webMethods Release Notes

Version 11.1

September 2024

Release Highlights

IBM webMethods offers a wide range of capabilities, including application and B2B integration, API management, managed file transfer, micro-services, high-speed messaging, and process automation.

- [IBM webMethods Integration](#)

- [IBM webMethods API Management](#)

- [IBM webMethods B2B](#)

- [IBM webMethods Managed File Transfer](#)

- [IBM webMethods BPM](#)

- [IBM EntireX](#)

- [IBM ApplinX](#)

IBM webMethods Integration

The IBM webMethods Integration consists of two main components: the webMethods Integration Server and the webMethods Microservices Runtime. These components make it easy to connect different systems, applications, and data sources, allowing seamless digital integrations for enterprise clients. The latest version, webMethods Integration 11.1, improves the integration process by delivering enhancements to integration capabilities across runtime and design time, making it more efficient, secure, and connected.

Key updates:

- To address the evolving landscape of messaging providers, 11.1 introduces a new event streaming framework that uses a technology agnostic approach, with initial support for Kafka, which delivers greater flexibility and allows developers to integrate natively with any platform.

- Security is the key to any successful integration. Features like security profiles, strict output filtering, and other standards-based improvements give administrators more tools to protect the integrity of their runtime environments.

- Developer-focused updates in webMethods Designer include updates for service development such as reference data for static lookups, webMethods package registry in webMethods Designer, and updated Admin APIs for improved remote operation and configuration.

- To make using runtimes more efficient, improvements include a new shutdown option to wait for running services to complete and include additional useful metrics on startup and loading errors.

- Improvements for hybrid use cases in key areas such as metrics, alerting, and performance. Hybrid use cases include transactions that span the iPaaS offering and self-hosted runtimes.

IBM webMethods API Management

IBM webMethods API Management offers a comprehensive list of features to enable organizations to effectively identify and authorize consumers, increase engagement, and integrate APIs in their applications.

Key updates:

- Consumption plans support all API consumer identification types. Earlier versions supported only API keys for identification. Version 11.1 adds support for all suitable consumer identification methods.

- Improved OAuth deployment strategy. Previously, settings for OAuth strategies and credentials were overwritten on consumer application deployment, requiring manual resets. In 11.1, administrators can choose to overwrite or preserve these settings.

- Early engagement with API consumers. The API management platform provides the capability to host beta programs and hackathons to enable developers to actively engage with API consumers and receive early feedback.

- Facilitates REST API integration. Features for viewing and copying sample code snippets in multiple programming languages for REST API resources and downloading of client SDKs help developers to quickly integrate the REST APIs in their applications.

- Payment gateway support. Organizations can generate direct revenue from API usage by configuring a payment gateway account.

- Localization. Option to configure a default language for the Developer Portal to enable localization of the welcome page, in addition to already existing profile language settings.

IBM webMethods B2B

IBM webMethods B2B includes webMethods B2B Trading Networks. webMethods B2B, a B2B integration and supply chain management solution, facilitates electronic transactions between businesses by providing a centralized platform to manage, monitor, and secure interactions with trading partners. It is designed for organizations that need robust and secure B2B integration with partners, coverage for a broad range of industry standard protocols, and powerful tools for automation, visibility, and compliance.

webMethods B2B 11.1 adds functionality for secure e-Invoicing and other e-Doc support through the addition of the PEPPOL protocol for eStandards and Trading Networks.

IBM webMethods Managed File Transfer

Built on the proven webMethods Integration Server, webMethods Managed File Transfer enables IT organizations to replace antiquated and non-secure file transfer systems with a consolidated, easy-to-use platform.

Key updates:

- Managed File Transfer now supports Google Cloud Platform and self-hosted S3 storage (non-Amazon S3) for both virtual file systems and events.

- HTTP API support for file operations - create, rename, delete, and so on.

- Transaction logs are enhanced with client IP information and transaction log data enables post-process events to be re-executed.

