()' has been added to an interface

com.webmethods.portal.service.task.ITaskDefinition: Method 'public java.lang.String getTaskDescription()' has been added to an interface

### Removed API/ Description

com.webmethods.caf.faces.component.gmap.GMarkerGroup: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.gmap.GMarkerList: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.logic.AsyncIterator: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.logic.Import: Removed javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.logic.ImportTemplate: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.logic.Iterator: Removed javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.Breadcrumbs: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.FirstLevelList: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.NavList: Removed javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.PopupMenus: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.SecondLevelList: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.StaticMenus\$SubList: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.StaticMenus\$SubSubList: Removed  
javax.faces.event.SystemEventListener from the set of implemented interfaces

## Removed API/ Description

com.webmethods.caf.faces.component.nav.ThirdLevelList: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.AsyncList: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.AsyncListbox: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.AsyncTabsList: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.DataList: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.ListBox: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.TabsList: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed

com.webmethods.portal.mech.access.IAccessMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed

com.webmethods.portal.mech.clipboard.IClipboardMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed

com.webmethods.portal.mech.storage.IBasicMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed

com.webmethods.portal.mech.subscription.ISubscribableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed

com.webmethods.portal.mech.view.IViewableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.access.IAccessMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.clipboard.IClipboardMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.storage.IBasicMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.subscription.ISubscribableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

## Removed API/ Description

com.webmethods.portal.mech.view.IViewableMechanics from the set of implemented interfaces

com.webmethods.rtl.script.JspC: Removed java.lang.Cloneable from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.clipboard.impl.ClipboardMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.storage.impl.BasicMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.subscription.impl.SubscribableMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.view.impl.ViewableMechanics from the list of superclasses

com.webmethods.rtl.script.JspC: Removed org.apache.tools.ant.ProjectComponent from the list of superclasses

com.webmethods.rtl.script.JspC: Removed org.apache.tools.ant.Task from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.clipboard.impl.ClipboardMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.storage.impl.BasicMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.subscription.impl.SubscribableMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.view.impl.ViewableMechanics from the list of superclasses

com.webmethods.rtl.script.JspC: Removed org.apache.tools.ant.ProjectComponent from the list of superclasses

com.webmethods.rtl.script.JspC: Removed org.apache.tools.ant.Task from the list of superclasses

com.webmethods.caf.faces.component.logic.Import: Method 'public boolean isListenerForSource(java.lang.Object)' has been removed

com.webmethods.caf.faces.component.logic.Import: Method 'public void processEvent(javax.faces.event.SystemEvent)' has been removed

com.webmethods.caf.faces.component.logic.ImportTemplate: Method 'public boolean isListenerForSource(java.lang.Object)' has been removed

com.webmethods.caf.faces.component.logic.ImportTemplate: Method 'public void processEvent(javax.faces.event.SystemEvent)' has been removed

com.webmethods.caf.faces.component.nav.PopupMenus: Method 'protected javax.faces.component.UIColumn getColumn()' has been removed

com.webmethods.caf.faces.component.table.html.DataList: Method 'public boolean

## Removed API/ Description

`isListenerForSource(java.lang.Object)` has been removed

`com.webmethods.caf.faces.component.table.html.DataList`: Method `'public void processEvent(javax.faces.event.SystemEvent)'` has been removed

`com.webmethods.caf.faces.component.tree.DataTree`: Method `'protected void autogenerate()'` has been removed

`com.webmethods.portal.service.install.impl.BaseInstallService`: Method `'protected com.webmethods.portal.service.install.IInstallServiceConfig getConfig()'` has been removed

`com.webmethods.portal.service.sql.runtime.base.TaskSearchAll`: Method `'protected void parseSearchQuery(int, java.util.Map, com.webmethods.caf.faces.data.task.impl.TaskSearchQuery, com.webmethods.portal.service.sql.runtime.base.TaskSearchAll$QueryInfo)'` has been removed

`com.webmethods.portal.service.sql.runtime.base.TaskSearchAll`: Method `'protected void parseSearchQueryTerm(int, java.util.Map, com.webmethods.caf.faces.data.task.impl.TaskSearchQueryTerm, com.webmethods.portal.service.sql.runtime.base.TaskSearchAll$QueryInfo)'` has been removed

`com.webmethods.portal.service.sql.runtime.base.TaskSearchFromInboxesPaged`: Method `'protected void parseSearchQueryTerm(int, java.util.Map, com.webmethods.caf.faces.data.task.impl.TaskSearchQueryTerm, com.webmethods.portal.service.sql.runtime.base.TaskSearchAll$QueryInfo)'` has been removed

`com.webmethods.rtl.script.JspC`: Method `'public void init()'` has been removed

`com.softwareag.caf.controls.mwsx.PeoplePickerDialog$FacetsMap`: Class removed

`com.softwareag.caf.controls.mwsx.PeopleSwapBox$FacetsMap`: Class removed

`com.webmethods.caf.faces.component.nav.StaticMenus$ChildrenList`: Class removed

`com.webmethods.caf.faces.component.nav.StaticMenus$FacetsMap`: Class removed

`com.webmethods.caf.faces.component.nav.ToggleMenus$ChildrenList`: Class removed

`com.webmethods.caf.faces.component.nav.ToggleMenus$FacetsMap`: Class removed

`com.webmethods.caf.faces.component.search.SearchBar$FacetsMap`: Class removed

`com.webmethods.caf.faces.component.table.SelectRowCheckbox$ChildrenList`: Class removed

`com.webmethods.caf.faces.component.table.SelectRowCheckbox$FacetsMap`: Class

## Removed API/ Description

com.webmethods.caf.faces.component.table.SelectRowCheckbox\$FacetsMap removed

com.webmethods.caf.faces.component.table.html.HtmlTableColumn\$FacetsMap: Class  
com.webmethods.caf.faces.component.table.html.HtmlTableColumn\$FacetsMap removed

com.webmethods.caf.faces.component.table.specialized.Newsfeed\$ChildrenList: Class  
com.webmethods.caf.faces.component.table.specialized.Newsfeed\$ChildrenList removed

com.webmethods.caf.faces.component.table.specialized.Newsfeed\$FacetsMap: Class  
com.webmethods.caf.faces.component.table.specialized.Newsfeed\$FacetsMap removed

com.webmethods.caf.faces.component.util.BaseChildrenList: Class  
com.webmethods.caf.faces.component.util.BaseChildrenList removed

com.webmethods.caf.faces.component.util.BaseFacetsAndChildrenIterator: Class  
com.webmethods.caf.faces.component.util.BaseFacetsAndChildrenIterator removed

com.webmethods.caf.faces.component.util.BaseFacetsMap: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$BaseCollection: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap\$BaseCollection removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$BaseCollection\$BaseIterator: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap\$BaseCollection\$BaseIterator removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Entries: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap\$Entries removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Entries\$EntrySetIterator: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap\$Entries\$EntrySetIterator removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Keys: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap\$Keys removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Keys\$KeySetIterator: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap\$Keys\$KeySetIterator removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Values: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap\$Values removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Values\$ValuesIterator: Class  
com.webmethods.caf.faces.component.util.BaseFacetsMap\$Values\$ValuesIterator removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.AntBaseFileListTask: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.AntBaseFileListTask removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.AntBaseTask: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.AntBaseTask removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.GenerateOSGiManifest: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.GenerateOSGiManifest removed

## Removed API/ Description

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.GetPortletInfo: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.GetPortletInfo removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PostRegisterPortlet: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PostRegisterPortlet removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PreRegisterPortlet: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PreRegisterPortlet removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PreUnregisterPortlet: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PreUnregisterPortlet removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.CreateSkinInstance: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.CreateSkinInstance removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.CreateThemeInstance: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.CreateThemeInstance removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.GetSkinInfo: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.GetSkinInfo removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.RemoveSkinInstance: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.RemoveSkinInstance removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.RemoveThemeInstance: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.RemoveThemeInstance removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.CreateDBOTables: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.CreateDBOTables removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.DropDBOTables: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.DropDBOTables removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.ExecuteCommand: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.ExecuteCommand removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.ExecuteTargetLoop: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.ExecuteTargetLoop removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetComponentInfo: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetComponentInfo removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetIsOSGiRuntime: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetIsOSGiRuntime removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetSystemPath: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetSystemPath removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetComponentInfo: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetComponentInfo removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetIsOSGiRuntime: Class



## Removed API/ Description

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetIsOSGiRuntime removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetSystemPath: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetSystemPath removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.InstallComponent: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.InstallComponent removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LoadClasses: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LoadClasses removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LoadConfig: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LoadConfig removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LookupComponent: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LookupComponent removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.RegisterComponent: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.RegisterComponent removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.RunSQLScript: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.RunSQLScript removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.UninstallComponent: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.UninstallComponent removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.UnregisterComponent: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.UnregisterComponent removed

com.webmethods.portal.mech.install.impl.NativeInstallMechanics: Class

com.webmethods.portal.mech.install.impl.NativeInstallMechanics removed

com.webmethods.portal.service.install.IInstallServiceConfig: Class

com.webmethods.portal.service.install.IInstallServiceConfig removed

com.webmethods.portal.service.install.impl.InstallServiceConfig: Class

com.webmethods.portal.service.install.impl.InstallServiceConfig removed

com.webmethods.portal.service.install.impl.ant.AntInstallService: Class

com.webmethods.portal.service.install.impl.ant.AntInstallService removed

com.webmethods.portal.service.install.impl.ant.AntLogSupport: Class

com.webmethods.portal.service.install.impl.ant.AntLogSupport removed

com.webmethods.portal.service.install.impl.ant.AntRunner: Class

com.webmethods.portal.service.install.impl.ant.AntRunner removed

com.webmethods.portal.service.install.impl.ant.AntRunner\$AntPropertyHelper: Class

com.webmethods.portal.service.install.impl.ant.AntRunner\$AntPropertyHelper removed

com.webmethods.portal.service.install.impl.ant.LpInstallService: Class

com.webmethods.portal.service.install.impl.ant.LpInstallService removed

## Removed API/ Description

com.webmethods.portal.service.install.impl.ant.WarLpInstallService: Class  
com.webmethods.portal.service.install.impl.ant.WarLpInstallService removed

com.webmethods.rtl.logging.Mws13818Filter: Class com.webmethods.rtl.logging.Mws13818Filter removed

com.webmethods.rtl.util.msg.IRuntimeMessage: Class com.webmethods.rtl.util.msg.IRuntimeMessage removed

com.webmethods.rtl.util.msg.IRuntimeMessageCallback: Class  
com.webmethods.rtl.util.msg.IRuntimeMessageCallback removed

com.webmethods.rtl.util.msg.IRuntimeMessageHook: Class  
com.webmethods.rtl.util.msg.IRuntimeMessageHook removed

com.webmethods.rtl.util.msg.RuntimeMessageUtil: Class  
com.webmethods.rtl.util.msg.RuntimeMessageUtil removed

com.webmethods.rtl.util.msg.RuntimeMessageUtil\$RuntimeListeners: Class  
com.webmethods.rtl.util.msg.RuntimeMessageUtil\$RuntimeListeners removed

com.webmethods.rtl.util.msg.RuntimeMessageUtil\$RuntimeMessageListener: Class  
com.webmethods.rtl.util.msg.RuntimeMessageUtil\$RuntimeMessageListener removed

com.webmethods.rtl.util.obj.CyclicIterator: Class com.webmethods.rtl.util.obj.CyclicIterator removed

com.webmethods.rtl.util.obj.EmptyEnumeration: Class  
com.webmethods.rtl.util.obj.EmptyEnumeration removed

com.webmethods.rtl.util.obj.EmptyIterator: Class com.webmethods.rtl.util.obj.EmptyIterator removed

com.webmethods.rtl.util.obj.FileClassLoader: Class com.webmethods.rtl.util.obj.FileClassLoader removed

com.webmethods.rtl.util.obj.IntMinMaxInfo: Class com.webmethods.rtl.util.obj.IntMinMaxInfo removed

com.webmethods.rtl.util.obj.IntStringMap: Class com.webmethods.rtl.util.obj.IntStringMap removed

com.webmethods.rtl.util.obj.IteratorTools: Class com.webmethods.rtl.util.obj.IteratorTools removed

com.webmethods.rtl.util.obj.PersistentMap: Class com.webmethods.rtl.util.obj.PersistentMap removed

com.webmethods.rtl.util.obj.PropertyGroup: Class com.webmethods.rtl.util.obj.PropertyGroup removed

com.webmethods.rtl.util.obj.PropertyGroups: Class com.webmethods.rtl.util.obj.PropertyGroups removed

com.webmethods.rtl.util.obj.SortableArray: Class com.webmethods.rtl.util.obj.SortableArray removed

com.webmethods.rtl.util.thread.ReadWriteMutex: Class  
com.webmethods.rtl.util.thread.ReadWriteMutex removed

## Removed API/ Description

com.softwareag.caf.controls.mwsx.PeoplePickerDialog: Removed field m\_facets

com.softwareag.caf.controls.mwsx.PeopleSwapBox: Removed field m\_facets

com.webmethods.caf.faces.component.behavior.BaseBehavior: Removed field m\_for

com.webmethods.caf.faces.component.behavior.CustomDragBehavior: Removed field m\_allowDrag

com.webmethods.caf.faces.component.behavior.CustomDragBehavior: Removed field m\_cursor

com.webmethods.caf.faces.component.behavior.CustomDragBehavior: Removed field m\_move

com.webmethods.caf.faces.component.behavior.CustomDragBehavior: Removed field m\_propagateEvent

com.webmethods.caf.faces.component.behavior.CustomDropBehavior: Removed field m\_allowDrop

com.webmethods.caf.faces.component.behavior.CustomDropBehavior: Removed field m\_handleDrop

com.webmethods.caf.faces.component.behavior.CustomDropBehavior: Removed field m\_hoverClass

com.webmethods.caf.faces.component.behavior.CustomDropBehavior: Removed field m\_onDropSetValue

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_add

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_allowDrag

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_allowDrop

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_copy

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_handleDrop

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_hoverClass

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_remove

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_reorder

com.webmethods.caf.faces.component.behavior.DragToReorderColumnsBehavior: Removed field m\_storePreferences

com.webmethods.caf.faces.component.behavior.DragToResizeBehavior: Removed field m\_resizeBottom

com.webmethods.caf.faces.component.behavior.DragToResizeBehavior: Removed field m\_resizeLeft

com.webmethods.caf.faces.component.behavior.DragToResizeBehavior: Removed field m\_resizeRight

## Removed API/ Description

com.webmethods.caf.faces.component.behavior.DragToResizeBehavior: Removed field m\_resizeTop

com.webmethods.caf.faces.component.behavior.DragToResizeColumnsBehavior: Removed field m\_storePreferences

com.webmethods.caf.faces.component.behavior.RaiseOnChangeBehavior: Removed field m\_command

com.webmethods.caf.faces.component.behavior.SynchronizeValuesBehavior: Removed field m\_with

com.webmethods.caf.faces.component.command.html.AsyncCommandButton: Removed field m\_refresh

com.webmethods.caf.faces.component.command.html.AsyncCommandIcon: Removed field m\_refresh

com.webmethods.caf.faces.component.command.html.AsyncCommandInterval: Removed field m\_interval

com.webmethods.caf.faces.component.command.html.AsyncCommandInterval: Removed field m\_waitUntilReloaded

com.webmethods.caf.faces.component.command.html.AsyncCommandLink: Removed field m\_refresh

com.webmethods.caf.faces.component.command.html.AsyncHiddenCommand: Removed field m\_refresh

com.webmethods.caf.faces.component.command.html.CommandForm: Removed field m\_forms

com.webmethods.caf.faces.component.command.html.CommandIcon: Removed field m\_alt

com.webmethods.caf.faces.component.command.html.CommandIcon: Removed field m\_url

com.webmethods.caf.faces.component.command.html.CommandIcon: Removed field m\_urlMouseDown

com.webmethods.caf.faces.component.command.html.CommandIcon: Removed field m\_urlMouseover

com.webmethods.caf.faces.component.events.OpenAjaxScript: Removed field openAjaxTopic

com.webmethods.caf.faces.component.events.OpenAjaxScript: Removed field shouldSubscribe

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_converter

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_entriesProvider

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_exportCharacterEncoding

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_exportFileName

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_exportForceDownload

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_feedProvider

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_feedUrl

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com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_for

com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_height

com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_initialAddress

com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_initialCountry

com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_key

com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_latitude

com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_longitude

com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_type

com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_width

com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_zoom

com.webmethods.caf.faces.component.gmap.GMapControl: Removed field m\_anchor

com.webmethods.caf.faces.component.gmap.GMapControl: Removed field m\_offsetX

com.webmethods.caf.faces.component.gmap.GMapControl: Removed field m\_offsetY

com.webmethods.caf.faces.component.gmap.GMapControl: Removed field m\_type

com.webmethods.caf.faces.component.gmap.GMapGetCoordsScript: Removed field m\_latitude

com.webmethods.caf.faces.component.gmap.GMapGetCoordsScript: Removed field m\_longitude

com.webmethods.caf.faces.component.gmap.GMapKey: Removed field m\_key

com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_clickable

com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_draggable

com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_icon

com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_iconSizeHeight

com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_iconSizeWidth

com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_initialAddress

com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_initialCountry

com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_latitude

com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_longitude

com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_selected

com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_title

com.webmethods.caf.faces.component.gmap.GMarkerGroup: Removed field m\_groupProvider

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com.webmethods.caf.faces.component.input.DateInput: Removed field m\_pattern  
com.webmethods.caf.faces.component.input.DateInput: Removed field m\_showMonthAndYearMenus  
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com.webmethods.caf.faces.component.input.DateRangeInput: Removed field m\_layout  
com.webmethods.caf.faces.component.input.DateRangeInput: Removed field m\_pastRanges  
com.webmethods.caf.faces.component.logic.If: Removed field m\_value  
com.webmethods.caf.faces.component.logic.Import: Removed field m\_value  
com.webmethods.caf.faces.component.logic.ImportTemplate: Removed field m\_value  
com.webmethods.caf.faces.component.logic.LoadResourceBundle: Removed field m\_basename

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com.webmethods.caf.faces.component.logic.LoadResourceBundle: Removed field m\_var  
com.webmethods.caf.faces.component.logic.VariableContainer: Removed field m\_value  
com.webmethods.caf.faces.component.logic.VariableContainer: Removed field m\_var  
com.webmethods.caf.faces.component.message.FormattedMessage: Removed field m\_showDetail  
com.webmethods.caf.faces.component.message.FormattedMessages: Removed field m\_showDetail  
com.webmethods.caf.faces.component.message.SpecificFormattedMessages: Removed field m\_for  
com.webmethods.caf.faces.component.message.SpecificMessages: Removed field m\_for  
com.webmethods.caf.faces.component.mws\_ui.MwsResourceInclude: Removed field renderer  
com.webmethods.caf.faces.component.mws\_ui.MwsResourceInclude: Removed field uri  
com.webmethods.caf.faces.component.nav.StaticMenus: Removed field m\_appNavBean  
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com.webmethods.caf.faces.component.nav.StaticMenus: Removed field m\_facets  
com.webmethods.caf.faces.component.nav.ToggleMenus: Removed field m\_appNavBean  
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com.webmethods.caf.faces.component.output.Chart: Removed field m\_barPadding  
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com.webmethods.caf.faces.component.output.Chart: Removed field m\_series  
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com.webmethods.caf.faces.component.output.ChartLabelColumn: Removed field m\_label  
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com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_alt  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_dir  
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com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_image  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_label  
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com.webmethods.caf.faces.component.output.html.HtmlLink: Removed field m\_label  
com.webmethods.caf.faces.component.output.refresh.RefreshButton: Removed field m\_for  
com.webmethods.caf.faces.component.output.refresh.RefreshIcon: Removed field m\_for  
com.webmethods.caf.faces.component.output.refresh.RefreshInterval: Removed field m\_for  
com.webmethods.caf.faces.component.output.refresh.RefreshInterval: Removed field m\_interval  
com.webmethods.caf.faces.component.output.refresh.RefreshInterval: Removed field m\_waitUntilReloaded  
com.webmethods.caf.faces.component.output.refresh.RefreshLink: Removed field m\_for  
com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_disableWhenHidden  
com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_lazy  
com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_refreshOnShow  
com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_suppressInputs  
com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_twoPass  
com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_visible  
com.webmethods.caf.faces.component.panel.OverlayPanel: Removed field m\_hideEffect  
com.webmethods.caf.faces.component.panel.OverlayPanel: Removed field m\_showEffect  
com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_click  
com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_close  
com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_closeOnClick  
com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_forRightClick  
com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_hideEffect  
com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_hideEffectOptions  
com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_hover  
com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_position  
com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_showEffect

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com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_showEffectOptions

com.webmethods.caf.faces.component.panel.PropertyLine: Removed field m\_description

com.webmethods.caf.faces.component.panel.PropertyLine: Removed field m\_label

com.webmethods.caf.faces.component.panel.PropertyLine: Removed field m\_overflow

com.webmethods.caf.faces.component.panel.PropertyLine: Removed field m\_parentId

com.webmethods.caf.faces.component.panel.StackPanel: Removed field m\_value

com.webmethods.caf.faces.component.panel.StaticCell: Removed field m\_align

com.webmethods.caf.faces.component.panel.StaticCell: Removed field m\_height

com.webmethods.caf.faces.component.panel.StaticCell: Removed field m\_width

com.webmethods.caf.faces.component.panel.StaticRow: Removed field m\_height

com.webmethods.caf.faces.component.panel.StaticRow: Removed field m\_width

com.webmethods.caf.faces.component.search.BaseSearchControlHelper: Removed field fQuerySupplied

com.webmethods.caf.faces.component.search.BaseSearchControlHelper: Removed field fQuerySuppliedExpr

com.webmethods.caf.faces.component.search.SearchBar: Removed field m\_facets

com.webmethods.caf.faces.component.select.FilterInput: Removed field m\_labelText

com.webmethods.caf.faces.component.select.FilterInput: Removed field m\_showGoButton

com.webmethods.caf.faces.component.select.SelectMany: Removed field m\_filter

com.webmethods.caf.faces.component.select.SelectMany: Removed field m\_other

com.webmethods.caf.faces.component.select.SelectMany: Removed field m\_sortByLabel

com.webmethods.caf.faces.component.select.SelectOne: Removed field m\_filter

com.webmethods.caf.faces.component.select.SelectOne: Removed field m\_other

com.webmethods.caf.faces.component.select.SelectOne: Removed field m\_sortByLabel

com.webmethods.caf.faces.component.select.html.HtmlSelectBoolean: Removed field m\_accesskey

com.webmethods.caf.faces.component.select.html.HtmlSelectBoolean: Removed field m\_dir

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com.webmethods.caf.faces.component.select.html.HtmlSelectMany: Removed field m\_dir

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com.webmethods.caf.faces.component.select.html.HtmlSelectMany: Removed field m\_ondblclick  
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com.webmethods.caf.faces.component.select.html.HtmlSelectMany: Removed field m\_style  
com.webmethods.caf.faces.component.select.html.HtmlSelectMany: Removed field m\_styleClass  
com.webmethods.caf.faces.component.select.html.HtmlSelectMany: Removed field m\_tabindex  
com.webmethods.caf.faces.component.select.html.HtmlSelectOne: Removed field m\_onblur  
com.webmethods.caf.faces.component.select.html.HtmlSelectOne: Removed field m\_onchange  
com.webmethods.caf.faces.component.select.html.HtmlSelectOne: Removed field m\_onclick  
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com.webmethods.caf.faces.component.table.AddRow: Removed field m\_for  
com.webmethods.caf.faces.component.table.AddRow: Removed field m\_row  
com.webmethods.caf.faces.component.table.AddRowIcon: Removed field m\_title  
com.webmethods.caf.faces.component.table.AddRowIcon: Removed field m\_url  
com.webmethods.caf.faces.component.table.AddRowIcon: Removed field m\_urlMouseDown  
com.webmethods.caf.faces.component.table.AddRowIcon: Removed field m\_urlMouseover  
com.webmethods.caf.faces.component.table.BaseExtendedColumn: Removed field m\_align  
com.webmethods.caf.faces.component.table.BaseExtendedColumn: Removed field m\_ascending  
com.webmethods.caf.faces.component.table.BaseExtendedColumn: Removed field m\_exportable  
com.webmethods.caf.faces.component.table.BaseExtendedColumn: Removed field m\_group  
com.webmethods.caf.faces.component.table.BaseExtendedColumn: Removed field m\_hidden  
com.webmethods.caf.faces.component.table.BaseExtendedColumn: Removed field m\_label  
com.webmethods.caf.faces.component.table.BaseExtendedColumn: Removed field m\_nowrap  
com.webmethods.caf.faces.component.table.BaseExtendedColumn: Removed field m\_optional  
com.webmethods.caf.faces.component.table.BaseExtendedColumn: Removed field m\_ordinal  
com.webmethods.caf.faces.component.table.BaseExtendedColumn: Removed field m\_secondary

## Removed API/ Description

com.webmethods.caf.faces.component.table.BaseExtendedColumn: Removed field m\_secondaryEnd  
com.webmethods.caf.faces.component.table.BaseExtendedColumn: Removed field m\_secondaryStart  
com.webmethods.caf.faces.component.table.BaseExtendedColumn: Removed field m\_sort  
com.webmethods.caf.faces.component.table.BaseExtendedColumn: Removed field m\_valign  
com.webmethods.caf.faces.component.table.BaseExtendedColumn: Removed field m\_width  
com.webmethods.caf.faces.component.table.BaseSelectRow: Removed field m\_accesskey  
com.webmethods.caf.faces.component.table.BaseSelectRow: Removed field m\_disabled  
com.webmethods.caf.faces.component.table.BaseSelectRow: Removed field m\_multiple  
com.webmethods.caf.faces.component.table.BaseSelectRow: Removed field m\_tabindex  
com.webmethods.caf.faces.component.table.DataPager: Removed field m\_for  
com.webmethods.caf.faces.component.table.DataPages: Removed field m\_maxPages  
com.webmethods.caf.faces.component.table.DataPages: Removed field m\_showAlways  
com.webmethods.caf.faces.component.table.MoveRowIcon: Removed field m\_title  
com.webmethods.caf.faces.component.table.MoveRowIcon: Removed field m\_url  
com.webmethods.caf.faces.component.table.MoveRowIcon: Removed field m\_urlMouseDown  
com.webmethods.caf.faces.component.table.MoveRowIcon: Removed field m\_urlMouseover  
com.webmethods.caf.faces.component.table.PrevNext: Removed field m\_expandToEdges  
com.webmethods.caf.faces.component.table.PrevNext: Removed field m\_nextIconUrl  
com.webmethods.caf.faces.component.table.PrevNext: Removed field m\_nextText  
com.webmethods.caf.faces.component.table.PrevNext: Removed field m\_prevIconUrl  
com.webmethods.caf.faces.component.table.PrevNext: Removed field m\_prevText  
com.webmethods.caf.faces.component.table.PrevNext: Removed field m\_showAlways  
com.webmethods.caf.faces.component.table.RemoveRow: Removed field m\_for  
com.webmethods.caf.faces.component.table.RemoveRow: Removed field m\_removeLastRow  
com.webmethods.caf.faces.component.table.RemoveRow: Removed field m\_row  
com.webmethods.caf.faces.component.table.RemoveRowIcon: Removed field m\_title  
com.webmethods.caf.faces.component.table.RemoveRowIcon: Removed field m\_url  
com.webmethods.caf.faces.component.table.RemoveRowIcon: Removed field m\_urlMouseDown  
com.webmethods.caf.faces.component.table.RemoveRowIcon: Removed field m\_urlMouseover

## Removed API/ Description

com.webmethods.caf.faces.component.table.SelectRow: Removed field m\_accesskey  
com.webmethods.caf.faces.component.table.SelectRow: Removed field m\_disabled  
com.webmethods.caf.faces.component.table.SelectRow: Removed field m\_for  
com.webmethods.caf.faces.component.table.SelectRow: Removed field m\_multiple  
com.webmethods.caf.faces.component.table.SelectRow: Removed field m\_tabindex  
com.webmethods.caf.faces.component.table.SelectRowCheckbox: Removed field m\_children  
com.webmethods.caf.faces.component.table.SelectRowCheckbox: Removed field m\_facets  
com.webmethods.caf.faces.component.table.html.AsyncList: Removed field m\_bufferChunk  
com.webmethods.caf.faces.component.table.html.AsyncList: Removed field m\_bufferMax  
com.webmethods.caf.faces.component.table.html.AsyncList: Removed field m\_bufferMin  
com.webmethods.caf.faces.component.table.html.AsyncList: Removed field m\_clientSideCache  
com.webmethods.caf.faces.component.table.html.AsyncList: Removed field m\_flashOnChange  
com.webmethods.caf.faces.component.table.html.AsyncList: Removed field m\_progressDelay  
com.webmethods.caf.faces.component.table.html.AsyncList: Removed field m\_progressMsg  
com.webmethods.caf.faces.component.table.html.AsyncList: Removed field m\_suppressInputs  
com.webmethods.caf.faces.component.table.html.AsyncListbox: Removed field m\_rowClasses  
com.webmethods.caf.faces.component.table.html.AsyncTable: Removed field m\_bufferChunk  
com.webmethods.caf.faces.component.table.html.AsyncTable: Removed field m\_bufferMax  
com.webmethods.caf.faces.component.table.html.AsyncTable: Removed field m\_bufferMin  
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com.webmethods.caf.faces.component.table.html.AsyncTable: Removed field m\_progressDelay  
com.webmethods.caf.faces.component.table.html.AsyncTable: Removed field m\_progressMsg  
com.webmethods.caf.faces.component.table.html.AsyncTable: Removed field m\_suppressInputs  
com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field dayVar  
com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field eventVar  
com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field m\_allDay  
com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field m\_calendarEndDate  
com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field m\_calendarStartDate

## Removed API/ Description

com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field m\_displayUnits

com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field m\_events

com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field m\_eventsSet

com.webmethods.caf.faces.component.table.html.CalendarTable: Removed field m\_initialDate

com.webmethods.caf.faces.component.table.html.DataList: Removed field m\_marker

com.webmethods.caf.faces.component.table.html.DataList: Removed field m\_selected

com.webmethods.caf.faces.component.table.html.DataList: Removed field m\_selectedRowClass

com.webmethods.caf.faces.component.table.html.DataTable: Removed field createdToOriginalRowIds

com.webmethods.caf.faces.component.table.html.DataTable: Removed field filter

com.webmethods.caf.faces.component.table.html.DataTable: Removed field first

com.webmethods.caf.faces.component.table.html.DataTable: Removed field firstSet

com.webmethods.caf.faces.component.table.html.DataTable: Removed field originalToCreatedRowIds

com.webmethods.caf.faces.component.table.html.DataTable: Removed field var

com.webmethods.caf.faces.component.table.html.HtmlTableColumn: Removed field m\_facets

com.webmethods.caf.faces.component.table.html.ListBox: Removed field m\_rowClasses

com.webmethods.caf.faces.component.table.specialized.Newsfeed: Removed field m\_children

com.webmethods.caf.faces.component.table.specialized.Newsfeed: Removed field m\_facets

com.webmethods.caf.faces.component.table.specialized.Newsfeed: Removed field m\_layout

com.webmethods.caf.faces.component.table.specialized.Newsfeed: Removed field m\_size

com.webmethods.caf.faces.component.table.specialized.Newsfeed: Removed field m\_url

com.webmethods.caf.faces.component.toggle.InitiateToggle: Removed field m\_for

com.webmethods.caf.faces.component.toggle.OneWayToggle: Removed field m\_for

com.webmethods.caf.faces.component.toggle.OneWayToggle: Removed field m\_way

com.webmethods.caf.faces.component.toggle.html.HtmlOneWayToggle: Removed field m\_disabled

com.webmethods.caf.faces.component.toggle.html.HtmlOneWayToggle: Removed field m\_disabledClass

com.webmethods.caf.faces.component.toggle.html.HtmlOneWayToggle: Removed field m\_enabledClass

com.webmethods.caf.faces.component.toggle.html.HtmlOneWayToggle: Removed field m\_width

com.webmethods.caf.faces.component.toggle.html.HtmlOneWayToggleCheckbox: Removed field



## Removed API/ Description

m\_checked

com.webmethods.caf.faces.component.toggle.html.HtmlOneWayToggleCheckbox: Removed field m\_checkedWhenVisible

com.webmethods.caf.faces.component.toggle.html.HtmlToggle: Removed field m\_disabled

com.webmethods.caf.faces.component.toggle.html.HtmlToggle: Removed field m\_disabledClass

com.webmethods.caf.faces.component.toggle.html.HtmlToggle: Removed field m\_enabledClass

com.webmethods.caf.faces.component.toggle.html.HtmlToggle: Removed field m\_layout

com.webmethods.caf.faces.component.toggle.html.HtmlToggle: Removed field m\_width

com.webmethods.caf.faces.component.tree.AsyncTree: Removed field m\_initialDepth

com.webmethods.caf.faces.component.tree.AsyncTree: Removed field m\_progressDelay

com.webmethods.caf.faces.component.tree.AsyncTree: Removed field m\_progressFlashOnComplete

com.webmethods.caf.faces.component.tree.AsyncTree: Removed field m\_progressMsg

com.webmethods.caf.faces.component.tree.AsyncTree: Removed field m\_refillDepth

com.webmethods.caf.faces.component.tree.AsyncTree: Removed field m\_refreshOnShow

com.webmethods.caf.faces.component.tree.AsyncTree: Removed field m\_suppressInputs

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_collapseAllIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_collapseIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_expandAllIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_expandIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_leafIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_lineBottomIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_lineIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_lineNoneIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_lineTopIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_loadingIcon

com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_showSortLink

com.webmethods.caf.faces.view.BaseViewHandler: Removed field RE\_FE\_URL

com.webmethods.portal.faces.view.PortalViewHandler: Removed field RE\_FE\_URL

com.webmethods.portal.taglib.PortalIterationTagSupport: Removed field EMPTY\_ITERATOR

## Release 9.8

### Added API

In Java 8, a sort (Comparator) method was added to the java.util.List interface.

### Description

The My webMethods Server IListView interface extends the java.util.List interface, and has its own "sort" method with the same name but with a different method signature, which is not an allowed overwrite.

To resolve the issue, the "throws PortalException" declaration has been removed from the IListView#sort(Comparator) method, so that it is compatible with the method in the List interface.

## Release 9.7

### Added API

Added new functions to tabbar.js to prevent a tab from being closed or switched.

### Description

The new functions are:

```
setCustomUserTabLeftNavHandlerForCurrentSelectedTab  
setCustomUserTabCloseHandlerForCurrentSelectedTab  
setCustomUserTabSwitchHandlerForCurrentSelectedTab
```

## 10.0 Copyright Information

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## 11.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

MWS-RM-912-20161018

# Software AG NERV 9.12 Readme

October 2016

This file contains important information you must read before using Software AG NERV 9.12. You can find user documentation on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find the suite-related information listed below.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- EDA-861  
When the JMS provider is unavailable, shutting down NERV gracefully may take too much time. When the JMS provider to which NERV emits events becomes unavailable, shutting down NERV or the runtime in which it is running takes 5 minutes.  
The issue is resolved for the case when a small number of events are available in the Camel inflight message repository. As a workaround for cases with a large number of events, you can terminate the JVM process in which NERV is running from the Task Manager of your operating system.
- EDA-1021  
Events are not redelivered in case of short-term endpoint unavailability during NERV shutdown. If a route endpoint becomes temporarily unavailable or throws an exception while processing an event during NERV shutdown, the event will not be redelivered if the endpoint becomes available again while the shutdown operation takes place. If guaranteed delivery is enabled, the event will be redelivered after NERV is restarted, which may corrupt the original order of events.  
There is currently no workaround for this issue.
- EDA-3450  
Software AG recommends against using the camel-jetty or camel-servlet Apache Camel components due to security vulnerability.  
NERV uses the Apache Camel framework version 2.12.3 to route events from producers to consumers. By default, NERV uses only the JMS component of Camel in producer and consumer routes. However, NERV allows you to use any other Camel component in a custom route definition. See “Switching Between Default and Custom NERV Logic” in the NERV user documentation.  
There is currently no workaround other than not to use these two components in NERV route definitions.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.10***

- EDA\_9.9\_NERV\_Fix1

### ***Release 9.8***

- NERV 9.7 Fix 5

### ***Release 9.7***

- NERV 9.6 Fix 5
- EDA Event Type Editor 9.6 Fix 3

### ***Release 9.6***

- NERV 9.5 SP1 Fix 1

### ***Release 9.5***

- Software AG Designer Event Type Editor 9.0 SP1 Fix 1
- webMethods NERV 9.0 SP1 Fix 4

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Release 9.9***

- EDA-1846  
In a non-OSGi environment, NERV fails to create events and process component bundles. For applications working in a non-OSGi environment, NERV cannot create events and process component bundles successfully. A `ClassNotFoundException` is thrown.  
This issue is now resolved.

