

# webMethods Product Suite 9.8

## Release Notes

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Release 9.8 of the webMethods product suite represents a significant step towards the establishment of Software AG's Digital Business Platform. In addition to expanding the webMethods cloud offerings, this major release improves developer productivity, supports key emerging standards, and makes business users more productive while also helping them make better decisions through improved analytics. Our goal with this release is to provide you with the agility to fully power your digital enterprise.

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## Release Highlights

### Integration

This release of the webMethods suite includes many integration enhancements. It includes advances in cloud integration, declarative template-based provisioning, ODATA support, hot deployment capabilities, advanced API management, and much more.

The key features include:

- webMethods Integration Cloud now enables the development of simple multi-step orchestration flows between any SaaS or on-premises applications, providing support for more complex integration patterns.
- webMethods Integration Server now supports the Salesforce Lightning Connect standard, which is based on OData. This new standard enables applications hosted on Force.com to easily connect and access data from external sources using a simple point-and-click model.
- webMethods Integration Server offers native support for OData version 2.0. Native OData version 2.0 support enables a REST-based protocol for CRUD-style operations (Create, Read, Update and Delete) against resources exposed as data service.
- Software AG Command Central allows provisioning of complex multi-server environments using declarative templates. Users can define environment-specific server mappings and configurations with the simplest possible set of configuration files.
- Software AG Command Central encrypts passwords in templates using a secure shared-secret. This allows passwords to be stored and applied without the risk of being compromised by anyone who has file system access to the templates.
- webMethods Integration Server provides support for the hot deployment of packages, allowing Integration Server administrators to quickly update packages without stopping the server.
- webMethods Universal Messaging now enables the configuration of Zones. Realm servers in the same Zone inform each other about local subscribers to channels/topics, so that other members of the Zone can forward messages to subscribers as needed.
- webMethods OneData's next generation user interface (New UI Preview) now includes new data detail views and advanced filtering.

- webMethods Application Platform now gives users the ability to develop and integrate application logic written in Java into the webMethods platform without proprietary webMethods APIs. Users can utilize popular Java development models (such as POJOs or Spring Beans) as the application logic, and can then run them directly within a webMethods runtime container, removing the need for a third-party application server.
- webMethods Trading Networks provides a variety of charts and dashboards for performing targeted deep analysis on partner transactions. It also features enhanced usability in a variety of areas, including improved keyword search of Trading Partner Agreements (TPAs).
- Terracotta monitoring in webMethods Optimize for Infrastructure includes support for SSL encryption in the discovery of Terracotta Server Arrays (TSAs), detailed Cache Manager and Cache monitoring, and delta readings to cumulative key performance indicators (KPIs).

## **Business Process Management**

The webMethods Business Process Management (BPM) Suite adds more capabilities to the Business Console to improve usability and customization while also providing businesses with the visibility and performance they need to improve decision making.

The key features include:

- Business Console displays user-aggregated data dashboards that allow process and stage level activity, along with better process administration.
- Monitor provides process predictions by showing the percentage of completion, estimating when a process might complete, and calculating the average cycle time for running instances.
- Monitor also features enhanced monitoring of individual instances of a dynamically referenced process.
- Open CAF provides a new approach to user interface development in My webMethods Server (MWS). It gives developers maximum flexibility in creating rich, interactive user interfaces, without being constrained to the proprietary webMethods Composite Application Framework (CAF) framework.
- webMethods Optimize for Infrastructure can now discover and monitor Presto servers.
- webMethods Deployer now allows users to roll back any previous deployment of webMethods Business Rules assets from a Rules Engine on Integration Server. It also allows users to browse and delete existing assets from a My webMethods Server.

## **API Management**

This release of webMethods API Management platform contains significant enhancements to CentraSite Mediator. This release also introduces API Cloud Managed Services, which provides hosting of API-Portal within webMethods Cloud, enabling customers to expose their APIs to internal users, third-party developers, and partners.

The key features include:

- Support for user onboarding that leverages existing social network accounts.
- Administrators can configure private API communities to which users can be assigned or invited.
- Administration user interface allows customization of portal page content as the first level of self-service.
- Individual tenant backup and restoration of API-Portal and collaboration.

## Cross-Suite Enhancements

webMethods product suite 9.8 provides several enhancements across various products. Listed here are a few highlights:

- webMethods 9.8 products support Java 8.
- webMethods 9.8 products support SQL Server 2014 for webMethods database schemas.
- webMethods suite 9.8 installation is supported on Red Hat Enterprise Server Linux version 7.
- Eclipse version for Software AG Designer and its plug-ins have been upgraded to version 4.4.

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For more details about the key additions and enhancements for this release, see the product descriptions.

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For important updates and a list of enhancements and issues that have been addressed since the previous release of each product, see the webMethods product readme files. You can access these documents, as well as all product documentation, from the webMethods area on the [Software AG Documentation website](#).