- Security enhancements include host key fingerprinting for SSH services and encryption and decryption in PGP tasks.

- Database archival can now be scheduled and logs can be viewed from the archive database.

- Managed File Transfer server supports Microsoft Azure Active Directory user and group management.

- Timezone configuration for date and time related server variables evaluation and greater than and less than operators are supported in Jump task.

IBM webMethods BPM

Key updates:

- My webMethods Server runtime now supports the latest compatible versions of Jetty 9.4.x and JavaServer Faces 2.3.9.

- My webMethods Server now provides enhanced support for user directory connectivity by replacing the Netscape SDK with support for UnboundID LDAP.

- BPM Business Rules runtime includes performance improvements for faster and more reliable rule execution within automated business processes.

- BPM Task Engine implementation for webMethods Integration Server includes lightweight user task management for automated business processes, supports running in pure integration scenarios, enables an enhanced REST layer support to all core functionalities.

- My webMethods Server and Glue support IPv6.

- My webMethods Server now supports OAuth authentication for e-mail protocols for Microsoft Office Exchange Online and Microsoft Office 365.

IBM EntireX

IBM EntireX 11.1 provides comprehensive connectivity across IBM z/OS, Linux, and Windows applications, enabling .NET and Java integration through REST APIs, client libraries, programmatic access, SOAP, messaging, native COBOL, and natural-language programming.

Key features:

- Provides integration with Natural using NaturalONE, an Eclipse-based development environment with pre-defined templates to integrate with Natural applications. In addition, EntireX provides integration with a wide variety of COBOL programs and can support features such as multiple output handling. This is achieved by mapping to avoid changing underlying source code. The functionality to automatically map functions with languages such as COBOL to modern programming languages such as Java without interfering with the back-end program.

- EntireX uses multiple communication models to meet the demands to trigger events between hybrid cloud environments. This is achieved by using asynchronous remote procedure calls (RPC), synchronous request-reply, and conversational RPCs. Therefore, EntireX can support inbound and outbound symmetrical messaging to start messages from either environment.

- EntireX provides connectivity with the webMethods Integration Server, to provide REST API connectivity for Java, .NET, or web services to connect core applications to a hybrid cloud environment.

IBM webMethods Release Notes 11.1   9

IBM ApplinX

IBM ApplinX 11.1 is designed to provide access to an organization's terminal-based applications through a browser-based web terminal, modern front-end application, enterprise-wide web services, or externally through REST APIs.

Key features:

- Displays existing terminals on an emulated web browser using a browser-based HTML emulator available in a .NET and J2EE environment. This can include customized AngularJS, React, or Vue.js front-end web apps.

- Uses default wizard-based transformations and simple web configurations to improve the design of IBM z/OS and UNIX terminals. The transformations can include designing top and side images, modifying style sheets with different fonts and colors, and the ability to aggregate information from multiple core systems on one page, integrating assets such as screen, transaction, and data information at various levels to meet business needs and customize web frameworks.

- Leverages automation to perform screen test automation for unit tests by utilizing manual steps to allow automated screen testing. This includes screen capture and definition for the developer to navigate through the test as an end-user, create test cases including test scripts, execute and then analyze test results.

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

Table of Contents

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 [IBM Documentation website](#).

IBM webMethods Integration
(IBM webMethods Integration Server, IBM webMethods Microservices Runtime, and IBM webMethods Service Development)

Event Streaming Framework

Introducing a new streaming framework designed to offer a scalable solution for evolving messaging standards and event-driven architectures. The framework currently supports Apache Kafka, with plans to add more providers in the future. Use the framework to develop event processing workstreams that process large volumes of events. Try out the framework in 11.1 by installing the WmStreaming package from the https://packages.webmethods.io/ registry.

Security Profiles

Simplify runtime hardening with pre-defined security profiles that offer default configurations, easily enabled by administrators. When activating these profiles, thorough testing and validation of services are essential to ensure functionality remains unaffected.

Package-Level Global Variables

Define variables at the package level, which can be loaded into the runtime as global variables.

