

CentraSite 9.9 Readme

October 2015

This file contains important information you must read before using CentraSite 9.9. 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

1.0	Critical Information.....	2
2.0	Known Issues.....	2
3.0	Usage Notes.....	4
4.0	Fixes Included in Each Release.....	7
5.0	Other Resolved Issues.....	7
6.0	Documentation Changes	20
7.0	Terminology Changes	21
8.0	Added, Removed, Deprecated, or Changed Items.....	22
9.0	Added, Removed, Deprecated, or Changed APIs.....	31
10.0	Copyright Information.....	32
11.0	Support.....	32

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- 18907
API-Portal and Mediator gateways cannot be created after migrating CentraSite to version 9.9. After migrating CentraSite from versions prior to 9.6 to version 9.9, API-Portal and Mediator gateways cannot be created in CentraSite Business UI using the "Create New Gateway" page. To work around this issue, post migration you must add the following snippet to jaas.config under "centrasite" context as the first line:
`com.softwareag.centrasite.security.cache.ShortTermTokenLoginModule sufficient ;`
The jaas.config file is located in the *Software AG_directory/profiles/CTP/configuration* directory.
- INM-19786
Exporting a REST API to swagger format will not generate the correct Swagger specification under the following conditions:
 - When the API has an API level parameter. The workaround is to define it at the Resource level or Method level.
 - When the "path" parameters are not mandatory. The workaround is to make them mandatory.
- INM-19712
In older LDAP configuration, it was possible to specify a ";" separate list of object classes whereas the JAAS configuration only allows to specify one object class for the 'userobjclass' property. If the customer has used the CentraSite command 'generate JaasConfiguration' to transform and migrate the LDAP configuration to the JAAS configuration, it may be possible that the object class list was moved to the JAAS configuration. In that case, an external user search may result in an empty list.
This issue will be resolved in Fix 1. The CentraSite command "generate JaasConfiguration" will transform the values properly.
- INM-19630
If an API is created by importing a Swagger specification file and it's published to API-Portal, upon modification, users will see both the old and newly generated Swagger specification files. The old file can be ignored safely. The out dated file will be removed in one of the next fixes.
- INM-19625
When a SOAP API with "Enabled REST support" action is published to API-Portal; user will see one invalid endpoint added to the possible valid endpoints in API-Portal Try-Out page. The invalid endpoint can be ignored for now and there is no functional impact.

- INM-18455

Service WSDL does not contain binding element for POST method.

When you have a SOAP service configured with the "Enable REST Support" action which provides the ability to expose the SOAP service as a REST Service, the service WSDL does not contain a binding element for the POST method but instead only contains a binding element for the GET method. However, the same service WSDL stored in webMethods Mediator contains the binding elements for both POST and GET methods. As a result, a client can invoke the SOAP service using both methods.

There is currently no workaround for this issue.

- 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. 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. 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
- Support

There 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 will 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.

- Beginning with version 9.9, the execution of reports will no longer be possible neither from CentraSite Control nor from the Designer's 'CentraSite Search and Browse' perspective. The execution of reports will be possible only from CentraSite Business UI.
- YF-1277
Preview on OData Support.
CentraSite provides a preview on the OData support. The preview includes importing of OData metadata through BusinessUI. Preview means that the OData support must not be used in production. The support of OData service instances created with preview capabilities will be limited in future versions.
- API-Portal instances must be republished right after upgrading CentraSite to version 9.9.
After upgrading CentraSite and webMethods API-Portal to version 9.9, you must republish all of the API-Portal instances that were created with previous version of CentraSite before performing publish or unpublish actions on APIs.
- Currently, CentraSite 9.9 is not compatible with webMethods API-Portal 9.7. Software AG recommends using the same version of webMethods API-Portal and CentraSite.
- INM-18818
After upgrading to CentraSite 9.0 SP1 and higher 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 higher will continue to include the targetNamespace of the file.