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## Application Platform

### Develop Application Logic Using Standard Java Frameworks

Application Platform provides users the means to develop and integrate application logic written in Java into the webMethods platform without proprietary webMethods APIs. Also, users can now employ popular Java development models (such as POJOs or Spring Beans) as the application logic and run them in a webMethods runtime container. Consequently, there is no need for a third-party application server.

### Integrate with Integration Server Services

Application Platform services can benefit from bi-directional integration with Integration Server service, such as Flow service or adapter services.

- Use simple Java annotations to expose Application Platform services within Integration Server and make them callable from Flow services, triggers, or web service connectors.
- Automatically create Java class wrappers for Integration Server services to make them callable from the Application Platform service, without using Integration Server's proprietary client APIs.

### Deploy into the Same Container

Application Platform services run in the Integration Server container. Use Asset Build Environment and Deployer to build and deploy Application Platform services from one environment to another.

# CentraSite

## Importers for RAML and Swagger API Documentation Formats

The CentraSite Business user interface supports direct importing of REST APIs that are described through RAML and Swagger API documentation formats. CentraSite 9.8 supports RAML version 0.8 and Swagger version 2.0.

## Scheduled Report Execution

CentraSite provides default reports that API-Portal consumers can use to monitor their API usage for a specific duration. Reports can be scheduled on a regular basis (daily, weekly, monthly) to automatically generate and distribute reports to the e-mail addresses that API-Portal consumers provided during registration.

## Gateway Management in CentraSite Business UI

The unified concept of *Gateways* in CentraSite Business user interface replaces Target Management in CentraSite Control. Using gateways, CentraSite users can create Mediator and API-Portals instances in the Business user interface. Additionally, gateways provide a fine-grained security model that helps control which users can view and use gateways for publishing.

## Archive Import for Business User Interface

CentraSite Business user interface offers a new “Archive Import” option to import assets by importing the archive file (ZIP file) to which the assets were previously exported. The Create Asset Wizard provides access to this new feature.

## Retry Mechanism for API-Portal Communication

CentraSite provides a configurable retry mechanism that ensures the delivery of messages from CentraSite to API-Portal, and protects requests from transient failures that might occur while messages are being sent.

## Unified Publishing for API-Portal and Mediator

The CentraSite Business user interface unifies the previously available “Publish” and “Publish to API-Portal” actions used to publish an API to Mediator and API-Portal, respectively. These actions also support bulk operations in this release.

## Kerberos-based SSO

CentraSite supports Kerberos authentication for SSO.

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# FICO Blaze Advisor, FICO Compiled Sequential and FICO Decision Simulator

## Product Deprecation

FICO Blaze Advisor, FICO Compiled Sequential and FICO Decision Simulator have been deprecated.

## Removal of FICO Blaze Advisor

FICO Blaze Advisor has been removed due to missing Java 8 compliance.

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## My webMethods Server

### OpenCAF

OpenCAF is a new approach to user interface development in My webMethods. OpenCAF gives developers maximum flexibility in creating rich, interactive user interfaces, without being constrained to the proprietary webMethods Composite Application Framework (CAF) framework.

Developers can import HTML, CSS, and JavaScript assets into their project and enrich them with CAF controls (for example, navigation). It provides the best of both worlds, allowing developers to use standard or custom-designed HTML/CSS templates to leverage their favorite JavaScript libraries and frameworks, while using enterprise capabilities (such as navigation, access control, clustering, integration) of My webMethods Server.

OpenCAF surfaces mainly in Software AG Designer with updated wizards for project creation.

### Concurrent Initial Startup

Previously, when configuring a cluster of newly installed My webMethods Servers, users had to start one instance and allow it to finish bootstrapping the database before starting additional nodes. This time-consuming process is now simplified with an automated installation of complex environments. Additional My webMethods Servers detect that bootstrapping is underway, and wait for it to complete automatically.

### Additional Software AG Command Central Support

The following My webMethods capabilities are now exposed through Software AG Command Central:

- Viewing, filtering, and download of log files.
- Configuration of endpoints for Monitor and Business Rules portlets.
- Creation and deletion of My webMethods Server instances from the command-line.

### webMethods Deployer Rollback of My webMethods Server assets

Users can roll back projects containing My webMethods Server assets to a previous state, if required.

## **Deletion of My webMethods Server Assets Using webMethods Deployer**

Deployer supports deletion sets for My webMethods Server assets. Users can browse and select assets for deletion and then trigger their deletion.

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## **Software AG Designer**

### **Eclipse 4.4.0 Update**

Software AG Designer and all its plug-ins are supported on Eclipse version 4.4.0.

### **Software AG Designer Installation**

It is now possible to install Software AG Designer and its plug-ins in a subfolder of C:\Program Files directory in the Windows environment.