Reference Data

Designer now supports reference data for running static lookups, aiding in service development.

Strict Top-Level Service Output

Control the output pipeline for any top-level service to return only the values specified by the service output. This ensures that all other values are removed, helping to prevent sensitive information from being inadvertently leaked through the output pipeline.

Configuration Enhancements

Several enhancements simplify runtime deployment in container orchestration and other variable configuration scenarios:

- Debug level can now be set with environment variables.

- Configuration variable template files now support default values, ensuring that defaults are applied if environment variables are not set.

- The webMethods Package Manager (WPM) is now built into all container images included in this release, making it easier to layer customer images with the necessary adapters and custom packages. WPM is a new Command Line Interface (CLI) tool that allows both developers and administrators to download and install webMethods packages into an Integration Server or Microservices Runtime.

New Shutdown Option (After all Service Executions end)

Runtimes can shut down more gracefully and predictably by allowing all ongoing service executions to finish while preventing new ones from being queued once shutdown is initiated.

Hybrid Connectivity Improvements

Several enhancements that improve reliability and transparency were made to support the use of runtimes in hybrid mode with webMethods.io:

- Updated alerting for hybrid connectivity issues.

- Added hybrid connectivity details to the health endpoints in the Admin API (/health).

- Improved connectivity session handling to prevent DoS scenarios.

- Introduced compression support.

- Enabled sharing of cloud context ID with self-hosted runtimes for easier tracing and diagnosis in hybrid setups.

- Enhanced retry and recovery mechanisms for hybrid connectivity, boosting resilience.

Admin API Enhancements

- Retrieve global variables by package to display package and global variables along with their references in flow services or connections.

- Create package-level variable.

- File-based upload and download of all global variables.

- Allow reference data to be read and updated.

- Facilitate creating and managing streaming connections and triggers to support the new event streaming framework.

- Retrieve and filter allowed and restricted service lists by package.

Security Enhancements for Built-In HTTP Client Services

Security-conscious features such as service-level hostname verification, validation of certificate revocation and expiration, and cipher suite selection provide an enhanced experience with the built-in HTTP client.

Support for Java Cryptography Extension (JCE)

Enable Java Cryptography Extension (JCE) support for encryption, decryption, and signature functions of the built-in security services (pub.security).

Enhanced Security Settings for JDBC Connections

Allow the use of keystore and truststore aliases to provide credentials for JDBC connections in the user interface to avoid providing credentials in plain text in JDBC connection URLs.

Password Hashing Algorithm

A new algorithm for password hashing (PBKDF2) aligns with the security standards NIST SP 800-132, IETF 2898, and FIPS 140-2.

SQL Injection Protection Filter Exception

A new extended setting allows users to bypass SQL injection protection filter scanning for specified content types.

Error Detailing Control for HTTP

Administrators can configure the level of detail disclosed in HTTP error responses. This feature helps address concerns about detailed server information being exposed to malicious actors through error responses.

Support for JSR 107-Compliant Public Caches for Service Results

Integration Server now supports using a public cache for service results that follows the requirements of the Java Specification Request 107 (JSR 107).

User Interface Improvements

- Improved dynamic resizing and responsiveness on the package home page and administrative user interface.
- OAuth tokens can now be labeled for easier identification by administrators.

Trading Networks (TN) Support for Microservices Runtime (MSR)

MSR now supports TN usage with the necessary licensing and commercial arrangements in place.

Support for New Datatypes in gRPC

Implemented support for MAP and ENUM datatypes in accordance with the gRPC framework.

Upgraded Java Messaging Service (JMS) API

Runtimes now support the JMS 2.0 standard.

Large File Support for MIME

Added large file support for MIME services in pub.mime.

Statistics Retention Change

Decreased the default retention period and disabled default statistics capture in Enterprise Gateway to reduce reported database load. These settings can be reverted if needed.

Metering Log

The metering simulator now writes service transaction usage to a separate metering log.