### ***Release 9.7***

- EDA-878  
NERV emits cached events at start-up before the activation of deployed emit configuration bundles. At start-up, NERV emits all messages found in the NERV cache directory. As a result, the messages are sent to the default endpoint, instead of the endpoint(s) defined in the deployed custom routes. This issue occurs randomly.  
The issue is now resolved.
- EDA-874  
A synchronous invocation of the `emit()` method during the activation of any deployed NERV emit configuration bundle causes NERV to block. Invoking the `emit(Message message)` method of the `EventEmitter` service during the activation of a deployed NERV emit configuration bundle leads to a deadlock in NERV, and the `EventEmitter` service becomes unresponsive.  
The issue is now resolved. The `emit()` method is called asynchronously in a separate thread which does not block the main thread of execution.

## 6.0 Documentation Changes

This section describes significant changes to the documentation in each release, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### ***Release 9.10***

Removed Item	Replacement, if any
com.softwareag.eda.nerv.hdfs.feature	The HDSF feature has been removed from the product. This functionality is now provided by Software AG Event Routing and webMethods Event Persistence.

### ***Release 9.7***

Deprecated Item	Replacement, if any
EDA Orchestrator	EDA Orchestrator is deprecated and no longer distributed with webMethods NERV 9.7. All functionality is available in webMethods NERV.

### ***Release 9.5***

Added Item	Description
com.softwareag.eda.nerv.jms.async.subscription	A configuration property that defines the way NERV subscribers consume events. The default value is false. If set to true, NERV subscribers consume events asynchronously.

## 9.0 Added, Removed, Deprecated, or Changed Parameters

A release is listed in this section only if changes occurred in that release.



## Release 9.7

Added Parameter	Description
com.softwareag.eda.nerv.security.file.location	<p>Contains the path to the NERV security file. This file contains the encrypted secret key used by NERV for encrypting and decrypting passwords specified in the route bundles making connections which require password authentications. The default value is:</p> <p><i>@path\sag.install.area/common/conf/nerv/nerv-security.xml</i>. When NERV runs in the Common Platform, the <i>@path:sag.install.area</i> token is dynamically resolved at runtime to point to your Software AG installation directory.</p> <p><b>Note:</b> When NERV runs outside the Common Platform, the default value is not taken into account.</p>
Removed Parameter	Replacement, if any
com.softwareag.eda.nerv.orchestrator.compatibility.mode	

## Release 9.6

Added Parameter	Description
com.softwareag.eda.nerv.guaranteed.delivery.level	<p>Specifies the guaranteed delivery level for storing events. The default value is <code>MAXIMUM_STRONG</code>. Other possible values are <code>NONE</code>, and <code>MAXIMUM_EVENTUAL</code>.</p> <p>Note: When you set up the guaranteed delivery level to <code>MAXIMUM_STRONG</code> or <code>MAXIMUM_EVENTUAL</code>, the value you have defined for the <code>com.softwareag.eda.nerv.maximum.redelivery.attempts</code> property is disregarded. Instead, NERV attempts to redeliver events infinitely.</p>
com.softwareag.eda.nerv.cache.configuration.location	<p>Specifies the location of the Ehcache configuration files. It is used together with the <code>com.softwareag.eda.nerv.guaranteed.delivery.level</code> property.</p>

Added Parameter	Description
com.softwareag.eda.nerv.jms.auto.generate.topics	Enables NERV to create topics automatically on the specified JMS provider. The default value is true. If set to false, users must create topics manually on the JMS provider.

## 10.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

### **Release 9.8**

The webMethods NERV component and the low-level Java API to it are now deprecated. Note that despite that deprecation, Software AG products continue to communicate using events, and you can still use the high-level webMethods Integration Server built-in services to send and receive events.

Added API	Description
com.softwareag.eda.store.api.parser.EventParser.validate(SchemaElementTree schemaDefinition, String event)	Validates the provided event content against the specified schemaDefinition.
com.softwareag.eda.store.api.EDAEventTypeStore.validate(EDAEventTypeID eventTypeID, String content)	Validates the provided content against the XSD schema of the specified event type.

Deprecated API	Replacement, if any
com.softwareag.eda.jndi	
com.softwareag.eda.nerv	
com.softwareag.eda.nerv.jms	
com.softwareag.eda.nerv.jms.util	
com.softwareag.eda.nerv.nonosgi	
com.softwareag.eda.nerv.nonosgi.util	
com.softwareag.eda.nerv.route.builder	
com.softwareag.eda.nerv.route.conf	
com.softwareag.eda.nerv.route.endpoint	
com.softwareag.eda.nerv.subscription	
com.softwareag.eda.nerv.util	
com.softwareag.eda.nerv.error.handling	

Changed API	Description
com.softwareag.eda.nerv.encrypt.api	This package has been renamed to com.softwareag.event.routing.encryption .

## Release 9.7

Added API	Description
EventParser.getProperties()	Retrieves leaf elements of event XML in <i>Map&lt;String, String&gt;</i> format.
com.softwareag.eda.nerv.admin.api.beans.blueprint	This package contains the JAXB generated POJO classes of the Blueprint schema used for setting up the Blueprint XML of a deployable JAR file.
NervTextEncryptor.decrypt(String)	Decrypts a given string.
NervTextEncryptor.decryptForCamel(String)	Decrypts a given string if the String is in Camel format it is decrypted, else return the input value.
NervTextEncryptor.encrypt(String)	Encrypts a given string.
NervTextEncryptor.encryptForCamel(String)	Encrypts a given string and wrap it for use in the Camel environment.
NervTextEncryptor. NervTextEncryptor()	Default constructor.

Added API	Description
NervTextEncryptor.setSecurityFileLocation (String)	Set the location of the <i>nerv-security.xml</i> file.
NervTextEncryptorFactory.createTextEncryptor (String)	Create a new NervTextEncryptor.
NervEncryptionException(String)	Constructs an object based on the provided parameters.
NervEncryptionException(String,Throwable)	Constructs an object based on the provided parameters.
NervEncryptionException(Throwable)	Constructs an object based on the provided parameters.

## Removed API

All EDA Orchestrator API classes from the packages below have been removed:

- `com.softwareag.eda.api`
- `com.softwareag.eda.api.exception`
- `com.softwareag.eda.event.schema`
- `com.softwareag.eda.event.schema.internal`
- `com.softwareag.eda.event.schema.relational`
- `com.softwareag.eda.event.schema.xsd`
- `com.softwareag.eda.utility`
- `com.softwareag.eda.utility.cache`
- `com.softwareag.eda.utility.config`
- `com.softwareag.eda.utility.core`
- `com.softwareag.eda.utility.jms`
- `com.softwareag.eda.utility.log`
- `com.softwareag.eda.utility.transform`

## Replacement, if any

The functionality of the EDA Orchestrator API is now available using the NERV API.

## Changed API

`EventParser.getHeaders()`

## Description

Returns type changed from `Map<String, Object>` to `Map<String, String>`.

`EventParser.getFilterableProperties()`

Returns type changed from `<String, Object>` to `Map<String, String>`.

## Release 9.6

### Added API

`Configuration.THREAD_POOL`

### Description

New subscription configuration.

Added API	Description
DefaultConstants. DEFAULT_AUTO_GENERATE_TOPICS	The default value is true. If set to false, users must create topics manually on the JMS provider.
DefaultConstants. DEFAULT_IN_MEMORY_CHANNEL_SIZE_VALUE	Default count of events that can exist in the in-memory channel.
DefaultConstants.DEFAULT_IN_MEMORY_CONCURRENT_CONSUMERS_VALUE	Default count of consumers that can work at the same time.
DefaultConstants.DEFAULT_MAXIMUM_REDELIVERY_ATTEMPTS_VALUE	Default count of attempts to redeliver unsent messages.
DefaultConstants. DEFAULT_REDELIVERY_DELAY_VALUE	Default delay in milliseconds between attempts to redeliver unsent messages.
DefaultConstants.GUARANTEED_DELIVERY_LEVEL_MAXIMUM_EVENTUAL	Value used for enabling the MAXIMUM EVENTUAL level of guaranteed delivery.
DefaultConstants.GUARANTEED_DELIVERY_LEVEL_MAXIMUM_STRONG	Value used for enabling the MAXIMUM STRONG level of guaranteed delivery
DefaultConstants. GUARANTEED_DELIVERY_LEVEL_NONE	Value used for disabling guaranteed delivery of events.
DefaultConstants. PROP_AUTO_GENERATE_TOPICS	Property to set if the generation of topics is enabled or disabled.
DefaultConstants. PROP_CACHE_CONFIGURATION_LOCATION	Property for setting the location of the configuration for guaranteed delivery cache.
DefaultConstants. PROP_GUARANTEED_DELIVERY_LEVEL	Property for setting the guaranteed delivery level.
DefaultConstants. PROP_IN_MEMORY_CONCURRENT_CONSUMERS	Property for setting the concurrent consumers count of the in memory VM channels.
EndpointResolver. generateInMemoryEndpointURINoOptions (EDAEventTypeID)	Generates an endpoint URI denoting the in memory VM channel which corresponds to the specified event type.
EndpointResolver. generateInMemoryEndpointURINoOptions (String)	Generates an endpoint URI denoting the in memory VM channel which corresponds to the specified event type.
NERVSingleton.getAutoCreateTopics()	Returns the status of auto generation of topics in JMS.

Added API	Description
PropertiesProvider.getProperties()	Gets all properties from a preinitialized java.util.Properties object.
PropertiesProvider.getProperty(String)	Gets a value of a property from a preinitialized java.util.Properties object.
Subscription.useThreadPool(int)	Configures the subscription to use a thread pool with the specified size.
Subscription.useThreadPool (ThreadPoolConfiguration)	Configures the subscription to use a thread pool with the specified configuration.
ThreadPoolConfiguration. ThreadPoolConfiguration(int, int, String)	Constructs an object based on the provided parameters.
ThreadPoolConfiguration.getMaxPoolSize()	Gives access to the maximum size of the pool to be used by NERV.
ThreadPoolConfiguration.getPoolSize()	Gives access to the initial size of the pool to be used by NERV.
ThreadPoolConfiguration.getThreadName()	Gives access to the template name used by NERV when processing threads are spawned.
ThreadPoolConfiguration.getType()	Returns the configuration type represented as an integer.
XSDParserResolver.resolveXsdParser()	Resolves a XSDParser instance.
SchemaElementTree.getFilterableProperties()	Gets the filterable properties.
SchemaElementTree.getWalker()	Gets a schema element tree walker.
SchemaElementTreeNode.getEffective Restriction()	Gets the restriction for the current node.
SchemaElementTreeNode.hasRestriction()	Check whether this node has a restriction.
XsdConverter	Converts IS schemata to EDA event types.
XsdConverterFactory	Factory to create instances of XsdConverter and XsdInfo.
XsdInfo	Represents a XML schema.

Removed API	Replacement, if any
EndpointResolver. generateDefaultInMemoryEndpointURI (String)	No replacement. Generates endpoint with a given event type.

Changed API	Description
EndpointResolver. generateDefaultInMemoryEndpointURI(String, PropertiesProvider)	Generates an endpoint URI denoting the default in memory VM channel which corresponds to the specified event type.
DefaultConstants. DEFAULT_IN_MEMORY_CHANNEL_ SIZE_VALUE	Replaces DefaultConstants.IN_MEMORY_CHANNEL_DEF AULT_SIZE. Constant type has been changed from String to int.

## Release 9.5

Deprecated API	Replacement, if any
NERVSingleton.loadAssets(Properties, String)	NERVSingleton.loadAssets(Properties)

## 11.0 Copyright Information

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## 12.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

NERV-RM-912-20161018



# webMethods OneData 9.9 Readme

October 2015

This file contains important information you must read before using webMethods OneData 9.8. You can find user documentation on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find the suite-related information listed below.

*webMethods Product Suite Release Notes*

*webMethods and Intelligent Business Operations System Requirements*

*webMethods System Cache Specifications*

*Using the Software AG Installer*

*Installing webMethods and Intelligent Business Operations Products*

*Using the Software AG Update Manager (fixes)*

*Upgrading webMethods and Intelligent Business Operations Products*

Security and globalization information

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- ODE-6308  
Create Object screen is blank when CSRF protection is enabled.  
If Cross-Site Request Forgery (CSRF) protection is enabled, Create Object screen appears blank.  
There is currently no workaround for this issue.
- ODE-6307  
Cannot define alternate key constraints for columns which have an XML element name defined.  
If a column has an XML element name defined, the message body includes the XML element name.  
However, when a user attempts to define an alternate key constraint for the column based on the element name, an error appears that the column does not exist.  
There is currently no workaround for this issue.
- ODE  
Column level and constraint level metadata are not included in full-text search.  
While searching metadata for data that match the search string in order to return the search results for category Objects, the full-text search engine does not consider column names, column captions, and constraint metadata objects.  
There is currently no workaround for this issue.
- ODE-6282  
In Nova mode, the Rules Engine skips non-editable columns in OneData version 9.8.  
The Rules Engine, in Nova mode, skips non-editable columns. Consequently, if users define a rule that requires update to a non-editable column, the rule fails and results in an error. This issue occurs in OneData version 9.8.  
The workaround for this issue is to change the column setting to editable.
- ODE-6262  
Application of internationalization for metadata is inconsistent.  
Though Data Manager screens for workflow and hooks readily inherit localized definitions for metadata, the localized definitions are not applied to certain columns and table captions.  
There is currently no workaround for this issue.
- ODE-6261  
Issues in New UI (Search) user interface.  
The following issues are observed in the New UI (Search) user interface:
  - When record and column names contain special characters, the details view window is blank

and an error occurs.

- The last updated time for records in the search results screen is incorrect. This time should match the actual last update time displayed for the records in the older OneData user interface
- In the Release area, OneData fails to display the view details screen when the user clicks on the record or column name in the search results screen.

There is currently no workaround for this issue.

▪ ODE-6260

Issues in data access authorization in the New UI (Search) user interface.

In the New UI (Search) user interface, user authorization to access and edit data does not work as expected:

- The search result displays records and object information that the users are not authorized to view.
- In the view details window, users are able to access edit records for which they do not have update privileges.
- The view details window are able to view records despite row filter restrictions.

There is currently no workaround for this issue.

▪ ODE-6213

Require OneData to support deep link when Kerberos-based Single Sign On (SSO) is configured.

Currently, customers cannot use the deep link feature if they configure Kerberos-based SSO.

There is currently no workaround for this issue.

▪ ODE-6156

Issues with post hook processing in customer data integration and data interchange mapping.

In the Consolidation MDM module, the following issues are observed in post hook processing:

- For consolidation gold objects, post hook processing fails to start even though OneData executes customer data integration successfully.
- Consider a conceptual object with 3 entities - Country, State, and City. Each entity has its own post hook configured. During data import through an interchange mapping, an exception occurs when processing the City entity. In this scenario, any post hook processing for the Country and State entities should roll back. Currently, this roll back of the post hook processing fails to occur.

There is currently no workaround for this issue.

▪ ODE-6148

OneData ignores empty fields when generating the output for scheduled reports.

When scheduled reports contain empty fields, OneData removes the empty spaces for the empty fields and aligns all the data that comes after to the left. Consequently, the report output is incorrect. The expected behavior is that OneData should maintain empty spaces for empty fields, so that all data is appears in the correct field alignment.

There is currently no workaround for this issue.

▪ ODE-6137

Issues when working with SQL server in OneData version 9.8.

The following issues are observed when using SQL server with OneData 9.8:

- Change Request link is not displayed even when the object definition Show in Change Request

is enabled.

- When Enable Advanced Filtering? column level user preference is changed to Enable and saved, the change is reverted to Disable.

There is currently no workaround for this issue.

▪ ODE-6115

Columns containing only spaces are treated as NULL value columns during data import.

When importing data from a remote database, OneData treats columns containing only spaces as NULL value columns. This issue occurs even though the `onedata.datamanager.TrimLeadingAndTrailingSpacesInDataValuesInNovaMode.enabled` property is set to false.

There is currently no workaround for this issue.

▪ ODE-6052

OneData does not insert audit data when a row containing columns with lengthy text is purged from Data Manager.

When the user purges a record containing rows with very lengthy text (for example, over 4000 characters), OneData fails to insert an audit data entry for the purged record in the data audit table.

There is currently no workaround for this issue.

▪ XML response does not match XML schema definition (XSD).

The XML response received from the REST call does not match the XSD defined in OneData.

There is currently no workaround for this issue.

▪ ODE-6047

Issue when deleting objects and interchange mapping with SVC log table entries, and Export to Excel in OneData 9.8.

The following issues are observed in OneData 9.8:

- An exception occurs when a user attempts to delete an object which has entries in SVC log tables. An identical issue also occurs when deleting an Interchange Mapping profile which has entries in SVC log tables.

- Using Export to Excel option results in an error on an Oracle server. Additionally, when using the SQL server, the option is not visible to users.

There is currently no workaround for this issue.

▪ ODE-5938

Error when inserting CLOB column data using REST services.

The following error occurs when inserting CLOB column data through REST services:

Total records inserted/updated : 0.The process finished successfully. Elapsed time : 0 s

There is currently no workaround for this issue.

▪ ODE-5811

Hook execution error occurs when a workflow rule includes insertion of a record and the record insertion requires approval.

When a workflow rule includes a hook action to insert a record in an object, and the record insertion requires approval, the hook execution fails with an error.

There is currently no workaround for this issue.

- ODE-5798  
OneData does not handle update of a primary key using an alternate key through a REST service call.  
Currently, when users attempt to update a primary key through an alternate key using a REST service call, OneData incorrectly sends a status complete response even though the update is not done. In such a scenario, OneData should respond with an error and provide the correct status for the action requested in the REST call.  
There is currently no workaround for this issue.
- ODE-5722  
Import jobs with Interchange Mapping profiles fail with a validation error.  
Import jobs with Interchange Mapping profiles fail for all records. The jobs are pushed to the exception queue with the following validation error:  
Batch# Exception.Validation Error.["Exception while processing workflow validation.could not execute query","Exception while processing workflow validation.could not execute query"].  
There is currently no workaround for this issue.
- ODE-5662  
Require support for data audit for network recursive objects in Nova mode.  
Currently, in Nova mode, OneData does not support data audit for network recursive objects.  
Require OneData to support this feature.  
There is currently no workaround for this issue.
- ODE-5592  
Exception occurs when performing Transfer Now operation on SQL Servers after configuring the transfer date.  
On an SQL server, when users configure the transfer date as a date column and subsequently update the column to a future date, the Transfer Now operation fails with an exception.  
There is currently no workaround for this issue.
- Workflow processing fails while performing a search-and-replace operation in self recursive and network recursive hierarchy structures.  
While performing a search-and-replace operation in self recursive and network recursive hierarchy structures, the following error occurs in workflow processing:  
java.lang.NullPointerException Encountered  
There is currently no workaround for this issue.
- ODE-3350  
The row filter does not work as expected for date and timestamp columns that are part of a primary key.  
Users are unable to view the values of date and timestamp columns in row filters after either the date or timestamp format is modified when:  
- The date and timestamp columns are part of a primary key.  
- And, the values of the date and timestamp columns were set in row filters before the date or timestamp format was modified.  
There is currently no workaround for this issue.

- ODE-3349  
OneData does not validate values entered in timestamp type column.  
When a user enters a value in the timestamp type column of Data Manager, OneData does not validate the value.  
There is currently no workaround for this issue.
- ODE-4668  
hookInput.userid property in hooks converts user IDs in lower case to upper case.  
If user IDs have lower case characters, when hooks containing the hookInput.userid property converts all the lower case characters to upper case. For example, the user ID is BSmith converts it to BSMITH.  
There is currently no workaround for this issue.
- ODE-4668  
Issues in filtering of non-ASCII text in objects for reports.  
If an object has Char data type columns with non-ASCII text, the following issues are observed:
  - Filtering on reports for the non-ASCII text does not provide any result.
  - In the report definition, the non-ASCII text is corrupted and displays "?????".
 There is currently no workaround for this issue.
- ODE-5240  
Issues in copying nodes for versions of self recursive objects.  
The following issues are observed when creating versions of self recursive objects:
  - After creating three versions of a self recursive object correctly, when a user creates the fourth version of the self recursive object, OneData fails to copy the nodes from the last approved version.
  - OneData does not copy nodes when users create new major or minor versions.
  - Nodes are missing when searching by version three of the underlying data object.
 There is currently no workaround for this issue.
- ODE-4678  
OneData displays foreign key related description columns inconsistently.  
OneData does not display description columns related to foreign keys consistently across Data Manager screens.  
There is currently no workaround for this issue.

### 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

#### *Release 9.9*

- While in the Nova mode, you can use the **New UI (Search)** option to perform a global search for records and objects in OneData. In the current release, the global search excludes binary large object (BLOB), character large object (CLOB), and multi-select columns.

## ***Release 9.8***

- While in the Nova mode, you can now use the **New UI Preview** tab for read-only access to all object records in a tree hierarchy. It enables you to quickly browse, sort, and filter the available object records.

## **4.0 Fixes Included in Each Release**

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.9***

- ODE\_8.4\_Fix6
- ODE\_9.5.1\_Fix4
- ODE\_9.7\_Fix4
- ODE\_9.8\_Fix4

### ***Release 9.8***

- ODE\_8.4\_Fix6
- ODE\_9.5.1\_Fix3
- ODE\_9.6\_Fix4
- ODE\_9.7\_Fix3

### ***Release 9.7***

- ODE\_9.0\_SP1\_Fix5
- ODE\_9.5.1\_Fix2
- ODE\_9.6\_Fix2

### ***Release 9.6***

- ODE\_8.4\_Fix5
- ODE\_9.0\_SP1\_Fix4

- ODE\_9.5.1\_Fix1

## **Release 9.5**

- ODE\_9.0\_SP1\_Fix2

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### **Release 9.7**

- ODE-5350  
Manual Merge does not include columns set up as foreign keys.  
OneData does not include the data object columns set up as foreign keys in the Manual Merge pop-up. Hence, users cannot perform Manual Merge on any of the foreign key columns to a Gold record.  
This issue is now resolved. Columns set for decode in the Interchange Mapping are available for the user to select in the Manual Merge pop-up. The Description attribute in the Interchange Mapping for decode is not currently supported. Instead, the column set as the default description for the foreign key constrain definition is used for decode.
- ODE-4869  
Issue while saving system Properties or changing the password if the Terracotta server is down. If the Terracotta server is down and the inmemory property, onedata.inmemorycaching.enabled=true, is enabled in onedata.properties file, then saving the system properties or changing the password while logging on the system returns a blank screen. This issue is now resolved.
- WIR-6738  
Issue while installing OneData using scripts and specifying the repository DBMS as the SQL Server. While installing the OneData RDBMS using scripts instead of the installer GUI and SQL Server, the installation process updates the internal OneData configuration files, setting the RDBMS as Oracle. This issue is now resolved.

### **Release 9.5**

- ODE-1604  
All records in the Insert Multiple screen are lost when returning from an exception screen. If a user encounters errors while saving records on the Insert Multiple screen, the errors are displayed on an exception screen. If at least one record already exists on the exception screen, then when the user returns to the Insert Multiple screen, all records on the Insert Multiple screen are lost.



This issue has been resolved.

- ODE-3053  
Issues in the object definition usability.  
When a user creates a logical object and adds a primary key, the result message shows audit-trigger-related information. For remote object and remote snapshots, the screen for adding a primary key prepopulates with an auto generated OneData constraint name.  
This issue has been resolved by removing the audit trigger information from the result message and by having the user enter the primary key constraint name for the remote object and remote snapshot.
- ODE-3232  
The Disable Unicode Data Storage option is not visible for views when adding new varchar/char columns.  
The Disable Unicode Data Storage option for SQL Server is not displayed when a user adds new varchar/char columns. If the base table has the column as varchar/char, then the addition qualifier is not populated in the view.  
This issue has been resolved by offering the capability to specify the Disable Unicode Data Storage option in the edit multiple columns screen.
- ODE-4248  
Exporting an object DDL using export DDL results in an error.  
Exporting an object DDL from Data Manager > View Definition > Export DDL results in an error.  
This issue has been resolved.
- ODE-4398  
Exception queue fails to capture records when import process results in an error.  
If you are using SQL server as the backend, the exception queue does not capture the records when the import using interchange mapping fails.  
This issue has been resolved.
- ODE-4399  
Accessing objects that are in Nova mode results in Javascript error in Internet Explorer.  
When you access objects that are in Nova mode, a Javascript error is shown at the bottom left corner of the browser. This behavior occurs if you are using Internet Explorer 8.  
As a workaround, use a later version of Internet Explorer or a supported version of another browser, such as Firefox or Chrome.  
This issue has been resolved.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### *Release 9.9*

- *Developing for webMethods OneData* guide includes significantly restructured hooks information.
- *Administering webMethods OneData* guide includes a new chapter “Installing and Configuring Elasticsearch”.
- *webMethods OneData User’s Guide* chapter "Working with the New UI Preview" has been renamed to "Working with the New User Interface" to accommodate the global full-text search and other functionalities available through the **New UI (Search)** option.

### *Release 9.8*

- *Implementing webMethods OneData*, *Administering webMethods OneData*, and *webMethods OneData User’s Guide* include extensive restructuring of content.
- *Administering webMethods OneData* includes a new chapter “Configuring and Viewing Service Audit Logs”.
- *Administering webMethods OneData* includes new information on how to configure Kerberos-based single sign on (SSO).

### *Release 9.7*

- *webMethods OneData User’s Guide* includes a new chapter “Working with the New UI Preview”. This chapter describes the features currently available for read-only data browsing in the next generation user interface developed.
- *webMethods OneData Consolidation MDM Guide* is includes a new chapter “Using Locate,” which consolidates all Locate server information previously available in other chapters.

## 7.0 Terminology Changes

This section lists any terminology changes.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists features, functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### **Release 9.9**

Added Item	Description
New UI (Search)	<p>This new user interface for full-text search across all data structures in OneData is available in the Log In page. Users can also access this user interface from a link in the Nova interface.</p> <p>This user interface also includes user account drop-down list that has the following options:</p> <ul style="list-style-type: none"><li>▪ Change Project</li><li>▪ Switch Schema</li><li>▪ Back to OneData Home</li><li>▪ Log Out</li></ul> <p>For more information, see the <i>webMethods OneData User's Guide</i>.</p>
onedata.search.server	<p>Set this property to indicate the search engine server OneData uses. For information about setting this property, see <i>Administering webMethods OneData</i>.</p>
onedata.search.elasticsearch.server.httpurl	<p>Set this property to specify the Elasticsearch server URL. For information about setting this property, see <i>Administering webMethods OneData</i>.</p>
onedata.search.elasticsearch.server.host	<p>Set this property to specify the Elasticsearch server hostname. For information about setting this property, see <i>Administering webMethods OneData</i>.</p>

Added Item	Description
onedata.search.elasticsearch.server.tcp.port	Set this property to specify the Elasticsearch server TCP port. For information about setting this property, see <i>Administering webMethods OneData</i> .
onedata.search.elasticsearch.enabled	Set this property to enable or disable Elasticsearch engine. For information about setting this property, see <i>Administering webMethods OneData</i> .
onedata.search.elasticsearch.loaddata.loadonstartup	Set this property to enable load data to the Elasticsearch search engine on OneData startup. For information about setting this property, see <i>Administering webMethods OneData</i> .
onedata.search.elasticsearch.loaddata.poolsize	Set this property to specify the size of the Elasticsearch connection pool. For information about setting this property, see <i>Administering webMethods OneData</i> .
onedata.search.elasticsearch.loaddata.batchsize	Set this property to specify the number of table rows to load for processing by Elasticsearch. For information about setting this property, see <i>Administering webMethods OneData</i> . For information about setting this property, see <i>Administering webMethods OneData</i> .
onedata.search.elasticsearch.cluster.clustername	Set this property to specify the unique cluster name as specified in the <code>elasticsearch.yml</code> file. For information about setting this property, see <i>Administering webMethods OneData</i> .
onedata.search.elasticsearch.fuzziness	Set this property to specify if Elasticsearch fuzzy matching is enabled and the edit distance for the search string.
onedata.search.elasticsearch.ngramanalyzer.enabled	Set this property to specify if the Elasticsearch ngram sequence analyzer is enabled. For information about setting this property, see <i>Administering webMethods OneData</i> .
onedata.search.elasticsearch.ngram.filter.type	Set this property to specify if the Elasticsearch ngram tokenizer for the analyzer to use. For information about setting this property, see <i>Administering webMethods OneData</i> .
onedata.search.elasticsearch.ngram.maxgram	Set this property to specify the maximum ngram size. For information about setting this property, see <i>Administering webMethods OneData</i> .

Added Item	Description
onedata.search.elasticsearch.ngram.mingram	Set this property to specify the minimum ngram size. For information about setting this property, see <a href="#">Administering webMethods OneData</a> .
onedata.search.elasticsearch.ngram.truncate.filter.type	Set this property to specify the token filter for Elasticsearch analyzer. For information about setting this property, see <a href="#">Administering webMethods OneData</a> .
onedata.search.elasticsearch.ngram.truncate.length	Set this property to specify if the length parameter for the token filter. For information about setting this property, see <a href="#">Administering webMethods OneData</a> .
onedata.search.autocomplete.mincharlength	Set this property to specify the number of characters users must enter before the autocomplete suggestions are displayed for the search string. For information about setting this property, see <a href="#">Administering webMethods OneData</a> .
onedata.search.autocomplete.category.pagesize	Set this property to specify the maximum number of auto-complete suggestions to display in the select box. For information about setting this property, see <a href="#">Administering webMethods OneData</a> .
onedata.search.searchpane.grid.pagesize	Set this property to specify the maximum number of search results to display in the result grid box for each data type. For information about setting this property, see <a href="#">Administering webMethods OneData</a> .
onedata.search.contextpane.grid.pagesize	Set this property to specify the size of the details pop-up window displayed when the user clicks the record name in the search results list. For information about setting this property, see <a href="#">Administering webMethods OneData</a> .

Added Item	Description
onedata.clustering.node	<p>Set this property to specify a unique name for OneData nodes to use in the transaction context ID in REST calls. node1 is the default value for a standalone implementation of OneData. In a clustered implementation of OneData, ensure that you specify this property for each OneData node in a cluster environment.</p> <p>For information about setting this property, see <a href="#">Administering webMethods OneData</a>.</p>
Owasp.CsrfGuard.properties	<p>This new property file, located in &lt;Software AG_directory&gt;/profiles/ODE/workspace/webapps/onedata/WEB-INF/classes/, contains the properties to control Cross-Site Request Forgery (CSRF) protection for Data Manager.</p> <p>The CSRF properties are:</p> <ul style="list-style-type: none"> <li>▪ org.owasp.csrfguard.Enabled Set this property to enable or disable CSRF protection.</li> <li>▪ org.owasp.csrfguard.PRNG.Provider Set this property appropriately for the operating system you use.</li> </ul> <p>For information about setting this property, see <a href="#">Administering webMethods OneData</a>.</p>
Metadata Localization	<p>New System menu option enables administrators to provide locale-specific translations for text fields. For more information, see <a href="#">Administering webMethods OneData</a>.</p>
Older Than (in days)	<p>Field name change from Interval (in days) in System Properties &gt; Metadata Audit Configuration tab. For more information, see <a href="#">Administering webMethods OneData</a>.</p>
Execute	<p>New button to execute the Action selected in System Properties &gt; Metadata Audit Configuration tab. For more information, see <a href="#">Administering webMethods OneData</a>.</p>

Added Item	Description
Import	New option to enable import of archived logs as XML files. For information about setting this property, see <i>Administering webMethods OneData</i> .

Removed Item	Replacement, if any
Archive and Purge	In System Properties > Metadata Audit Configuration tab, Action field now replaces the Archive and Purge options. previously available. This field allows you to choose Archive Only, Archive & Purge, or Purge Only options. For more information, see <i>Administering webMethods OneData</i> .

Deprecated Item	Replacement, if any
Process Flow	New Screen Flow functionality to be provided in a future release.
Customer MDM Template	A new version of Customer MDM Template to be provided in a future release.
Hierarchy Management PL/SQL package	A new Java-based version of the functionality provided by the current PL/SQL package will be provided in a future release.
Trillium-based cleanser, matcher engines, and projects	Trillium integration will be shipped in the future as examples for the use of OneData's pluggable Data Quality architecture.
SNNP (Pager) and SMS notifications.	None.
Workflow dashboard based on Mashzone	New built-it dashboards will be provided in a future release.
ARIS data model import	None.

## **Release 9.8**

Added Item	Description
onedata.kerberos.sso.enabled	Set this new property to enable or disable Kerberos authentication for single sign on. By default, it is set to false. For information about setting this property, see <i>Administering webMethods OneData</i> .

Added Item	Description
onedata.webservice.rest.objectNamePrefixedInXSD	Set this new property to include or exclude, by default, an object's defined XML Element Name as prefix to the object's column names in implicit interchange mappings (RESTful GET output and the input POST XMLs and XSDs). For information about setting this property, see <i>Administering webMethods OneData</i> .
onedata.service.serviceLogLevel	Set this new global property to indicate the audit log level for inbound service requests through REST, Interchange Mapping, and JMS. For information about setting this property, see <i>Administering webMethods OneData</i> .
onedata.webservice.rest.responseLogLevel	Set this new property to indicate the level of logged service audit information for inbound requests to be included in REST responses. For information about setting this property, see <i>Administering webMethods OneData</i> .
Service Audit Log Level	<p>New field in the Interchange Mapping Profile screen &gt; Processing Options, which allows users to set the logging level for inbound data import service requests. The service requests could be through REST, Interchange Mapping, and JMS. For information about setting this property, see <i>Implementing webMethods OneData</i> and <i>Administering webMethods OneData</i>.</p> <p>For information about setting this property, see <i>Administering webMethods OneData</i>.</p>
Service Layer Logs menu	<p>New log menu with two options:</p> <ul style="list-style-type: none"> <li>▪ OneData Service Audit: This provides users a denormalized view of the status and summary details for all inbound service requests.</li> <li>▪ OneData Service Audit (CO): This allows users to views details of a particular inbound service request.</li> </ul> <p>The Job Center allows users to also download the logs.</p> <p>For information on how to use Service Layer Logs feature, see <i>Administering webMethods OneData</i>.</p>



Added Item	Description
Service Layer folder containing System Objects and Reference Data folders	New folders to view service layer logs. For more information, see <i>Administering webMethods OneData</i> .
Source System	New field in the Interchange Mapping Profile > Processing Options, which allows the user to enter a description of the payload's source system. For more information, see <i>Implementing webMethods OneData</i> .
Advanced filtering	Advanced filtering is now possible in the New UI Preview view on parent and child. For more information, see the <i>webMethods OneData User's Guide</i> .
Create New button	New button to insert new records at the root level in the New UI Preview tree grid.
Right-click or contextual menu	New feature to insert new records to child objects or edit existing child object records.
ServiceAuditLog_<REPOSITORY_ID>_<JOB_ID>.txt	New error logs, written for each service call in case of occasional failures in the service log mechanism. The error logs are written to <Software AG_directory>\profiles\ODE\bin\ondata\temp\C001. For information, see <i>Administering webMethods OneData</i> .

Changed Item	Description
Message Log	When Inbound Messaging Mode is set to Nova in System Properties, you no longer view any JMS logs using this link. To continue to view JMS logs with this link, set Inbound Messaging Mode to Default.
View Logs	In Job Center screen, the information in the downloadable log files now includes only the new service audit log instead of the non-informative log available in previous OneData versions.