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## **Software AG Command Central**

### **Declarative Composite Template-Based Provisioning**

Declarative templates enable the provisioning of complex multi-server environments. Three-level inheritance allows users to customize standard out-of-the-box templates and use them with environment-specific server mapping and configuration through the simplest possible set of configuration files.

Command Central orchestrates installation, patching, and configuration of the environment using parallel processing, wherever possible.

### **Improved Password Handling in Templates**

Previously, outbound passwords were not included in Command Central templates for security reasons. Therefore, passwords had to be set separately after applying a template, in order to make a system operational. Now, Command Central encrypts passwords in templates using a secure shared-secret. This allows the storage and application of passwords without the risk of being compromised by anyone with file system access to the templates.

### **Terracotta Support**

Command Central allows management of Terracotta instances for the following:

- Installation of Terracotta.
- Start/stop of Terracotta instances.
- Configuration of ports.
- Configuration of memory settings.
- Configuration of Terracotta clustering.
- Monitoring of basic KPIs.

- Viewing, filtering, and downloading of Terracotta log files.

### **Additional My webMethods Server Support**

Command Central allows management of the following for My webMethods Server:

- Configuration of endpoints for Rules and Task Engine portlets.
- Creation of My webMethods Server instances.
- Viewing, filtering, and download of My webMethods Server log files.

### **Additional Integration Server Support**

Command Central now allows management of the configuration of remote server aliases in Integration Server.

### **Pre-QA Fix Installation**

Users can install pre-QA fixes with Command Central. Each Pre-QA fix must be enabled with a key that Software AG Global Support provides as part of a Support Incident.

### **Product Installation (Command-Line Interface Only)**

Users can install products on a remote server using Command Central command-line tools or REST APIs. This facility is available for adding products to an existing installation or performing a new installation, especially in combination with Platform Manager bootstrapping.

### **License Installation Report**

Command Central now makes it easier for customers to manage and monitor their compliance with their license agreements. After obtaining an electronic license manifest (which contains complete details of the licensed software) from Software AG, customers can import the electronic license manifest into Command Central, and generate a report showing any mismatch between the landscape known to Command Central and their license agreements.

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## **Software AG Installer**

### **Checksum Verification for Downloaded Files**

Product jar files and product files downloaded from Empower require SHA256 checksum verification.

### **Java 1.8 in Installer DMG and EXE Files**

The DMG and EXE files, used to start the Software AG Installer, contain Java 1.8. The previous release contained Java 1.7.

## **Install Allowed for Some Products in the Program Files Directory**

Users can now install some Software AG design-time products in the Program Files directory of a Microsoft Windows system. The installer indicates which products meet the condition.

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## **Software AG Presto**

### **Dashboard**

Presto presents a new business user-centric and freeform dashboard in this release. This feature offers users an easy-to-use means of generating dashboards based on a flexible layout, visualizing both streaming data and data from Terracotta BigMemory. Users also have the option to refine and condense data from BigMemory before being visualized. The use of Real-Time Analytics Query Language (RAQL) enables this feature. The (Freeform) dashboard comes with out-of-the-box components that include line chart and grid view.

### **Miscellaneous Enhancements**

Presto also offers the following features:

- Configuration of chart themes in Presto Apps.
  - Enhanced querying through RAQL built-in functions for handling date values.
  - Read-only mode to enable users to deploy and execute apps and mashables even if they do not have creation privileges.
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## **webMethods Process Performance Manager**

### **Real-Time to Historic Visual Data Analytics**

Process Performance Manager (PPM) presents and allows process analytics for the user who is directed to PPM from Optimize. When customers implement PPM templates for webMethods BPMS, PPM displays data for the original Optimize process to which the users had referred.

### **Data Analytics**

During overlapping imports, PPM detects duplicate rows using the primary key of the table, and prevents duplication. For this process, the Compact Test Kit (CTK) user interface provides the facility to configure primary key settings.

### **Operations and Automation**

PPM provides additional options for users to work with data sources. Users can now:

- View the current data source list.
- Add and remove currently available data sources.
- Change the order of data sources.

- Create and maintain their own data source lists and use them in their automation jobs.
- Configure PPM job notifications to use different sender e-mail addresses.
- Manually retrieve summary and detailed job status files from the server using a URL.

The other PPM enhancements include:

- Improved PPM which prevents two processes from working on the same data.
- Inclusion of specification for usernames and passwords in individual automation jobs.

## **Content Packages**

Content packages for SAP Sales and Distribution Module and Material Management have been enriched to include additional fields, measures and dimensions, where needed. The additions include Quantity Conversion, Quantities, and Currencies fields.

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## **Software AG Runtime**

### **Single Sign On with Security Assertion Markup Language (SAML)**

In a Software AG Runtime instance of the Common Platform environment, user authentication is possible using a SAML token for single sign on (SSO). The SAML token is validated against an external SAML provider.