Removed Alpine-Based Images from Container Releases

Starting from version 11.1, Integration Server and Microservices Runtime container images provided by IBM will no longer use Alpine as a base image. Red Hat Universal Base Image (UBI) will be used exclusively as the base image. Ensure that any custom images built with the base image are validated for functionality with this change.

Removed support for Event Driven Architecture (EDA)

Removed support for Event Driven Architecture types and supporting services in pub.event.eda and pub.event.routing.

Removed support for Digital Event Services (DES)

Removed the pub-sub intercommunication capability previously used for communication between webMethods products. This change streamlines the architecture and eliminates legacy dependencies.

Removed support for Open Services Gateway initiative (OSGi)

Removed support for the OSGi module system for Java within the runtime products. This change simplifies the system and focuses on more modern and efficient module management solutions.

Removed WmConsul Package

Removed WmConsul package and all supporting services in pub.consul.

Removed packages from MSR images

Removed WmISExtDC and WmARTExtDC packages from MSR container images.

Removed packages from MSR images and provided alternative installation method

Removed the WmFlatFile, WmXSLT, and WmJSONAPI packages from MSR images. These packages are now available in the webMethods Package Registry at packages.webmethods.io and can be installed via webMethods Package Manager (WPM).

IBM webMethods Designer

Designer Upgraded to Eclipse 4.25 & Java Azul 17

Designer now uses Eclipse 4.25 and Java 17.0. Check your code for compatibility.

https://eclipse.dev/eclipse/development/readme_eclipse_4.25.php
https://docs.azul.com/core/release/17-ga/release-notes

Removed CentraSite Support

Designer no longer includes support for CentraSite.

IBM webMethods Integration Test Suite

WmUnitTestManager Package

Improved setup, execution, and analysis of tests, all made available to you as a package in webMethods Package Registry (https://packages.webmethods.io/). Install the package from the registry.

IBM webMethods Adapters

Released Adapters

- IBM webMethods Adapter 10.3 for JDBC

- IBM webMethods Adapter 6.5 for MQ

- IBM webMethods Adapter 10.1 for SAP

- IBM webMethods Adapter 9.6 for Apache Kafka

- IBM webMethods Adapter 10.3 for OPC

- IBM webMethods Adapter 8.2 for Salesforce

- IBM webMethods Adapter 10.11 for IBM Power

- IBM webMethods Adapter 9.12 for MongoDB

IBM MQ V9.3 Certification

webMethods Adapter 6.5 for MQ is certified with IBM MQ v9.3

Support for Integration Server Quiesce Mode

Support for Integration Server's Quiesce mode is added for all ART-based adapters.

IBM webMethods CloudStreams

Z-Function / Z-Field and ClientId support for SAP S/4 HANA Connector

Z-Function / Z-Field and ClientId support were introduced in the SAP S/4 HANA Connector, so that the private and customized S/4 HANA endpoints can be supported.

CloudStreams Connector for Salesforce v60 REST API

A new CloudStreams connector is now available for Salesforce v60 REST API versions.

Netsuite REST Connector with Search API

NetSuite REST connector is released to cover the NetSuite search API.

Mashzone Based Cloudstreams Analytics Dashboard

The MashZone based CloudStreams Analytics dashboard has reached its end of life and is no longer supported from this release.

IBM webMethods Universal Messaging

New Features

The following features are added in IBM webMethods Universal Messaging:

Client Support for JMS 2.0 and Jakarta Messaging 3.0

The Universal Messaging Java client now supports JMS 2.0 and Jakarta Messaging 3.0 in addition to JMS 1.1.

Support for Java 17

Starting with version 11.1, Universal Messaging supports only Java 17 as a runtime for the server, client, and tools components. Other Java versions are not supported.

Monitoring Durables Using the Java Client API

You can use the Java Client API to obtain the details of a durable including last read time, last write time, pending events, number of connections, and number of outstanding events. You can use the following new and modified objects and methods:

- com.pcbsys.nirvana.client.nDurableDetails - new object that contains the details of a durable.