## Release 9.7

Added Item	Description
onedata.recursivetree.childnodecount	Set this new property to control the number of child nodes displayed in the tree view for network recursive objects in Nova mode. For information about setting this property, see <i>Administering webMethods OneData</i> .
onedata.security.enableclientsidexfscheck	Set this property to true (which is also the default value) to enable client-side Cross-Frame Scripting (XFS) protection. This property should be set to false only if there is valid client-side XFS activity between multiple applications, and the applications already interact in a secure environment.

Changed Item	Description
Description column hyperlink	Columns, selected as Description while creating foreign keys, appear as hyperlinks in the Data Manager grid. On clicking these column hyperlinks, OneData now directs users to the related objects.

## Release 9.6

Added Item	Description
onedata.datamanager.TrimLeadingAndTrailingSpacesInDataValuesInNovaMode.enabled	Set this new property to control whether spaces, entered as a value in char and varchar columns, are trimmed and treated for objects in Nova mode. For information about setting this property, see <i>Administering webMethods OneData</i> .

Deprecated Item	Replacement, if any
Flex mode and Nova-Echo mode have been deprecated.	None. These modes are supported in this release, but will be discontinued in a future release.
Default mode in OneData MDM has been deprecated.	None. Default mode is supported in this release, but will be discontinued in a future release. Default mode is still supported for OneData MDR.

Deprecated Item	Replacement, if any
Netrics as the matching engine in Metamap has been deprecated.	None. Netrics is supported in this release, but will be replaced with an alternate technology in a future release.
Default mode in OneData Import Jobs has been deprecated.	None. Default mode is supported in this release, but will be discontinued in a future release leaving Nova mode as the only mode available in the Import Job.

## Release 9.5

Deprecated Item	Replacement, if any
Flex mode and Nova-Echo mode have been deprecated.	None. These modes are supported in this release, but will be discontinued in a future release.
Default mode in OneData MDM has been deprecated.	None. Default mode is supported in this release, but will be discontinued in a future release. Default mode is still supported for OneData MDR.
Netrics as matching engine in Metamap has been deprecated.	None. Netrics is supported in this release, but will be replaced with an alternate technology in a future release.
Default mode in OneData Import Job has been deprecated.	None. Default mode is supported in this release, but will be discontinued in a future release leaving Nova mode as the only mode available in the Import Job.

## 9.0 Added, Removed, Deprecated, or Changed Parameters

A release is listed in this section only if changes occurred in that release.

### Release 9.8

Added Parameter	Description
IDATA parameters	New IDATA input and output parameters have been introduced to handle Integration Server forms, workflows for data objects and conceptual objects, and a few other properties. For more information, <i>Developing for webMethods OneData</i> .

Added Parameter	Description
lowVolumeLoad	New parameter to indicate if the volume of data in the incoming payload can be processed in a single batch size of 100 or fewer records. This parameter, if set to true, optimizes the performance of the import process. For more information, <i>Developing for webMethods OneData</i> .
objectNamePrefixedInXSD	New REST parameter to override the global configuration property, onedata.webservice.rest.objectNamePrefixedInXSD, and XML Element Name defined for an object. For more information, <i>Developing for webMethods OneData</i> .
responseLogLevels	New REST parameter to override global configuration property onedata.webservice.rest.responseLogLevel.
svcLogLevel	New REST and JMS parameter to override the global configuration onedata.service.serviceLogLevel and individual Interchange Mapping profile settings.  For more information, <i>Developing for webMethods OneData</i> .
sourceSystem	New REST and JMS parameter to override a payload's Source System description specified in an Interchange Mapping Profile. For more information, <i>Developing for webMethods OneData</i> .

## 10.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

### Release 9.6

Added API	Description
com.datafoundations.onedata.rmi.executeAsynchronousDataQualityJob	This method executes an asynchronous data quality cleansing or matching job on a consolidation object, based on the provided parameters, and returns the jobLogHandle. The jobLogHandle can be used to retrieve the result of a particular execution of the job using the getJobExecutionResult API method.

## 11.0 Copyright Information

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## 12.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

ODE-RM-99- 20151015

# webMethods Optimize for Infrastructure 9.12 Readme

**October 2016**

This file contains important information you must read before using webMethods Optimize for Infrastructure 9.12. You can find user documentation on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

- webMethods Optimize for Infrastructure 9.12 monitors current and older supported versions of webMethods products. However, it requires Infrastructure Data Collector 9.12, Analytic Engine 9.12, Universal Messaging 9.12, and My webMethods Server 9.12 for execution.

- When using Broker Basic Authentication, do not set ACL on the Analysis client group.
- In order for Optimize for Infrastructure 9.12 to function correctly, it is strongly recommended that all customers install OPT\_9.12\_Fix1.

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- OBE-8297  
In Optimize, when you create a rule for a KPI with a condition equal to value zero and you select the Generate historical rule violations option, attempting rules back-population fails. There is currently no workaround for this issue.
- OBE-8414  
When you change the display name of a measure attribute, the KPIs that are set for this measure stop functioning.  
To work around this issue, set the display name back to the original display name.
- OBE-8876  
The Value drop-down list in the Rule Audit page in Optimize is not populated correctly. On the Advanced tab in the Rule Audit page, when you filter by username, the Value drop-down list does not show all available users.  
There is currently no workaround for this issue.
- OBE-8904  
In the Optimize KPI Summary page, the Event table might not load properly.  
In the KPI Summary page, sometimes the Event table in the KPI Performance panel fails to load.  
To work around this issue, refresh the page.
- OBE-8932  
Back-populating rules in Optimize might fail.  
In some cases, when you click the Generate Rule Violations button on the Rule List page, the initiated rule back-population operation fails. Although no error message appears, the status of the back-population job in the Job Audit page, is "Failed".  
There is currently no workaround for this issue.
- WID-1437  
The Infrastructure Data Collector migration utility fails to start on HP-UX systems.  
This issue is resolved by OPT\_9.12\_Fix1.

- WID-1436  
Trading Network assets cannot be monitored in Optimize.  
You cannot monitor Trading Network assets because the WmTNextDC package does not initialize properly.  
This issue is resolved by OPT\_9.12\_Fix1.

### 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- To maintain performance, Optimize now requires a greater quantity of database connections than are provided by default in the webMethods Database Pool Connection settings. For typical systems, the maximum number of connections should be increased to 80. To change the number of available database connections, navigate to Administration > System-Wide > Environments > Database Pool Connections, and then on the Pool Settings panel, change the value in the Maximum Connections field from 36 to 80.
- The KPI Summary Page does not support extended display durations. If you want the KPI Summary page to remain active for long periods of time without user interaction, you must add a workspace and use the Workspace Refresh portlet to keep the page current.
- SSL registration of Analytic Engine web services is not supported.

### 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

#### **Release 9.12**

- OPT\_9.0\_SP1\_Fix14
- OPT\_9.5\_SP1\_Fix13
- OPT\_9.6\_SP1\_Fix9
- OPT\_9.7\_Fix13
- OPT\_9.8\_Fix11
- OPT\_9.9\_Fix9



- OPT\_9.10\_Fix4
- CMP\_9.10\_Fix1

### ***Release 9.10***

- OPT\_9.0\_SP1\_Fix12
- OPT\_9.5\_SP1\_Fix9
- OPT\_9.6\_SP1\_Fix7
- OPT\_9.7\_Fix7
- OPT\_9.8\_Fix5
- CMP\_9.8\_Fix2
- OPT\_9.9\_Fix2
- CMP\_9.9\_Fix1

### ***Release 9.9***

- OPT\_9.0\_SP1\_Fix9
- OPT\_9.5\_SP1\_Fix7
- OPT\_9.6\_SP1\_Fix4
- OPT\_9.7\_Fix5
- OPT\_9.8\_Fix3
- CMP\_9.8\_Fix1

### ***Release 9.8***

- OPT\_8.2\_SP1\_Fix14
- OPT\_9.0\_SP1\_Fix7
- OPT\_9.5\_SP1\_Fix5
- OPT\_9.6\_SP1\_Fix2
- OPT\_9.7\_Fix2

## ***Release 9.7***

- OPT\_8.0\_SP3\_Fix10
- OPT\_8.2\_SP1\_Fix12
- OPT\_9.0\_SP1\_Fix6
- OPT\_9.5\_SP1\_Fix3
- OPT\_9.6\_SP1\_Fix1

## ***Release 9.6***

- OPT\_8.0\_SP3\_Fix9
- OPT\_8.2\_SP1\_Fix11
- OPT\_9.0\_SP1\_Fix1
- OPT\_9.5\_SP1\_Fix2

## ***Release 9.5***

- OPT\_7.1\_SP2\_Fix15
- OPT\_8.0\_SP3\_Fix9
- OPT\_8.2\_SP1\_Fix11
- OPT\_9.0\_SP1\_Fix1

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Release 9.10***

- WID-1221  
The Asset page fails to display status "Refused" for Integration Server assets.  
In My webMethods Server, on the Applications > Administration > Analytics > Infrastructure

Components > Assets page, when you edit the connection parameters for an Integration Server asset and you accidentally enter an invalid password, the status of the asset is not updated to "Refused" but remains "Accepted," even though no new KPI readings are collected from this asset because of the invalid password.

This issue has been resolved.

- OBE-7017  
The Analytics Overview page continues to display KPI instances for deleted assets.  
In My webMethods Server, after you delete an asset from the Applications > Administration > Analytics > Infrastructure Components > Assets page and you go to the Applications > Monitoring > System-Wide > Analytics Overview page, you can still see KPI data for the removed asset.  
This issue has been resolved.
- OBE-7145  
Data remains unprocessed in the Universal Messaging JMS queues when an Analytic Engine node is down.  
When the Analytic Engine is running in a clustered environment, and some of the nodes are down, the data that is pushed to the respective Universal Messaging queue is not processed until the nodes come back up again.  
This issue has been resolved.
- OBE-7597  
On the KPI Instance Detail page, when you plot KPIs with collection intervals of 2, 4, or 8 hours, the graph displays incorrect times for reading values.  
In My webMethods Server, when you plot KPIs on the KPI Instance Detail page with collection intervals of 2, 4, or 8 hours, the KPI reading values that are displayed on the graph are plotted at incorrect times.  
This issue has been resolved.
- OBE-7536  
The Advanced search tab on the Problems page does not return correct results.  
In My webMethods Server, on the Applications > Monitoring > System-Wide > Problems page, when you use the Advanced search tab to filter problems setting the "Field Name" to "Duration" and selecting "Greater Than" or "Less Than" as operators, your search might be misleading, since they also contain problems with duration that is equal to the selected value.  
This issue has been resolved. The "Greater Than" and "Less Than" operators no longer return problems with Duration equal to the selected filter Value. Also, the following operators have been added when filtering by duration:  
"Greater Than or Equal To" and "Less Than or Equal To"
- OBE-7511  
An error prevents you from editing or copying an instant rule with no user specified.  
In My webMethods Server, on the KPI Instance Detail page, when you create an instant rule without specifying a user for the Send Alert To drop-down list, and then you navigate to the Applications > Administration > Analytics > Rules > Rule List Page, you cannot edit or copy the rule. The following error is displayed in the Alerts panel on the Add/Edit/Copy Rule page:

User is unknown or email address is undefined.  
This issue has been resolved.

- OBE-7990  
The Define Environments page allows you to create an environment with no name.  
In My webMethods Server, on the Administration > System-Wide > Environments > Define Environment page, when you click Add Environment, you can save your environment with no value for Environment Name.  
This issue has been resolved.
- OBE-7491  
The KPI Instance Detail page incorrectly aggregates KPIs of type Sum or Count to the beginning of the hour.  
In My webMethods Server, on the KPI Instance Detail page, when you plot KPIs of type Sum or Count, the KPI data values are incorrectly aggregated to the beginning of the hour, instead of the end.  
This issue has been resolved.
- OBE-7485  
The Select All icon on the Database Pool Configuration page does not select all listed pools.  
In My webMethods Server, on the Applications > Administration > System-Wide > Environments > Database Pool Configuration, when you click the Select All icon, not all listed pools are selected.  
This issue has been resolved.

## ***Release 9.9***

- WID-1189  
IS Terracotta Cluster component fails to collect readings.  
This issue is now resolved.
- WID-1196  
Modifying the MWS discovery credentials to an invalid user/password should result in a discovery failure.  
This issue is now resolved.

## ***Release 9.8***

- WID-1075/WID-1116  
Service request counts for Integration Server count KPI may show negative values.  
The Infrastructure Data Collector Integration Server Is Service long Count KPI may return negative values.  
This issue has been resolved.
- OBE-6734  
Central Configuration - Define Environment allows an empty environment to be created.  
Central Configuration - Define Environment allows an empty environment to be created if a user

presses the ENTER key before entering any value in the name field.  
This issue has been resolved.

- OBE-6282  
KPI Instance Detail graph is incorrectly plotting data points where a given data point is comprised of multiple events with the exact timestamp down to the millisecond.  
This issue has been resolved.
- OBE-4182  
Threshold rule expressions might fail if the underlying event map is renamed.  
If the event map referenced by with a threshold rule expression was renamed, in some cases the threshold rule evaluation will fail.  
This issue has been resolved.

## **Release 9.7**

- OBE-6466  
The Analytic Engine logs an SQL error when deploying KPI definitions where a large number of events were processed before the definition was defined.  
The following error is written to the AE log when deploying KPI definitions containing a large number of events that were processed before the definition was created:  
"TemporaryEventStage.UnknownKey] .... ERROR: java.sql.SQLException: [SoftwareAG][Oracle JDBC Driver][Oracle]ORA-01795: maximum number of expressions in a list is 1000", when there are over 1000 temporary events recorded within Optimize prior to defining the KPI definition.  
This issue has been resolved.
- WID-985  
In some cases, KPI data is not collected for Terracotta based Integration Server clusters.  
Optimize does not collect KPI data for Terracotta based Integration Server clusters in some situations. This problem occurs because of DNS resolution in the network. If a fully qualified host name is required to connect from Infrastructure Data Collector to an Integration Server host then IS Cluster monitoring fails.  
This issue has been resolved.
- WID-991  
The Infrastructure Data Collector version 8.2.2 to version 9.6 data migration utility fails in some cases.  
The Infrastructure Data Collector migration{bat|sh} which migrates data from version 8.2.2 to 9.6 fails with a file not found exception.  
This issue has been resolved.
- WID-987  
The Infrastructure Data Collector migrate.sh migration utility fails on Solaris  
When the Infrastructure Data Collector ./migrate.sh script is executed, it fails to run and throws the following exception  
bash-3.00\$ pwd

```
/FS/fs0311/CV/home/wmguest/SoftwareAG96/InfrastructureDC/bin/migrate
bash-3.00$ cd ./migrate.sh
bash: cd: ./migrate.sh: Not a directory
bash-3.00$ ./migrate.sh
./migrate.sh: syntax error at line 13: `INSTALL_DIR=$' unexpected
This issue has been resolved.
```

- OBE-6031  
The Analytic Engine may not start properly on UNIX.  
The Analytic Engine fails to start properly on UNIX if the startupAnalyticEngineNoWrapper.sh is used.  
This issue has been resolved.

## **Release 9.6**

- OBE-5878  
The My webMethods Asset Extraction page does not show some assets, when these assets share the same name.  
When using the Assets Extraction page within MWS to extract Optimize assets such as KPI definitions, rules, dimensions, and so on, assets that shared the same name are not displayed for extraction.  
This issue has been resolved
- OBE-4274  
In some cases, Analytic Engine fails to start when running under the HP UX operating system. Due to an issue with the Java Server Wrapper, when running on the HP-UX operating system, Analytic Engine fails to start properly when using the startup.sh script. No logs are created but a core dump file is created and the following error text (truncated) appears on the console:  
bash-4.2\$ ./startup.sh  
bash-4.2\$ wrapper | --> Wrapper Started as Console  
DLPI Error (Primitive:0x0b, Errno:0x03, UnixErr:0x00)  
DLPI Error (Primitive:0x0b, Errno:0x03, UnixErr:0x00)  
DLPI Error (Primitive:0x0b, Errno:0x03, UnixErr:0x00)  
This issue has been resolved.

## **Release 9.5**

- WID-909  
The Infrastructure Data Collector OSGI profile uses an inappropriate JMX port, which may lead to log errors.  
The Infrastructure Data Collector OSGI profile is always installed with default JMX port as 8044. The same port is used as default in CTP profile, which is also managed by SAG Installer as CTP prerequisites. This port conflict results in Infrastructure Data Collector log errors.  
This issue has been resolved.

- WID-904  
ART connection components are deleted when migrating from Optimize 8.2.1 to the 9.0.1 version. When migrating from Optimize 8.2.1 to 9.0.1, ART connection components and related KPIs are cleared, and users must reselect the components and KPIs to resume monitoring. This issue has been resolved.
- OBE-5933  
In some cases, Infrastructure Data Collector fails to collect events.  
In some cases, Infrastructure Data Collector does not collect events because the Integration Server is not functioning correctly, and as a result no Object Status rules show violations. This issue has been resolved.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

- A new “Using Command Central to Manage Optimize” chapter has been added to the *Administering webMethods Optimize* guide. This chapter is moved from the *Software AG Command Central Help*. The chapter describes the currently supported operations in Command Central for managing Optimize.
- The “Monitored KPI Definitions” chapter of the *Administering webMethods Optimize* guide has been updated with information about KPI definitions for Event Routing.
- The “Built-In Rules” chapter of the *Administering webMethods Optimize* guide has been updated with information about Event Routing rules.
- The “Monitored KPI Definitions” chapter of the *Administering webMethods Optimize* guide has been updated with information about KPI definitions for Universal Messaging named objects.
- The “Adding Terracotta Server and Terracotta Server Array Assets for Discovery” section of the *Administering webMethods Optimize* guide has been updated with information about monitoring Terracotta Server and Terracotta Server Array assets over HTTPS.
- The “The Assets Page” section of the *Administering webMethods Optimize* guide has been updated with information about monitoring My webMethods Server with a root context.
- The “Managing webMethods Optimize Environments” chapter of the *Configuring BAM* guide has been updated with information about configuring in-process event publication.

## **Release 9.10**

- The “Monitored KPI Definitions” chapter of the *Administering webMethods Optimize* guide has been updated with information about KPI definitions for MashZone NextGen, UM Cluster, and Presto delta KPIs.
- The “Monitored KPI Definitions” chapter of the *Administering webMethods Optimize* guide now contains information about newly added diagnostic KPIs about the following component types: InfrastructureDataCollector, ApamaCorrelator, BrokerServer, SNMP, IntergrationServer, ISCluster, MyWebMethodsServer, Presto, Universal Messaging Realm, and TerracottaConnection.
- The “Adding an Asset” section of the *Administering webMethods Optimize* guide now contains information about adding Universal Messaging Cluster and MashZone NextGen assets.

## **Release 9.9**

The *Administering webMethods Optimize* guide has been revised as follows:

- The “Monitored KPI Definitions” chapter has been updated with information about KPI definitions for Apama, Presto Catalina, Presto UM, IS File Polling, and Terracotta monitoring.
- The “Adding an Asset” section of the guide now contains information about adding Apama, Presto, Terracotta, SNMP3, and Terracotta assets.
- The “Configuring and Using the Infrastructure Data Collector” section of the guide now contains information about configuring Infrastructure Data Collector for clustering.
- The “Configuring and Using the Infrastructure Data Collector” section also contains information about changing the Infrastructure Data Collector ports.
- The “Configuring Event Routing Settings for Optimize” section in this guide has also been updated with details regarding the setup of Software AG Event Routing in your Optimize system.

The *webMethods Optimize User’s Guide* now includes information about using the “Investigate” button to jump to Process Performance Manager and further investigate process-related intrinsic data from Optimize. You will also find information about creating an alert in Optimize from the PPM user interface.

The *Software AG Command Central* help contains information about administering the Optimize Analytic Engine using the Command Central user interface.

## **Release 9.8**

- **Universal Messaging Delta KPIs** - Appendix A “Monitored KPI Definitions” of the “*Administering Optimize*” PDF publication now contains the “Universal Messaging KPI Definitions” section that lists and explains KPIs for monitoring Universal Messaging Servers has been updated with



additional KPIs.

- **Presto KPIs** - Appendix A “Monitored KPI Definitions” of the “*Administering Optimize*” PDF publication now contains the “Presto KPI Definitions” section that lists and explains KPIs for monitoring Universal Messaging Servers has been updated with additional KPIs.
- **Terracotta KPIs** - Appendix A “Monitored KPI Definitions” of the “*Administering Optimize*” PDF publication now contains the “Terracotta KPI Definitions” section that lists and explains KPIs for monitoring Universal Messaging Servers has been updated with additional KPIs.

## **Release 9.5**

The *Administering webMethods Optimize* guide has been revised as follows:

- **Universal Messaging KPIs** - Appendix A “Monitored KPI Definitions” has been updated with a new section titled “Universal Messaging KPI Definitions” that lists and explains new KPIs for monitoring Universal Messaging Servers.
- **Optimize Schema Overview** - Appendix D “Optimize Schema Overview” has been added describing the Optimize database schema and components.

The *Optimize User’s Guide* has been revised as follows:

- The title of the guide has been simplified with the removal of the *Optimizing BPM and System Resources with BAM* subtitle, so the guide is now simply titled *Optimize Users Guide*.
- **KPI Delete** - Chapter 2 “Monitoring Business Component and System Process Performance” has been updated to include information on a new feature of the Analytics Overview page that facilitates deletion of KPIs.
- **Process Analytics** - Process Analytics functionality has been revised, and the following chapters have been removed: Chapter 9 “Process Analytics Concepts,” Chapter 11 “Analyzing How a Process is Doing,” Chapter 12 “Analyzing

Information on Analytic Engine clustering with Terracotta has been updated and enhanced in the *Configuring BAM* guide.

## **7.0 Terminology Changes**

A release is listed in this section only if changes occurred in that release.

## ***Release 9.6***

<b>Old Term</b>	<b>New Term</b>
KPI hierarchy	Dimension hierarchy
Fact	Measure
Dimension Definition	Dimension

## ***Release 9.5***

<b>Old Term</b>	<b>New Term</b>
KPI hierarchy	Dimension hierarchy
Fact	Measure
Dimension Definition	Dimension

## **8.0 Added, Removed, Deprecated, or Changed Items**

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

<b>Added Item</b>	<b>Description</b>
EDA	Event routing framework is embedded in products like IS, Optimize, MWS etc. Monitoring of EDA to these products will be through a JMX port
MWS root context	Monitoring MWS with root context defined
Universal Messaging named objects	Monitoring of UM name objects
Terracotta HTTPS	Monitoring of Terracotta over HTTPS

### ***Release 9.10***

<b>Added Item</b>	<b>Description</b>
UM Cluster Monitoring	Monitoring of UM Cluster Nodes
Ability to delete Key Performance Indicators by date and name	You are now able to delete KPIs by date and name.

Changed Item	Description
Presto 9.10 only	Name changed to MashZone Next Gen

## **Release 9.9**

Added Item	Description
Presto Catalina JMX	Presto Catalina monitoring
Presto UM	Presto UM monitoring
Apama	Apama monitoring
Integration Server File Polling	File Polling port monitoring
MWS HTTPS	MWS running HTTPS port enabled. Monitoring secure port.
SNMP v3 Support	SNMP v3 monitoring
Changing Infrastructure Data Collector ports after configuration	The properties file and location of the Infrastructure Data Collector port assigned during installation has been changed. See documentation on how to modify the Infrastructure Data Collector port after startup/configuration has completed.
Aesthetic enhancements for Process Dashboards	Aesthetic improvements have been made to the Process dashboards including: Principle picker now uses enter key to submit form when entering keyword characters, general control alignment and styling
Command Central integration for Analytic Engine	User can now start, stop, restart and receive the status for the Analytic Engine using Command Central. This includes configuring event routing for the Analytic Engine
Performance and scalability improvements	<ul style="list-style-type: none"> <li>▪ 100 times improvement in clustered Analytic Engine throughput performance</li> <li>▪ 2 times faster Analytic Engine startup</li> <li>▪ 500 percent increase in dimensional handling throughput</li> <li>▪ 30% throughput improvement in State engine</li> </ul>

## **Release 9.8**

<b>Added Item</b>	<b>Description</b>
Universal Messaging Delta KPI's	New Universal Messaging Delta KPI's. The difference between the last 2 reading values of the target KPI.
Presto Monitoring	Presto Monitoring.
Terracotta Monitoring	Enhanced Terracotta monitoring to include Cache, Cache Manager, TSA, TSA Server, Terracotta Connection. Discover TMS by Group Name or discover Direct by TSA Name.
Intrinsic Stage Metrics available in the UI	The intrinsic metrics associated with Stages are now available for use in the Analytics Overview.
New KPI type - Counter	A new KPI type, called Counter, has been added. This KPI counts the number of data points received for a specific fact over a fixed aggregation period.
New Rule Violation/Resolution EDA event	Optimize now is able to emit Rule Violation/Resolution EDA events

<b>Removed Item</b>	<b>Replacement, if any</b>
Terracotta Monitoring	Removed TMC Connection for Terracotta Server.

<b>Deprecated Item</b>	<b>Replacement, if any</b>
Removal of BAM_AGG_... database tables	The BAM_AGG_... database tables usage is being removed from future releases. These tables are currently used for Optimize Only UI support and will no longer be used.

## **Release 9.7**

<b>Added Item</b>	<b>Description</b>
Terracotta Management Console	Monitoring of the Terracotta Management Console and Terracotta Server Array.
Integration Server Delta KPI's	New Integration Server KPI's. The difference between the last 2 reading values of the target KPI.
Integration Server JDBC Functional Alias Component	New Integration Server component type.

## **Release 9.6**

<b>Added Item</b>	<b>Description</b>
Ability to monitor milestones	Added support for analysis of process stages and milestones. Optimize for Process now provides the following information in the form of both EDA events and REST services: stage started, stage completed, stage breached.

## **Release 9.5**

<b>Added Item</b>	<b>Description</b>
Universal Messaging Discovery and Monitoring	Optimize for Infrastructure can now discover and monitor webMethods Universal Messaging Servers.

<b>Removed Item</b>	<b>Replacement, if any</b>
The following Integration Server KPIs have been removed: com.wm.isextdc.IntegrationServer com.wm.isextdc.IsSocketPort com.wm.isextdc.IsHttpPort	

## **9.0 Added, Removed, Deprecated, or Changed APIs**

### **Release 9.7**

<b>Added API</b>	<b>Description</b>
Rest Services	These services enable users to access Optimize data in various ways.

## **10.0 Copyright Information**

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## **11.0 Support**

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

OPTINF-RM-912-20161018

# webMethods Optimize for Process 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods Optimize for Process 9.12. You can find user documentation on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find the suite-related information listed below.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

- webMethods Optimize for Process 9.12 is compatible for execution only with the latest 9.12 versions of other webMethods products.
- When using Broker Basic Authentication, do not set ACL on the Analysis client group.

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- OBE-8897  
In the Process Analytics page, the Go button that you use to apply a custom date range is displayed in grey color.  
When you open the Enter custom range dialog box from the My webMethods > Process Analytics page or the Business Console, the Go button is greyed out, although the button is not disabled.  
This issue is resolved by OPT\_9.12\_Fix1.
- OBE-8905  
The Stage Instances dashboard in the Process Dashboards page is empty.  
In Optimize and in the Business Console user interface, the Stage Instances dashboard in the Process Dashboards page does not display the information about the stage instances. The issue occurs for business processes that consist of a single stage.  
This issue is resolved by OPT\_9.12\_Fix1.
- OBE-8936  
Process Tracker does not create step and stage instances for steps that have empty or non-unique names.  
This issue is resolved by OPT\_9.12\_Fix1.
- OBE-8908  
You cannot access the Business Console user interface from the process instance ID link on the Optimize KPI Instance Detail page.  
In Optimize, when you open the Business Data > KPI Instance Detail page for stage intrinsic metrics, and you select Show Menu > View Data, the link in the processinstanceid column is inactive. As a result, you cannot access the Business Console user interface.  
This issue is resolved by OPT\_9.12\_Fix1.
- OBE-8911  
The Business Console Single Sign-On does not work with process instance detail links from the Optimize user interface to the Business Console user interface.  
In Optimize, when you click on a process instance detail link for a dynamic business process, you are redirected to the Business Console user interface, but you are prompted to enter your login credentials again. The issue occurs because the Single Sign-On functionality for the Business Console cannot be resolved.  
This issue is resolved by OPT\_9.12\_Fix1.
- OBE-8297  
In Optimize, when you create a rule for a KPI with a condition equal to value zero and you select the Generate historical rule violations option, attempting rules back-population fails.  
There is currently no workaround for this issue.



- OBE-8414  
When you change the display name of a measure attribute, the KPIs that are set for this measure stop functioning.  
To work around this issue, set the display name back to the original display name.
- OBE-8868  
Optimize fails to extract large numbers of assets.  
In the Asset Extraction page in Optimize, if a large number of assets is available and you select all the assets and try to export them, the page freezes.  
There is currently no workaround for this issue.
- OBE-8876  
The Value drop-down list in the Rule Audit page in Optimize is not populated correctly.  
On the Advanced tab in the Rule Audit page, when you filter by username, the Value drop-down list does not show all available users.  
There is currently no workaround for this issue.
- OBE-8904  
In the Optimize KPI Summary page, the Event table might not load properly.  
In the KPI Summary page, sometimes the Event table in the KPI Performance panel fails to load.  
To work around this issue, refresh the page.
- OBE-8932  
Back-populating rules in Optimize might fail.  
In some cases, when you click the Generate Rule Violations button on the Rule List page, the initiated rule back-population operation fails. Although no error message appears, the status of the back-population job in the Job Audit page, is "Failed".  
There is currently no workaround for this issue.

### 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- To maintain performance, Optimize now requires a greater quantity of database connections than are provided by default in the webMethods Database Pool Connection settings. For typical systems, the maximum number of connections should be increased to 80. To change the number of available database connections, navigate to Administration > System-Wide > Environments > Database Pool Connections, and then on the Pool Settings panel, change the value in the Maximum Connections field from 36 to 80.
- The KPI Summary Page does not support extended display durations. If you want the KPI Summary page to remain active for long periods of time without user interaction, you must add a workspace and use the Workspace Refresh portlet to keep the page current.

- SSL registration of Analytic Engine web services is not supported.
- Optimize supports the Dynamic Business Orchestrator version 9.12.

## **4.0 Fixes Included in Each Release**

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.12***

- OPT\_9.0\_SP1\_Fix14
- OPT\_9.5\_SP1\_Fix13
- OPT\_9.6\_SP1\_Fix9
- OPT\_9.7\_Fix13
- OPT\_9.8\_Fix11
- OPT\_9.9\_Fix9
- OPT\_9.10\_Fix4

### ***Release 9.10***

- OPT\_9.0\_SP1\_Fix12
- OPT\_9.5\_SP1\_Fix9
- OPT\_9.6\_SP1\_Fix7
- OPT\_9.7\_Fix7
- OPT\_9.8\_Fix6
- OPT\_9.9\_Fix2

### ***Release 9.9***

- OPT\_9.0\_SP1\_Fix9
- OPT\_9.5\_SP1\_Fix7
- OPT\_9.6\_SP1\_Fix4

- OPT\_9.7\_Fix5
- OPT\_9.8\_Fix3

### ***Release 9.8***

- OPT\_8.2\_SP1\_Fix14
- OPT\_9.0\_SP1\_Fix7
- OPT\_9.5\_SP1\_Fix5
- OPT\_9.6\_SP1\_Fix2
- OPT\_9.7\_Fix2

### ***Release 9.7***

- OPT\_8.0\_SP3\_Fix10
- OPT\_8.2\_SP1\_Fix12
- OPT\_9.0\_SP1\_Fix6
- OPT\_9.5\_SP1\_Fix3
- OPT\_9.6\_SP1\_Fix1

### ***Release 9.6***

- OPT\_8.0\_SP3\_Fix9
- OPT\_8.2\_SP1\_Fix11
- OPT\_9.0\_SP1\_Fix1
- OPT\_9.5\_SP1\_Fix2

## **Release 9.5**

- OPT\_7.1\_SP2\_Fix15
- OPT\_8.0\_SP3\_Fix9
- OPT\_8.2\_SP1\_Fix11
- OPT\_9.0\_SP1\_Fix1

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

- OBE-8602  
In some cases, the Process Dashboards page in Optimize does not load.  
In the Overview tab of the Process Dashboards page in Optimize, a "Loading Process models" message appears, indefinitely but the page does not load. The issue occurs when no process models that are enabled for analysis are deployed in the environment.  
The issue is resolved.

### **Release 9.10**

- OBE-7145  
Data remains unprocessed in the Universal Messaging JMS queues when an Analytic Engine node is down.  
When the Analytic Engine is running in a clustered environment, and some of the nodes are down, the data that is pushed to the respective Universal Messaging queue is not processed until the nodes come back up again.  
This issue has been resolved.
- OBE-7597  
On the KPI Instance Detail page, when you plot KPIs with collection intervals of 2, 4, or 8 hours, the graph displays incorrect times for reading values.  
In My webMethods Server, when you plot KPIs on the KPI Instance Detail page with collection intervals of 2, 4, or 8 hours, the KPI reading values that are displayed on the graph are plotted at incorrect times.  
This issue has been resolved.

- OBE-7888  
Loading faulty KPI instances may lead to a NullPointerException when the Optimize Analytic Engine is restarted.  
When a KPI definition contains a hierarchy with one or multiple dimensions, and Analytic Engine processes a related reading where some of the data for the dimensions is null, a faulty KPI instance is created. As a result, when the Analytic Engine is restarted afterwards, a NullPointerException is observed.  
This issue has been resolved.
- OBE-7518  
The Delete button on the Business Processes section in the Data Level Security tab for a role becomes inactive when you move between table pages.  
In My webMethods Server, on the Applications > Administration > System-Wide > User Management > Roles page, when you edit a role and go to the Business Process section in the Data Level Security tab, the Delete button becomes inactive when you move between table pages.  
This issue has been resolved.
- OBE-7511  
An error prevents you from editing or copying an instant rule with no user specified.  
In My webMethods Server, on the KPI Instance Detail page, when you create an instant rule without specifying a user for the Send Alert To drop-down list, and then you navigate to the Applications > Administration > Analytics > Rules > Rule List Page, you cannot edit or copy the rule. The following error is displayed in the Alerts panel on the Add/Edit/Copy Rule page: User is unknown or email address is undefined.  
This issue has been resolved.
- OBE-7990  
The Define Environments page allows you to create an environment with no name.  
In My webMethods Server, on the Administration > System-Wide > Environments > Define Environment page, when you click Add Environment, you can save your environment with no value for Environment Name.  
This issue has been resolved.
- OBE-7536  
The Advanced search tab on the Problems page does not return correct results.  
In My webMethods Server, on the Applications > Monitoring > System-Wide > Problems page, when you use the Advanced search tab to filter problems setting the "Field Name" to "Duration" and selecting "Greater Than" or "Less Than" as operators, your search might be misleading, since they also contain problems with duration that is equal to the selected value.  
This issue has been resolved. The "Greater Than" and "Less Than" operators no longer return problems with Duration equal to the selected filter Value. Also, the following operators have been added when filtering by duration:  
"Greater Than or Equal To" and "Less Than or Equal To"
- OBE-7750  
The swarm line density and colors are displayed incorrectly on the Process Diagram panel of the

Process Analytics page.

In My webMethods Server, on the Applications > Monitoring > Business > Process Analytics page, the Process Diagram panel displays swarm lines with incorrect density and colors.

This issue has been resolved.

- OBE-7491  
The KPI Instance Detail page incorrectly aggregates KPIs of type Sum or Count to the beginning of the hour.  
In My webMethods Server, on the KPI Instance Detail page, when you plot KPIs of type Sum or Count, the KPI data values are incorrectly aggregated to the beginning of the hour, instead of the end.  
This issue has been resolved.
- OBE-7485  
The Select All icon on the Database Pool Configuration page does not select all listed pools.  
In My webMethods Server, on the Applications > Administration > System-Wide > Environments > Database Pool Configuration, when you click the Select All icon, not all listed pools are selected.  
This issue has been resolved.
- OBE-7558  
Email notifications at the Process Dashboards panel fail to display the end time of a stage instance.  
On the Stage Instances tab of the Process Dashboards panel, when you select a stage instance and you click the Forward as Email link, the email received mistakenly displays the Stage End Date as "n/a", instead of showing the value, displayed on the Stage Instances panel.  
This issue has been resolved.