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## **webMethods ActiveTransfer Server**

### **Improved Management of Events through Virtual Folders**

webMethods ActiveTransfer offers the ability to use virtual folder definitions (instead of direct IP addresses) in scheduled and post-processing events for remote endpoints involved with file transfers. The use of virtual folders facilitates central management of all endpoints. Any change to an endpoint address only needs a single edit in the virtual folder definition, which automatically reflects in all events that access the endpoint.

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## **webMethods API-Portal**

### **User Onboarding with Social Network Accounts**

API-Portal now supports user onboarding by leveraging existing social network accounts for Google and Facebook.

### **Configurable Onboarding Approvals**

The API-Portal Administrator enables configuration of explicit approvals for user onboarding requests or use of confirmation e-mails.

## **Testing of SOAP APIs**

In addition to REST API testing, API-Portal now provides testing of SOAP-based APIs.

## **API Communities**

Administrators can configure private API communities to which users can be assigned or invited.

When APIs are associated with communities, only community members can view and use the associated APIs.

## **Self-Service Support**

The Administration user interface allows the first level of self-service customization of portal content pages. An easy-to-use editor enables customization of the Home page. In the advanced mode, users can edit other pages by modifying the underlying templates.

## **Tenant Backup and Restore**

Users can back up and restore API-Portal and collaboration data for individual tenants.

## **API Consumption Reports**

Users can request reports on their API consumption through the API-Portal. Based on the configured schedule, API-Portal e-mails the requested report to users.

## **Simplified Architecture**

The number of infrastructure processes needed for API-Portal is reduced by the co-location of several runnables into shared JVMs.

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# **webMethods ApplinX**

## **New Look and Feel for Web Applications**

The look and feel of ApplinX Web applications is enhanced. In particular, for applications specifically designed for easier use on mobile devices.

## **Usability Improvements**

Creating new ApplinX applications is simplified. Users do not need to define a repository, because the application now uses an internal repository.

## **Performance Improvements**

CPU usage is optimized. When using Natural host keys pattern, CPU usage is reduced on average by approximately 50 percent compared to what was previously observed.

## Session Filtering

In ApplinX Administrator, users can filter their sessions by Session ID, Application, Device Name, Duration, State, Connection Pool and Type.

## Detecting Use of ActiveX when Downloading a Natural File

The download process for a Natural file uses a new property which indicates whether the download process uses ActiveX.

## Mobile Browser Support

ApplinX supports mobile browsers (for example, Safari) to:

- Perform checks to indicate whether a particular feature is supported by a browser.
- Override default setting which disables modal windows mobile devices, such as iPad and iPhone.

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# webMethods BPMS

## Business Console

webMethods Business Console includes additional capabilities that enable users to:

- Create and manage group tasks.
- Customize the logo, title, color theme, masthead, and landing page.
- Save and reuse task searches.
- View the process analytics dashboard in the “Processes” tab.

## BPMS: Process Engine, Monitor and Closed Loop Analytics (CLA)

Monitor includes following changes in this release:

- Consolidation and merge of business process dashboard views in the My webMethods Server process administration page.
- Ability to convert the process analytics pages to Google Web Toolkit (GWT) and surface a process analytics page in the “Process” tab of Business Console.
- Ability to surface custom process IDs in a process analytics page and in CLA dashboards.
- Addition of a principal picker in CLA dashboards for escalation of task assignments.
- Ability to provide process projections by showing the percentage of completion, estimating when a process might be complete, and calculating the average cycle time for running instances.
- Use of Call Activities to invoke dynamic processes instead of using the *referenced processes* previously used. The dynamic referenced processes feature is deprecated.
- Ability to monitor individual dynamic referenced process instances.
- Improved Process Engine handling of parent-child status and interface. Parent-child process handling is streamlined and the Process Engine parent-child status and interface is improved.

Additionally, Send Tasks is enhanced to only publish sub-process return documents instead of publishing both native documents and sub-process return documents.

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## **webMethods Broker**

webMethods Broker 9.6 features (tested and supported) in webMethods 9.8 are:

### **Migration Utility**

webMethods Broker offers a new command-line utility to migrate JNDI and JMS assets (such as JMS queues and topics) from Broker to webMethods Universal Messaging. This migration utility provides the ability to automatically move most of an organization's assets.

### **Improvements for Default Settings**

The default values for settings, such as cache, storage file size, parallel channels, and file settings, are adjusted to reflect customers' current common settings.

### **Monitor Authentication**

Broker Monitor connects to Broker Server only after Broker Server authenticates the requesting Broker Monitor. This feature strengthens the Broker Server security.

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## **webMethods Business Rules**

### **New Set of Functions**

A new set of functions is now available in:

- Rules Engine.
- Rules Development feature of Software AG Designer.
- Rules Management Console, including math functions, date functions, inRange functions for dates, conversion functions, and mathematical expressions.

In the Rules Management console, a completely redesigned expression editor replaces the former function editor.