- com.pcbsys.nirvana.client.nDurable#getDetails - new method that returns an object containing the details of a durable.

- nDurableManager#get() - existing method that returns an updated durable for a specific channel.

- nDurableManager#getAll() - existing method that returns all durables for a specific channel.

User Connections JMX Bean and Metrics

Universal Messaging exposes a new JMX bean named Universal Messaging User Connections, which enables access to data about the number of current sessions each user has established to the server. You can use the related NumberOfConnections JMX metric and sag_um_connections_per_user Prometheus metric for monitoring.

New Healthchecker Tool Check

The new JoinLastEIDMismatchCheck of the HealthChecker command-line administration tool checks for joins that are ahead of a channel's last EID.

Flag For Deprecated Realm Configuration Properties

In the Universal Messaging Enterprise Manager, the deprecated realm configuration properties are now marked as [Deprecated].

New Properties

Server Parameters

The following server parameter is added in Universal Messaging:

- AuthenticationTimeLogThreshold

  Enables the server to report warning messages if a connection takes more than a specified time to authenticate.

Client Parameters

The following client parameters are added in Universal Messaging:

- DisplayCurrentThreadID

  Specifies whether thread ID logging is enabled.

- com.softwareag.um.client.missed_keep_alives

  Specifies the number of missed server-side keep-alive intervals before the client closes a connection.

- com.softwareag.um.client.realmnode.cleanup

  Specifies whether to clean up internally created nRealmNode objects when an nRealmNode is closed if no other references to these objects exist. By default, the property is set to 'true', which means that the server closes and cleans up internally created nRealmNodes.

Realm Configuration Properties

The following realm configuration properties are added in Universal Messaging:

- MaxNoOfConnectionsPerUserName

  Specifies the number of concurrent connections to a Universal Messaging server per user.

- LogLevel

  Specifies the server log level when the server uses the fLogger or Log4j2 logging framework. Use this property only for the fLogger framework or when LogLevelOverride is set to 'true' for Log4j2.

- FlushHandlerThreads

  Specifies the number of threads to allocate for flushing client data through connection flush write handlers. This property replaces the deprecated NetworkMonitorThreads.

IBM webMethods B2B Trading Networks

Product Enhancements

Full Containerization Support

You can produce production-ready Docker images directly from source code and provide capabilities for participation in unified CI/CD images promotion process.

PEPPOL Support

The addition of the PEPPOL protocol for secure e-Invoicing and other e-Doc exchange.

IBM webMethods API Gateway

Continuous Value Delivery Model

Starting from 11.x release, webMethods API Gateway consistently introduces new features and improvements in its periodic updates. This allows you to swiftly tap into added value rather than waiting for the next major version release.

Faster Provisioning and Smaller Deployment Footprint

webMethods API Management now includes several architectural improvements. The policy enforcement runtime engine now resides on the Microservice Runtime (MSR) instead of the Integration Server (IS), and the Tanuki wrapper is removed.

API Monetization Enhancements

Consumption plans now support all API consumer identification types. Prior to version 11.1, only API Keys were supported. Version 11.1 introduces support for all suitable consumer identification methods.

Deploying Consumer Applications

Improved OAUTH strategy deployment. Previously, OAUTH strategies and credentials were overwritten on consumer app deployment, requiring manual resets. Now, administrators can choose to overwrite or preserve these settings.

API Control Plane Agent Configuration Using API Gateway UI

webMethods API Gateway offers the functionality to manage API Control Plane agent configuration using both the API Gateway UI and REST APIs. Setting up API Control Plane as a destination establishes the communication link between API Gateway and API Control Plane. Data synchronization from API Gateway to API Control Plane occurs only when the API Control Plane agent is configured, and communication channels are successfully established. Upon successful connection, the API Control Plane agent initiates the transmission of health check statuses, asset information, and runtime metrics from API Gateway to API Control Plane. This enables informed business decision-making through metrics' analysis.