## **Release 9.8**

- OBE-6748  
The Process dashboards should not show processes that are not set for analysis.  
The process selector within the Process Dashboards is allowing users to select processes set for analysis as well as processes that are not set for analysis. The user should only be shown processes set for analysis.  
This issue has been resolved.
- OBE-6734  
Central Configuration - Define Environment allows an empty environment to be created.  
Central Configuration - Define Environment allows an empty environment to be created if a user presses the ENTER key before entering any value in the name field.  
This issue has been resolved.
- OBE-6282  
KPI Instance Detail graph is incorrectly plotting data points where a given data point is comprised of multiple events with the exact timestamp down to the millisecond.  
This issue has been resolved.

- OBE-4182  
Threshold rule expressions might fail if the underlying event map is renamed.  
If the event map referenced by a threshold rule expression was renamed, in some cases the threshold rule evaluation will fail.  
This issue has been resolved.

## **Release 9.7**

- OBE-6466  
The Analytic Engine logs an SQL error when deploying KPI definitions where a large number of events were processed before the definition was defined.  
The following error is written to the AE log when deploying KPI definitions containing a large number of events that were processed before the definition was created:  
"TemporaryEventStage.UnknownKey] ... ERROR: java.sql.SQLException: [SoftwareAG][Oracle JDBC Driver][Oracle]ORA-01795: maximum number of expressions in a list is 1000", when there are over 1000 temporary events recorded within Optimize prior to defining the KPI definition.  
This issue has been resolved.
- OBE-6218  
The wmOptimize package is potentially vulnerable to attack.  
The wmOptimize IS package can expose application containers and components when an error condition is forced.  
This issue has been resolved.
- OBE-6048  
The wmOptimize package is not fully localized.  
Labels on the wmOptimize Package Configuration screen are not localized.  
This issue has been resolved.
- OBE-6031  
The Analytic Engine may not start properly on UNIX.  
The Analytic Engine fails to start properly on UNIX if the startupAnalyticEngineNoWrapper.sh is used.  
This issue has been resolved.

## **Release 9.6**

- OBE-5983  
Optimize logging fails for the wmPRT package when the JMS Server is Universal Messaging.  
If the Optimize JNDI configuration for the wmPRT package specifies Universal Messaging as the JMS Server, Optimize logging for the wmPRT package may fail.  
This issue has been resolved.

- OBE-5878

The My webMethods Asset Extraction page does not show some assets, when these assets share the same name.

When using the Assets Extraction page within MWS to extract Optimize assets such as KPI definitions, rules, dimensions, and so on, assets that shared the same name are not displayed for extraction.

This issue has been resolved.
- OBE-4274

In some cases, Analytic Engine fails to start when running under the HP UX operating system. Due to an issue with the Java Server Wrapper, when running on the HP-UX operating system, Analytic Engine fails to start properly when using the startup.sh script. No logs are created but a core dump file is created and the following error text (truncated) appears on the console:

```
bash-4.2$ ./startup.sh
bash-4.2$ wrapper | --> Wrapper Started as Console
DLPI Error (Primitive:0x0b, Errno:0x03, UnixErr:0x00)
DLPI Error (Primitive:0x0b, Errno:0x03, UnixErr:0x00)
DLPI Error (Primitive:0x0b, Errno:0x03, UnixErr:0x00)
```

This issue has been resolved.

## **Release 9.5**

- OBE-4817

In some cases, Infrastructure Data Collector fails to collect events.

In some cases, Infrastructure Data Collector does not collect events because the Integration Server is not functioning correctly, and as a result no Object Status rules show violations.

This issue has been resolved.
- OBE-5878

The My webMethods Asset Extraction page does not show some assets, when these assets share the same name.

When using the Assets Extraction page within MWS to extract Optimize assets such as KPI definitions, rules, dimensions, etc., assets that shared the same name are not displayed for extraction.

This issue has been resolved
- OBE-4274

In some cases, Analytic Engine fails to start when running under the HP UX operating system. Due to an issue with the Java Server Wrapper, when running on the HP-UX operating system, Analytic Engine fails to start properly when using the startup.sh script. No logs are created but a core dump file is created and the following error text (truncated) appears on the console:

```
bash-4.2$ ./startup.sh
bash-4.2$ wrapper | --> Wrapper Started as Console
```



DLPI Error (Primitive:0x0b, Errno:0x03, UnixErr:0x00)  
DLPI Error (Primitive:0x0b, Errno:0x03, UnixErr:0x00)  
DLPI Error (Primitive:0x0b, Errno:0x03, UnixErr:0x00)  
This issue has been resolved.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

- A new “Using Command Central to Manage Optimize” chapter has been added to the *Administering webMethods Optimize* guide. This chapter is moved from the *Software AG Command Central Help*. The chapter describes the currently supported operations in Command Central for managing Optimize.
- The “Managing webMethods Optimize Environments” chapter of the *Configuring BAM* guide has been updated with information about configuring failover tuning for guaranteed consistency in Terracotta.
- The “Managing webMethods Optimize Environments” chapter of the *Configuring BAM* guide has been updated with information about configuring in-process event publication.
- The “Process Analytics” chapter of the *webMethods Optimize User’s Guide* has been updated with information about the new date range and refresh rate options, available on the Optimize Process Analytics page.
- The “Monitored KPI Definitions” chapter of the *Administering webMethods Optimize* guide has been updated with information about using additional JVM parameters for task event KPI definitions.

### **Release 9.10**

The *Administering webMethods Optimize* guide has been revised as follows:

- The “Integration between Optimize and PPM” chapter has been added. It contains information you should have in mind when using the two products for extended analysis of business process data.

The *Configuring BAM Guide* now includes information about creating an alert in Optimize from the PPM user interface.

The *Software AG Command Central* help contains information about administering the Web Service Data Collector using the Command Central user interface.

## **Release 9.9**

The *Administering webMethods Optimize* guide has been revised as follows:

- The “Monitored KPI Definitions” chapter has been updated with information about KPI definitions for Apama, Presto Catalina, Presto UM, IS File Polling, and Terracotta monitoring.
- The “Adding an Asset” section of the guide now contains information about adding Apama, Presto, Terracotta, SNMP3, and Terracotta assets.
- The “Configuring and Using the Infrastructure Data Collector” section of the guide now contains information about configuring Infrastructure Data Collector for clustering.
- The “Configuring and Using the Infrastructure Data Collector” section also contains information about changing the Infrastructure Data Collector ports.
- The “Configuring Event Routing Settings for Optimize” section in this guide has also been updated with details regarding the setup of Software AG Event Routing in your Optimize system.

The *webMethods Optimize User’s Guide* now includes information about using the “Investigate” button to jump to Process Performance Manager and further investigate process-related intrinsic data from Optimize. You will also find information about creating an alert in Optimize from the PPM user interface.

The *Software AG Command Central* help contains information about administering the Optimize Analytic Engine using the Command Central user interface.

## **Release 9.6**

The “Monitoring System Component and Business Process Performance” chapter of the *webMethods Optimize User’s Guide* now includes information about support for process stages.

Information on Analytic Engine clustering with Terracotta has been updated and enhanced in the *Configuring BAM* guide. The “Defining Event Publication Settings” topic in the Managing webMethods Optimize Environments chapter of this guide now includes information about publishing process tracking events.

## **Release 9.5**

The *Administering webMethods Optimize* guide has been revised as follows:

- **Universal Messaging KPIs** - Appendix A “Monitored KPI Definitions has been updated with a new section titled “Universal Messaging KPI Definitions” that lists and explains new KPIs for monitoring Universal Messaging Servers.
- **Optimize Schema Overview** - Appendix D “Optimize Schema Overview” has been added describing the Optimize database schema and components.

The *Optimize User's Guide* has been revised as follows:

- The title of the guide has been simplified with the removal of the *Optimizing BPM and System Resources with BAM* subtitle, so the guide is now simply titled *Optimize Users Guide*.
- **KPI Delete** - Chapter 2 “Monitoring Business Component and System Process Performance” has been updated to include information on a new feature of the Analytics Overview page that facilitates deletion of KPIs.
- **Process Analytics** - Process Analytics functionality has been revised, and the following chapters have been removed: Chapter 9 “Process Analytics Concepts,” Chapter 11 “Analyzing How a Process is Doing,” Chapter 12 “Analyzing How to Improve a Process,” and Chapter 13 “Analyzing a Process as it Runs.” These chapters have been replaced with a new chapter that described the revised Process Analytics functionality, Chapter 9 “Process Analytics.”

Information on Analytic Engine clustering with Terracotta has been updated and enhanced in the *Configuring BAM* guide.

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

### **Release 9.6**

Old Term	New Term
KPI hierarchy	Dimension hierarchy
Fact	Measure
Dimension Definition	Dimension

### **Release 9.5**

Old Term	New Term
KPI hierarchy	Dimension hierarchy
Fact	Measure
Dimension Definition	Dimension

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### **Release 9.10**

Added Item	Description
Command Central integration for Web Service Data Collector	Users can now start, stop, restart, inventory and receive the status for Web Service Data Collector using Software AG Command Central.
Process Instance Control (PIC) and Process Step Instance Control (PSIC) content are now identical.	The content of the Process Instance Control (PIC) and Process Step Instance Control (PSIC) events are now identical for both orchestrated and un-orchestrated processes.
Launching the Process Performance Manager (PPM) no longer depends on a Java applet	PPM now is launched via Java web start which allows the PPM user interface to display properly in browsers where the Java Applet has been dropped such as Google Chrome.
Ability to delete Key Performance Indicators by date and name	You are now able to delete KPIs by date and name.
Ability to view custom MashZone Next Gen dashboards within Business Console	You are now able to view your custom dashboards within the Business Console.
Optimize User Interface provides 508 Compliance for images	The Optimize User Interface provides 508 Compliance for images ensuring all images have proper alt text.

## Deprecated Item

## Replacement, if any

KPI Instance Detail Portlet (9.9 and prior)

For 9.10, the KPI Instance Detail portlet was replaced with a revised version. The KPI Instance Detail portlet (wm\_bam\_monitor\_detail) prior to 9.10 has been deprecated in 9.10, and will be removed in 9.12. While the previous portlet is no longer accessible through My webMethods navigation, the portlet will still be functional on a user's workspace until it is removed in the next release (9.12). Users migrating from a release prior to 9.10 who have a KPI Instance Detail portlet added to a workspace should manually remove the old portlet instance(s) from their workspace and re-add the new KPI Instance Detail portlet using the usual procedure (see steps below).

To re-add the KPI Instance Detail portlet to a workspace:

1. Open the workspace containing the KPI Instance Detail portlet.
2. Copy the KPI instance name shown above the graph.
3. Navigate to the Analytics Overview.
4. Select the Configuration appropriate for the KPI.
5. Search for the KPI instance name copied from step 2. Surround the name with quotes ("") for an exact match.
6. Expand the tree if necessary and view the detail for the KPI instance.
7. Render the detail using the desired time range.
8. Add the detail portlet to the desired workspace.
  - 8.1 Open the portlet menu.
  - 8.2 Select Add to Workspace.
  - 8.3 Select the desired workspace.

## Release 9.9

Added Item	Description
Analytic Engine emits additional EDA Events	New EDA events emitted by the Analytic Engine include ProcessInstanceStatusChange, ProcessErrorCount, StepErrorCount and StepWaitTime
Jump from PPM to Optimize with context providing ability to create an alert	If PPM is installed and configured to interact with Optimize, the user is now able to jump from PPM with context while providing the ability to create an alert related to the passed context. The current context includes the Process model
Ability to investigate a Process related Optimize Intrinsic KPI further within PPM	If PPM is installed and configured to interact with Optimize, the user is now able to investigate a process related Optimize Intrinsic KPI further within PPM by clicking on the “investigate” button on the KPI Instance Detail page
Process Dashboards now retain Stage selection on return URLs	When a user has made Stage selections on the process dashboard, this information is now retained when returning from an email or task URL.
Aesthetic enhancements for Process Dashboards	Aesthetic improvements have been made to the Process dashboards including: Principle picker now uses enter key to submit form when entering keyword characters, general control alignment and styling
Command Central integration for Analytic Engine	User can now start, stop, restart and receive the status for the Analytic Engine using Command Central. This includes configuring event routing for the Analytic Engine
Performance and scalability improvements	<ul style="list-style-type: none"><li>▪ 100 times improvement in clustered Analytic Engine throughput performance</li><li>▪ 2 times faster Analytic Engine startup</li><li>▪ 500 percent increase in dimensional handling throughput</li><li>▪ 30% throughput improvement in State engine</li></ul>

## Release 9.8

Added Item	Description
Ability for user to jump from Optimize to PPM	If PPM is installed and configured to interact with Optimize, the user is now able to jump from the Process Analytic page and Process Dashboards to PPM. The navigation includes the current process model as context.
Principle picker on escalation dialog in the Process Dashboards	A principle picker has been added to the escalation dialog within the Process dashboards. It now allows the user to easily find and choose a specific user and include their email address or user id in the escalation.
Customers can now provide a custom process instance id for a given process instance	BAM only processes now support the ability to provide a custom process instance id, also known as a display name, for a given process instance. The display name is used in place of the underlying unique id, when provided throughout the user interface.
Intrinsic Stage Metrics available in the UI	The intrinsic metrics associated with Stages are now available for use in the Analytics Overview.
New KPI Counter type	A new KPI type has been added called Counter. This KPI counts the number of data points received for a specific fact over a fixed aggregation period.
New Rule Violation/Resolution EDA event	Optimize now is able to emit Rule Violation/Resolution EDA events.

### Deprecated Item

### Replacement, if any

Removal of BAM\_AGG\_... database tables

The BAM\_AGG\_... database tables usage is being removed from future releases. These tables are currently used for Optimize Only UI support and will no longer be used.

## Release 9.6

Added Item	Description
Ability to monitor milestones	Added support for analysis of process stages and milestones. Optimize for Process now provides the following information in the form of both EDA events and REST services: stage started, stage completed, stage breached.

Added Item	Description
Support publication of process tracking events	Enabled users to select process tracking events for publication.

### **Release 9.5**

Added Item	Description
Enhanced Event Map Edit Capabilities	Metadata enhancements to facilitate non-destructive editing of event maps. Users can now add new attributes (including facts, dimensions and transactional attributes) to an existing event map without losing the underlying collected data.

Changed Item	Description
Process Analytics	The How am I doing?, What Can I Improve? and What Is Happening Now? views on the Process Analytics page have been removed, and the page has been simplified so there is only one view. See the <i>webMethods Optimize User's Guide</i> for more information.

## **9.0 Added, Removed, Deprecated, or Changed APIs**

A release is listed in this section only if changes occurred in that release.

### **Release 9.7**

Added API	Description
Rest Services	These services enable users to access Optimize data in various ways.



## 10.0 Copyright Information

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## 11.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

OPTPROC-RM-912-20161018

# webMethods Service Development 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods Service Development 9.12. You can find user documentation on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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### 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- WED-6370  
Dropping an input array variable that is part of a ForEach mapping results in an exception. There is no workaround for this issue.
- WED-6374  
When you add the input and output variables in a newly created flow service, the variables are not displayed in the Data Mapper tab.  
To work around this issue, save the flow service and reopen the Data Mapper tab.
- WED-6311  
Changes made in Pipeline view do not reflect in the Data Mapper view immediately.  
To work around this issue, click anywhere on the editor and then click the Map step. Now, go to the Data Mapper tab to view the changes.
- WED-6227  
During refactoring, preview of the new and old value is unavailable for webMethods messaging trigger.  
There is no workaround for this issue.
- WED-6226  
During refactoring, preview is unavailable for the old and new values of variables present in specification.  
There is no workaround for this issue.
- WED-6225  
During refactoring, preview is unavailable for the old and new values of a variable in a Java service signature.  
There is no workaround for this issue.
- WED-6149  
During refactoring of variables that appear in the pipeline, preview is unavailable.  
There is no workaround for this issue.
- WEL-6  
When you use Team Foundation Server (TFS) as your VCS client, TFS issues an IllegalArgumentException exception when sharing the local service development project.  
To work around this issue, clear the 'Connect mapped projects to TFS automatically' check box in Window > Preferences > Team > Team Foundation Server before sharing the local service development project.  
There is no workaround for this issue.
- SDEF-2219

Merge option appears enabled.

Although merging package content is not supported, the merge option is still enabled in Designer. There is no workaround for this issue.

- SDEF-2241  
Launching the element editor from compare editor opens a blank editor when comparing Adapter Notifications.  
While comparing two Adapter Notifications, if you launch the element editor from the compare editor using the 'Open in Editor' option, a blank editor appears.  
There is no workaround for this issue.
- SDEF-2245  
Undo action fails to reset the dependent properties values in the Adapter Notification editor. In Adapter Notification editor, if you change a property value such as, a procedure name and undo the change, Designer fails to reset the dependent expression property value.  
There is no workaround for this issue.
- SDEF-2232  
Reload of Adapter service or Adapter Notification element fails.  
When you change the compared Adapter service or Adapter Notification element outside the compare editor, editor views do not refresh properly.  
There is no workaround for this issue.
- SDEF-2226  
Flow Service properties merge revokes the previous merges.  
When you merge a service property, the previous merges on the service property is revoked.  
There is no workaround for this issue.
- SDEF-2132  
Logged Fields view fails to reflect the updated signature structure.  
If you merge a service signature structure, then the Logged Fields view does not reflect the updated signature structure.  
There is no workaround for this issue.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- Debugging of ForEach mapping is currently not supported.
- When comparing Integration Server packages and assets, internal changes in assets from one release to another might result in functionally identical assets being reported as different.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.12***

- ESB\_9.10\_Fix2
- ESB\_9.9\_Fix3
- ESB\_9.8\_Fix4
- ESB\_9.7\_Fix7
- ESB\_9.5\_SP1\_Fix8

### ***Release 9.10***

- ESB\_9.9\_Fix2
- ESB\_9.8\_Fix2
- ESB\_9.7\_Fix5
- ESB\_9.6\_Fix5

### ***Release 9.9***

- ESB\_9.8\_Fix1
- ESB\_9.7\_Fix4
- ESB\_9.5\_SP1\_Fix7

### ***Release 9.8***

- ESB\_8.2\_SP3\_Fix15
- ESB\_9.0\_SP1\_Fix9
- ESB\_9.5\_SP1\_Fix6
- ESB\_9.6\_Fix4
- ESB\_9.7\_Fix2

## ***Release 9.7***

- ESB\_8.2\_SP3\_Fix14
- ESB\_9.0\_SP1\_Fix6
- ESB\_9.5\_SP1\_Fix5
- ESB\_9.6\_Fix3

## ***Release 9.6***

- ESB\_8.2\_SP3\_Fix12
- ESB\_9.0\_SP1\_Fix5
- ESB\_9.5\_SP1\_Fix4

## ***Release 9.5***

- ESB\_8.2\_SP3\_Fix9
- ESB\_9.0\_SP1\_Fix1

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

- WED-6034  
Designer fails to handle the URL redirections while creating Integration Server elements.  
In Designer, if the URL has redirection, creation of Integration Server elements, such as web service descriptors, document types, and Integration Server schema from external URL fail.  
This issue is now fixed.
- WED-5592  
Tooltips remain frozen in Designer.  
In Designer, the document or flow editor tooltips remain on the screen even after closing the editor using the keyboard shortcut Ctrl+W.  
This issue is now fixed.

- WED-5820  
 Designer fails to display the details of Forms tab for Custom Remedy Adapter.  
 Forms tab does not display the details of Custom Remedy Adapter service such as the 'Selected Form' details in Designer.  
 This issue is now fixed.
- WED-5611  
 Web service descriptor fails to generate xsd:any element and attributes when the 'Allow unspecified fields' property is set to true.  
 The WSDL document for a web service descriptor does not include the xsd:any element and attributes when the web service descriptor uses a Document variable for which the 'Allow unspecified fields' property is set to true. This issue occurs even if the server configuration parameter `watt.core.schema.createSchema.omitXSDAny` is set to false.  
 This issue is now fixed.
- WED-5210  
 When unresolved package issues are manually resolved in a Java service, Designer does not append the import details correctly to other Java services in the same folder of the package if they are also open in the editor.  
 While editing Java services, upon doing an Organize Imports operation in a Java service, Designer removes necessary import details of other Java services that are in the same folder in the package if they are currently open in the editor. If the import details that are removed from the other services are manually resolved, the import details of the first service get corrupted, instead of getting appended to the existing import details.  
 This issue is now fixed.
- WED-6204  
 The field name abbreviator, as used for XmlIData, truncates the field names that start or end with '#'.  
 When you run a flow service, Designer fails to display the parameter names that start or end with # in the Results window. The Field name abbreviator, as used for XmlIData, truncates the field names that start or end with '#'.  
 This issue is now fixed.

## **Release 9.10**

- WED-5339  
 After installing a fix or a version of Integration Server that includes PIE-30233, a pipeline link (map or mapping) where the destination is a Document reference variable with an unresolved document type reference, behaves differently at run time.  
 When executing the pipeline link, at run time, Integration Server ignores the field order defined in the target Document reference variable which results in unpredictable field ordering in IData.  
 This issue is now fixed.  
**Note:** Integration Server versions 9.7, 9.8, and 9.9.
- WED-5692

There is no keyboard shortcut to drop variables from the pipeline.

This issue is now fixed. Ctrl+Shift+O is the new keyboard shortcut to drop variables from the pipeline.

- WED-5584

While searching for Integration Server elements in all packages, Designer does not work as expected when installed with a non-English language pack.

If you select **All Packages** option while searching for an Integration Server element in Designer (Search -> Integration Server), Designer searches for the element in all the packages before displaying the results. However, if Designer is installed with a language pack other than English, Designer does not search for the element in all packages. As a result, no results are displayed.

This issue is now fixed.

- WED-5397

Performance of Designer slows down when saving a flow service with a large number of service references. While saving a flow service, Designer checks whether the services referenced in the flow service exists. As a result, if there are a large number of service references in the flow service, the performance of Designer slows down.

This issue is now fixed. A new flow service editor preference is introduced. In the Flow Service Editor preferences page, if you do not want Designer to validate the referenced services while saving a flow service, clear the Validate service references while saving check box. Clearing this preference improves the performance of Designer while saving a flow service. By default, this check box is not selected. Select the Validate service references while saving check box if you want Designer to validate the referenced services while saving a flow service.

- WED-5210

When user selects Organize Imports to fix a JAVA service, it fixes the import statements of that service but the import statements in other JAVA services fails in the same folder.

This issue is now fixed.

- WED-5464

If Centrasite is selected as the source of the WSDL or XML schema definition, Designer does not display the child organizations when creating a web service descriptor or an IS document type.

When creating a consumer or WSDL first provider web service descriptor from a service asset in CentraSite or an IS document type from an XML Schema definition in CentraSite, Designer does not display the assets that belong to the child organizations.

This issue is now fixed. Now, if Centrasite is selected as the source of the WSDL or XML schema definition when creating a web service descriptor or an IS document type, Designer lists the child organizations

- WED-5465

If you set the Pre-8.2 compatibility mode property to true for a web service descriptor using Designer, StackOverflowException occurs.

If the web service descriptor contains a recursive document type reference, using Designer to set the Pre-8.2 compatibility mode property to true results in a StackOverflowException.

This issue is now fixed.



## **Release 9.6**

- WED-4156  
When a pipeline variable is defined in a SEQUENCE step within a branch, the variable does not appear in the pipeline for subsequent steps that use that variable.  
In the flow implementation for a branch step, a pipeline variable that was defined in a SEQUENCE step was ignored in subsequent child steps within the branch. As a result, the variable did not appear in the pipeline for the subsequent child steps.  
This issue is resolved. Defined pipeline variables are now visible in the pipeline for all subsequent steps within the branch in which they were defined.

## **Release 9.5**

- WED-3585  
Designer does not show enumeration values for an element defined to be a union of a defined type and an in-line simple type with enumerated values.  
This issue is now fixed.
- WED-3622  
In Designer, the properties of pipeline variables are not editable.  
The issue is fixed. The properties that are applicable to pipeline variables, namely the variable name and the Java wrapper type properties, are now editable.
- WED-3624  
Designer does not display the pick list choices of String and String list variables in the derived document from a consumer web service descriptor that is created from an external WSDL file that has got some enumeration in its schema for simpleType variables.  
When a consumer web service descriptor is created from an external WSDL file that has got some enumeration in its schema for simpleType variables, Designer does not display the pick list choices of String and String list variables in the derived document. Designer displays the pick list choices only after the schema is manually refreshed or reloaded.  
This issue is now resolved. The derived schema and variables in the document show the pick list choices that are available in the source WSDL for simpleType variables without manually refreshing or reloading the schema. Designer displays the pick list choices for String and String list variables in their Properties view as well as in the Run Configurations dialog boxes.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 9.9**

- Service Development Help contains a new topic, *Working with XML Document Types*, which explains what XML document types are and how to create XML document types.
- Service Development Help contains a new topic, *Comparing Integration Server Packages and Elements*, which tells you how you can compare packages and elements in Integration Server using the compare tool.
- Service Development Help contains the *Managing Cloud Connector Services* topic, which was earlier available only in the documentation specific to your CloudStreams provider (for example, *webMethods CloudStreams Provider for Salesforce.com Installation and User's Guide*).

### **Release 9.8**

- Service Development Help contains a new topic, *Working with OData Services*, which provides information about how to create and edit OData services.

### **Release 9.6**

- The “*Working with webMethods Messaging Triggers*” section of the Service Development Help has been added as a new chapter to the *Publish-Subscribe Developer's Guide*.
- The “*Working with JMS Triggers*” section of the Service Development Help has been added as a new chapter to *Using webMethods Integration Server to Build a Client for JMS*.
- The “*Working with Web Services*” section of the Service Development Help has been added as a new chapter to the *Web Services Developer's Guide*.

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

### **Release 9.5**

<b>Old Term</b>	<b>New Term</b>
Service Results view, Broker/Local Trigger Results view, Flat File Results view, Publish Results view	Results view
webMethods Nirvana	webMethods Universal Messaging
Broker/Local Trigger	webMethods Messaging Trigger
Publication property category	webMethods Messaging property category
Broker document type property	Provider definition property

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

<b>Added Item</b>	<b>Description</b>
Comparing and merging JMS triggers, adapter services, and adapter connections	JMS triggers, adapter services, and adapter connections can now be visually compared and differences between versions can be merged. Previously, merging was available only for flow services and IS document types.
Debug to Here	Debug to Here option in the context menu allows you to debug a flow service up to the specified flow step.
Data Mapper	Data Mapper view in Designer allows you to execute, modify, and test a MAP step without saving the flow service.
ForEach mapping	Designer provides ForEach mapping approach in the pipeline view of a MAP step to simplify array mapping and array data processing.

Added Item	Description
Move project to Integration Server package as linked resource	Move project to Integration Server package as linked resource option in the Local Service Development Preferences, allows you to set any repository on your workspace as the local repository directory and a linked directory is created under the Integration Server_directory\instances\default\packages directory.
Digital Event Services (DES)	From Designer, a user can integrate with Digital Event Services using the existing webMethods Messaging infrastructure. Also, Annotations property is now available for publishable document types that use the IS_DES_CONNECTION messaging connection alias.
Search and Refactor	Search functionality now provides the ability to search for a particular variable and identify all references to that variable in other assets, such as flow services, document types, specifications, and triggers. The Refactor option in the context menu allows you to refactor the input/output variables of various Integration Server assets (for example, flow services, Java services, specifications, documents type).
API Portal	The API Portal metadata repository type in the Asset publish wizard helps a user to configure connections to API Portal and publish REST API descriptors.
Changed Item	Description
Processing mode property default	The default processing mode for JMS triggers and webMethods messaging trigger is now changed from Serial to Concurrent. The value for 'Max execution threads' is changed from 10 to 1.
Encoding type property default	The default encoding type for publishable document type associated with a Universal Messaging connection alias is now Protocol buffers. Previously, the default encoding type was IData.

## **Release 9.10**

<b>Added Item</b>	<b>Description</b>
REST API Descriptor	A descriptor for a group of REST services on Integration Server.
Merging Integration Server Elements	Merge capability allows you to merge the differences between two elements on the same server or on different servers. Merging is available for flow services and Integration Server document types.
LCVI: Integration Server instance need not be named 'default' to use as LCVI.	Multiple Integration Server local instances can now be made as Local Version Control Inegration Server (LCVI).
Validate service references while saving preference	Flow service editor preference for validating all of the referenced services in the flow service upon saving the service.
Rest API Descriptor Preference	Preference for specifying MIME type available for use with REST API descriptors..
OData service creation from external sources	OData service can now be created using an external source type.

### **Changed Item**

REST Resource folder icon

### **Description**

A folder that contains services that function as a REST resource now has a unique icon to differentiate it from a folder that does not contain any services or elements used as a REST resource.

## **Release 9.9**

<b>Added Item</b>	<b>Description</b>
XML document type	An XML document type corresponds to a global element declaration, global attribute declaration, or global complex type definition in an XML schema definition.

**Deprecated Item**

WmVCS and VCS Integration feature

**Replacement, if any**

Use the local service development feature (Local Version Control Integration) to check package elements and their supporting files into and out of a version control system (VCS) directly from Designer.

**Changed Item**

Serial webMethods messaging triggers that receive documents from Universal Messaging now process documents from a publisher publication order.

**Description**

Previously, a webMethods messaging trigger with serial processing corresponded to a shared named object on a channel on Universal Messaging server. Now, a serial webMethods messaging trigger corresponds to a priority named object. This provides processing in publishing order for a serial trigger in a cluster or a non-clustered group of Integration Server

**Release 9.8****Added Item**

OData service wizard and editor

**Description**

New wizard and editor to create, view, and edit OData services.

Support for VCS operations from the Package Navigator view

VCS operations can now be performed on elements from Package Navigator view for Local Development.

**Changed Item**

Default value of the Hide generated flow services preference.

**Description**

The Hide generated flow services check box in the In the Preferences dialog box under Software AG > Service Development > Package Navigator is now cleared by default.

## Release 9.7

Added Item	Description
Encoding type property	Publishable document types that use Universal Messaging as the webMethods messaging provider can specify an Encoding type property. The encoding type indicates the format used to encode and decode instances of the publishable document type. You can select IData or protocol buffers as the encoding type. Support for encoding/decoding documents as protocol buffers is new for 9.7. Previously, documents could only be encoded/decoded as serialized IData objects.
Run/Debug preferences	Preferences page to customize the settings while running or debugging a service. Includes the following preferences: <ul style="list-style-type: none"><li>- Always show the No input dialog</li><li>- Flow Annotation Types</li></ul>

## 9.0 Copyright Information

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## 10.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

SD-RM-910-20161018



# Software AG System Management Hub 9.6 Readme

**April 2014**

This file contains important information you must read before using System Management Hub 9.6. You can find additional information about System Management Hub 9.6 on the [Software AG Documentation website](#). In addition, the following suite-related information is also available at that location:

*webMethods Product Suite Release Notes*  
*webMethods and Intelligent Business Operations System Requirements*  
*webMethods System Cache Specifications*  
*Using the Software AG Installer*  
*Installing webMethods and Intelligent Business Operations Products*  
*Using the Software AG Update Manager (fixes)*  
*Upgrading webMethods and Intelligent Business Operations Products*  
Product Documentation

You can find the following information in the Products section of the [Empower website](#):

Security Information  
Globalization Information

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[4.6 Added, Removed, Deprecated, or Changed Items](#)

[4.7 Added, Removed, Deprecated, or Changed Built-In Services](#)

[4.8 Added, Removed, Deprecated, or Changed APIs](#)

## [5.0 Copyright Information](#)

## [6.0 Support](#)

# 1.0 Critical Information

This section lists the critical issues that were known when this readme was published. For critical information found later, go to the Knowledge Center portion of the [Empower website](#).

None.

# 2.0 Known Issues

This section lists issues that were known when this readme was published. For known issues found later, go to the Knowledge Center portion of the [Empower website](#).

None.

# 3.0 Usage Notes

This section highlights product limitations and changes to product behavior introduced in this release.

- The Migration Tool, when used in console mode, cannot migrate single users if the user name contains non-ASCII characters. In console mode it also cannot migrate all available users for a particular product if the name of the product contains non-ASCII characters. The migrating is not possible because the communication between the console and the program is byte oriented. The migration of a user, whose user name contains non-ASCII characters, is possible when migrating all users for the specified product, or all users for all products. The migration of users for a product, which name contains non-ASCII characters, is possible when all users for all products are selected for migration. The graphical version (the GUI mode) of the Migration Tool does not have problems with non-ASCII characters.
- Configure the following web browser settings:
  - Enable JavaScript.
  - Enable Cascading Style Sheets (CSS) processing
- Windows Start Menu

The Windows start menu does not contain a shortcut to the System Management Hub 9.6 logon screen. Use the following URL to access the logon screen: `http://<MIL_NODE>:<port_number>/smh/login.htm`. <MIL\_NODE> is the host name of the MIL server, for example, "my\_pc.softwareag.com", or "localhost" on the local machine. The default Software AG Runtime HTTP port is 10010. You cannot access the 9.6 version logon screen with an 8.2 version shortcut containing the old URL. In this case, you must change the port number in your link to the System Management Hub 9.6 default Software AG Runtime HTTP port (10010).
- Using MIL Servers on Remote Machines

You can use a remote or a local MIL server. See the System Management Hub documentation for the configuration details.

- For release information related to the security package distributed with System Management Hub, see the Software AG Security Infrastructure 9.6 readme.

## **4.0 Fixes and Enhancements**

This section describes the fixes and enhancements included in System Management Hub 9.6.

### ***4.1 Fixes and Service Packs Included in This Release***

This section lists the fixes and service packs for previous releases that have been included into the current release. If only some issues in a fix or service pack have been included, that partially included fix or service pack is not listed here, and those issues are listed separately in [Section 4.2 Resolved Issues](#). See the Knowledge Center section of the [Empower website](#) for more information about fixes and service packs.

None.

### ***4.2 Resolved Issues***

This section lists issues that were resolved in this release and that are not included in the fixes and service packs listed in [Section 4.1 Fixes and Service Packs Included in This Release](#). These issues might have been resolved in a fix or service pack that was not included in its entirety into this release, or they might have been resolved since the last fix or service pack was released.

None.

### ***4.3 Enhancements***

For a detailed list of the enhancements included in System Management Hub 9.6, see the Release Notes available on the [Software AG Documentation website](#).

### ***4.4 Documentation Changes***

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content.

None.

### ***4.5 Terminology Changes***

This section lists terminology that has changed since the last full release of the product.

None.

## ***4.6 Added, Removed, Deprecated, or Changed Items***

This section lists product functionality that has been added, removed, deprecated, or changed since the last full release of the product. Deprecated Built-In services and APIs are listed in the relevant sections that follow this one.

None.

## ***4.7 Added, Removed, Deprecated, or Changed Built-In Services***

This section lists Built-In services that have been added, removed, deprecated, or changed since the last full release of the product.

None.

## ***4.8 Added, Removed, Deprecated, or Changed APIs***

This section lists APIs that have been added, removed, deprecated, or changed since the last full release of the product.

None.

## **5.0 Copyright Information**

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## 6.0 Support

To obtain support for webMethods Product Suite components, refer to the following resources:

### [Empower website](#)

Visit the Empower website to learn about support policies and critical alerts, read technical articles and papers, download products, fixes, and service packs, submit feature/enhancement requests, and more.