### **Deployer Improvements**

Business Rules now supports automatic rollback for deployment to previous version and state.

### **Command Central Integration**

Inventory, Runtime Status, and provisioning using templates are all available in Command Central for Business Rules.

Within Command Central, users can configure connection information for Business Rules to an Integration Server.

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## webMethods CloudStreams

### Support for an Updated Salesforce connector

CloudStreams connector for Salesforce is updated to support partner SOAP API v31.

### Support Connectivity to Salesforce Wave (Analytics Cloud)

CloudStreams connector for Salesforce supports Salesforce Wave. The connector sends data to Salesforce Wave to help Salesforce generate analytics.

### Support OAuth Tokens in Connection Pools

Users can now configure CloudStreams connection pools to use OAuth tokens for authentication to SaaS APIs.

### Support for Enhanced NetSuite Connector

The CloudStreams connector for NetSuite is enhanced for better usability:

- Identification and automatic selection of mandatory and optional fields.
- Pre-population of NetSuite record fields, based on business object selection and other related conditions.

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## webMethods Composite Application Framework

### OpenCAF

OpenCAF is a new approach to user interface development in My webMethods. It gives developers maximum flexibility in creating rich, interactive user interfaces without being constrained to the proprietary webMethods Composite Application Framework (CAF) framework.

Using OpenCAF, developers can import HTML, CSS, and JavaScript assets into their project and enrich them with CAF controls, navigation, and so on. It allows developers to use standard or custom-designed HTML/CSS templates to leverage their favorite JavaScript libraries and frameworks, while also using the enterprise capabilities of My webMethods Server, such as navigation, access control, clustering, integration, and so on.

OpenCAF surfaces mainly in Software AG Designer, with updated wizards for project creation.

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## **webMethods Deployer**

### **Business Rules Rollback and Deletion**

Deployer includes these new features for business rules:

- Rollback of a previous deployment of webMethods Business Rules assets from a Rules Engine on Integration Server.
- Browsing and deletion of existing webMethods Business Rules assets from a Rules Engine on Integration Server.

### **My webMethods Server Rollback and Deletion**

In this release, Deployer allows users to:

- Roll back a previous deployment of My webMethods Server assets.
- Browse and delete existing My webMethods assets from a My webMethods Server.

### **Deployment of Universal Messaging JNDI Assets**

Deployer deploys JNDI assets to Universal Messaging servers. These include ConnectionFactories, Queues, and Topics.

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## **webMethods Enterprise Gateway**

### **Support for Displaying Connections from Enterprise Gateway to Internal Servers**

webMethods Integration Server Administrator has a new option to display active connections between Enterprise Gateway and Internal Servers. This option is available from Display Connections to Enterprise Gateway Registration Port in the View Enterprise Gateway Server Details screen. The complete navigation is: Ports Screen > Port number of an Enterprise Gateway registration port > Security > Ports > View Enterprise Gateway Server Details > Display Connections to Enterprise Gateway Registration Port.

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## **webMethods EntireX**

These enhancements are part of webMethods EntireX Version 9.7.0.7, which is included with webMethods Suite 9.8.

### **EntireX Workbench under C:\Program Files**

As part of the Software AG Designer, the EntireX Workbench can now be run under C:\Program Files.

### **Support for Java 8**

EntireX now supports Java 8.

## Support for RedHat v7

EntireX now supports Red Hat Enterprise Linux AS 7 on 64-bit platforms.

## Enhanced COBOL and CICS Support

The enhanced COBOL and CICS support includes:

- Use of concrete COBOL data length for a variable number of array elements.
- Mapping of fixed-size COBOL arrays to an unbounded IDL array in the IDL Extractor.
- Inclusion of the maximum expected length of the output data in the CICS RPC Server User Exit before calling the CICS transaction.

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# webMethods Integration Server

## Support for OData Standard

Integration Server offers native support for OData (Open Data Protocol) version 2.0. The purpose of OData is to provide a REST-based protocol for CRUD-style operations (Create, Read, Update and Delete) against resources exposed as data services. Integration Server supports the new asset type OData service. Developers can quickly develop OData services using the OData service wizard available in the Designer Service Development plug-in.

## Web Service Authentication Using Kerberos for Outbound Service Requests

Integration Server uses Kerberos tokens to invoke a Kerberos-secured web service. Integration Server Administrator enables and configures Kerberos authentication for outbound web service requests. At run time, users can also provide includes Kerberos authentication details in a web service connector.

## Support for Salesforce Lightning Connect

Salesforce Lightning Connect is a new way for Force.com applications to connect with backend office applications. Integration Server can host OData-based data services that provide access to backend applications. Force.com accesses these servers and represents the on-premises data as external objects in Salesforce.

## Basic Authentication Support for Universal Messaging Connections

webMethods messaging connections to Universal Messaging servers can now include credentials for basic authentication (username/password). This allows basic secured communications to a Universal Messaging server for webMethods messaging (also known as *native pub-sub*).