JWT Time Tolerance Clock Skew Support

This enhancement focuses on validating JWT tokens considering clock skew. When verifying the JWT tokens' expiration and not-before claims, a minor time variance might exist between the API Gateway and the external authorization server. In such instances, API Gateway might not authorize JWT tokens. To address this concern, a clock skew value can be established at the global level using the pg_JWT_clock_skew_seconds extended setting. This clock skew value can be configured within the external authorization settings.

Elasticsearch Upgrades

You can upgrade Elasticsearch without causing API Gateway downtime.

Enhancements to Log Aggregation

Log aggregation is now streamlined through Fluentd, enhancing efficiency and flexibility in managing your application logs.

IBM webMethods Developer Portal

API Control Plane support

Customers are now able to add the IBM webMethods Developer Portal as a runtime in the API Control Plane for visualizing the entire hybrid multi-cloud webMethods API Management landscape.

Fine-Grained Consumer Visibility

Fine-grained controls over which consumers can see which other consumers to help administrators protect the identity of users.

API Code Snippet and SDK Download Function

Users can view and copy the code snippets or download entire project SDKs in multiple programming languages to quickly integrate the APIs in their applications.

Ability To Host Beta Programs and Hackathons

Organizations can increase their reach and engagement with users by organizing hackathons and beta programs.

Partner Privilege Introduction

A partner privilege is added to enable some API provider organizations to only able to manage their own APIs.

Invite User Functionality

New users can be invited from IBM webMethods Developer Portal to set up their own credentials.

Payment Gateway Support

Organizations can generate direct revenue from APIs by configuring Stripe payment gateway.

Locale Configuration

IBM webMethods Developer Portal supports extensive localization capabilities with the addition of a locale switcher on the **Welcome** page.

Pending Approval Page Enhancements

The **Pending approvals** page is enhanced to provide additional details on the pending requests.

Onboarding Notifications Enhancements

When a new user signs up or an application is requested, the requestor will receive notifications stating the reason for approval or rejection.

IBM webMethods Managed File Transfer

(IBM webMethods Managed File Transfer Server, IBM webMethods Managed File Transfer Agent, IBM webMethods Managed File Transfer Gateway)

SSH Host Key Fingerprinting

Managed File Transfer Server will now verify the Host Key while making SSH connections and will alert the user if the key has changed. This will prevent potential man-in-the-middle attacks.

Support for Google Cloud Services

Introducing GCP integration for both VFS and Events. Users now have the choice of using GCP Cloud Storage as the VFS or through Events for all file related operations.

Support for Hosted S3 storage

Enabling the support for Hosted S3 storage. Hosted S3 buckets can now be connected using endpoints. Endpoint provides a way for an S3 request to be routed through to the S3 service.

Azure AD Integration

Managed File Transfer Server now supports Azure Active Directory (AD) as an external directory service using the Microsoft graph library.

IP Banning and Unbanning

Banned IP Addresses can now be unbanned from within the same UI on an ad hoc basis by the administrator.

Server Variables Support in Email TO, CC, And BCC Fields

Email fields TO, CC, BCC now support server variables.

Support for Signing and Signature Verification in PGP Tasks

As part of the PGP encrypt task, a file can also be signed and the signature in the source file can be verified in the PGP decrypt task.

Post Processing Action Re-Execution

Support is now provided to re-run post-processing actions in case of failure due to issues like network failure.

HTTP API Support

Managed File Transfer Server now supports operations on HTTP/s listeners through API, so that they can be triggered programmatically.

Database Archival Scheduling

Database archival can now be scheduled to run at pre-defined intervals.

Ability To View Logs from Archive Database In MFT

Introduced the ability to view data from the archive database as well.

Date/Time Validation Against Chosen Time Zone

Date and time-related server variables are now evaluated based on the time zone selected in the server settings.

Support for Greater Than and Less Than Operators on Jump Task

In Jump task, the *greater than* and *less than* operators are now available for setting up conditions.