### [Software AG Developer Community for webMethods](#)

Visit the Software AG Developer Community to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

SMH-RM-96-20140415

# webMethods Task Engine 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods Task Engine 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- WTN-3733  
My webMethods does not display details about a step in a collaboration process.  
On the Collaboration Processes > Process Details page, when you select a step in a collaboration process, the Step Info, Task Info, Task Audit, and Task Comments tabs on the Details panel do not display any information about the step. Only the Process Info tab contains any information.  
There is currently no workaround for this issue.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.12***

- MWS\_9.10\_Fix2
- MWS\_9.10\_SPM\_Fix1
- MWS\_9.10\_SPM\_IS\_Fix1
- MWS\_9.9\_Fix5
- MWS\_9.9\_GLUE\_Fix2
- MWS\_9.9\_SPM\_Fix1
- MWS\_9.8\_Fix12

- MWS\_9.8\_SPM\_Fix4
- MWS\_9.7\_Fix16
- MWS\_9.6\_Fix16
- MWS\_9.6\_SPM\_Fix3
- MWS\_9.5\_SP1\_Fix22
- MWS\_9.0\_SP1\_Fix13
- MWS\_8.2\_SP1\_Fix28
- TE\_9.8\_TC\_Fix1
- TE\_9.6\_Fix1
- TE\_9.5\_SP1\_TC\_Fix3

### ***Release 9.10***

- MWS\_9.9\_Fix2
- MWS\_9.9\_GLUE\_Fix1
- MWS\_9.8\_Fix8
- MWS\_9.8\_GLUE\_Fix1
- MWS\_9.7\_Fix12
- MWS\_9.6\_Fix10
- MWS\_9.6\_GLUE\_Fix1
- MWS\_9.5\_SP1\_Fix15
- MWS\_9.0\_SP1\_Fix9
- MWS\_8.2\_SP1\_Fix26
- TE\_9.7\_TC\_Fix1
- TE\_8.2\_SP1\_TC\_Fix7

### ***Release 9.9***

- MWS\_9.8\_Fix3



- MWS\_9.7\_Fix7
- MWS\_9.6\_Fix8
- MWS\_9.5\_SP1\_Fix11
- MWS\_9.0\_SP1\_Fix7
- MWS\_8.2\_SP1\_Fix24

### ***Release 9.8***

- MWS\_9.7\_Fix3
- MWS\_9.6\_Fix5
- MWS\_9.5\_SP1\_Fix6
- MWS\_9.0\_SP1\_Fix5
- MWS\_8.2\_SP1\_Fix19
- MWS\_8.0\_SP2\_Fix20

### ***Release 9.7***

- MWS 9.6 Fix2
- MWS 9.5 SP1 Fix3
- MWS 9.0 SP1 Fix3
- MWS 8.2 SP1 Fix18
- TE\_9.5\_SP1\_Fix2

### ***Release 9.6***

- MWS 8.2 SP1 Fix15
- MWS 9.0 SP1 Fix1

### ***Release 9.5***

- MWS 8.2 SP1 Fix13

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

- WTN-3684  
On the Business Data page in My webMethods, the Intrinsic Task Metrics event maps are improperly set as user-defined.  
When you expand the Intrinsic Task Metrics node on the Administration > Analytics > KPIs > Business Data page in My webMethods, the DEFINED BY column for the Intrinsic Task Metrics event maps displays the value of "User". However, intrinsic event map and KPI definitions should be system-defined to prevent users from deleting or modifying the definitions.  
The issue is resolved. The DEFINED BY column for the Intrinsic Task Metrics event maps now has a value of "System".

### **Release 9.6**

- MWS-10947  
Task events are not getting fired consistently for date/time events.  
In some instances, task events are not getting fired consistently for date/time events.  
This issue is now resolved.

### **Release 9.5**

- MWS-9830  
Unable to add process scoped comments to a task.  
If a task is configured for process scoped comments, and a user attempts to add a comment, the following errors results: "user1 cannot add a Comment Entry to \_task\_PID:<task ID>-commentsContainer."  
This issue is now resolved.
- WTN-2212  
Violation of PRIMARY KEY constraint 'PK\_STEPDEF' Error while creating collaboration task in a clustered environment.  
When attempting to create a collaboration task in a clustered environment, a "Violation of PRIMARY KEY constraint 'PK\_STEPDEF'" Error occurs.  
This issue is now resolved.
- WTN-2190  
An NPE error occurs when a Scheduled Delegation rule is created and the "Delegate From" user is an LDAP user.  
A "java.lang.NullPointerException" error occurs when you attempt to create a Scheduled

Delegation rule and the "Delegate From" user is an LDAP user.  
This issue is now resolved.

- WTN-2047 / WTN-2314  
An error occurs while creating collaborative tasks using the queueTask IS service in a loop.  
When using the public Task Engine service pub.task.taskclient:queueTask to create child tasks, a "TaskID cannot be found" error occurs.  
This issue is now resolved.
- WTN-1966  
Task Administration permission for a Group/User/Role is not saved after 7.1.3 to 9.0 over-install migration.  
After a task application has been migrated from 7.1.3 to 9.0, and permissions are granted to a Group, User, or Role for this task, not all task permissions are saved.  
This issue is now resolved.
- WTN-2046  
Resubmitting a step in a process creates a duplicate task instance.  
After a process instance is started, either resubmitting the document in the process or resubmitting a task step in the process creates a new task instance but does not delete the old task instance.  
This issue is now resolved.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

A new chapter, "Using Command Central to Manage Task Engine" is added to *webMethods Task Engine User's Guide*. The chapter contains information about how you use Software AG Command Central to administer the WmTaskClient and Task Engine layered products.

### **Release 9.7**

A new chapter is added to the *webMethods Task Engine API and Service Reference*, "Using the Task Engine RESTful Web Services in My webMethods Server." This chapter describes how webMethods Task Engine enables web applications to use RESTful services in My webMethods Server to directly communicate with the Task Engine.

### **Release 9.6**

webMethods Task Engine provides support for Mobile Task Integration (MTI), which enables a user to interact with MTI-enabled tasks running in the Task Engine from an iOS or Android mobile device. A

separate PDF publication, *Software AG Designer Mobile Task Integration Supplemental Documentation*, is available from the documentation website and with the documentation installation. This publication describes the procedures required to create a mobile task application in Software AG Designer, how to publish the application to Mobile Administrator, and how to connect to and interact with the mobile task application from a mobile device.

## **7.0 Terminology Changes**

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### Release 9.12

Deprecated Item	Replacement, if any
-----------------	---------------------

Support for Axis 1.x, which is used for exposing web services from My webMethods Server, is deprecated.

Support for webMethods Glue

### Release 9.10

Added Item	Description
------------	-------------

webMethods Task Development now supports the String List data type when you configure task assignees with a webMethods Business Rules decision table in Software AG Designer.

You can assign a task to multiple user IDs by using a String List in the assignee field of your IS document type. For more information about working with task assignments, see *webMethods BPM Task Development Help*.

Scheduling of task instances

When you create a task instance, you can now schedule the task instance to start at a specified date and time. You specify or modify the schedule of a task instance, using:

- Task Engine built-in services
- Task Engine RESTful services
- webMethods Business Console user interface

## 9.0 Added, Removed, Deprecated, or Changed Built-In Services

A release is listed in this section only if changes occurred in that release.

## ***Release 9.10***

<b>Changed Service</b>	<b>Description</b>
pub.task.taskclient:queueTask	The built-in service now accepts the task schedule details for a task instance to be added to Task Engine's queue.
pub.task.taskclient:updateTask	The built-in service now allows changes to the new taskScheduleDate parameter if a task instance is in scheduled state.
pub.task.taskclient:getTask	The built-in service now retrieves the task schedule date along with other details of a task instance.

## 10.0 Added, Removed, Deprecated, or Changed Parameters

A release is listed in this section only if changes occurred in that release.

### **Release 9.10**

Added Parameter	Description
taskScheduleDate	The taskScheduleDate parameter has been added to: <ul style="list-style-type: none"><li>pub.task:TaskInfo</li><li>pub.task:TaskQueueInfo</li><li>TaskInfo model used by RESTful services</li></ul>

Changed Parameter	Description
Status	The pub.task:TaskInfo service and the TaskInfo model used by RESTful services have been updated to include the new “scheduled” status.

## 11.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

### **Release 9.12**

Added API	Description
com.webmethods.caf.common.thread.NamedThreadFactory	Method 'public NamedThreadFactory(java.lang.String, boolean)' has been added
com.webmethods.caf.faces.bean.mws_ui.HtmlHead	Method 'public java.lang.String getEffectsJS()' has been added
com.webmethods.caf.faces.convert.FormattedDateTimeConverter	Added protected field dateFormatDefault
com.webmethods.caf.faces.data.object.DateRange	Added protected field controlCalendar
com.webmethods.caf.faces.data.object.DateRange	Method 'protected java.util.Calendar getControlCalendar(javax.faces.context.FacesContext)' has been added
com.webmethods.caf.faces.data.object.DateRange	Method 'public void

**Added API****Description**

setControlCalendar(java.util.Calendar)' has been added

com.webmethods.caf.mobile.notify.IMobileNotificationConstants: Class  
com.webmethods.caf.mobile.notify.IMobileNotificationConstants added

com.webmethods.caf.mobile.notify.IMobileNotificationProvider: Class  
com.webmethods.caf.mobile.notify.IMobileNotificationProvider added

com.webmethods.caf.mobile.notify.IMobileNotifierComponent: Class  
com.webmethods.caf.mobile.notify.IMobileNotifierComponent added

com.webmethods.caf.mobile.notify.activator.MobileNotificationActivator: Class  
com.webmethods.caf.mobile.notify.activator.MobileNotificationActivator added

com.webmethods.caf.mobile.notify.impl.MobileNotificationProvider: Class  
com.webmethods.caf.mobile.notify.impl.MobileNotificationProvider added

com.webmethods.caf.mobile.notify.impl.MobileNotifierComponent: Class  
com.webmethods.caf.mobile.notify.impl.MobileNotifierComponent added

com.webmethods.caf.mobile.notify.impl.TaskEventsHandler: Class  
com.webmethods.caf.mobile.notify.impl.TaskEventsHandler added

com.webmethods.caf.mobile.notify.task.Message: Class  
com.webmethods.caf.mobile.notify.task.Message added

com.webmethods.caf.mobile.notify.task.MonitorPendingNotificationMessages: Class  
com.webmethods.caf.mobile.notify.task.MonitorPendingNotificationMessages added

com.webmethods.caf.mobile.notify.task.NotificationSender: Class  
com.webmethods.caf.mobile.notify.task.NotificationSender added

com.webmethods.caf.mobile.notify.util.MobileNotifierUtil: Class  
com.webmethods.caf.mobile.notify.util.MobileNotifierUtil added

com.webmethods.caf.wssserver.auth.saml.SamlUtils: Method 'public org.w3c.dom.Element  
marshallSamlObject(org.opensaml.xml.XMLObject)' has been added

com.webmethods.caf.wssserver.auth.saml.SamlUtils: Method 'public org.opensaml.xml.XMLObject  
unmarshallElement(org.w3c.dom.Element)' has been added

com.webmethods.portal.bizPolicy.biz.dir.IGroupBizPolicy: Added  
com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy to the set of implemented  
interfaces

com.webmethods.portal.bizPolicy.biz.dir.IPrincipalBizPolicy: Added  
com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy to the set of implemented  
interfaces

com.webmethods.portal.bizPolicy.biz.dir.IUserBizPolicy: Added  
com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy to the set of implemented  
interfaces



**Added API****Description**

com.webmethods.portal.bizPolicy.biz.dir.impl.GroupBizPolicy: Added  
com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy to the set of implemented interfaces

com.webmethods.portal.bizPolicy.biz.dir.impl.GroupBizPolicy: Added  
com.webmethods.portal.bizPolicy.biz.view.impl.ViewableContainerPolicy to the list of superclasses

com.webmethods.portal.bizPolicy.biz.dir.impl.PrincipalBizPolicy: Added  
com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy to the set of implemented interfaces

com.webmethods.portal.bizPolicy.biz.dir.impl.PrincipalBizPolicy: Added  
com.webmethods.portal.bizPolicy.biz.view.impl.ViewableContainerPolicy to the list of superclasses

com.webmethods.portal.bizPolicy.biz.dir.impl.UserBizPolicy: Added  
com.webmethods.portal.bizPolicy.biz.view.IViewableContainerPolicy to the set of implemented interfaces

com.webmethods.portal.bizPolicy.biz.dir.impl.UserBizPolicy: Added  
com.webmethods.portal.bizPolicy.biz.view.impl.ViewableContainerPolicy to the list of superclasses

com.webmethods.portal.bizPolicy.biz.task.impl.TaskInfo: Added java.io.Serializable to the set of implemented interfaces

com.webmethods.portal.bizPolicy.biz.task.impl.TaskInfoExtended: Added java.io.Serializable to the set of implemented interfaces

com.webmethods.portal.bizPolicy.command.ICommandManager: Method 'public com.webmethods.portal.bizPolicy.command.IRemoteCommandTransport getRemoteCommandTransport(java.lang.String)' has been added to an interface

com.webmethods.portal.bizPolicy.command.ICommandManager: Method 'public java.util.List invokeClusterCommand(com.webmethods.portal.bizPolicy.IContext, com.webmethods.portal.bizPolicy.command.ICommand, com.webmethods.portal.bizPolicy.command.ICommandBean)' has been added to an interface

com.webmethods.portal.bizPolicy.command.ICommandResponseEntry: Class com.webmethods.portal.bizPolicy.command.ICommandResponseEntry added

com.webmethods.portal.bizPolicy.command.dir.GetPortalStyle: Method 'protected void checkAccess(com.webmethods.portal.bizPolicy.IContext, com.webmethods.portal.mech.dir.IPrincipalMechanics, com.webmethods.portal.system.IURI)' has been added

com.webmethods.portal.bizPolicy.command.dir.SearchDirectory: Method 'protected void checkAccess(com.webmethods.portal.bizPolicy.IContext, com.webmethods.portal.mech.dir.IDirServiceMechanics, com.webmethods.portal.service.meta2.thing.IThingID)' has been added

Added API	Description
com.webmethods.portal.bizPolicy.command.dir.SearchDirectoryEx: checkAccess(com.webmethods.portal.bizPolicy.IContext, com.webmethods.portal.mech.dir.IDirServiceMechanics, com.webmethods.portal.service.meta2.thing.IThingID)	Method 'protected void checkAccess(com.webmethods.portal.bizPolicy.IContext, com.webmethods.portal.mech.dir.IDirServiceMechanics, com.webmethods.portal.service.meta2.thing.IThingID)' has been added
com.webmethods.portal.bizPolicy.command.dir.SearchDirectoryRefined: checkAccess(com.webmethods.portal.bizPolicy.IContext, com.webmethods.portal.mech.dir.IDirServiceMechanics, com.webmethods.portal.service.meta2.thing.IThingID)	Method 'protected void checkAccess(com.webmethods.portal.bizPolicy.IContext, com.webmethods.portal.mech.dir.IDirServiceMechanics, com.webmethods.portal.service.meta2.thing.IThingID)' has been added
com.webmethods.portal.bizPolicy.command.dir.SearchDirectoryRefinedPaged: void checkAccess(com.webmethods.portal.bizPolicy.IContext, com.webmethods.portal.mech.dir.IDirServiceMechanics, com.webmethods.portal.service.meta2.thing.IThingID)	Method 'protected void checkAccess(com.webmethods.portal.bizPolicy.IContext, com.webmethods.portal.mech.dir.IDirServiceMechanics, com.webmethods.portal.service.meta2.thing.IThingID)' has been added
com.webmethods.portal.bizPolicy.command.impl.CommandManager: com.webmethods.portal.bizPolicy.command.IRemoteCommandTransport getRemoteCommandTransport(java.lang.String)	Method 'public com.webmethods.portal.bizPolicy.command.IRemoteCommandTransport getRemoteCommandTransport(java.lang.String)' has been added
com.webmethods.portal.bizPolicy.command.impl.CommandManager: com.webmethods.portal.bizPolicy.command.ICommand, com.webmethods.portal.bizPolicy.command.ICommandBean)	Method 'public java.util.List invokeClusterCommand(com.webmethods.portal.bizPolicy.IContext, com.webmethods.portal.bizPolicy.command.ICommand, com.webmethods.portal.bizPolicy.command.ICommandBean)' has been added
com.webmethods.portal.bizPolicy.command.remote.RemoteCommand: com.webmethods.portal.bizPolicy.command.remote.RemoteCommand	Class com.webmethods.portal.bizPolicy.command.remote.RemoteCommand added
com.webmethods.portal.bizPolicy.command.remote.RemoteCommandBean: com.webmethods.portal.bizPolicy.command.remote.RemoteCommandBean	Class com.webmethods.portal.bizPolicy.command.remote.RemoteCommandBean added
com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteCommandTransport: com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteCommandTransport	Class com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteCommandTransport added
com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteCommandTransport\$RemoteJmsException: com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteCommandTransport\$RemoteJmsException	Class com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteCommandTransport\$RemoteJmsException added
com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteTransaction: com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteTransaction	Class com.webmethods.portal.bizPolicy.command.remote.jms.JmsRemoteTransaction added
com.webmethods.portal.bizPolicy.command.system.JndiRefreshCluster: com.webmethods.portal.bizPolicy.command.system.JndiRefreshCluster	Class com.webmethods.portal.bizPolicy.command.system.JndiRefreshCluster added
com.webmethods.portal.bizPolicy.command.task.jms.AbstractTaskCommand: com.webmethods.portal.bizPolicy.command.task.jms.AbstractTaskCommand	Class com.webmethods.portal.bizPolicy.command.task.jms.AbstractTaskCommand added

**Added API****Description**

com.webmethods.portal.bizPolicy.command.task.jms.AbstractTaskCommandBean: Class  
com.webmethods.portal.bizPolicy.command.task.jms.AbstractTaskCommandBean added

com.webmethods.portal.bizPolicy.command.task.jms.AddTaskAttachmentJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.AddTaskAttachmentJMS added

com.webmethods.portal.bizPolicy.command.task.jms.AddTaskCommentJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.AddTaskCommentJMS added

com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskAttachmentJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskAttachmentJMS added

com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskCommentJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskCommentJMS added

com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.DeleteTaskJMS added

com.webmethods.portal.bizPolicy.command.task.jms.GetTaskAttachmentsJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.GetTaskAttachmentsJMS added

com.webmethods.portal.bizPolicy.command.task.jms.GetTaskAuditJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.GetTaskAuditJMS added

com.webmethods.portal.bizPolicy.command.task.jms.GetTaskCommentsJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.GetTaskCommentsJMS added

com.webmethods.portal.bizPolicy.command.task.jms.GetTaskJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.GetTaskJMS added

com.webmethods.portal.bizPolicy.command.task.jms.QueueTaskJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.QueueTaskJMS added

com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksFieldsJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksFieldsJMS added

com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksJMS added

com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksPagedJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksPagedJMS added

com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksTotalCountJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.SearchTasksTotalCountJMS added

com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskAttachmentJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskAttachmentJMS added

com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskCommentJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskCommentJMS added

**Added API****Description**

com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskJMS: Class  
com.webmethods.portal.bizPolicy.command.task.jms.UpdateTaskJMS added

com.webmethods.portal.bizPolicy.command.task.jms.impl.TaskJMSUtils: Class  
com.webmethods.portal.bizPolicy.command.task.jms.impl.TaskJMSUtils added

com.webmethods.portal.bizPolicy.command.task.rs.MWSCustomDispatchProvider: Class  
com.webmethods.portal.bizPolicy.command.task.rs.MWSCustomDispatchProvider added

com.webmethods.portal.bizPolicy.command.task.rs.MWSRequestDispatcher: Class  
com.webmethods.portal.bizPolicy.command.task.rs.MWSRequestDispatcher added

com.webmethods.portal.bizPolicy.command.task.webservice.SearchTasksFieldsWS: Added  
java.io.Serializable to the set of implemented interfaces

com.webmethods.portal.bizPolicy.command.task.webservice.SearchTasksWS: Added  
java.io.Serializable to the set of implemented interfaces

com.webmethods.portal.bizPolicy.command.task.webservice.Task: Added java.io.Serializable to the set  
of implemented interfaces

com.webmethods.portal.bizPolicy.command.task.webservice.dotnet.SearchTasksDotNetWS: Added  
java.io.Serializable to the set of implemented interfaces

com.webmethods.portal.bizPolicy.command.task.webservice.dotnet.SearchTasksFieldsDotNetWS:  
Added java.io.Serializable to the set of implemented interfaces

com.webmethods.portal.bizPolicy.impl.upgrade.MoveVersionSystemComponentData: Class  
com.webmethods.portal.bizPolicy.impl.upgrade.MoveVersionSystemComponentData added

com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent: Class  
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent added

com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$IListener: Class  
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$IListener added

com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$ISynchronousListener: Class  
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$ISynchronousListener added

com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$Listeners: Class  
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$Listeners added

com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$QueueListeners: Class  
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$QueueListeners added

com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$SynchronousListeners: Class  
com.webmethods.portal.event.dir.IDirPrincipalDNUpdateEvent\$SynchronousListeners added

com.webmethods.portal.event.dir.impl.DirPrincipalDNUpdateEvent: Class  
com.webmethods.portal.event.dir.impl.DirPrincipalDNUpdateEvent added

com.webmethods.portal.event.sso.ISSODataChangeEvent: Class

Added API	Description
com.webmethods.portal.event.sso.ISSODataChangeEvent	added
com.webmethods.portal.event.sso.ISSODataChangeEvent\$IListener	Class
com.webmethods.portal.event.sso.ISSODataChangeEvent\$IListener	added
com.webmethods.portal.event.sso.ISSODataChangeEvent\$ISynchronousListener	Class
com.webmethods.portal.event.sso.ISSODataChangeEvent\$ISynchronousListener	added
com.webmethods.portal.event.sso.ISSODataChangeEvent\$Listeners	Class
com.webmethods.portal.event.sso.ISSODataChangeEvent\$Listeners	added
com.webmethods.portal.event.sso.ISSODataChangeEvent\$QueueListeners	Class
com.webmethods.portal.event.sso.ISSODataChangeEvent\$QueueListeners	added
com.webmethods.portal.event.sso.ISSODataChangeEvent\$SynchronousListeners	Class
com.webmethods.portal.event.sso.ISSODataChangeEvent\$SynchronousListeners	added
com.webmethods.portal.event.sso.impl.SSODataChangeEvent	Class
com.webmethods.portal.event.sso.impl.SSODataChangeEvent	added
com.webmethods.portal.framework.dispatch.handlers.system.SAMLSSOHandler	Class
com.webmethods.portal.framework.dispatch.handlers.system.SAMLSSOHandler	added
com.webmethods.portal.framework.dispatch.preProcessors.OpenRedirectCheck	Class
com.webmethods.portal.framework.dispatch.preProcessors.OpenRedirectCheck	added
com.webmethods.portal.framework.dispatch.resolvers.SAMLAuthReqResolver	Class
com.webmethods.portal.framework.dispatch.resolvers.SAMLAuthReqResolver	added
com.webmethods.portal.framework.impl.PortalServlet	Added public field
PORTAL_SERVLET_LOCK_OBJ	
com.webmethods.portal.framework.portletcontainer.servlet.JettyPortletRequestWrapper	Method
'public org.eclipse.jetty.util.MultiMap getParameterMultiMap()'	has been added
com.webmethods.portal.framework.portletcontainer.servlet.JettyPortletRequestWrapper	Method
'public java.util.Map getParameters()'	has been added
com.webmethods.portal.jms.JMSPhaseProvider	Added com.webmethods.portal.system.IComponent
com.webmethods.portal.jms.JMSPhaseProvider	to the set of implemented interfaces
com.webmethods.portal.jms.JMSPhaseProvider	Added com.webmethods.portal.system.IConstants
com.webmethods.portal.jms.JMSPhaseProvider	to the set of implemented interfaces
com.webmethods.portal.jms.JMSPhaseProvider	Added
com.webmethods.portal.system.impl.BaseComponent	to the list of superclasses
com.webmethods.portal.jms.JMSPhaseProvider	Added public field COMPONENT_NAME
com.webmethods.portal.jms.um.UmJMSClient	Added abstract modifier to class
com.webmethods.portal.jms.um.UmJMSClient	Added
com.webmethods.portal.system.init.IInitializable	to the set of implemented interfaces

Added API	Description
com.webmethods.portal.jms.um.UmJMSClient:	Added com.webmethods.rtl.msg.jms.IJMSPProvider to the set of implemented interfaces
com.webmethods.portal.jms.um.UmJMSClient:	Added com.webmethods.rtl.msg.jms.JMSPProvider to the list of superclasses
com.webmethods.portal.jms.um.UmJMSClient:	Added com.webmethods.rtl.msg.jms.JMSStdConnProvider to the list of superclasses
com.webmethods.portal.jms.um.UmJMSClient:	Method 'protected boolean createInitialContext()' has been added
com.webmethods.portal.jms.um.UmJMSClient:	Method 'protected void registerFactory(org.w3c.dom.Element)' has been added
com.webmethods.portal.jms.um.UmJMSClient:	Method 'protected void registerQueue(org.w3c.dom.Element)' has been added
com.webmethods.portal.jms.um.UmJMSClient:	Method 'protected void registerTopic(org.w3c.dom.Element)' has been added
com.webmethods.portal.jms.um.UmJMSClient:	Method 'protected void resetContext()' has been added
com.webmethods.portal.jms.um.UmJMSConnProvider:	Added com.webmethods.portal.jms.um.UmJMSClient to the list of superclasses
com.webmethods.portal.jms.um.UmJMSConnProvider:	Method 'protected void onDisconnect(boolean)' has been added
com.webmethods.portal.jms.um.UmJMSConnProvider:	Method 'public void onShutdown()' has been added
com.webmethods.portal.mech.dir.IDirServiceMechanics:	Method 'public java.util.List updatePrincipalUUID(int)' has been added to an interface
com.webmethods.portal.mech.dir.IGroupMechanics:	Added com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces
com.webmethods.portal.mech.dir.IPrincipalMechanics:	Added com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces
com.webmethods.portal.mech.dir.IRoleMechanics:	Added com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces
com.webmethods.portal.mech.dir.IUserMechanics:	Added com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces
com.webmethods.portal.mech.dir.impl.DirMechanicsUtils:	Method 'public java.lang.String generateUUIDQuery(com.webmethods.portal.service.dir.IDirService, java.lang.String, int)' has been added
com.webmethods.portal.mech.dir.impl.DirServiceMechanics:	Method 'public java.util.List

**Added API****Description**

updatePrincipalUUID(int)' has been added

com.webmethods.portal.mech.dir.impl.GroupMechanics: Added

com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces

com.webmethods.portal.mech.dir.impl.GroupMechanics: Added

com.webmethods.portal.mech.view.impl.ViewableContainerMechanics to the list of superclasses

com.webmethods.portal.mech.dir.impl.PrincipalMechanics: Added

com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces

com.webmethods.portal.mech.dir.impl.PrincipalMechanics: Added

com.webmethods.portal.mech.view.impl.ViewableContainerMechanics to the list of superclasses

com.webmethods.portal.mech.dir.impl.RoleMechanics: Added

com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces

com.webmethods.portal.mech.dir.impl.RoleMechanics: Added

com.webmethods.portal.mech.view.impl.ViewableContainerMechanics to the list of superclasses

com.webmethods.portal.mech.dir.impl.UserMechanics: Added

com.webmethods.portal.mech.view.IViewableContainerMechanics to the set of implemented interfaces

com.webmethods.portal.mech.dir.impl.UserMechanics: Added

com.webmethods.portal.mech.view.impl.ViewableContainerMechanics to the list of superclasses

com.webmethods.portal.mech.task.impl.RefreshTaskHandler: Class

com.webmethods.portal.mech.task.impl.RefreshTaskHandler added

com.webmethods.portal.mech.task.impl.TaskHelper: Method 'public java.lang.ClassLoader getClassLoaderIfExists(com.webmethods.portal.service.task.ITaskDefinition)' has been added

com.webmethods.portal.mech.view.impl.ViewableContainerMechanics: Method 'protected

com.webmethods.portal.service.view.IPagingCookie

createPagingCookie(com.webmethods.portal.service.meta2.thing.IThingID)' has been added

com.webmethods.portal.service.access.IAccessPrivilegeConfiguration: Class

com.webmethods.portal.service.access.IAccessPrivilegeConfiguration added

com.webmethods.portal.service.access.impl.DashboardAclManager: Class

com.webmethods.portal.service.access.impl.DashboardAclManager added

com.webmethods.portal.service.access.impl.DashboardAclManager\$DashboardAclResource: Class

com.webmethods.portal.service.access.impl.DashboardAclManager\$DashboardAclResource added

com.webmethods.portal.service.access.impl.DashboardContainerAclManager: Class

com.webmethods.portal.service.access.impl.DashboardContainerAclManager added

com.webmethods.portal.service.access.impl.DashboardContainerAclManager\$DashboardContainerAclResource: Class

com.webmethods.portal.service.access.impl.DashboardContainerAclManager\$DashboardContainerAcl

Added API	Description
Resource added	
com.webmethods.portal.service.access.impl.GadgetsAclManager:	Method 'public java.util.Map getResultColumnMetadata()' has been added
com.webmethods.portal.service.access.impl.GadgetsAclManager:	Method 'public java.util.List searchResources(com.webmethods.caf.faces.search.query.ISearchQuery)' has been added
com.webmethods.portal.service.access.impl.GadgetsAclManager\$GadgetAclResource:	Method 'public java.lang.Object getValue(java.lang.Object)' has been added
com.webmethods.portal.service.access.impl.WMAppsAclManager:	Method 'public void addServiceTracker(org.osgi.framework.BundleContext)' has been added
com.webmethods.portal.service.access.impl.WMAppsAclManager:	Method 'public void stopServiceTracker()' has been added
com.webmethods.portal.service.cache.impl.AliasCache:	Added
com.webmethods.portal.event.remove.IDeleteEvent\$ISynchronousListener:	Added to the set of implemented interfaces
com.webmethods.portal.service.cache.impl.AliasCache:	Method 'public void onSynchronousEvent(com.webmethods.portal.event.remove.IDeleteEvent)' has been added
com.webmethods.portal.service.dir.DirectoryTools:	Added public field UUIDUserResolution
com.webmethods.portal.service.dir.DirectoryTools:	Added protected field UUID_CONFIG
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public
com.webmethods.portal.service.dir.IDirService:	Method 'public
com.webmethods.portal.service.dir.IDirService:	Method 'public java.util.List getDirectoryService(com.webmethods.portal.system.IURI)' has been added
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public java.util.List getEmptyUUIDUsers()' has been added
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public java.lang.Boolean getUUIDResolution()' has been added
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public java.lang.String getUserDNFromUserUUID(java.lang.String, com.webmethods.portal.service.meta2.IUserService)' has been added
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public void invalidateGroupRoleCache(com.webmethods.portal.service.meta2.thing.IThingID)' has been added
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public
com.webmethods.portal.service.meta2.thing.IThingID:	Method 'public
com.webmethods.portal.service.dir.init.IInitializableUser:	Method 'public void resolveUserByUUID(com.webmethods.portal.service.dir.init.IInitializableUser)' has been added
com.webmethods.portal.service.dir.DirectoryTools:	Method 'public java.util.List updatePrincipalUUID()' has been added



Added API	Description
com.webmethods.portal.service.dir.IDirConstants:	Added public field USER_UUID
com.webmethods.portal.service.dir.IDirQueryProvider:	Method 'public com.webmethods.portal.service.dir.IDirPrincipal lookupByUUID(int, java.lang.String)' has been added to an interface
com.webmethods.portal.service.dir.impl.DirServicePortletBean:	Method 'public boolean isSirNameFirst(com.webmethods.portal.bizPolicy.IContext)' has been added
com.webmethods.portal.service.dir.init.IInitializablePrincipal:	Method 'public java.lang.String getUUID()' has been added to an interface
com.webmethods.portal.service.dir.init.impl.InitializablePrincipal:	Method 'public java.lang.String getUUID()' has been added
com.webmethods.portal.service.meta2.IUserService:	Method 'public java.util.List getEmptyUUIDUsers()' has been added to an interface
com.webmethods.portal.service.meta2.IUserService:	Method 'public java.util.Map getUserDetailsByURI(com.webmethods.portal.system.IURI)' has been added to an interface
com.webmethods.portal.service.meta2.IUserService:	Method 'public java.util.Map getUserDetailsByUUID(java.lang.String)' has been added to an interface
com.webmethods.portal.service.meta2.IUserService:	Method 'public void invalidateUserUUID()' has been added to an interface
com.webmethods.portal.service.meta2.IUserService:	Method 'public void updateDistinguishedName(java.lang.String, java.lang.String, int)' has been added to an interface
com.webmethods.portal.service.meta2.IUserService:	Method 'public void updateUUID(java.lang.String, java.lang.String, int)' has been added to an interface
com.webmethods.portal.service.meta2.directory.IUserInfo:	Method 'public java.lang.String getUUID()' has been added to an interface
com.webmethods.portal.service.meta2.directory.impl.User:	Method 'public java.lang.String getUUID()' has been added
com.webmethods.portal.service.meta2.directory.impl.UserInfo:	Added protected field uuid
com.webmethods.portal.service.meta2.directory.impl.UserInfo:	Method 'public java.lang.String getUUID()' has been added
com.webmethods.portal.service.meta2.impl.UserService:	Method 'public java.util.List getEmptyUUIDUsers()' has been added
com.webmethods.portal.service.meta2.impl.UserService:	Method 'public java.util.Map getUserDetailsByURI(com.webmethods.portal.system.IURI)' has been added
com.webmethods.portal.service.meta2.impl.UserService:	Method 'public java.util.Map getUserDetailsByUUID(java.lang.String)' has been added

Added API	Description
com.webmethods.portal.service.meta2.impl.UserService: Method 'public void invalidateUserUUID()' has been added	
com.webmethods.portal.service.meta2.impl.UserService: Method 'public void updateDistinguishedName(java.lang.String, java.lang.String, int)' has been added	
com.webmethods.portal.service.meta2.impl.UserService: Method 'public void updateUUID(java.lang.String, java.lang.String, int)' has been added	
com.webmethods.portal.service.socialbpm.chart.impl.ChartData: Method 'public java.lang.String getTaskTypeID()' has been added	
com.webmethods.portal.service.socialbpm.chart.impl.ChartData: Method 'public void setTaskTypeID(java.lang.String)' has been added	
com.webmethods.portal.service.socialbpm.chart.impl.ChartService: Method 'protected java.lang.String getTaskTypeID(java.lang.String)' has been added	
com.webmethods.portal.service.sql.runtime.base.EmptyUUIDUserList: Class com.webmethods.portal.service.sql.runtime.base.EmptyUUIDUserList added	
com.webmethods.portal.service.sql.runtime.base.InvalidateUserUUID: Class com.webmethods.portal.service.sql.runtime.base.InvalidateUserUUID added	
com.webmethods.portal.service.sql.runtime.base.SetUserGroupUUID: Class com.webmethods.portal.service.sql.runtime.base.SetUserGroupUUID added	
com.webmethods.portal.service.sql.runtime.base.TaskLockSetNew: Class com.webmethods.portal.service.sql.runtime.base.TaskLockSetNew added	
com.webmethods.portal.service.sql.runtime.base.UserDetailsByURI: Class com.webmethods.portal.service.sql.runtime.base.UserDetailsByURI added	
com.webmethods.portal.service.sql.runtime.base.UserDetailsByUUID: Class com.webmethods.portal.service.sql.runtime.base.UserDetailsByUUID added	
com.webmethods.portal.service.task.ITaskLockingService: Method 'public com.webmethods.portal.service.task.ITaskLock acquireLock(com.webmethods.portal.system.IURI, com.webmethods.portal.system.IURI, long, long, boolean)' has been added to an interface	
com.webmethods.portal.service.task.event.RefreshTaskEvent: Class com.webmethods.portal.service.task.event.RefreshTaskEvent added	
com.webmethods.portal.service.task.event.RefreshTaskEvent\$ISynchronousListener: Class com.webmethods.portal.service.task.event.RefreshTaskEvent\$ISynchronousListener added	
com.webmethods.portal.service.task.event.RefreshTaskEvent\$SynchronousListeners: Class com.webmethods.portal.service.task.event.RefreshTaskEvent\$SynchronousListeners added	
com.webmethods.portal.service.task.event.RefreshTaskEvent\$SynchronousListeners\$SynchronousList ener: Class	