## pub.publish:deliver\* Services Support for Universal Messaging

The pub.publish:deliver\* services now support Universal Messaging as well as webMethods Broker. The pub.publish:deliver\* services deliver documents to a specific webMethods messaging trigger or Integration Server.

## **Utility for Migrating Publishable Document Types and Trigger Filters to Work with Universal Messaging**

When switching webMethods messaging provider from Broker to Universal Messaging, users may want to:

- Change the encoding type of the publishable document types to protocol buffers.
- Update webMethods messaging trigger filters to benefit fully from the provider-side filtering available with Universal Messaging.

A new utility, the `pub.utils.messaging:migrateDocTypesTriggersToUM` service, enables the migration of publishable document types and filters for subscribing triggers to work with Universal Messaging instead of Broker. This utility also updates a subset of the publishable document types and triggers. This ability supports a phased migration or updates all publishable document types and triggers in a single operation. The utility also provides a report-only mode that allows the user to inspect the changes the utility will make before the changes are committed.

## **Support for Hot Deployment of Integration Server Packages**

Integration Server allows hot deployment of packages, which enables Integration Server administrators to quickly update packages without stopping the server. When using the “Hot Deployment” option for package deployment, Integration Server queues up new requests coming to the package. After a package finishes handling all existing in-process requests, Integration Server deploys a new package, and then begins processing the queued requests.

## **Support for SOCKS Proxy for Outbound Requests**

Socket Secure (SOCKS) routes network packets between clients and servers through a proxy server. Integration Server supports SOCKS proxy when sending outbound requests to other servers. SOCKS support is limited to versions 4 and 5.

## **Support for Chunking Flow Service Results**

Integration Server provides the ability to chunk results for a specified service. This can be very useful in cloud integration scenarios when an on-premises service returns a large data set to Integration Cloud. Integration Cloud requests the on-premises Integration server to send data in small batches sequentially. This approach is useful on networks with bandwidth constraints.

## **Additional Public Caching Services**

Integration Server provides built-in services that access the batch Ehcache APIs, including `pub.cache:getAll`, `pub.cache:removeAll`, and `pub.cache:putAll`.

## **Removal of WmPKI Package from Integration Server Distribution**

Integration Server version 9.7 announced the deprecation of the WmPKI package. This release removes the deprecated WmPKI package from Integration Server.

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## **webMethods Mediator**

### **Enhanced Logging and Tracing**

Mediator supports a more granular logging configuration to enable better tracing of the Mediator operational and error information. Users can configure logging through Integration Server.

### **Configurable Service Result Caching**

For caching of service results, Mediator provides a new Runtime Policy Action that allows configuration of the caching behavior for each virtualized service. This functionality is available for SOAP- as well as REST-based services, and can be configured in the CentraSite Business user interface.

### **Cross Platform NT LAN Manager (NTLM) Authentication**

Mediator uses NTLM-based authentication on Windows and UNIX-based (Linux) platforms.

### **REST-to-SOAP Transformation**

For the exposure of existing SOAP Services as REST APIs, Mediator provides a Runtime Policy Action that triggers the automatic transformation of XML and JSON payloads to SOAP messages.

### **Content-Type Defaults for REST Services**

A new Runtime Policy Action is available to set the default Content-Type for requests or responses if the Accept or Content-Type HTTP Headers are not specified.

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## **webMethods Mobile Administrator**

### **Switch to Software AG License Format**

Mobile Administrator uses the standard Software AG license key format.

### **Windows Build Node Wizard**

Similar to the Mobile Administrator Mac Build Node wizard, the Windows Build Node wizard highlights and verifies installation steps for all SDKs and dependencies.

### **Improved installation on Suse Linux Enterprise (SLES)**

Installation of Mobile Administrator on Suse Linux Enterprise 11 is improved.

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## **webMethods Mobile Designer**

### **Install Mobile Designer via Software AG Installer Natively**

Now, Software AG installer directly installs Mobile Designer.

### **Program Files Installation**

Mobile Designer (along with Software AG Designer and Mobile Development) supports installation in the C:\Program Files\ folder on Windows platforms. Also, users no longer require administration rights to run Mobile Designer.

### **iOS 8 Support**

Mobile Designer provides full support of iOS 8 and iPhone 6 devices.

### **Support for iOS SDK 8.x**

Mobile Designer (and Mobile Administrator) supports the use of iOS SDK 8.x for development, both for local builds and on Mobile Administrator build nodes.

### **Support for Windows Phone 8.1 Project Format**

Mobile Designer now supports generation of both Windows Phone 8.1 and Windows Phone 8.0 projects. This extended support of the Windows Phone platform allows users to use Windows Phone 8.1 features and distribution formats.

### **Windows Phone Rotation Support**

Rotation of the user interface of mobile apps on the Windows Phone 8 platform is significantly improved.