- INM-17023

Importing older versions of predefined asset types 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 will behave 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 higher. 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 version 9.9 and higher, 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 9.9.

Therefore, you need to adjust your custom SSL configurations after upgrading to CentraSite version 9.9. 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 higher. 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 Password

The following commands have been updated to support the new LDAPLoginModule:

- set Authentication
- get Authentication
- list Authentication
- remove Authentication
- set DefaultDomain

The following command has been newly introduced to support the new LDAPLoginModule:

- generate JaasConfiguration

The 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

- CentraSite Control does not support creating REST Services, XML Services and their Virtual variants in versions 9.7 and higher. CentraSite Control does not have the required options in the “Add Asset” wizard for creating these services in versions 9.7 and higher. After migrating CentraSite to version 9.9, the REST Services, XML Services and their Virtual variants that were transferred to CentraSite 9.9 by an earlier version can only be viewed in the CentraSite Control. You cannot edit or delete these services using the CentraSite Control user interface (even if you belong to the CentraSite Administrator role). Instead of using CentraSite Control, you must use the CentraSite Business UI for creating the following services:
 - REST Service
 - XML Service
 - Virtual REST Service
 - Virtual XML Service

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

- INM_9.8_Fix8

Release 9.7

- INM_9.7_Fix14

Release 9.6

- INM_9.6_Fix19

Release 9.5

- INM_9.5_SP1_Fix20

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

- 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-osi.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.xquery.XQException: 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 9.9

- 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 9.9

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 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
Pending approval enhancement	Now 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.

Removed Item	Replacement, if any
<p>CentraSite report execution from Control and Designer</p>	<p>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</p>
Deprecated Item	Replacement, if any
<p>Impact Analysis</p>	<p>For usecase except the generic traversal, Asset Navigator is preferred.</p>
Changed Item	Description

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">- Mediator Administrator- API-Portal Administrator- Mediator Publisher- API-Portal Publisher <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"> - Publish - Publish to API-Portal - Unpublish - Unpublish from API-Portal <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>
Removed Item	Replacement, if any

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"> ▪ ESB Document ▪ ESB Document Field ▪ ESB Document Type ▪ ESB Folder ▪ ESB Package ▪ ESB Service ▪ ESB Specification ▪ ESB WS Descriptor ▪ ESB WS Operation 	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.	Instead of using CentraSite Control, use the CentraSite Business UI for creating the following services: <ul style="list-style-type: none"> - REST Service - Virtual REST Service - XML Service - Virtual XML Service

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"> - REST Service - Virtual REST Service - XML Service - Virtual XML Service 	<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

Removed Item	Replacement, if any
<p>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.</p> <ul style="list-style-type: none">▪ ESB Document▪ ESB Document Field▪ ESB Document Type▪ ESB Folder▪ ESB Package▪ ESB Service▪ ESB Specification▪ ESB WS Descriptor▪ ESB WS Operation	None.

Deprecated Item	Replacement, if any
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

Copyright © 2015 Software AG, Darmstadt, Germany and/or Software AG USA Inc., Reston, VA, USA, and/or its subsidiaries and/or its affiliates and/or their licensors.

The name Software AG and all Software AG product names are either trademarks or registered trademarks of Software AG and/or Software AG USA Inc. and/or its subsidiaries and/or its affiliates and/or their licensors. Other company and product names mentioned herein may be trademarks of their respective owners.

Detailed information on trademarks and patents owned by Software AG and/or its subsidiaries is located at <http://softwareag.com/licenses>.

This software may include portions of third-party products. For third-party copyright notices, license terms, additional rights or restrictions, please refer to "License Texts, Copyright Notices and Disclaimers of Third Party Products". For certain specific third-party license restrictions, please refer to section E of the Legal Notices available under "License Terms and Conditions for Use of Software AG Products / Copyright and Trademark Notices of Software AG Products". These documents are part of the product documentation, located at <http://softwareag.com/licenses> and/or in the root installation directory of the licensed product(s).

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.

CS-RM-99-20151015