Added API	Description
com.webmethods.portal.service.task.event.RefreshTaskEvent\$SynchronousListeners\$SynchronousListener added	
com.webmethods.portal.service.task.event.TaskChangedEventRetry: Class com.webmethods.portal.service.task.event.TaskChangedEventRetry added	
com.webmethods.portal.service.task.event.impl.RefreshTaskEvent: Class com.webmethods.portal.service.task.event.impl.RefreshTaskEvent added	
com.webmethods.portal.service.task.impl.TaskLockingService: Method 'public com.webmethods.portal.service.task.ITaskLock acquireLock(com.webmethods.portal.system.IURI, com.webmethods.portal.system.IURI, long, long, boolean)' has been added	
com.webmethods.portal.system.ISAMLSSOConstants: Class com.webmethods.portal.system.ISAMLSSOConstants added	
com.webmethods.portal.system.cluster.IClusterProvider: Method 'public java.lang.String getClusterId()' has been added to an interface	
com.webmethods.portal.system.cluster.IClusterProvider: Method 'public boolean isCurrentServer(com.webmethods.portal.system.cluster.IServer)' has been added to an interface	
com.webmethods.portal.system.cluster.IClusterProvider: Method 'public void recreateJNDIConnection()' has been added to an interface	
com.webmethods.portal.system.cluster.IClusterProvider: Method 'public boolean reloadJNDIProviderURL()' has been added to an interface	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Added public field CLUSTER_ID_PROP_KEY	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Added public field s_logCategory	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Method 'public java.lang.String getClusterId()' has been added	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Method 'public boolean isCurrentServer(com.webmethods.portal.system.cluster.IServer)' has been added	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Method 'public void recreateJNDIConnection()' has been added	
com.webmethods.portal.system.cluster.impl.ClusterProvider: Method 'public boolean reloadJNDIProviderURL()' has been added	
com.webmethods.portal.system.sso.saml.idp.SAMLIdentityProvider: Class com.webmethods.portal.system.sso.saml.idp.SAMLIdentityProvider added	
com.webmethods.portal.system.sso.saml.idp.SAMLSSODataChangeListener: Class com.webmethods.portal.system.sso.saml.idp.SAMLSSODataChangeListener added	
com.webmethods.portal.system.sso.saml.idp.SAMLServiceProvider: Class	

Added API	Description
com.webmethods.portal.system.sso.saml.idp.SAMLServiceProvider	added
com.webmethods.portal.system.sso.saml.idp.SSOIDPConfiguration	Class
com.webmethods.portal.system.sso.saml.idp.SSOIDPConfiguration	added
com.webmethods.portal.system.sso.saml.idp.WebSSOPropsUtil	Class
com.webmethods.portal.system.sso.saml.idp.WebSSOPropsUtil	added
com.webmethods.portal.taglib.TaglibUtil	Method 'public java.lang.String generateUniqueID()' has been added
com.webmethods.portal.webservices.wsclient.PortalArtifactFactory	Method 'public org.opensaml.saml2.core.AuthnRequest getAuthnRequest(java.lang.String)' has been added
com.webmethods.portal.webservices.wsclient.PortalArtifactFactory	Method 'public java.lang.String getResponse(java.net.URL, java.lang.String, java.util.Map, java.lang.String[], java.util.Map, org.opensaml.saml2.core.AuthnRequest)' has been added
com.webmethods.portal.webservices.wsclient.PortalArtifactFactory	Method 'public void reInitSecurityTokenService()' has been added
com.webmethods.rtl.event.DeliveryService	Method 'public java.lang.String addClusterIdPrefix(java.lang.String)' has been added
com.webmethods.rtl.event.DeliveryService	Method 'public void setClusterId(java.lang.String)' has been added
com.webmethods.rtl.event.DeliveryService	Method 'public void startRemoteDelivery()' has been added
com.webmethods.rtl.event.DeliveryService	Method 'public void stopRemoteDelivery()' has been added
com.webmethods.rtl.event.Event	Method 'public java.lang.String getJcrSessionUserData()' has been added
com.webmethods.rtl.event.IEvent	Method 'public java.lang.String getJcrSessionUserData()' has been added to an interface
com.webmethods.rtl.jms.PortalClientOverJMS	Class com.webmethods.rtl.jms.PortalClientOverJMS added
com.webmethods.rtl.logging.EnhancedPatternLayout	Class
com.webmethods.rtl.logging.EnhancedPatternLayout	added
com.webmethods.rtl.msg.jms.IJMSPProvider	Method 'public java.lang.String getEndpointAddress()' has been added to an interface
com.webmethods.rtl.msg.jms.IJMSPProvider	Method 'public boolean isConnected()' has been added to an interface
com.webmethods.rtl.msg.jms.JMSPProvider	Added protected field m_endpointAddress

Added API	Description
com.webmethods.rtl.msg.jms.JMSProvider:	Added protected field m_isConnected
com.webmethods.rtl.msg.jms.JMSProvider:	Method 'public java.lang.String getEndpointAddress()' has been added
com.webmethods.rtl.msg.jms.JMSProvider:	Method 'public boolean isConnected()' has been added
com.webmethods.rtl.msg.jms.JMSProvider:	Abstract method 'protected void stopConnections()' has been added
com.webmethods.rtl.msg.jms.JMSStdConnProvider:	Method 'protected void stopConnections()' has been added
com.webmethods.rtl.script.JspC:	Method 'public java.lang.String getExcludes()' has been added
com.webmethods.rtl.script.JspC:	Method 'public void setExcludes(java.lang.String)' has been added
com.webmethods.rtl.util.xml.XMLUtil:	Method 'protected org.w3c.dom.Document _loadDocumentUncaught(org.xml.sax.InputSource)' has been added
com.webmethods.rtl.util.xml.XMLUtil:	Method 'public org.w3c.dom.Document loadDocumentFromInputStreamUncaught(java.io.InputStream)' has been added
com.webmethods.rtl.util.xml.XMLUtil:	Method 'public org.w3c.dom.Document loadDocumentFromReaderUncaught(java.io.Reader)' has been added
com.webmethods.rtl.util.xml.XMLUtil:	Method 'public org.w3c.dom.Document loadDocumentFromXMLUncaught(java.lang.String)' has been added
com.webmethods.rtl.util.xml.XMLUtil:	Method 'public org.w3c.dom.Document loadDocumentUncaught(java.lang.String)' has been added

Removed API	Replacement, if any
com.webmethods.caf.jcr.rmi.IRMITunnelHttpPortAware:	Class
com.webmethods.caf.jcr.rmi.IRMITunnelHttpPortAware:	removed
com.webmethods.caf.jcr.rmi.JcrRMIMHttpToCGISocketFactory:	Class
com.webmethods.caf.jcr.rmi.JcrRMIMHttpToCGISocketFactory:	removed
com.webmethods.caf.jcr.rmi.JcrRMIMMasterSocketFactory:	Class
com.webmethods.caf.jcr.rmi.JcrRMIMMasterSocketFactory:	removed
com.webmethods.jackrabbit.server.io.DefaultHandler:	Class
com.webmethods.jackrabbit.server.io.DefaultHandler:	removed
com.webmethods.jackrabbit.servlet.JCRWebdavServerServlet:	Class
com.webmethods.jackrabbit.servlet.JCRWebdavServerServlet:	removed
com.webmethods.jackrabbit.servlet.SimpleWebdavServlet:	Class
com.webmethods.jackrabbit.servlet.SimpleWebdavServlet:	removed

**Removed API****Replacement, if any**

com.webmethods.portal.jms.um.UmJMSClient: Field DEFAULT\_UM\_REALM has been removed, but it was previously a constant

com.webmethods.portal.jms.um.UmJMSClient: Method 'public void init()' has been removed

com.webmethods.portal.schema.bcgadget.GadgetDefinition: Removed field gadgetExternalScripts

com.webmethods.portal.schema.bcgadget.GadgetDefinition: Method 'public com.webmethods.portal.schema.bcgadget.GadgetDefinition\$GadgetExternalScripts getGadgetExternalScripts()' has been removed

com.webmethods.portal.schema.bcgadget.GadgetDefinition: Method 'public void setGadgetExternalScripts(com.webmethods.portal.schema.bcgadget.GadgetDefinition\$GadgetExternalScripts)' has been removed

com.webmethods.portal.schema.bcgadget.GadgetDefinition\$GadgetExternalScripts: Class com.webmethods.portal.schema.bcgadget.GadgetDefinition\$GadgetExternalScripts removed

com.webmethods.portal.schema.bcgadget.ObjectFactory: Method 'public com.webmethods.portal.schema.bcgadget.GadgetDefinition\$GadgetExternalScripts createGadgetDefinitionGadgetExternalScripts()' has been removed

com.webmethods.portal.service.access.impl.GadgetsAclManager: Method 'protected java.lang.String buildXPathQuery(java.util.Map)' has been removed, but an inherited definition exists.

com.webmethods.portal.service.access.impl.GadgetsAclManager\$GadgetAclResource: Method 'public GadgetsAclManager\$GadgetAclResource(javax.jcr.Node, java.lang.String)' has been removed

com.webmethods.rtl.msg.jms.JMSProvider: Method 'public void enableMessageDelivery()' has been removed

com.webmethods.rtl.msg.jms.JMSProvider: Method 'public boolean hasInitialized()' has been removed

com.webmethods.rtl.msg.jms.JMSProvider: Method 'protected void setInstance(com.webmethods.rtl.msg.jms.JMSProvider)' has been removed

com.webmethods.rtl.msg.jms.JMSProvider: Method 'protected void startConnections()' has been removed

com.webmethods.rtl.msg.jms.JMSStdConnProvider: Method 'protected void startConnections()' has been removed

**Changed API****Description**

com.webmethods.caf.common.bnd.PortletXmlAnalyzer: Parameter 1 of 'public boolean analyzeJar(aQute.lib.osgi.Analyzer)' has changed its type to aQute.bnd.osgi.Analyzer

com.webmethods.caf.common.bnd.WebXmlAnalyzer: Parameter 1 of 'public boolean analyzeJar(aQute.lib.osgi.Analyzer)' has changed its type to aQute.bnd.osgi.Analyzer

**Changed API****Description**

com.webmethods.caf.wsserver.auth.saml.SamlUtils: Parameter 2 of 'public void displayAssertion(java.io.PrintWriter, org.opensaml.SAMLAssertion)' has changed its type to org.opensaml.saml1.core.Assertion

com.webmethods.caf.wsserver.auth.saml.SamlUtils: Parameter 1 of 'public java.lang.String getLoginName(org.opensaml.SAMLAssertion)' has changed its type to org.opensaml.saml1.core.Assertion

com.webmethods.caf.wsserver.auth.saml.SamlUtils: Return type of method 'public org.opensaml.SAMLAssertion getSamlAssertion(java.lang.String, java.lang.String)' has been changed to org.opensaml.saml1.core.Assertion

com.webmethods.caf.wsserver.auth.saml.SamlUtils: Parameter 1 of 'public org.opensaml.SAMLAssertion getSamlAssertion(org.opensaml.SAMLResponse)' has changed its type to org.opensaml.saml1.core.Response

com.webmethods.caf.wsserver.auth.saml.SamlUtils: Return type of method 'public org.opensaml.SAMLAssertion getSamlAssertion(org.opensaml.SAMLResponse)' has been changed to org.opensaml.saml1.core.Assertion

com.webmethods.caf.wsserver.auth.saml.SamlUtils: Return type of method 'public org.opensaml.SAMLResponse getSamlResponse(java.lang.String, java.lang.String)' has been changed to org.opensaml.saml1.core.Response

com.webmethods.caf.wsserver.auth.saml.SamlUtils: Parameter 1 of 'public java.lang.String verifyAssertion(org.opensaml.SAMLAssertion)' has changed its type to org.opensaml.saml1.core.Assertion

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public UmJMSClient()' has been decreased from public to protected

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public void closeUMSession(com.pcbSYS.nirvana.client.nSession)' has been decreased from public to private

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public void createConnectionFactory(java.lang.String)' has been decreased from public to protected

com.webmethods.portal.jms.um.UmJMSClient: Return type of method 'public javax.naming.Context createJNDIContext()' has been changed to void

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public javax.naming.Context createJNDIContext()' has been decreased from public to private

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public void createQueue(java.lang.String, boolean, int)' has been decreased from public to protected

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public void createQueueConnectionFactory(java.lang.String)' has been decreased from public to protected

com.webmethods.portal.jms.um.UmJMSClient: Accessibility of method 'public void

**Changed API****Description**

`createStringVal(java.lang.String, java.lang.String)` has been decreased from public to package

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public void `createTopic(java.lang.String, boolean, int)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public void `createTopicConnectionFactory(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public void `createXAConnectionFactory(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public void `deleteConnectionFactory(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public void `deleteQueue(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public void `deleteQueueConnectionFactory(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public void `deleteTopic(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public void `deleteTopicConnectionFactory(java.lang.String)`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public `javax.naming.Context` `getJNDIContext()`' has been decreased from public to protected

`com.webmethods.portal.jms.um.UmJMSClient`: Accessibility of method 'public `com.pcbsys.nirvana.client.nSession` `getUMSession()`' has been decreased from public to private

`com.webmethods.portal.service.bcgadget.IBCGadgetProvider`: Return type of method 'public `java.util.List` `getAccessibleGadgets(com.webmethods.portal.service.meta2.thing.IThingID)`' has been changed to `java.util.Map`

`com.webmethods.portal.service.bcgadget.impl.BCGadgetProvider`: Return type of method 'public `java.util.List` `getAccessibleGadgets(com.webmethods.portal.service.meta2.thing.IThingID)`' has been changed to `java.util.Map`

`com.webmethods.portal.service.task.impl.TaskLockingService`: Accessibility of field `TASK_LOCK_MAX_TIME` has been increased from private to public

`com.webmethods.portal.service.task.impl.TaskLockingService`: Accessibility of field `TASK_LOCK_MAX_WAIT_TIME` has been increased from private to public

`com.webmethods.portal.service.task.impl.TaskLockingService`: In method 'protected `com.webmethods.portal.service.task.ITaskLock`

`createDbLock(com.webmethods.portal.service.sql.ISqlWorker, com.webmethods.portal.service.meta2.thing.IThingID, java.util.Date, java.util.Date)`' the number of arguments has changed



**Changed API****Description**

com.webmethods.portal.system.PortalSystem: Accessibility of method 'private void initGuestUser()' has been increased from private to public

com.webmethods.rtl.msg.jms.JMSProvider: Accessibility of method 'public void onShutdown()' has been decreased from public to protected

com.webmethods.rtl.msg.jms.JMSProvider: Accessibility of method 'private void setMaintenanceMode(boolean)' has been increased from private to protected

com.webmethods.rtl.msg.jms.JMSStdConnProvider: Accessibility of method 'public JMSStdConnProvider()' has been decreased from public to protected

com.webmethods.portal.service.version.impl.dcv.DCVersionService: Value of compile-time constant VERSION\_SERVICES\_ROOT has been changed

## Release 9.10

### Added API/ Description

com.webmethods.portal.bizPolicy.biz.access.IAccessPolicy: Method 'public

com.webmethods.portal.service.view.IListView

listSecurityRealmObjects(com.webmethods.portal.bizPolicy.IContext,

com.webmethods.portal.service.meta2.thing.IThingID)' has been added to an interface

com.webmethods.portal.mech.subscription.ISubscribableMechanics: Method 'public void

checkViewSubscription(com.webmethods.portal.system.IURI,

com.webmethods.portal.service.meta2.thing.IThingID, java.util.Map,

com.webmethods.portal.service.meta2.thing.IThingID)' has been added to an interface

com.webmethods.portal.bizPolicy.biz.IBizPolicyResolver: Method 'public

com.webmethods.portal.bizPolicy.biz.IBizPolicy getBizPolicyByType(java.lang.String, java.util.Map)'

has been added to an interface

com.webmethods.caf.wsclient.saml.IArtifactFactory: Method 'public java.lang.String

getAssertion(java.lang.String, java.lang.String[], java.util.Map)' has been added to an interface

com.webmethods.caf.wsclient.saml.IArtifactFactory: Method 'public java.lang.String

getAssertion(java.lang.String, java.lang.String[], java.util.Map, java.util.Map)' has been added to an

interface

com.webmethods.caf.wsclient.session.IWSClientSession: Method 'public java.util.Map

getSessionCookieMap()' has been added to an interface

com.webmethods.caf.wsclient.session.IWSClientSession: Method 'public void

setSessionCookieMap(java.util.Map)' has been added to an interface

com.webmethods.caf.wsclient.session.IWSClientSessionManager: Method 'public

com.webmethods.caf.wsclient.session.IWSClientSessionPool

getSessionPool(com.webmethods.caf.wsclient.proxy.IWSClientProxy, java.lang.String)' has been added to an interface

com.webmethods.caf.faces.data.task.ITaskInfo: Method 'public java.util.Date getTaskScheduleDate()'

has been added to an interface

com.webmethods.caf.faces.data.task.ITaskInfo: Method 'public void setCreatedDate(java.util.Date)' has

been added to an interface

com.webmethods.caf.faces.data.task.ITaskInfo: Method 'public void

setTaskScheduleDate(java.util.Date)' has been added to an interface

com.webmethods.portal.service.task.ITask: Method 'public java.util.Date getTaskScheduleDate()' has

been added to an interface

Changed API	Description
POST a New Task Instance	The Task Engine RESTful web service in My webMethods Server now accepts the task schedule details for a task instance to be added to Task Engine's queue.
PUT Information in a Task Instance	The Task Engine RESTful web service in My webMethods Server now allows changes to the new taskScheduleDate parameter if a task instance is in scheduled state.
GET Task Instance Information	The Task Engine RESTful web service in My webMethods Server now retrieves the task schedule date along with other details of a task instance.

com.webmethods.portal.event.system.ICriterionEvent\$IListener: Parameter 1 of 'public void onEvent(com.webmethods.portal.event.system.ISubscriptionEvent)' has changed its type to com.webmethods.portal.event.system.ICriterionEvent

com.webmethods.portal.event.system.ICriterionEvent\$ISynchronousListener: Parameter 1 of 'public void onSynchronousEvent(com.webmethods.portal.event.system.ISubscriptionEvent)' has changed its type to com.webmethods.portal.event.system.ICriterionEvent

com.webmethods.portal.service.access.impl.MwsObjectAclManager: In method 'protected int countAceProperties(java.util.List)' the number of arguments has changed

com.webmethods.caf.wsclient.session.impl.WSClientSessionManager: Parameter 2 of 'protected java.lang.String getSessionPoolID(com.webmethods.caf.wsclient.proxy.IWSClientProxy, com.webmethods.caf.wsclient.AuthCredentials)' has changed its type to java.lang.String

## Removed API/ Description

com.webmethods.portal.mech.system.ISystemMechanics: Removed

com.webmethods.portal.mech.access.IAccessMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed

com.webmethods.portal.mech.clipboard.IClipboardMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed

com.webmethods.portal.mech.storage.IBasicMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed

com.webmethods.portal.mech.subscription.ISubscribableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed

com.webmethods.portal.mech.view.IViewableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.access.IAccessMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.clipboard.IClipboardMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.storage.IBasicMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.subscription.ISubscribableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.view.IViewableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.clipboard.impl.ClipboardMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.storage.impl.BasicMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.subscription.impl.SubscribableMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.view.impl.ViewableMechanics from the list of superclasses

com.webmethods.portal.webapp.jetty7.WebApplicationInstallService: Removed field  
COMPONENT\_DELETE\_RETRIES

com.webmethods.portal.service.global.impl.LanguagePackManager: Field QUERY\_STRING has been removed, but it was previously a constant

com.webmethods.caf.faces.convert.FormattedDateTimeConverter: Method 'protected java.text.DateFormat setupGMTDateTimeFormater(javax.faces.context.FacesContext)' has been removed

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public java.util.List getTaskCommentsByProcessModelId(java.lang.String, int, int, int)' has been added to an interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public java.util.List getPaginatedTaskCommentsByProcessModelId(java.lang.String, int, int, int)' has been added to an interface

com.webmethods.portal.service.dir.IRoleSystem: Method 'public void clearCache(com.webmethods.portal.service.dir.IDirPrincipal)' has been added to an interface

com.webmethods.portal.mech.dir.IPrincipalMechanics: Method 'public void fireRoleMembershipEvent(com.webmethods.portal.service.meta2.thing.IThingID, com.webmethods.portal.system.IURI, com.webmethods.portal.service.dir.IDirPrincipalList, com.webmethods.portal.service.dir.IDirPrincipalList, int)' has been added to an interface

move the com.webmethods.jms.\*\* packages from caf-server bundle to a unique package name

com.webmethods.jms.JMSPhaseProvider: Class com.webmethods.jms.JMSPhaseProvider removed

com.webmethods.jms.db.DbJMSSClient: Class com.webmethods.jms.db.DbJMSSClient removed

com.webmethods.jms.db.DbJMSSConnProvider: Class com.webmethods.jms.db.DbJMSSConnProvider removed

com.webmethods.jms.db.impl.JMSConnection: Class com.webmethods.jms.db.impl.JMSConnection removed

com.webmethods.jms.db.impl.JMSConnection\$CompressedObject: Class com.webmethods.jms.db.impl.JMSConnection\$CompressedObject removed

com.webmethods.jms.db.impl.JMSDestination: Class com.webmethods.jms.db.impl.JMSDestination removed

com.webmethods.jms.db.impl.JMSDispatcherThread: Class com.webmethods.jms.db.impl.JMSDispatcherThread removed

com.webmethods.jms.db.impl.JMSEvent: Class com.webmethods.jms.db.impl.JMSEvent removed

com.webmethods.jms.db.impl.JMSMessage: Class com.webmethods.jms.db.impl.JMSMessage removed

com.webmethods.jms.db.impl.JMSMessageConsumer: Class com.webmethods.jms.db.impl.JMSMessageConsumer removed

com.webmethods.jms.db.impl.JMSMessageProducer: Class com.webmethods.jms.db.impl.JMSMessageProducer removed

com.webmethods.jms.db.impl.JMSObjectMessage: Class  
com.webmethods.jms.db.impl.JMSObjectMessage removed

com.webmethods.jms.db.impl.JMSPollThread: Class com.webmethods.jms.db.impl.JMSPollThread  
removed

com.webmethods.jms.db.impl.JMSQueue: Class com.webmethods.jms.db.impl.JMSQueue removed

com.webmethods.jms.db.impl.JMSQueuePollThread: Class  
com.webmethods.jms.db.impl.JMSQueuePollThread removed

com.webmethods.jms.db.impl.JMSQueueReceiver: Class  
com.webmethods.jms.db.impl.JMSQueueReceiver removed

com.webmethods.jms.db.impl.JMSQueueSender: Class  
com.webmethods.jms.db.impl.JMSQueueSender removed

com.webmethods.jms.db.impl.JMSQueueSession: Class  
com.webmethods.jms.db.impl.JMSQueueSession removed

com.webmethods.jms.db.impl.JMSSession: Class com.webmethods.jms.db.impl.JMSSession removed

com.webmethods.jms.db.impl.JMSTopic: Class com.webmethods.jms.db.impl.JMSTopic removed

com.webmethods.jms.db.impl.JMSTopicBatchMessage: Class  
com.webmethods.jms.db.impl.JMSTopicBatchMessage removed

com.webmethods.jms.db.impl.JMSTopicPublisher: Class  
com.webmethods.jms.db.impl.JMSTopicPublisher removed

com.webmethods.jms.db.impl.JMSTopicSession: Class com.webmethods.jms.db.impl.JMSTopicSession  
removed

com.webmethods.jms.db.impl.JMSTopicSubscriber: Class  
com.webmethods.jms.db.impl.JMSTopicSubscriber removed

com.webmethods.jms.db.impl.QueueFactory: Class com.webmethods.jms.db.impl.QueueFactory  
removed

com.webmethods.jms.db.impl.TopicFactory: Class com.webmethods.jms.db.impl.TopicFactory  
removed

com.webmethods.jms.db.impl.db2.EventDelivered: Class  
com.webmethods.jms.db.impl.db2.EventDelivered removed

com.webmethods.jms.db.impl.db2.EventPoll: Class com.webmethods.jms.db.impl.db2.EventPoll  
removed

com.webmethods.jms.db.impl.db2.EventSave: Class com.webmethods.jms.db.impl.db2.EventSave  
removed

com.webmethods.jms.db.impl.db2.GetSqlTime: Class com.webmethods.jms.db.impl.db2.GetSqlTime  
removed

com.webmethods.jms.db.impl.db2.PublishQueue: Class  
com.webmethods.jms.db.impl.db2.PublishQueue removed

com.webmethods.jms.db.impl.db2.PurgeEvents: Class com.webmethods.jms.db.impl.db2.PurgeEvents  
removed

com.webmethods.jms.db.impl.db2.PurgeInactiveSubscriptions: Class  
com.webmethods.jms.db.impl.db2.PurgeInactiveSubscriptions removed

com.webmethods.jms.db.impl.db2.RegisterDestination: Class  
com.webmethods.jms.db.impl.db2.RegisterDestination removed

com.webmethods.jms.db.impl.db2.RegisterSubscription: Class  
com.webmethods.jms.db.impl.db2.RegisterSubscription removed

com.webmethods.jms.db.impl.db2.UnregisterSubscription: Class  
com.webmethods.jms.db.impl.db2.UnregisterSubscription removed

com.webmethods.jms.db.impl.db2.UpdateSubscriptions: Class  
com.webmethods.jms.db.impl.db2.UpdateSubscriptions removed

com.webmethods.jms.db.impl.mssql.EventDelivered: Class  
com.webmethods.jms.db.impl.mssql.EventDelivered removed

com.webmethods.jms.db.impl.mssql.EventPoll: Class com.webmethods.jms.db.impl.mssql.EventPoll  
removed

com.webmethods.jms.db.impl.mssql.EventSave: Class com.webmethods.jms.db.impl.mssql.EventSave  
removed

com.webmethods.jms.db.impl.mssql.GetSqlTime: Class  
com.webmethods.jms.db.impl.mssql.GetSqlTime removed

com.webmethods.jms.db.impl.mssql.PublishQueue: Class  
com.webmethods.jms.db.impl.mssql.PublishQueue removed

com.webmethods.jms.db.impl.mssql.PurgeEvents: Class  
com.webmethods.jms.db.impl.mssql.PurgeEvents removed

com.webmethods.jms.db.impl.mssql.PurgeInactiveSubscriptions: Class  
com.webmethods.jms.db.impl.mssql.PurgeInactiveSubscriptions removed

com.webmethods.jms.db.impl.mssql.RegisterDestination: Class  
com.webmethods.jms.db.impl.mssql.RegisterDestination removed

com.webmethods.jms.db.impl.mssql.RegisterSubscription: Class  
com.webmethods.jms.db.impl.mssql.RegisterSubscription removed

com.webmethods.jms.db.impl.mssql.UnregisterSubscription: Class  
com.webmethods.jms.db.impl.mssql.UnregisterSubscription removed

com.webmethods.jms.db.impl.mssql.UpdateSubscriptions: Class  
com.webmethods.jms.db.impl.mssql.UpdateSubscriptions removed

com.webmethods.jms.db.impl.mysql.EventDelivered: Class  
com.webmethods.jms.db.impl.mysql.EventDelivered removed

com.webmethods.jms.db.impl.mysql.EventPoll: Class com.webmethods.jms.db.impl.mysql.EventPoll  
removed

com.webmethods.jms.db.impl.mysql.EventSave: Class com.webmethods.jms.db.impl.mysql.EventSave  
removed

com.webmethods.jms.db.impl.mysql.GetSqlTime: Class  
com.webmethods.jms.db.impl.mysql.GetSqlTime removed

com.webmethods.jms.db.impl.mysql.PublishQueue: Class  
com.webmethods.jms.db.impl.mysql.PublishQueue removed

com.webmethods.jms.db.impl.mysql.PurgeEvents: Class  
com.webmethods.jms.db.impl.mysql.PurgeEvents removed

com.webmethods.jms.db.impl.mysql.PurgeInactiveSubscriptions: Class  
com.webmethods.jms.db.impl.mysql.PurgeInactiveSubscriptions removed

com.webmethods.jms.db.impl.mysql.RegisterDestination: Class  
com.webmethods.jms.db.impl.mysql.RegisterDestination removed

com.webmethods.jms.db.impl.mysql.RegisterSubscription: Class  
com.webmethods.jms.db.impl.mysql.RegisterSubscription removed

com.webmethods.jms.db.impl.mysql.UnregisterSubscription: Class  
com.webmethods.jms.db.impl.mysql.UnregisterSubscription removed

com.webmethods.jms.db.impl.mysql.UpdateSubscriptions: Class  
com.webmethods.jms.db.impl.mysql.UpdateSubscriptions removed

com.webmethods.jms.db.impl.oracle.EventDelivered: Class  
com.webmethods.jms.db.impl.oracle.EventDelivered removed

com.webmethods.jms.db.impl.oracle.EventPoll: Class com.webmethods.jms.db.impl.oracle.EventPoll  
removed

com.webmethods.jms.db.impl.oracle.EventSave: Class com.webmethods.jms.db.impl.oracle.EventSave  
removed

com.webmethods.jms.db.impl.oracle.GetSqlTime: Class  
com.webmethods.jms.db.impl.oracle.GetSqlTime removed

com.webmethods.jms.db.impl.oracle.PublishQueue: Class  
com.webmethods.jms.db.impl.oracle.PublishQueue removed

com.webmethods.jms.db.impl.oracle.PurgeEvents: Class  
com.webmethods.jms.db.impl.oracle.PurgeEvents removed

com.webmethods.jms.db.impl.oracle.PurgeInactiveSubscriptions: Class  
com.webmethods.jms.db.impl.oracle.PurgeInactiveSubscriptions removed



com.webmethods.jms.db.impl.oracle.RegisterDestination: Class  
com.webmethods.jms.db.impl.oracle.RegisterDestination removed

com.webmethods.jms.db.impl.oracle.RegisterSubscription: Class  
com.webmethods.jms.db.impl.oracle.RegisterSubscription removed

com.webmethods.jms.db.impl.oracle.UnregisterSubscription: Class  
com.webmethods.jms.db.impl.oracle.UnregisterSubscription removed

com.webmethods.jms.db.impl.oracle.UpdateSubscriptions: Class  
com.webmethods.jms.db.impl.oracle.UpdateSubscriptions removed

com.webmethods.jms.db.impl.sybase.EventPoll: Class com.webmethods.jms.db.impl.sybase.EventPoll removed

com.webmethods.jms.db.impl.sybase.PublishQueue: Class  
com.webmethods.jms.db.impl.sybase.PublishQueue removed

com.webmethods.jms.db.impl.sybase.PurgeEvents: Class  
com.webmethods.jms.db.impl.sybase.PurgeEvents removed

com.webmethods.jms.um.UmJMSClient: Class com.webmethods.jms.um.UmJMSClient removed

com.webmethods.jms.um.UmJMSConnProvider: Class  
com.webmethods.jms.um.UmJMSConnProvider removed

electric.util.holder.ArrayOfbyteInOut: Class electric.util.holder.ArrayOfbyteInOut removed

electric.util.holder.ArrayOfbyteOut: Class electric.util.holder.ArrayOfbyteOut removed

com.webmethods.portal.bizPolicy.command.system.xml.XMLImport: Field  
OVERWRITE\_PERMISSIONS\_KEY has been removed, but it was previously a constant

com.webmethods.portal.service.dir.IDirService: Method 'public boolean supportsNestedGroups()' has been added to an interface

com.webmethods.caf.faces.application.CAFStateManager: Class  
com.webmethods.caf.faces.application.CAFStateManager removed

com.webmethods.caf.faces.application.CAFStateManager\$TreeStructure: Class  
com.webmethods.caf.faces.application.CAFStateManager\$TreeStructure removed

com.webmethods.caf.faces.portlet.PortletViewFragmentPhaseListener: Class  
com.webmethods.caf.faces.portlet.PortletViewFragmentPhaseListener removed

com.webmethods.caf.faces.portlet.PortletViewFragmentPhaseListenerWrapper: Class  
com.webmethods.caf.faces.portlet.PortletViewFragmentPhaseListenerWrapper removed

com.webmethods.caf.faces.portlet.PortletViewHandler: Method 'protected void  
initResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been removed

com.webmethods.caf.faces.portlet.PortletViewHandler: Method 'protected void  
renderResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been removed

com.webmethods.caf.faces.render.html.command.CommandFormRenderer: In method 'protected java.lang.String getTagName()' the number of arguments has changed

com.webmethods.caf.faces.render.html.command.DisjointFormRenderer: In method 'protected java.lang.String getTagName()' the number of arguments has changed

com.webmethods.caf.faces.view.BaseViewHandler: Field STATE\_KEY has been removed, but it was previously a constant

com.webmethods.caf.faces.view.BaseViewHandler: Method 'protected void initResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been removed

com.webmethods.caf.faces.view.BaseViewHandler: Method 'protected void renderResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been removed

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Field INJECT\_STATE has been removed, but it was previously a constant

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Field NO\_RENDER has been removed, but it was previously a constant

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Field STATE\_KEY has been removed, but it was previously a constant

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Field VIEW\_FRAGMENT has been removed, but it was previously a constant

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Field VIEW\_FRAGMENT\_CLIENT\_ID has been removed, but it was previously a constant

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Return type of method 'protected void initResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been changed to javax.faces.context.ResponseWriter

com.webmethods.caf.faces.view.CafViewDeclarationLanguage: Method 'protected void renderResponse(javax.faces.context.FacesContext, javax.faces.component.UIViewRoot)' has been removed

com.webmethods.caf.faces.view.ViewFragmentPhaseListener: Class  
com.webmethods.caf.faces.view.ViewFragmentPhaseListener removed

## ***Release 9.9***

### **Added API/ Description**

com.webmethods.caf.faces.data.task.ITaskInfo: Method 'public java.lang.Integer getIsMandatory()' has been added to an interface

com.webmethods.caf.faces.data.task.ITaskInfo: Method 'public void setIsMandatory(java.lang.Integer)' has been added to an interface

## Added API/ Description

com.webmethods.caf.wsclient.saml.IArtifactFactory: Method 'public java.lang.String validateSAMLResponse(javax.servlet.http.HttpServletRequest, java.lang.String)' has been added to an interface

com.webmethods.portal.bizPolicy.biz.access.IAccessPolicy: Method 'public com.webmethods.portal.service.view.IListView listSecurityRealmObjects(com.webmethods.portal.bizPolicy.IContext, com.webmethods.portal.service.meta2.thing.IThingID)' has been added to an interface

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public java.util.List getAllTaskAttachments(java.lang.String, int, int)' has been added to an interface

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public java.lang.Integer getAllTaskAttachmentsCount(java.lang.String)' has been added to an interface

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public java.util.List getTaskComments(java.lang.String, int, int)' has been added to an interface

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public java.lang.Integer getTaskCommentsCount(int)' has been added to an interface

com.webmethods.portal.mech.socialbpm.comments.ICommentsMechanics: Method 'public java.lang.Integer getTaskCommentsCount(java.lang.String)' has been added to an interface

com.webmethods.portal.mech.subscription.ISubscribableMechanics: Method 'public void checkViewSubscription(com.webmethods.portal.system.IURI, com.webmethods.portal.service.meta2.thing.IThingID, java.util.Map, com.webmethods.portal.service.meta2.thing.IThingID)' has been added to an interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public java.util.List getAllTaskAttachments(java.lang.String, int, int)' has been added to an interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public java.lang.Integer getAllTaskAttachmentsCount(java.lang.String)' has been added to an interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public java.util.List getTaskComments(java.lang.String, int, int)' has been added to an interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public java.lang.Integer getTaskCommentsCount(int)' has been added to an interface

com.webmethods.portal.service.socialbpm.comments.ICommentsService: Method 'public java.lang.Integer getTaskCommentsCount(java.lang.String)' has been added to an interface

com.webmethods.portal.service.task.ITask: Method 'public java.lang.Integer getIsMandatory()' has been added to an interface

com.webmethods.portal.service.task.ITaskDefinition: Method 'public java.lang.String getTaskDescription()' has been added to an interface

## Removed API/ Description

com.webmethods.caf.faces.component.gmap.GMarkerGroup: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.gmap.GMarkerList: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.logic.AsyncIterator: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.logic.Import: Removed javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.logic.ImportTemplate: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.logic.Iterator: Removed javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.Breadcrumbs: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.FirstLevelList: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.NavList: Removed javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.PopupMenus: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.SecondLevelList: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.StaticMenus\$SubList: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.StaticMenus\$SubSubList: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.nav.ThirdLevelList: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.AsyncList: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.AsyncListbox: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.AsyncTabsList: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.DataList: Removed