IBM webMethods BPM

(IBM webMethods BPM Process Engine, IBM webMethods BPM Business Rules, IBM My webMethods Server, and Content Adapters)

- All IBM BPM webMethods runtimes now support Java 17.

- The My webMethods Server runtime now supports the latest compatible versions of Jetty and JSF. The current Jetty version is 9.4.54 and the JSF version is 2.3.9 (including fixes).

- My webMethods Server now provides enhanced support for user directory connectivity by replacing the Netscape SDK with the UnboundID LDAP SDK.

- The Business Rules runtime includes performance improvements for faster and more reliable rule execution within automated business processes.

- The runtime deployment behavior for rule projects is improved. New rule projects are now deployed before the old projects get removed, ensuring zero downtime and better availability.

- The Task Engine implementation for Integration Server, which allows including lightweight user task management for automated business processes, running in pure integration scenarios now provides an enhanced REST layer with support to all core functionalities.

- IBM My webMethods Server and Glue support IPv6.

- My webMethods Server now supports OAuth authentication for e-mail protocols for Office Exchange Online (Microsoft Office 365).

IBM EntireX

What's New

- EntireX Broker Enhancements

- EntireX Adapter Enhancements

- Security Enhancements

- Other Changes and Enhancements

EntireX Broker Enhancements

- zOS Broker may start local server if requested service is not available. A Broker on zOS can now start a local server if requested and configured accordingly.

- New CLEANSCM command to purge UOWs. A new command, CLEANSCM, is introduced that can implicitly execute the commands for purging UOWs, deleting the conversation and shutting down the service.

- New PSTORE ACBX based implementation. For ADABAS used as PSTORE, larger block sizes are used to reduce the number of ADABAS calls.

Security Enhancements

Authenticate using SSL client certificates on LUW platforms. In addition to a password, SSL client certificates can also be used to authenticate a user on Linux and Windows systems.

Other Changes and Enhancements

Java Version

The Java version used is now Java 17.

Licensing

This EntireX version does not need any license file, neither for installation, nor at runtime.

IBM ApplinX

Multi-Session Functionality Support

ApplinX 11.1 (and later) support the ability to open multiple sessions on different browser tabs. Each browser tab uses a different session. This allows users to function independently across multiple tabs.

Session-Level Code Page Configuration Support

This feature supports code page configuration from the application (JSP and .NET) and enables the configuration of distinct code pages for different sessions.

Ability to Retrieve Partial Fields from the Screen API

This release enhances the Screen API, providing a flexibility to retrieve partial field sets by specifying a row range.

Accumulated Screens Included in Output for Path Procedures REST Endpoints

This release implements the functionality to return screen data from the path procedure having only flat attributes and screens that are sending data to the base object.

Enable SSL/TLS Support for SMTP

This release implements an enhanced SMTP connection feature to ensure robust and secure email communication. It includes the following:

- Custom Ports: Allows specification of customer ports for SMTP connections, providing flexibility in configuring email services.

- SSL/TLS connections: Supports secure email transmission with SSL/TLS protocols. It includes compatibility with TLS 1.2 and TLS 1.3, ensuring high data encryption and integrity standards.

- SSL certificates: Facilitates the integration of SSL certificates to enhance the security of SMTP connections, enabling encrypted and authenticated email communication.

Upgrade Announcements

Java Version 17 Support

ApplinX now fully supports Java Version 17 (runtime and compile time).

Upgrade to Tomcat Server 9.0

The ApplinX internal Tomcat server is now version 9.0.

Eclipse Support in Designer

ApplinX now supports Eclipse version 4.25 provided by the webMethods suite.

Azul Support

ApplinX runtime now supports Azul Java 17.

Retirement Announcements

Discontinuation of CentraSite Support

CentraSite support is removed and is no longer supported.

Discontinuation of Web-Page Integration Support

Web-Page Integration support is removed and is no longer supported.

IBM webMethods Documentation

All product documentation for this release is available at docs.webmethods.io.