### **Configuration of Mobile Designer Instance**

Software AG Mobile Development preferences include Mobile Designer configuration of the Mobile Designer instance used in the Software AG Designer workspace. Therefore, the MOBILE\_DESIGNER environment variable is no longer required for Software AG Designer and Mobile Development.

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## **webMethods Mobile Development**

### **Improved New Mobile Development Project Wizard**

In the "New Mobile Development Project" wizard users can select one of the predefined pane configurations for application creation. Furthermore, users can now log in to Mobile Administrator with a username and password instead of an access token.

## **Mobile Development Preferences**

The preferences dialog box for Mobile Development now supports setting a default package name, a Mobile Administrator instance for the "New Mobile Development Project" wizard, and selection of the Mobile Designer installation to be used within the Eclipse workspace.

## **Outline Editor Enhancements**

The Outline Editor now supports:

- Fold and unfold operations for the application model.
- Contextual filtering and sorting of all drop-down properties.

## **Re-orderable List Views**

Native list views can now be re-ordered by the use of native platform conventions.

## **Improved Web Service Definition Language (WSDL) Support**

The existing WSDL support is significantly improved.

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# **webMethods OneData**

## **Enhanced New User Interface Preview**

This release extends the use of the preview of OneData's next generation user interface (which was introduced in version 9.7) for data browsing in the parent-child level hierarchy. The enhancements are:

- New data detail views allow users to see the complete data record in separate screens.
- Advanced filtering capabilities.
- Insertion and editing of data with context menus and screens.

## **Service Layer Improvements**

Service logging and data auditing for incoming data are improved to provide more detailed information (six logging levels) that is presented in a format harmonized across the Representational State Transfer (REST) and JMS application programming interfaces (APIs). The data audit information is also easily accessible through the user interface using new System Objects.

Improvements to XSD generation and handling for data objects allow OneData to support complex data structures as well as easier and more flexible handling of XSDs for API clients.

The REST service performance for data import is also improved.

## **Security Improvement**

OneData now supports SSO between a client browser and OneData with Windows Integrated Authentication using the Kerberos protocol.

## User Interface Improvement in Data Manager

Columns, selected as *Description* while creating foreign keys, appear as hyperlinks in the Data Manager grid. On clicking these column hyperlinks, OneData directs users to the related objects.

## Support Expanded for Interactive Hooks

Integration Server's interactive hooks can use forms and work with OneData objects which have workflows defined.

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# webMethods Optimize for Infrastructure

## Presto Monitoring

Optimize for Infrastructure now includes Presto as a first class citizen. Discovery of Presto and monitoring of its key metrics are now possible within Optimize for Infrastructure.

## Enhanced Terracotta Monitoring

Terracotta monitoring is enhanced to include SSL encryption in the discovery TSAs, detailed Cache Manager and Cache monitoring, and delta readings to cumulative KPIs.

## Enhanced Universal Messaging (UM) Monitoring

The full-featured UM monitoring is extended to include:

- Monitoring support for 9.7 and 9.8 UM servers.
- Simple authentication with user ID and password to connect to Universal Messaging.
- Cumulative KPIs for existing monitoring, and delta KPIs on them.

## Performance Enhancements

The base Optimize engine improvements are:

- Much faster startup time.
- Much higher throughput in both clustered unclustered configurations.

These improvements bring Optimize to new performance levels, enabling its application in situations that would have been unmanageable previously.

## webMethods Optimize for Process

### Enhanced Closed Loop Analytics

Closed Loop Analytics (CLA), which was introduced last release, is enhanced with many new capabilities for business users:

- New Email action in CLA dashboards.
- Support for customer process instance IDs.
- Support for estimated process completion time.
- New principal picker in task assignments.

Additionally, the user interface presents many aesthetic changes.

### New KPI Type: Counter

In earlier releases, while Optimize performed robust statistical analysis of inbound streaming data, it lacked the simple ability to define a KPI that counted events and records. The current release addresses this gap. Now, users can create KPIs that count the occurrences of any *non-blank* field in an Optimize event.

### In-context Jump to PPM for Exploration

Should users see something on a dashboard that requires additional investigation to understand its root cause, they can now jump directly to PPM while retaining the original context of the dashboard. Once in PPM, the user has the full strength of the PPM engine to explore historical data related to the process under investigation.

### Performance and Scale Enhancements

In addition to immensely improved throughput of KPI Engine, DCA Dimension handling and Stats engine, the startup time of Analytic Engine is greatly reduced. When coupled with the ability to horizontally scale Analytic Engines, this release meets and exceeds the throughput requirements of even the most demanding operational situations.

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## webMethods Service Development

### Support for VCS Operations from the Package Navigator View

When using the Local Service Development feature, users can perform Virtual Client Services (VCS) operations on Integration Server assets directly from the Package Navigator view instead of from the Package Explorer view. This improvement streamlines the user experience and reduces the number of steps required to complete the task.