## Removed API/ Description

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.ListBox: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.caf.faces.component.table.html.TabsList: Removed

javax.faces.event.SystemEventListener from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed

com.webmethods.portal.mech.access.IAccessMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed

com.webmethods.portal.mech.clipboard.IClipboardMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed

com.webmethods.portal.mech.storage.IBasicMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed

com.webmethods.portal.mech.subscription.ISubscribableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.ISystemMechanics: Removed

com.webmethods.portal.mech.view.IViewableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.access.IAccessMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.clipboard.IClipboardMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.storage.IBasicMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.subscription.ISubscribableMechanics from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.view.IViewableMechanics from the set of implemented interfaces

com.webmethods.rtl.script.JspC: Removed java.lang.Cloneable from the set of implemented interfaces

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.clipboard.impl.ClipboardMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.storage.impl.BasicMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

com.webmethods.portal.mech.subscription.impl.SubscribableMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed

## Removed API/ Description

com.webmethods.portal.mech.view.impl.ViewableMechanics from the list of superclasses

com.webmethods.rtl.script.JspC: Removed org.apache.tools.ant.ProjectComponent from the list of superclasses

com.webmethods.rtl.script.JspC: Removed org.apache.tools.ant.Task from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.clipboard.impl.ClipboardMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.storage.impl.BasicMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.subscription.impl.SubscribableMechanics from the list of superclasses

com.webmethods.portal.mech.system.impl.SystemMechanics: Removed  
com.webmethods.portal.mech.view.impl.ViewableMechanics from the list of superclasses

com.webmethods.rtl.script.JspC: Removed org.apache.tools.ant.ProjectComponent from the list of superclasses

com.webmethods.rtl.script.JspC: Removed org.apache.tools.ant.Task from the list of superclasses

com.webmethods.caf.faces.component.logic.Import: Method 'public boolean  
isListenerForSource(java.lang.Object)' has been removed

com.webmethods.caf.faces.component.logic.Import: Method 'public void  
processEvent(javax.faces.event.SystemEvent)' has been removed

com.webmethods.caf.faces.component.logic.ImportTemplate: Method 'public boolean  
isListenerForSource(java.lang.Object)' has been removed

com.webmethods.caf.faces.component.logic.ImportTemplate: Method 'public void  
processEvent(javax.faces.event.SystemEvent)' has been removed

com.webmethods.caf.faces.component.nav.PopupMenus: Method 'protected  
javax.faces.component.UIColumn getColumn()' has been removed

com.webmethods.caf.faces.component.table.html.DataList: Method 'public boolean  
isListenerForSource(java.lang.Object)' has been removed

com.webmethods.caf.faces.component.table.html.DataList: Method 'public void  
processEvent(javax.faces.event.SystemEvent)' has been removed

com.webmethods.caf.faces.component.tree.DataTree: Method 'protected void  
autogenerate()' has been removed

com.webmethods.portal.service.install.impl.BaseInstallService: Method 'protected  
com.webmethods.portal.service.install.IInstallServiceConfig getConfig()' has been removed

com.webmethods.portal.service.sql.runtime.base.TaskSearchAll: Method 'protected void  
parseSearchQuery(int, java.util.Map, com.webmethods.caf.faces.data.task.impl.TaskSearchQuery,

## Removed API/ Description

com.webmethods.portal.service.sql.runtime.base.TaskSearchAll\$QueryInfo) has been removed

com.webmethods.portal.service.sql.runtime.base.TaskSearchAll: Method 'protected void parseSearchQueryTerm(int, java.util.Map, com.webmethods.caf.faces.data.task.impl.TaskSearchQueryTerm, com.webmethods.portal.service.sql.runtime.base.TaskSearchAll\$QueryInfo)' has been removed

com.webmethods.portal.service.sql.runtime.base.TaskSearchFromInboxesPaged: Method 'protected void parseSearchQueryTerm(int, java.util.Map, com.webmethods.caf.faces.data.task.impl.TaskSearchQueryTerm, com.webmethods.portal.service.sql.runtime.base.TaskSearchAll\$QueryInfo)' has been removed

com.webmethods.rtl.script.JspC: Method 'public void init()' has been removed

com.softwareag.caf.controls.mwsx.PeoplePickerDialog\$FacetsMap: Class  
com.softwareag.caf.controls.mwsx.PeoplePickerDialog\$FacetsMap removed

com.softwareag.caf.controls.mwsx.PeopleSwapBox\$FacetsMap: Class  
com.softwareag.caf.controls.mwsx.PeopleSwapBox\$FacetsMap removed

com.webmethods.caf.faces.component.nav.StaticMenus\$ChildrenList: Class  
com.webmethods.caf.faces.component.nav.StaticMenus\$ChildrenList removed

com.webmethods.caf.faces.component.nav.StaticMenus\$FacetsMap: Class  
com.webmethods.caf.faces.component.nav.StaticMenus\$FacetsMap removed

com.webmethods.caf.faces.component.nav.ToggleMenus\$ChildrenList: Class  
com.webmethods.caf.faces.component.nav.ToggleMenus\$ChildrenList removed

com.webmethods.caf.faces.component.nav.ToggleMenus\$FacetsMap: Class  
com.webmethods.caf.faces.component.nav.ToggleMenus\$FacetsMap removed

com.webmethods.caf.faces.component.search.SearchBar\$FacetsMap: Class  
com.webmethods.caf.faces.component.search.SearchBar\$FacetsMap removed

com.webmethods.caf.faces.component.table.SelectRowCheckbox\$ChildrenList: Class  
com.webmethods.caf.faces.component.table.SelectRowCheckbox\$ChildrenList removed

com.webmethods.caf.faces.component.table.SelectRowCheckbox\$FacetsMap: Class  
com.webmethods.caf.faces.component.table.SelectRowCheckbox\$FacetsMap removed

com.webmethods.caf.faces.component.table.html.HtmlTableColumn\$FacetsMap: Class  
com.webmethods.caf.faces.component.table.html.HtmlTableColumn\$FacetsMap removed

com.webmethods.caf.faces.component.table.specialized.Newsfeed\$ChildrenList: Class  
com.webmethods.caf.faces.component.table.specialized.Newsfeed\$ChildrenList removed

com.webmethods.caf.faces.component.table.specialized.Newsfeed\$FacetsMap: Class  
com.webmethods.caf.faces.component.table.specialized.Newsfeed\$FacetsMap removed

com.webmethods.caf.faces.component.util.BaseChildrenList: Class  
com.webmethods.caf.faces.component.util.BaseChildrenList removed

## Removed API/ Description

com.webmethods.caf.faces.component.util.BaseFacetsAndChildrenIterator: Class

com.webmethods.caf.faces.component.util.BaseFacetsAndChildrenIterator removed

com.webmethods.caf.faces.component.util.BaseFacetsMap: Class

com.webmethods.caf.faces.component.util.BaseFacetsMap removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$BaseCollection: Class

com.webmethods.caf.faces.component.util.BaseFacetsMap\$BaseCollection removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$BaseCollection\$BaseIterator: Class

com.webmethods.caf.faces.component.util.BaseFacetsMap\$BaseCollection\$BaseIterator removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Entries: Class

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Entries removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Entries\$EntrySetIterator: Class

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Entries\$EntrySetIterator removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Keys: Class

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Keys removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Keys\$KeySetIterator: Class

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Keys\$KeySetIterator removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Values: Class

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Values removed

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Values\$ValuesIterator: Class

com.webmethods.caf.faces.component.util.BaseFacetsMap\$Values\$ValuesIterator removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.AntBaseFileListTask: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.AntBaseFileListTask removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.AntBaseTask: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.AntBaseTask removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.GenerateOSGiManifest: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.GenerateOSGiManifest removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.GetPortletInfo: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.GetPortletInfo removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PostRegisterPortlet: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PostRegisterPortlet removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PreRegisterPortlet: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PreRegisterPortlet removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PreUnregisterPortlet: Class

com.webmethods.portal.bizPolicy.command.install.taskdefs.portlet.PreUnregisterPortlet removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.CreateSkinInstance: Class



## Removed API/ Description

com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.CreateSkinInstance removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.CreateThemeInstance: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.CreateThemeInstance removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.GetSkinInfo: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.GetSkinInfo removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.RemoveSkinInstance: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.RemoveSkinInstance removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.RemoveThemeInstance: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.skin.RemoveThemeInstance removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.CreateDBOTables: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.CreateDBOTables removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.DropDBOTables: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.DropDBOTables removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.ExecuteCommand: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.ExecuteCommand removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.ExecuteTargetLoop: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.ExecuteTargetLoop removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetComponentInfo: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetComponentInfo removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetIsOSGiRuntime: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetIsOSGiRuntime removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetSystemPath: Class  
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com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetComponentInfo: Class  
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com.webmethods.portal.bizPolicy.command.install.taskdefs.system.GetSystemPath: Class  
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com.webmethods.portal.bizPolicy.command.install.taskdefs.system.InstallComponent: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.InstallComponent removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LoadClasses: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LoadClasses removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LoadConfig: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LoadConfig removed

## Removed API/ Description

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LookupComponent: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.LookupComponent removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.RegisterComponent: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.RegisterComponent removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.RunSQLScript: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.RunSQLScript removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.UninstallComponent: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.UninstallComponent removed

com.webmethods.portal.bizPolicy.command.install.taskdefs.system.UnregisterComponent: Class  
com.webmethods.portal.bizPolicy.command.install.taskdefs.system.UnregisterComponent removed

com.webmethods.portal.mech.install.impl.NativeInstallMechanics: Class  
com.webmethods.portal.mech.install.impl.NativeInstallMechanics removed

com.webmethods.portal.service.install.IInstallServiceConfig: Class  
com.webmethods.portal.service.install.IInstallServiceConfig removed

com.webmethods.portal.service.install.impl.InstallServiceConfig: Class  
com.webmethods.portal.service.install.impl.InstallServiceConfig removed

com.webmethods.portal.service.install.impl.ant.AntInstallService: Class  
com.webmethods.portal.service.install.impl.ant.AntInstallService removed

com.webmethods.portal.service.install.impl.ant.AntLogSupport: Class  
com.webmethods.portal.service.install.impl.ant.AntLogSupport removed

com.webmethods.portal.service.install.impl.ant.AntRunner: Class  
com.webmethods.portal.service.install.impl.ant.AntRunner removed

com.webmethods.portal.service.install.impl.ant.AntRunner\$AntPropertyHelper: Class  
com.webmethods.portal.service.install.impl.ant.AntRunner\$AntPropertyHelper removed

com.webmethods.portal.service.install.impl.ant.LpInstallService: Class  
com.webmethods.portal.service.install.impl.ant.LpInstallService removed

com.webmethods.portal.service.install.impl.ant.WarLpInstallService: Class  
com.webmethods.portal.service.install.impl.ant.WarLpInstallService removed

com.webmethods.rtl.logging.Mws13818Filter: Class com.webmethods.rtl.logging.Mws13818Filter  
removed

com.webmethods.rtl.util.msg.IRuntimeMessage: Class com.webmethods.rtl.util.msg.IRuntimeMessage  
removed

com.webmethods.rtl.util.msg.IRuntimeMessageCallback: Class  
com.webmethods.rtl.util.msg.IRuntimeMessageCallback removed

com.webmethods.rtl.util.msg.IRuntimeMessageHook: Class

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com.webmethods.rtl.util.msg.IRuntimeMessageHook removed

com.webmethods.rtl.util.msg.RuntimeMessageUtil: Class  
com.webmethods.rtl.util.msg.RuntimeMessageUtil removed

com.webmethods.rtl.util.msg.RuntimeMessageUtil\$RuntimeListeners: Class  
com.webmethods.rtl.util.msg.RuntimeMessageUtil\$RuntimeListeners removed

com.webmethods.rtl.util.msg.RuntimeMessageUtil\$RuntimeMessageListener: Class  
com.webmethods.rtl.util.msg.RuntimeMessageUtil\$RuntimeMessageListener removed

com.webmethods.rtl.util.obj.CyclicIterator: Class com.webmethods.rtl.util.obj.CyclicIterator removed

com.webmethods.rtl.util.obj.EmptyEnumeration: Class  
com.webmethods.rtl.util.obj.EmptyEnumeration removed

com.webmethods.rtl.util.obj.EmptyIterator: Class com.webmethods.rtl.util.obj.EmptyIterator removed

com.webmethods.rtl.util.obj.FileClassLoader: Class com.webmethods.rtl.util.obj.FileClassLoader removed

com.webmethods.rtl.util.obj.IntMinMaxInfo: Class com.webmethods.rtl.util.obj.IntMinMaxInfo removed

com.webmethods.rtl.util.obj.IntStringMap: Class com.webmethods.rtl.util.obj.IntStringMap removed

com.webmethods.rtl.util.obj.IteratorTools: Class com.webmethods.rtl.util.obj.IteratorTools removed

com.webmethods.rtl.util.obj.PersistentMap: Class com.webmethods.rtl.util.obj.PersistentMap removed

com.webmethods.rtl.util.obj.PropertyGroup: Class com.webmethods.rtl.util.obj.PropertyGroup removed

com.webmethods.rtl.util.obj.PropertyGroups: Class com.webmethods.rtl.util.obj.PropertyGroups removed

com.webmethods.rtl.util.obj.SortableArray: Class com.webmethods.rtl.util.obj.SortableArray removed

com.webmethods.rtl.util.thread.ReadWriteMutex: Class  
com.webmethods.rtl.util.thread.ReadWriteMutex removed

com.softwareag.caf.controls.mwsx.PeoplePickerDialog: Removed field m\_facets

com.softwareag.caf.controls.mwsx.PeopleSwapBox: Removed field m\_facets

com.webmethods.caf.faces.component.behavior.BaseBehavior: Removed field m\_for

com.webmethods.caf.faces.component.behavior.CustomDragBehavior: Removed field m\_allowDrag

com.webmethods.caf.faces.component.behavior.CustomDragBehavior: Removed field m\_cursor

com.webmethods.caf.faces.component.behavior.CustomDragBehavior: Removed field m\_move

com.webmethods.caf.faces.component.behavior.CustomDragBehavior: Removed field m\_propagateEvent

## Removed API/ Description

com.webmethods.caf.faces.component.behavior.CustomDropBehavior: Removed field m\_allowDrop

com.webmethods.caf.faces.component.behavior.CustomDropBehavior: Removed field m\_handleDrop

com.webmethods.caf.faces.component.behavior.CustomDropBehavior: Removed field m\_hoverClass

com.webmethods.caf.faces.component.behavior.CustomDropBehavior: Removed field m\_onDropSetValue

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_add

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_allowDrag

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_allowDrop

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_copy

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_handleDrop

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_hoverClass

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_remove

com.webmethods.caf.faces.component.behavior.DragToMoveRowsBehavior: Removed field m\_reorder

com.webmethods.caf.faces.component.behavior.DragToReorderColumnsBehavior: Removed field m\_storePreferences

com.webmethods.caf.faces.component.behavior.DragToResizeBehavior: Removed field m\_resizeBottom

com.webmethods.caf.faces.component.behavior.DragToResizeBehavior: Removed field m\_resizeLeft

com.webmethods.caf.faces.component.behavior.DragToResizeBehavior: Removed field m\_resizeRight

com.webmethods.caf.faces.component.behavior.DragToResizeBehavior: Removed field m\_resizeTop

com.webmethods.caf.faces.component.behavior.DragToResizeColumnsBehavior: Removed field m\_storePreferences

com.webmethods.caf.faces.component.behavior.RaiseOnChangeBehavior: Removed field m\_command

com.webmethods.caf.faces.component.behavior.SynchronizeValuesBehavior: Removed field m\_with

com.webmethods.caf.faces.component.command.html.AsyncCommandButton: Removed field m\_refresh

com.webmethods.caf.faces.component.command.html.AsyncCommandIcon: Removed field m\_refresh

## Removed API/ Description

com.webmethods.caf.faces.component.command.html.AsyncCommandInterval: Removed field m\_interval

com.webmethods.caf.faces.component.command.html.AsyncCommandInterval: Removed field m\_waitUntilReloaded

com.webmethods.caf.faces.component.command.html.AsyncCommandLink: Removed field m\_refresh

com.webmethods.caf.faces.component.command.html.AsyncHiddenCommand: Removed field m\_refresh

com.webmethods.caf.faces.component.command.html.CommandForm: Removed field m\_forms

com.webmethods.caf.faces.component.command.html.CommandIcon: Removed field m\_alt

com.webmethods.caf.faces.component.command.html.CommandIcon: Removed field m\_url

com.webmethods.caf.faces.component.command.html.CommandIcon: Removed field m\_urlMouseDown

com.webmethods.caf.faces.component.command.html.CommandIcon: Removed field m\_urlMouseover

com.webmethods.caf.faces.component.events.OpenAjaxScript: Removed field openAjaxTopic

com.webmethods.caf.faces.component.events.OpenAjaxScript: Removed field shouldSubscribe

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_converter

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_entriesProvider

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_exportCharacterEncoding

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_exportFileName

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_exportForceDownload

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_feedProvider

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_feedUrl

com.webmethods.caf.faces.component.export.AtomFeedIcon: Removed field m\_for

com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_height

com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_initialAddress

com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_initialCountry

com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_key

com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_latitude

com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_longitude

## Removed API/ Description

com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_type  
com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_width  
com.webmethods.caf.faces.component.gmap.GMap: Removed field m\_zoom  
com.webmethods.caf.faces.component.gmap.GMapControl: Removed field m\_anchor  
com.webmethods.caf.faces.component.gmap.GMapControl: Removed field m\_offsetX  
com.webmethods.caf.faces.component.gmap.GMapControl: Removed field m\_offsetY  
com.webmethods.caf.faces.component.gmap.GMapControl: Removed field m\_type  
com.webmethods.caf.faces.component.gmap.GMapGetCoordsScript: Removed field m\_latitude  
com.webmethods.caf.faces.component.gmap.GMapGetCoordsScript: Removed field m\_longitude  
com.webmethods.caf.faces.component.gmap.GMapKey: Removed field m\_key  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_clickable  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_draggable  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_icon  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_iconSizeHeight  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_iconSizeWidth  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_initialAddress  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_initialCountry  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_latitude  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_longitude  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_selected  
com.webmethods.caf.faces.component.gmap.GMarker: Removed field m\_title  
com.webmethods.caf.faces.component.gmap.GMarkerGroup: Removed field m\_groupProvider  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_clickable  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_draggable  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_icon  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_iconSizeHeight  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_iconSizeWidth  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_initialAddress  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_initialCountry

## Removed API/ Description

com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_latitude  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_longitude  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_multiple  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_title  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_multiple  
com.webmethods.caf.faces.component.gmap.GMarkerList: Removed field m\_title  
com.webmethods.caf.faces.component.input.DateInput: Removed field m\_pattern  
com.webmethods.caf.faces.component.input.DateInput: Removed field m\_showMonthAndYearMenus  
com.webmethods.caf.faces.component.input.DateInput: Removed field m\_showSeconds  
com.webmethods.caf.faces.component.input.DateInput: Removed field m\_showTime  
com.webmethods.caf.faces.component.input.DateInput: Removed field m\_showTimezone  
com.webmethods.caf.faces.component.input.DateInput: Removed field m\_timezone  
com.webmethods.caf.faces.component.input.DateInput: Removed field m\_valuePattern  
com.webmethods.caf.faces.component.input.DateInput: Removed field m\_yearMenuRange  
com.webmethods.caf.faces.component.input.DateRangeInput: Removed field m\_futureRanges  
com.webmethods.caf.faces.component.input.DateRangeInput: Removed field m\_label  
com.webmethods.caf.faces.component.input.DateRangeInput: Removed field m\_layout  
com.webmethods.caf.faces.component.input.DateRangeInput: Removed field m\_pastRanges  
com.webmethods.caf.faces.component.logic.If: Removed field m\_value  
com.webmethods.caf.faces.component.logic.Import: Removed field m\_value  
com.webmethods.caf.faces.component.logic.ImportTemplate: Removed field m\_value  
com.webmethods.caf.faces.component.logic.LoadResourceBundle: Removed field m\_basename  
com.webmethods.caf.faces.component.logic.LoadResourceBundle: Removed field m\_var  
com.webmethods.caf.faces.component.logic.VariableContainer: Removed field m\_value  
com.webmethods.caf.faces.component.logic.VariableContainer: Removed field m\_var  
com.webmethods.caf.faces.component.message.FormattedMessage: Removed field m\_showDetail  
com.webmethods.caf.faces.component.message.FormattedMessages: Removed field m\_showDetail  
com.webmethods.caf.faces.component.message.SpecificFormattedMessages: Removed field m\_for  
com.webmethods.caf.faces.component.message.SpecificMessages: Removed field m\_for

## Removed API/ Description

com.webmethods.caf.faces.component.mws\_ui.MwsResourceInclude: Removed field renderer

com.webmethods.caf.faces.component.mws\_ui.MwsResourceInclude: Removed field uri

com.webmethods.caf.faces.component.nav.StaticMenus: Removed field m\_appNavBean

com.webmethods.caf.faces.component.nav.StaticMenus: Removed field m\_children

com.webmethods.caf.faces.component.nav.StaticMenus: Removed field m\_facets

com.webmethods.caf.faces.component.nav.ToggleMenus: Removed field m\_appNavBean

com.webmethods.caf.faces.component.nav.ToggleMenus: Removed field m\_children

com.webmethods.caf.faces.component.nav.ToggleMenus: Removed field m\_facets

com.webmethods.caf.faces.component.output.Chart: Removed field m\_barPadding

com.webmethods.caf.faces.component.output.Chart: Removed field m\_barWidth

com.webmethods.caf.faces.component.output.Chart: Removed field m\_color

com.webmethods.caf.faces.component.output.Chart: Removed field m\_gridColor

com.webmethods.caf.faces.component.output.Chart: Removed field m\_gridStyle

com.webmethods.caf.faces.component.output.Chart: Removed field m\_height

com.webmethods.caf.faces.component.output.Chart: Removed field m\_legendLocation

com.webmethods.caf.faces.component.output.Chart: Removed field m\_legendStyleClass

com.webmethods.caf.faces.component.output.Chart: Removed field m\_numberofGridLines

com.webmethods.caf.faces.component.output.Chart: Removed field m\_padding

com.webmethods.caf.faces.component.output.Chart: Removed field m\_rowColors

com.webmethods.caf.faces.component.output.Chart: Removed field m\_series

com.webmethods.caf.faces.component.output.Chart: Removed field m\_showLegend

com.webmethods.caf.faces.component.output.Chart: Removed field m\_type

com.webmethods.caf.faces.component.output.Chart: Removed field m\_width

com.webmethods.caf.faces.component.output.ChartDataColumn: Removed field m\_color

com.webmethods.caf.faces.component.output.ChartDataColumn: Removed field m\_toolTip

com.webmethods.caf.faces.component.output.ChartDataColumn: Removed field m\_value

com.webmethods.caf.faces.component.output.ChartLabelColumn: Removed field m\_label

com.webmethods.caf.faces.component.output.Custom: Removed field m\_name

com.webmethods.caf.faces.component.output.Icon: Removed field m\_converter



## Removed API/ Description

com.webmethods.caf.faces.component.output.Icon: Removed field m\_label  
com.webmethods.caf.faces.component.output.Icon: Removed field m\_url  
com.webmethods.caf.faces.component.output.Icon: Removed field m\_urlMousedown  
com.webmethods.caf.faces.component.output.Icon: Removed field m\_urlMouseover  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_accesskey  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_alt  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_dir  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_disabled  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_image  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_label  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_lang  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_onblur  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_onclick  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_ondblclick  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_onfocus  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_onkeydown  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_onmouseout  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_onmouseover  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_onmouseup  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_readonly  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_style  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_styleClass  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_tabindex  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_title  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_type  
com.webmethods.caf.faces.component.output.html.HtmlButton: Removed field m\_width  
com.webmethods.caf.faces.component.output.html.HtmlLink: Removed field m\_label  
com.webmethods.caf.faces.component.output.refresh.RefreshButton: Removed field m\_for  
com.webmethods.caf.faces.component.output.refresh.RefreshIcon: Removed field m\_for

## Removed API/ Description

com.webmethods.caf.faces.component.output.refresh.RefreshInterval: Removed field m\_for

com.webmethods.caf.faces.component.output.refresh.RefreshInterval: Removed field m\_interval

com.webmethods.caf.faces.component.output.refresh.RefreshInterval: Removed field m\_waitUntilReloaded

com.webmethods.caf.faces.component.output.refresh.RefreshLink: Removed field m\_for

com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_disableWhenHidden

com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_lazy

com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_refreshOnShow

com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_suppressInputs

com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_twoPass

com.webmethods.caf.faces.component.panel.BaseHideablePanel: Removed field m\_visible

com.webmethods.caf.faces.component.panel.OverlayPanel: Removed field m\_hideEffect

com.webmethods.caf.faces.component.panel.OverlayPanel: Removed field m\_showEffect

com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_click

com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_close

com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_closeOnClick

com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_forRightClick

com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_hideEffect

com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_hideEffectOptions

com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_hover

com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_position

com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_showEffect

com.webmethods.caf.faces.component.panel.PopupPanel: Removed field m\_showEffectOptions

com.webmethods.caf.faces.component.panel.PropertyLine: Removed field m\_description

com.webmethods.caf.faces.component.panel.PropertyLine: Removed field m\_label

com.webmethods.caf.faces.component.panel.PropertyLine: Removed field m\_overflow

com.webmethods.caf.faces.component.panel.PropertyLine: Removed field m\_parentId

com.webmethods.caf.faces.component.panel.StackPanel: Removed field m\_value

com.webmethods.caf.faces.component.panel.StaticCell: Removed field m\_align

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com.webmethods.caf.faces.component.panel.StaticCell: Removed field m\_height

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com.webmethods.caf.faces.component.panel.StaticRow: Removed field m\_height

com.webmethods.caf.faces.component.panel.StaticRow: Removed field m\_width

com.webmethods.caf.faces.component.search.BaseSearchControlHelper: Removed field fQuerySupplied

com.webmethods.caf.faces.component.search.BaseSearchControlHelper: Removed field fQuerySuppliedExpr

com.webmethods.caf.faces.component.search.SearchBar: Removed field m\_facets

com.webmethods.caf.faces.component.select.FilterInput: Removed field m\_labelText

com.webmethods.caf.faces.component.select.FilterInput: Removed field m\_showGoButton

com.webmethods.caf.faces.component.select.SelectMany: Removed field m\_filter

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com.webmethods.caf.faces.component.select.SelectMany: Removed field m\_sortByLabel

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com.webmethods.caf.faces.component.select.html.HtmlSelectOne: Removed field m\_title  
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com.webmethods.caf.faces.component.table.BaseExtendedColumn: Removed field m\_label  
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com.webmethods.caf.faces.component.table.DataPages: Removed field m\_showAlways  
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com.webmethods.caf.faces.component.table.SelectRow: Removed field m\_tabindex  
com.webmethods.caf.faces.component.table.SelectRowCheckbox: Removed field m\_children  
com.webmethods.caf.faces.component.table.SelectRowCheckbox: Removed field m\_facets

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com.webmethods.caf.faces.component.table.html.AsyncList: Removed field m\_flashOnChange  
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com.webmethods.caf.faces.component.table.html.DataTable: Removed field createdToOriginalRowIds

com.webmethods.caf.faces.component.table.html.DataTable: Removed field filter

com.webmethods.caf.faces.component.table.html.DataTable: Removed field first

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com.webmethods.caf.faces.component.table.html.HtmlTableColumn: Removed field m\_facets

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com.webmethods.caf.faces.component.toggle.OneWayToggle: Removed field m\_way

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com.webmethods.caf.faces.component.toggle.html.HtmlToggle: Removed field m\_disabled

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com.webmethods.caf.faces.component.toggle.html.HtmlToggle: Removed field m\_enabledClass

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com.webmethods.caf.faces.component.tree.AsyncTree: Removed field m\_progressMsg  
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com.webmethods.caf.faces.component.tree.AsyncTree: Removed field m\_suppressInputs  
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com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_loadingIcon  
com.webmethods.caf.faces.component.tree.BaseTreeControl: Removed field m\_showSortLink  
com.webmethods.caf.faces.view.BaseViewHandler: Removed field RE\_FE\_URL  
com.webmethods.portal.faces.view.PortalViewHandler: Removed field RE\_FE\_URL  
com.webmethods.portal.taglib.PortalIterationTagSupport: Removed field EMPTY\_ITERATOR

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## 13.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

TE-RM-912-20161018

# webMethods Trading Networks 9.12 and webMethods Optimize for B2B 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods Trading Networks 9.12 and webMethods Optimize for B2B 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find the suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Trading Networks***

#### ***Release 9.12***

- TNS\_9.0\_SP1\_Fix9
- TNS\_9.5\_SP1\_Fix12
- TNS\_9.6\_Fix10
- TN\_9.6\_MWS\_Fix6
- TNS\_9.7\_Fix9
- TN\_9.7\_MWS\_Fix9
- TNS\_9.8\_Fix7
- TN\_9.8\_MWS\_Fix5
- TNS\_9.9\_Fix3
- TNS\_9.10\_Fix2

- TN\_9.10\_MWS\_Fix2

### ***Release 9.10***

- TNS\_9.5\_SP1\_Fix9
- TNS\_9.6\_Fix7
- TNS\_9.7\_Fix6
- TN\_9.7\_MWS\_Fix5
- TNS\_9.8\_Fix5
- TN\_9.8\_MWS\_Fix3
- TNS\_9.9\_Fix1
- TN\_9.9\_MWS\_Fix1

### ***Release 9.9***

- TNS\_8.2\_SP2\_Fix27
- TNS\_9.0\_SP1\_Fix8
- TN\_9.0\_SP1\_MWS\_Fix7
- TNS\_9.5\_SP1\_Fix7
- TN\_9.5\_SP1\_MWS\_Fix6
- TNS\_9.6\_Fix5
- TN\_9.6\_MWS\_Fix4
- TNS\_9.7\_Fix3
- TN\_9.7\_MWS\_Fix3
- TNS\_9.8\_Fix3
- TN\_9.8\_MWS\_Fix2

### ***Release 9.8***

- TNS\_8.2\_SP2\_Fix26
- TN\_8.2\_SP2\_MWS\_Fix24

- TNS\_9.0\_SP1\_Fix6
- TN\_9.0\_SP1\_MWS\_Fix6
- TNS\_9.5\_SP1\_Fix6
- TN\_9.5\_SP1\_MWS\_Fix5
- TNS\_9.6\_Fix3
- TN\_9.6\_MWS\_Fix3
- TNS\_9.7\_Fix1
- TN\_9.7\_MWS\_Fix1

### ***Release 9.7***

- TNS\_8.2\_SP2\_Fix25
- TN\_8.2\_SP2\_MWS\_Fix22
- TNS\_9.0\_SP1\_Fix4
- TN\_9.0\_SP1\_MWS\_Fix4
- TNS\_9.5\_SP1\_Fix4
- TN\_9.5\_SP1\_MWS\_Fix3
- TNS\_9.6\_Fix1
- TN\_9.6\_MWS\_Fix1

### ***Release 9.6***

- TN\_8.2\_SP1\_MWS\_Fix14
- TNS\_8.2\_SP1\_Fix16
- TN\_8.2\_SP2\_MWS\_Fix19
- TNS\_8.2\_SP2\_Fix22
- TN\_9.0\_SP1\_MWS\_Fix3
- TNS\_9.0\_SP1\_Fix3
- TN\_9.5\_SP1\_MWS\_Fix1

- TNS\_9.5\_SP1\_Fix1

## ***Release 9.5***

- TN\_8.2\_SP1\_MWS\_Fix13
- TNS\_8.2\_SP1\_Fix15
- TN\_8.2\_SP2\_MWS\_Fix16
- TNS\_8.2\_SP2\_Fix17
- TN\_9.0\_SP1\_MWS\_Fix1
- TNS\_9.0\_SP1\_Fix1

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Trading Networks***

#### ***Release 9.12***

- OTN-16377  
Inbuilt 'Unknown' document details in Trading Networks are changed using the import and export feature.  
Exporting, modifying, and importing an 'Unknown' document results in a change of the document name.  
This issue is resolved.
- OTN-16197  
Inbuilt 'Unknown' partner profile details in Trading Networks are changed using the import and export feature.  
Exporting, modifying, and importing an 'Unknown' partner profile results in a change of the partner profile name.  
This issue is resolved.
- OTN-15070  
In My webMethods: Administration > Partner Profiles > Delivery Settings > Suspend Delivery Schedule page, 'Time Zone' is not localized.  
This issue occurs if localizations are not handled for 'Time Zone.'



This issue is resolved.

- OTN-15067

In My webMethods: Administration > Partner Profiles > Delivery Settings > Suspend Delivery Schedule page, 'Recurrence Pattern' is not localized.

This issue occurs if localizations are not handled for 'Recurrence Pattern.'

This issue is resolved.

- OTN-15045

In My webMethods: Administration > Partner Profiles > Delivery Settings page, the 'Status' icon tooltip is not localized.

This issue occurs if localizations are not handled for the 'Status' icon tooltip.

This issue is resolved.

- OTN-15044

In My webMethods: Administration > Partner Profiles > Delivery Settings > Suspend Delivery Schedule page, the 'Days' selection is not localized.

This issue occurs if localizations are not handled for the 'Days' selection.

This issue is resolved.

- OTN-15043

In My webMethods: Administration > Partner Profiles > Delivery Settings page, 'Suspend Delivery Schedule' is not localized.

This issue occurs if localizations are not handled for 'Suspend Delivery Schedule.'

This issue is resolved.

- OTN-15624

Updation or creation of a partner profile fails with the following error in the Integration Server log: [SoftwareAG][SQLServer JDBC Driver][SQLServer]Invalid column name 'LastModified'.

This issue occurs because the column name is not in Pascal.

This issue is resolved.

- OTN-15788

The Clear button is enabled before creating a certificate in the Certificates Tab under the Partner Profiles page.

The Clear button is enabled due to a CAF update.

This issue is resolved.

- OTN-15472

While using the Lookup of Address or Contact in Partner Profile an exception occurs.

When a user uses the lookup for Address or Contact in partner profile with TN database pointed to DB2, the following exception is displayed:

"Failed to evaluate binding expression: "#{ContactsPage.impactdPartners}"

This issue is resolved.

## **Release 9.8**

- OTN-14125  
My webMethods throws an exception when you view the details of a transaction that has an ebxml Envelope.  
When you try to view the details of a transaction that has an ebxml Envelope, My webMethods throws an exception related to the content encoding not being supported. It is observed that the content encoding value is enclosed in double quotes.  
This issue is resolved.
- OTN-13995  
Document attributes of type STRING that contain Chinese characters are not extracted properly. If a document attribute of type STRING contains Chinese characters, Trading Networks replaces the Chinese characters with special characters. This can be noticed when you view the details of the corresponding transaction in My webMethods.  
This issue is resolved.

## **Release 9.7**

- OTN-13217  
The Original Sender and Original Receiver attributes in the Transaction Details section do not contain any values.  
In My webMethods, the Original Sender and Original Receiver attributes displayed in the Transaction Details section are blank and do not contain any value. However, these values are present in the Trading Networks database.  
This issue is resolved. The Original Sender and Original Receiver attributes now contain the external IDs of sender and receiver respectively.

## **Release 9.6**

- OTN-12534  
webMethods Module for EDI throws misleading error messages while creating EDI document types on Integration Server Administrator.  
In Integration Server Administrator, when you try to create an EDI document type, a duplicate entry error is displayed, stating that the schema for the EDI document type already exists in the WmEDIforTN package. The error message is misleading because in reality, the EDI document type and the schema have been created successfully.  
This issue is resolved.
- OTN-12519  
Changing the Status of an email invitation from Inactive to Active results in a NullPointerException in My webMethods.  
When you create an invitation to onboard new partners, My webMethods allows you to select the 'Send Invitation Immediately' and 'Set Reminder' options, and then save the invite and send it as an email at a later time by setting the Status to Inactive. When you are ready to send the email

invite that has both these options selected, and you change the status from Inactive to Active, My webMethods throws a NullPointerException.

This issue is resolved.

## **Release 9.5**

- OTN-8194

When archiving or deleting documents, webMethods Trading Networks does not provide detailed progress information in the log.

When using the archive feature in Trading Networks, the host Integration Server's server log file contains only the start and completion times of the archive or delete task, and how many documents were processed. It would be beneficial to include additional status messages showing how many batches are expected to run and how far along the process is.

This issue is resolved. The archive feature now provides the following additional information in the server log file: the number of documents that will be archived or deleted, batch size, and number of batches completed. This additional log information gives high-volume Trading Networks customers visibility into the archive procedure, allowing them to tune the parameters and troubleshoot the process more easily.

- OTN-11726

The Trading Networks timport utility does not work.

The timport utility used to import Trading Networks assets results in a Java usage-related error in the console.

This issue is resolved. The timport utility now works as expected without error.

## **6.0 Documentation Changes**

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### ***Trading Networks***

#### **Release 9.12**

The Trading Networks Webhelp is not available as a standalone document on the Empower website. The contents of the Trading Networks Webhelp are available in the B2B Integration compendium.

#### **Release 9.10**

The following procedural information has been added to the *webMethods Trading Networks Administrator's Guide*:

- Copying or Sharing Addresses

- Copying or Sharing Contacts
- Adding a Custom Immediate Delivery Method to a Profile
- Copying or Sharing Custom Immediate Delivery Methods

## **Release 9.9**

The following conceptual and procedural information has been added to the *webMethods Trading Networks Administrator's Guide*:

- Database Partitioning
  - Partitioning Trading Networks Database
  - Using a partitioned database for archiving data
  - Deleting run-time and archived data from a partitioned database
  - Dropping tables from a partitioned database

## **Release 9.7**

The following conceptual and procedural information has been added to the *webMethods Trading Networks Administrator's Guide*:

- Dashboards and Charts
  - List of dashboards and charts
  - Viewing dashboards and charts
  - `tn.chart.fetchMaxRows` property

The following service has been added to the *webMethods Trading Networks Built-In Services Reference*:

- `wm.tn.purge:TransactionSummaryData`

## **Release 9.6**

The following conceptual and procedural information has been added to the *webMethods Trading Networks Administrator's Guide*:

- Run-time events
  - Types of run-time events
  - Event properties to set in order to enable the run-time events

- Caching
  - Types of caches supported
  - Cache settings for the supported caches

## **Release 9.5**

- The following conceptual and procedural information has been added to the *webMethods Trading Networks Administrator's Guide*:
  - Setting up keystores for partner profiles in Integration Server.
  - Adding, modifying, and deleting keystore aliases and key aliases in enterprise and partner profiles in Trading Networks.
  - Configuring overlapping sign/verify, encrypt/decrypt, and SSL certificates in Trading Networks.
- Procedural information on partner onboarding has been moved from the concept section of the *webMethods Trading Networks Administrator's Guide* to a new chapter "Onboarding New Partners" in the same guide.
- The following information has been added to the *webMethods Trading Networks Built-In Services Reference*:
  - Descriptions of the following new security Built-In services:
    - `wm.tn.security:getCertificateData`
    - `wm.tn.security:setPrimaryCertificate`
  - New parameters for the following Built-In services to support keystores:
    - `wm.tn.security:addCertificateData`
    - `wm.tn.security:updateCertificateData`
- The following information has been updated in the *webMethods Trading Networks Java API Reference*:
  - New APIs added in this release:
    - `SecurityOps.getAllCertificateData`
    - `SecurityOps.getAllCertificateDataByKeystoreAlias`
    - `SecurityOps.getAllCertificateDataForOwner`

- SecurityOps.setPrimaryCertificate
- APIs modified in this release:
  - SecurityOps.insertCertificateData
  - SecurityOps.updateCertificateData

## **7.0 Terminology Changes**

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### *Trading Networks*

#### **Release 9.12**

Added Item	Description
Integration with ActiveTransfer	Trading Networks provides an ability to deliver documents through ActiveTransfer. Administrators can select ActiveTransfer as the delivery method in Trading Networks and set the end points that ActiveTransfer will connect with to transfer files.
Configure User Status	Administrators can configure user statuses and allow it to be set only from a predefined set of values.
Transport Status	Trading Networks allows you to search and view the status of a service for a delivery task.

#### **Release 9.10**

Added Item	Description
Reusability of Address, Contacts, and Delivery Methods.	Trading Networks allows you to reuse configuration items across multiple partners. The configuration items that are made reusable are address, contacts, and delivery methods.

#### **Release 9.9**

Added Item	Description
Suspending document delivery to a partner using suspension schedules	Trading Networks allows you to schedule a document delivery suspension to a partner. The delivery suspensions can be scheduled once, daily, weekly, monthly, or on a yearly basis.

Added Item	Description
Database Partitioning	Trading Networks database can be partitioned logically to separate one set of data from another. Database partitioning is useful especially when you archive data from production tables to archive tables because it provides the flexibility to perform operations at partition level.
Routing run-time events using Event Routing  tn.portal.rule.preventValidation	Trading Networks supports run-time event notification using Software AG Event Routing.  Whether to validate a processing rule name. Set this property to true or false. If the value is true, Trading Networks does not validate the processing rule name (allows special characters). If the value is false, Trading Networks validates the processing rule name and prompts you to provide a valid name.

## ***Release 9.8***

Added Item	Description
Dashboards and Charts	Trading Networks provides a set of dashboards and charts that give you a graphical view of the transaction volume and total value trend for a document attribute, summary of successful and failed transactions, and the late FA violations by partners.



Added Item	Description
Usability Enhancements	<p>Includes the following:</p> <ul style="list-style-type: none"> <li>• The keyword search criteria for Trading Partner Agreements (TPAs) based on agreement IDs has been added. This is in addition to the already existing search criteria based on sender name or receiver name. This is enabled on TPA page and Import/Export page for TPAs.</li> <li>• On the Public Queues page, the option to save the searches as 'Public' or 'Private' has been added. Initially, all searches would be saved as Private.</li> <li>• Import of Trading Networks assets functionality has been extended to include importing using a zip file. This is in addition to the already existing functionality that allows importing using a binary or an xml file.</li> <li>• Trading Networks maintains context sensitivity across all its screens.</li> </ul>
Editing a TPA	<p>While editing a TPA, if another user tries to edit at the same time, Trading Networks ensures that data written by you is not over written by the other user and vice versa. While saving the TPA, Trading Networks ensures that you are working on the latest version of data, and notify you if another transaction has modified the TPA. In that case, you have to cancel the changes you have made, and reopen the TPA for edit.</p>
Document Attribute Added run-time event	<p>Trading Networks publishes this event when a new attribute is added to a document or an existing attribute in a document is updated.</p>

Added Item	Description
tn.eda.events.emittableDocumentAttributeNameFilter	Determines the set of document attributes for which Trading Networks will publish the Document Attribute Added run-time event. By default, Trading Networks publishes this event when Late FA document attribute is added or updated. To enable Trading Networks to publish this event for any other document attribute apart from Late FA attribute, set this property to a fully qualified custom java class. This class should include the set of document attributes apart from Late FA attribute that will enable Trading Networks to publish the event when the specified set of document attributes are added or updated.

Removed Item	Replacement
WmTNPki package	The WmTNPki package which provides functionality for using PKI profiles with Trading Networks has been deprecated. There is no replacement for the WmTNPki package.

## ***Release 9.7***

Added Item	Description
Dashboards and Charts	Trading Networks provides a set of dashboards and charts that give you a graphical view of transaction volumes of partners and the document types exchanged between partners.
tn.db.readonly	When Trading Networks points to a read-only database, set this property to true. If you set this property to false, Integration Server logs an SQL exception in the server log file. The default value is false.

Added Item	Description
tn.chart.fetchMaxRows	When the number of records in the dashboard table is less than or equal to the value set, My webMethods displays data in the form of dashboards and charts. When the number of records is greater than the value set, My webMethods throws an error when you access the Analytics link. By default, tn.chart.fetchMaxRows = 500000.

Deprecated Item	Replacement, if any
WmTNPki package	The WmTNPki package which provides functionality for using PKI profiles with Trading Networks has been deprecated. There is no replacement for the WmTNPki package.

## **Release 9.6**

Added Item	Description
Run-time events	<p>Trading Networks publishes two types of run-time events:</p> <ul style="list-style-type: none"> <li>• Transaction events - Occur when Trading Networks processes a document.</li> <li>• Task events - Occur when Trading Networks performs a post-processing task on a document.</li> </ul>
Caching	<p>Trading Networks uses the caching capabilities of Ehcache to provide:</p> <ul style="list-style-type: none"> <li>• Asset caching - Trading Networks uses Ehcache to cache assets. While the assets are in cache, Trading Networks can quickly retrieve them for similar requests, rather than getting the details from Trading Networks database.</li> <li>• Query results caching - Trading Networks uses Ehcache to store the results of a database query. It stores the number of rows you specify in a session object on the host Integration Server and stores the remaining rows in Ehcache.</li> </ul>

Added Item	Description
tn.eda.events.transactions	Trading Networks publishes the following run-time events when you enable this property: Routing Rule Selected, Document Persisted, System Status Changed, User Status Changed, Verification, Validation, Alert Email, and Queue for Polling.
tn.eda.events.completedTransactions	Trading Networks publishes the Document Processing Complete run-time event when you enable this property.
tn.eda.events.deliveryTasks	Trading Networks publishes the following run-time events when you enable this property: Enqueued Document, Start Delivery, Send Document, Immediate Delivery Complete, and Batch Delivery Complete.
tn.eda.events.serviceExecutionTasks	Trading Networks publishes the Service Invoke run-time event when you enable this property.
tn.eda.events.userInitiatedTasks	Trading Networks publishes the following run-time events when you enable this property: Reprocess Document, Resubmit Document, Relate Documents, and Task Action.
Profile cache	Holds elements for profiles of all corporations who are trading partners in your network.
Profile Summary cache	Holds elements for all profile summaries. It is a subset of Profile cache.
Profile ID cache	Holds elements for the profile IDs of all profiles present in your network.
Document Type cache	Holds elements for all document types required for XML and flat files.
Document Attribute cache	Holds elements for all document attributes required to process documents.
Trading Partner Agreement (TPA) cache	Holds elements for trading partner agreements between various partners in your network.
TPA ID cache	Holds elements for the TPA IDs of all the trading partner agreements between various partners in your network.

## 9.0 Added, Removed, Deprecated, or Changed Built-In Services

A release is listed in this section only if changes occurred in that release.

### Trading Networks

#### Release 9.12

Added Service	Description
wm.tn.transport:activeTransfer	Delivers documents using webMethods ActiveTransfer.
wm.tn.rec:activeTransferOutput	If a task uses the ActiveTransfer delivery service to deliver documents, use this IS document type to map the output from the delivery service.
wm.tn.doc:addConfigUserStatusList	Adds new user status values to the configured list of user status values.
wm.tn.doc:deleteConfigUserStatusList	Deletes user status values from the configured list of user status values.
wm.tn.doc:getConfigUserStatusList	Provides the configured list of user status values.

#### Release 9.9

Added Service	Description
wm.tn.archive:purgeBizdocUniqueKeysData	Purges data from BizDocUniqueKeys and ARCHIVE_BizDocUniqueKeys tables.
wm.tn.archive:purgeEDITrackingData	Purges data from EDITracking and ARCHIVE_EDITracking tables.

Changed Service	Description
wm.tn.rec: BizDocEnvelope	Four new fields have been added to BizDocEnvelope document type. <ul style="list-style-type: none"><li>-VERSION_NO - Version of Trading Networks.</li><li>-ReceiveSvc - For resubmitting the document. This is extracted from TN_parms/\$receiveSvc from the pipeline.</li><li>-Comments - Comments associated with transactions.</li><li>-Duplicate - Whether the document is duplicate or not. Valid values are true and false.</li></ul>

## Release 9.8

### Added Service

wm.tn.charting: populateSummaryData

### Description

During migration, purges existing records from the dashboard tables, and populates records in the dashboard tables from runtime tables.

### Changed Service

wm.tn.purge:TransactionSummaryData

### Description

Modified the service so that it can purge records from the newly added dashboard tables. The dashboard tables include:

- TransactionSummaryData
- CustomAttributeVolumeValue
- TransactionSuccessFailedData
- SuccessFailedChartDocIdMap
- TransactionLateFADData

wm.tn.mime:createSignedAndEncryptedData  
wm.tn.mime:createSignedData  
wm.tn.mime:processEncryptedData  
wm.tn.mime:processSignedData  
wm.tn.mime:sign  
wm.tn.mime:verify

*profileAlias* is an input parameter to these services. It is an alias of the PKI profile that contains the private key, signer cert, and certificates you wish to use to sign the message. However, the WmTNPki package which provides functionality for using PKI profiles with Trading Networks has been removed, and there is no replacement for the WmTNPki package. Hence, the *profileAlias* parameter has been removed from these services.

## Release 9.7

### Added Service

wm.tn.purge:TransactionSummaryData

### Description

The time frame to consider before purging records from the TransactionSummaryData table. This service purges records starting from the first record up to all records present in the table  $n$  days prior to the current day, where  $n$  is the number of days you specify for the parameter.

## Release 9.5

Added Service	Description
wm.tn.security:getAllCertificateData	Retrieves information about active and inactive certificates for a given combination of owner, partner, and usage.
wm.tn.security:setPrimaryCertificate	Sets a certificate as the primary certificate.

Changed Service	Description
wm.tn.security:addCertificateData	Added <i>keyStoreAliasName</i> and <i>keyAliasName</i> input parameters for specifying keystore and private key aliases when adding certificate data to an Enterprise profile.
wm.tn.security:updateCertificateData	Added <i>keyStoreAliasName</i> and <i>keyAliasName</i> input parameters for specifying keystore and private key aliases when updating certificate data in an Enterprise profile.

## 10.0 Added, Removed, Deprecated, or Changed Parameters

A release is listed in this section only if changes occurred in that release.

### Release 9.6

Added Parameter	Description
watt.WmTN.aclMap	Indicates whether Trading Networks maps the ACLs to the Trading Networks public services.
watt.WmTN.mwsMap	Indicates whether Trading Networks adds My webMethods roles related to Trading Networks to their respective ACLs.

## 11.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

### Trading Networks

#### Release 9.5

Added API	Description
SecurityOps.getAllCertificateData	Retrieve all certificate data for a given OwnerID, PartnerID, and Usage.
SecurityOps.getAllCertificateDataByKeystoreAlias	Given a keystore alias, return all certificate data from the CertificateData table.
SecurityOps.getAllCertificateDataForOwner	Retrieve all certificate data for a specified owner.
SecurityOps.setPrimaryCertificate	Set a certificate as the primary certificate for a given certificate ID, owner, partner, and usage combination.

  

Changed API	Description
SecurityOps.insertCertificateData	Added <i>keyStoreAliasName</i> and <i>keyAliasName</i> input parameters for specifying keystore and private key aliases when adding certificate data to an Enterprise profile.
SecurityOps.updateCertificateData	Added <i>keyStoreAliasName</i> and <i>keyAliasName</i> input parameters for specifying keystore and private key aliases when updating certificate data in an Enterprise profile.



## 12.0 Copyright Information

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## 13.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

TNOPTB2B-RM-912-20161018

# webMethods Universal Messaging 9.12 Readme

## October 2016

This file contains important information you must read before using webMethods Universal Messaging 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

- Shared Durable Filter displayed in Enterprise Manager

In the durable objects panel in Enterprise Manager, the displayed shared durable filter does not update dynamically. It will show the correct filter from when the durables are initially loaded, but the displayed filter will not reflect subsequent changes until Enterprise Manager is restarted.

- NUM-6147  
P2P hidden channel appearing

When upgrading an installation from 9.10 to 9.12, a channel with the name "-p2p/serviceinfo" may be visible within the namespace of Universal Messaging. This channel can safely be removed as it is an artifact of a deprecated and now removed feature P2P. If not removed it will have no adverse effect on Universal Messaging.

- Shared memory drivers are currently not supported on HP-UX systems

On HP-UX systems, shared memory drivers are currently not supported. There is currently no workaround for this issue.

- NUM-2211  
Paged Store type is unsupported in Solaris / SPARC with JDK 1.8.

Currently, the Paged Storage feature is not supported in a Solaris/SPARC environment with JDK 1.8.

Workaround: Consider using JDK 1.7 instead.

- PIF-12248  
Cannot deploy JNDI assets from a source Universal Messaging server to a target Universal Messaging server using webMethods Deployer.

To resolve this issue, install the latest Universal Messaging fixes.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. Information for a release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.12***

### ***Release 9.10***

- NUM\_9.10.0\_Client\_Fix4
- NUM\_9.10.0\_EnterpriseManager\_Fix4
- NUM\_9.10.0\_RealmServer\_Fix4
- NUM\_9.10.0\_TemplateApplications\_Fix4

### ***Release 9.9***

- NUM\_9.9.0\_Client\_Fix9
- NUM\_9.9.0\_EnterpriseManager\_Fix9
- NUM\_9.9.0\_wM\_RealmServer\_Fix9
- NUM\_9.9.0\_wM\_TemplateApplications\_Fix9

### ***Release 9.8***

- NUM\_9.8.0\_Client\_Fix14
- NUM\_9.8.0\_RealmServer\_Fix14
- NUM\_9.8.0\_EnterpriseManager\_Fix13
- NUM\_9.8.0\_TemplateApplications\_Fix14
- NUM\_9.8.0\_PlatformManagerPlugins\_Fix4

## ***Release 9.7***

- NUM\_9.7.0\_Client\_Fix17
- NUM\_9.7.0\_RealmServer\_Fix17
- NUM\_9.7.0\_EnterpriseManager\_Fix14
- NUM\_9.7.0\_TemplateApplications\_Fix17
- NUM\_9.7.0\_PlatformManagerPlugins\_Fix4

## ***Release 9.6***

- NUM\_9.6.0\_Client\_Fix18
- NUM\_9.6.0\_RealmServer\_Fix18
- NUM\_9.6.0\_EnterpriseManager\_Fix12
- NUM\_9.6.0\_TemplateApplications\_Fix10

## ***Release 9.5 SP2***

- NUM\_9.5.2\_Client\_Fix16
- NUM\_9.5.2\_RealmServer\_Fix16
- NUM\_9.5.2\_EnterpriseManager\_Fix15
- NUM\_9.5.2\_TemplateApplications\_Fix15

## ***Release 9.0***

- NUM\_9.0.1\_Client\_Fix14
- NUM\_9.0.1\_RealmServer\_Fix13
- NUM\_9.0.1\_EnterpriseManager\_Fix12

### Enhancements:

- Off Heap Stores  
Universal Messaging 9.5 SP2 introduces a new store type for channels and queues – Off Heap. Off Heap Store is a new Topic or Queue store mechanism that uses memory which is not within the Java Heap space, but rather, is allocated directly from the host's memory.  
Any memory allocated within the JVM is subject to Garbage Collection inspection. This inspection allows the JVM to release unused memory and move memory that has been used for a while into different memory partitions. It also adds a level of jitter to the JVM, as it needs to pause while it does this inspection and potential move. The use of Off Heap memory stops the Garbage Collection

from inspecting and moving these regions since they are outside of the JVM's memory domain. This has the effect of reducing such jitter within the Universal Messaging Server. Since the events are stored in memory, you still get fast memory access, with no impact from GC within the Server. This is extremely useful when using stores that can potentially contain data that will exist for a prolonged period of time, since pauses that might otherwise be caused by GC inspections will not occur.

By default, the server will be allowed to use a maximum of 1GB of memory for off heap store use (in addition to the current default of 1GB maximum available to the Java heap). However, these amounts are not pre-located. Typically, a system will start off consuming approximately 128-256MB of RAM, and will consume more memory only if it needs to.

- RDMA

Remote Direct Memory Access is direct access from the memory of one computer into that of another without involving either one's operating system. This permits high-throughput low-latency communication, which is especially useful in massively parallel computer clusters.

With Shared Memory drivers built into Universal Messaging and supported in C#, C++ and Java we can achieve very fast, high throughput messaging on the same machine. With conventional networking standards like TCP/IP, all messages are pushed through the kernel's network stack and back again. There are some off-loaded drivers allowing application code direct access to the Network card, but these still require a layer of TCP above to interpret and manage. RDMA removes this restriction and allows an area of application memory to be mapped and then written to from a remote computer with no Operating System involvement at all; instead, the Interface card and driver alone marshal the incoming event and put the data directly in the application's memory. This results in performance close to that of same-machine Shared Memory, but between 2 separate computers.

- Changes to Default Configurations

The default value for *Config / Event Storage / CacheAge* has been reduced from 1 day to 1 minute.

The default value for: *Config / Global Values / DisableExplicitGC* has been changed from *true* to *false*.

A new configuration parameter: *Config / Fanout Values / DelayPublishOnCapacity* has been added, with a default value of *true*. It causes the publisher to be throttled once any optionally set capacities are reached on a channel or queue.

The default heap size has been changed from 512MB to 1GB.

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. Information for a release is listed in this section only if changes occurred in that release.

### **Release 9.12**

### **Release 9.10**

### **Release 9.9**

- NUM-2769  
Universal Messaging / JMS Temp Queue / Topics must be destroyed on disconnect  
Temporary queues are a JMS feature. When a client is closed, the temporary queues should be deleted. In some cases, for example if a client connection dropped due to a network problem, this was not happening correctly. Now the temporary queues will always be deleted correctly.  
The issue is resolved.

### **Release 9.8**

- NUM-2614  
Universal Messaging Client with semicolon-separated RNAME list always connects to the first entry when there are two nodes in the list.  
The issue is resolved.
- NUM-2427  
Join information not working correctly with .net admin API.  
nChannel.getJoinInformation is returning blank results instead of the correct list of joins fetched from the server.  
The issue is resolved.

### **Release 9.7**

- NUM-1396  
Universal Messaging does not provide transparent failover in cluster  
Example: there is a cluster with two nodes (two sites, second site with isPrime=true). If we switch the node which is not in the isPrime-site off, we would expect a transparent failover. Instead we see the following behavior in a standalone Java client and in a Message-Driven Bean running in JBoss 4.2.3 (using the Universal Messaging 9.5 client libs): Standalone client: for about 10 seconds sends fail with a "nSessionNotConnectedException". If these are caught and the sends are retried, the client can recover. JBoss MDB: stops receiving messages and never does a failover. Even if the node is brought up again, the MDB does not recover.  
This issue is now resolved. The value of the nirvana.conxExceptionOnRetryFailure property of a JMS connection factory determines whether the Universal Messaging cluster fails over

transparently when the prime site fails or throws an exception to the JMS client. For transparent cluster failover, set this property to true. By default, the value of the `nirvana.conxExceptionOnRetryFailure` property is false.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### ***Release 9.12***

The description of how to use Command Central to perform administrative tasks on Universal Messaging has moved from the Command Central documentation set to the Administration Guide of the Universal Messaging documentation set.

### ***Release 9.7***

The documentation is provided in a new format, with a navigation frame and content frame. The navigation presents the documentation under the following main categories:

- Concepts
- Administration
- Developer's Guide
- Reference Guide
- Installation Guide

The API documentation is available as a topic in the Reference Guide. The code examples for each of the supported languages are available within the appropriate language-specific part of the Developer's Guide.

## 7.0 Terminology Changes

Information for a release is listed in this section only if changes occurred in that release.

### ***Release 9.7***

Old Term	New Term
Brokerless API	umTransport API



## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. Information for a release is listed in this section only if changes occurred in that release.

### **Release 9.12**

<b>Added Item</b>	<b>Description</b>
Origin Header to HTTP Drivers	<p>The Universal Messaging WebSocket/HTTP drivers have been updated to process the Origin header field (RFC-6454, RFC-6455 and W3C Cross Origin Resource Sharing).</p> <p>Any nhp/nhps interfaces in Universal Messaging may have to have their CORS Allowed origins (located under the nhp/nhps Interface -&gt; Javascript tab in Enterprise Manager) altered if an HTTP request has the Origin header field set.</p>
Server-side throttling	<p>The server tracks memory utilization.</p> <p>When memory utilization is too high, the server will apply progressive levels of back pressure on publishers to prevent an out-of-memory (OOM) event.</p>
Improved Logging	<p>Universal Messaging logging has been improved to optionally support Log4J 2 and Logback engines.</p>
ACL setting in client API at store creation time	<p>ACLs can now be set at store-creation time via the Client API. This allows basic ACL control for newly created stores without needing the administration API.</p>

### **Release 9.10**

<b>Removed Item</b>	<b>Description</b>
Standalone Installer	<p>There is no longer a standalone installer for the product. Installation is now available only using the Software AG Installer.</p>

  

<b>Added Item</b>	<b>Description</b>
Docker Support	<p>A Universal Messaging Packaging Kit for Docker is now part of the standard Universal Messaging</p>

## Added Item

## Description

installation on Linux.

The Universal Messaging Packaging Kit can be found here: <SAG Install Folder>/UniversalMessaging/server/< Universal Messaging Server Name>/bin/docker.

The kit includes following Docker tools:

- Dockerfile for creating Docker image from the Universal Messaging installation on Linux.
- Samples showing how to start the Universal Messaging server from the Docker image and running Universal Messaging's sample applications within the image.
- The Tradespace demo application showing how to use 'docker-compose' to set up and run Universal Messaging's TradeSpace demo.

## New Persistent Store backing

We have a new persistent store backing which, when enabled, removes the need to "perform maintenance" on channels and queues. This new mechanism also allows stores to grow without any restriction on the JVM heap. Our existing persistent store mechanism keeps an in-memory index which grows each time a message is added

Added Item	Description
Handling of maximum message size	<p>In previous releases, Universal Messaging restricted the maximum message size that the server will read in by the <code>MaxBufferSize</code> configuration property. Exceeding this value would cause the connection to be disconnected, but the message had already been sent over the network and the reason for the disconnection was not obvious to the client. This check remains but Universal Messaging now has a client side check so that the message is rejected before it is sent over the network and the user can handle the exception.</p>
Clients can “follow the master node”	<p>Clients can now be enabled to “follow the master” in a cluster. The client will initially connect to a server in the cluster but if that server is not the master, they will be redirected to the master node. Connecting to the master node can give better performance in some use cases.</p>
Transactions over AMQP are now supported	<p>The AMQP specification defines a good number of transactional operations. With Universal Messaging 9.10 we now support AMQP transacted operations so that client applications can perform transactional work when communicating with the realm server over AMQP. For example, if an application communicates to the realm server using a JMS AMQP client library (e.g. Apache Qpid JMS client) it can take advantage of the local transaction functionalities defined in the JMS specification.</p> <p>Universal Messaging does not currently support the AMQP Transactional Acquisition operation. However, this sets no limitations on using JMS transactions over AMQP.</p>
Configuration profiles in the Installer	<p>It is now possible to select different configuration profiles using the Software AG installer. We have provided two configurations, one tuned for typical webMethods use cases and one tuned for standalone use cases.</p>

## Release 9.9

Added Item	Description
AMQP 1.0 Support	<p>Universal Messaging 9.9 introduces support for AMQP 1.0. AMQP is an open standard binary application layer protocol whose main topics of concern are orientation, queuing, routing (both point-to-point and publish-and-subscribe), reliability and security. It defines a number of mechanisms such as flow control, message-delivery guarantee strategies (at-most-once, at-least-once and exactly-once), authentication based on SASL or TLS, etc.</p> <p>The Universal Messaging AMQP implementation provides support for a subset of the components of the protocol specification (for more information on AMQP, please refer to <a href="http://www.amqp.org/">http://www.amqp.org/</a>). Here is the complete list of features that we support:</p> <ul style="list-style-type: none"><li>•AMQP PLAIN &amp; AMQP over SASL</li><li>•Publishing to Topics and Queues</li><li>•Temporary Queues</li><li>•Keep Alive</li><li>•Synchronous and Asynchronous consuming on topics and queues</li><li>•Flow control</li><li>•Durable subscribers</li><li>•Interoperability with existing AMQP JMS clients (SwiftMQ, Apache QPID and Apache Legacy QPID)</li></ul>
New ordering policy for rolled back messages on queues	<p>When a transactional queue consumer rolls back a message, it needs to be put back onto the queue. Prior to 9.9 this message would be simply republished to the end of the queue. In 9.9 we have changed the default behavior so that the message is re-added to the front of the queue.</p>

Added Item	Description
Per-session SSL settings	It is now possible to specify custom SSL settings per nSession rather than per JVM, e.g. key store, trust store.
JMS resource adapter support	As part of the install we now ship a resource adapter for JMS. Users with existing JMS applications that run on an application server such as JBoss can now seamlessly switch to Universal Messaging as a JMS provider.
Support for dynamically updating Google Protocol Buffer schema	Universal Messaging allows you to attach a Google Protocol Buffer schema to a channel/queue but until 9.9, changing the schema would require deleting and recreating the channel. A channel edit that only changes the schema is now supported without recreating the channel.
Usability improvements for shared named objects	It is now possible to monitor the number of messages outstanding for a shared named object. Due to the architecture of shared named objects it was not previously clear how many events were being stored waiting to be consumed. This information is now available in the API and also visible in the Enterprise Manager.
Enterprise Manager JNDI panel improvements	The JNDI panel has been reworked to make it more user friendly. It now automatically shows the contents for the server you are connected to and does not require entry of a server URL. It is also clearer how to enable shared durables on creation of a connection factory.

## **Release 9.8**

Added Item	Description
WAN interest propagation (Realm Zones)	Zones provide a logical grouping of one or more Realms which maintain active connections to each other. Using zones, Universal Messaging can deliver messages between realms and clusters when interest from one realm or cluster has been registered on another realm or cluster in the same zone. Interest between zones is propagated by manually creating static joins.

Added Item	Description
MQTT 3.1.1 Support	Support for the standardized MQTT protocol version 3.1.1 has been added in addition to the legacy 3.1 version. Additional features now include automatic topic creation, authentication support as well as retained messages and session persistence.
JNDI assets: Connection Factories, Topic Connection Factories, Queue Connection Factories, XA Connection Factories, JNDI Topics, JNDI Queues.	JNDI assets from a source Universal Messaging server can be deployed to a target Universal Messaging server using webMethods Deployer.

Removed Item	Replacement, if any
MQTT Virtual Payload types	Virtual payload type support has now been removed for reasons of compliance to the specification. All MQTT messages are now being handled as JMS bytes messages.

## ***Release 9.7***

Added Item	Description
Interest Propagation	Interest Propagation expands upon the functionality provided by joins to provide the ability to forward information only when there are subscribers present on the remote realm or cluster. By forwarding only events which have an active subscription present reduces the number of events and bandwidth used on these links.
umTransport API (formerly Brokerless API) support for C++	The umTransport API was already available for Java, and now this API is available for C++ also, with some restrictions in functionality compared to the Java-based API.

## **Release 9.6**

<b>Added Item</b>	<b>Description</b>
Java Transport API	To provide a broker-less style of messaging, Universal Messaging now contains a new API, <code>com.softwareag.um.io</code> , which exposes the underlying communication drivers used within the Universal Messaging client and server, and enables direct synchronous and asynchronous communication between client applications using TCP/SSL sockets, SHM (shared memory), or RDMA protocols.
SASL Support	Universal Messaging now provides new security authentication features offering password authentication (Plain and Cram-MD5) via SASL. The Universal Messaging server now accepts username and password credentials from the client, and enables administrators to lock down servers in accordance with specific pluggable providers configured on the Universal Messaging server. These pluggable directory providers include User File (similar to <code>.htaccess</code> files) and LDAP.
MQTT Virtual Payload Types	Universal Messaging now provides MQTT users with the ability to define namespace roots where advanced namespace semantics can be applied. Specifically, the last part of the full topic namespace address can be used to publish / subscribe, indicating your preferred virtual payload type.

## **Release 9.5 SP1**

<b>Added Item</b>	<b>Description</b>
Multicast for Channel/Topic Delivery	Channels/topics now support delivery of events via multicast. Previously, multicast support was limited to Data Group and inter-cluster communication. As multicast is a broadcast mechanism, the consumers can receive events through Multicast only when they do not use selectors in their subscriptions to channels.

Added Item	Description
Individual Message Acknowledgement	<p>With both topic and queue delivery in JMS, the acknowledge model means that if you consume messages 1 through 10, but acknowledge message 5 only, then messages 1 to 4 are also automatically acknowledged. While this is fine in most cases, there is sometimes the requirement for applications to distribute the consumed messages across different threads or other components, which makes this model a difficult fit.</p> <p>We have therefore provided support for acknowledging individual messages, which ensures that only the specified message will be acknowledged.</p>

## ***Release 9.5 SP2***

Added Item	Description
Multicast for Channel/Topic Delivery	<p>Channels/topics now support delivery of events via multicast. Previously, multicast support was limited to Data Group and inter-cluster communication. As multicast is a broadcast mechanism, the consumers can receive events through Multicast only when they do not use selectors in their subscriptions to channels.</p>
Individual Message Acknowledgement	<p>With both topic and queue delivery in JMS, the acknowledge model means that if you consume messages 1 through 10, but acknowledge message 5 only, then messages 1 to 4 are also automatically acknowledged. While this is fine in most cases, there is sometimes the requirement for applications to distribute the consumed messages across different threads or other components, which makes this model a difficult fit.</p> <p>We have therefore provided support for acknowledging individual messages, which ensures that only the specified message will be acknowledged.</p>



## 9.0 Added, Removed, Deprecated, or Changed APIs

Information for a release is listed in this section only if changes occurred in that release.

### **Release 9.12**

Removed Item	Description
API for P2P	The API for P2P was deprecated in 9.10 and has been removed for 9.12.
Support for Adobe Flex	Support for Adobe Flex was deprecated in 9.10 and has now been removed in 9.12.

### **Release 9.9**

Added API	Description
Storage API	The Universal Messaging server has a highly optimized I/O subsystem for efficient serialization of data to and from disk. The umStorage API (Java only) abstracts this layer from the server so it can be used directly by applications. This simple API allows the user to construct any of the standard Universal Messaging storage types (Mixed, Off Heap, Reliable etc.) and easily serialize/deserialize data.

### **Release 9.8**

Added API	Description
com.pcbssys.nirvana.nAdminAPI.nRealmNode <ul style="list-style-type: none"><li>public Zone createZone(String zoneName)</li><li>public void joinZone(Zone zone)</li><li>public void leaveZone(Zone zone)</li><li>public Zone getZone()</li></ul>	Provides Zone management functionality through the Universal Messaging Administration API, allowing users to create a zone, join a realm to a zone, remove a realm from a zone, and obtain realm zone information.

## Release 9.6

### Added API

com.softwareag.um.io

### Description

Provides direct, broker-less synchronous and asynchronous communication between client applications, using Universal Messaging TCP/SSL sockets, SHM (shared memory), or RDMA protocols.

## Release 9.5 SP1

### Added API

**nConsumeEvent** class has new method:

*ack(boolean isSynchronous, boolean ackPrevious)*

Sends an ack for a specific event to the server.

**nConsumeEvent** class has new method:

*rollback(boolean isSynchronous)*

Sends a rollback for this event to the server.

**nQueueTransactionReader** class has new method:

*commit(long eventId)*

Commits all events up to the event ID specified. This means you can partially commit received events.

**nQueueTransactionReader** class has new method:

*rollback(long eventId, boolean isIndividual)*

If *isIndividual* is true, then just the event with the specified event ID is rolled back. This event is then pushed back onto the queue for redelivery. If *isIndividual* is false, then all events consumed after the specified event ID are rolled back.

**nStoreProperties** class has new method:

*enableMulticast(boolean flag)*

If *flag* is true, then the channel/topic will be multicast-enabled. If false, it won't (default).

## Release 9.5 SP2

### Added API

**nConsumeEvent** class has new method:

*ack(boolean isSynchronous, boolean ackPrevious)*

Sends an ack for a specific event to the server.

**nConsumeEvent** class has new method:

*rollback(boolean isSynchronous)*

Sends a rollback for this event to the server.

**nQueueTransactionReader** class has new method:

*commit(long eventId)*

Commits all events up to the event ID specified. This means you can partially commit received events.

## Added API

**nQueueTransactionReader** class has new method:

*rollback(long eventId, boolean isIndividual)*

**nStoreProperties** class has new method:

*enableMulticast(boolean flag)*

## Description

If *isIndividual* is true, then just the event with the specified event ID is rolled back. This event is then pushed back onto the queue for redelivery. If *isIndividual* is false, then all events consumed after the specified event ID are rolled back.

If *flag* is true, then the channel/topic will be multicast-enabled. If false, it won't (default).

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UM-RM-912-20161018