*Note: If your VCS client is Team Foundation Server, you cannot use this feature with Java services.*

## Support for OData Standard

Integration Server offers native support for OData (Open Data Protocol) version 2.0. The purpose of OData is to provide a REST-based protocol for CRUD-style operations (Create, Read, Update and Delete) against resources exposed as data services. Integration Server supports the new asset type, OData service. Developers can quickly develop OData services using the OData service wizard available in the Designer Service Development plug-in.

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## webMethods Trading Networks

### Enhanced B2B Analytics

webMethods Trading Networks includes a variety of charts and dashboards for deep targeted analysis on partner transactions. Users have an additional set of dashboards and charts to monitor a variety of metrics, either across all partners, or for a specific partner. The metrics include transaction volume trends, total value trends (based on purchase order amount, invoice amount, and so on), late functional acknowledgement (FA), violations, and the split between successful and failed transactions. Filtering of the information shown in charts is also possible to focus on a sub-set of partners (top-tier, bottom-tier, and so on).

### Improved management of TPAs

webMethods Trading Networks has simplified the editing of Trading Partner Agreement (TPA) parameters, especially for TPAs containing an array list. An array list now appears as a table in a pop-up window. An administrator can create rows for and add values to child elements. The tabular representation makes it easy for users to compare values across all the elements in an array without opening and closing each element individually.

### Improved Usability

webMethods Trading Networks has enhanced usability in a variety of areas:

- Improved keyword search of Trading Partner Agreements (TPAs), where keywords can now search for senders and receivers, in addition to agreement ID.
- Trading Networks maintains context sensitivity across all its screens. The initial state before a user's action is recorded, and returns the user to the initial state after a user action is complete.
- Users can also directly import ZIP files as well as bin and XML files. Administrators no longer have to extract ZIP files before importing them.

### Support for Substitution Variables during Deployment

webMethods Trading Networks enables users to specify substitution values for almost all assets. This ability to substitute values during deployment removes the need to go into target systems to tweak configurations after deployment. For easy monitoring and tracking of deployment activities, Trading Networks Activity logs the deployment of all assets through Deployer.

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## webMethods Universal Messaging

### Automatic Interest Propagation Using Zones

Universal Messaging now allows the configuration of Zones. Realm servers in the same Zone inform each other about local subscribers to channels/topics, so that other members of the Zone can forward messages to local subscribers when required. This minimizes unnecessary wide area network (WAN) traffic by only forwarding messages when there is a known interested party on the remote Realm server.

Also, users can configure Zones from the Enterprise Manager or by using a newly introduced section of the Admin API. This feature is the equivalent of webMethods Broker Territories.

### Basic Authentication with Admin API and Enterprise Manager

The Universal Messaging Admin API and Enterprise Manager support the passing of basic authentication credentials when a connection is established. This provides a more secure configuration of the Realm and improved authentication of administrative clients.

### Realm XML Export Includes JNDI Assets

XML export of a Realm server now includes the option to export JNDI assets: ConnectionFactories, Topics, and Queues. These are used for deployment using Deployer.

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## Documentation

Significant changes to product documentation sets or to individual documents are described in the readmes for each product.

### webMethods BPMS

- Business Console includes context-sensitive online help.

### webMethods Mobile Administrator

- Information previously in the *webMethods Mobile Administrator Configuration Guide* is now included in the new *webMethods Mobile Administrator User's Guide*. The *webMethods Mobile Administrator Configuration Guide* is deprecated.

### Distribution of Documentation

- Documentation is now no longer available for download from the Software AG Installer.
- Customers with existing Empower credentials can view and/or download the documentation from the Software AG customer portal Empower at <https://empower.softwareag.com/Products/Documentation/>. For convenience, selection boxes are available on the web pages for flexible bulk download of product documentation as zipped content.

- Users registered with the Software AG TechCommunity can view the documentation at <http://techcommunity.softwareag.com/>. When registering with the TechCommunity, users must select Documentation as an area of interest on the registration form.

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## Upgrade

### Infrastructure

Migration of infrastructure for webMethods and IBO products that are running on the common platform has been completely automated. This includes migration of Software AG Runtime. You now migrate all infrastructure and Software AG runtime using the Infrastructure migration utility.

### Command Central

Migration of Command Central port configuration has been automated; you can migrate port configurations using the Command Central migration utility. You can also migrate the ehCache DiskStore used by Command Central.

### Platform Manager

Migration of Platform Manager port configuration has been automated for upgrade from 9.6 or 9.7; you can migrate port configurations using the Platform Manager migration utility.

### My webMethods Server

The My webMethods Server migration utility now supports the use of a zip file containing the source installation. You no longer have to copy the actual source installation to the target machine and recreate the directory structure.

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WEBM-RN-98-20150707