This document introduces Oracle Retail Integration Cloud Service 16.0.

Overview

The Oracle Retail Integration Cloud Service is comprised of the Oracle Retail Integration Suite of products that are cloud deployable for a customer’s integration to Oracle Retail applications, and the customer’s on-premises or hybrid configurations of third-party applications.

The integration products supported are the same as the generally-available on-premises versions of the Oracle Retail Integration Bus (RIB), the Oracle Retail Service Backbone (RSB) and Oracle Retail Bulk Data Integration (BDI).

The cloud-deployed versions of the integration products render some functionality and documentation not applicable. For example, installation documentation is not provided in this release because those activities are handled by the cloud provider. In addition, customization tooling documentation is no longer available because those activities are no longer supported.

In a few documents, minor changes in configuration are noted. See the section, Related Documentation, later in this document for the complete list of documents associated with this release.

Note: The Oracle Retail Integration Cloud Service application is based on corresponding on-premises applications. References to the on-premises application names exist throughout the application and documents.

Oracle Retail Cloud Services and Business Agility

Oracle Retail Integration Bus Cloud Service is hosted in the Oracle Cloud with the security features inherent to Oracle technology and a robust data center classification, providing significant uptime. The Oracle Cloud team is responsible for installing, monitoring, patching, and upgrading retail software.

Included in the service is continuous technical support, access to software feature enhancements, hardware upgrades, and disaster recovery. The Cloud Service model helps to free customer IT resources from the need to perform these tasks, giving retailers greater business agility to respond to changing technologies and to perform more value-added tasks focused on business processes and innovation.

Oracle Retail Software Cloud Service is acquired exclusively through a subscription service (SaaS) model. This shifts funding from a capital investment in software to an
operational expense. Subscription-based pricing for retail applications offers flexibility and cost effectiveness.

**Client System Requirements**

The following technology is supported:

- **Operating Systems**
  - Microsoft Windows 7
  - Microsoft Windows 10
- **Browser Support**
  - Mozilla Firefox ESR 45
  - Internet Explorer 11.0
  - Google Chrome (Desktop) 48+

**New Documents for the Cloud Service Release**

See the following new documents in the Oracle Retail Integration Cloud Service documentation set:

- Administration Guide
- Service Administrator Action List

**Oracle Retail Integration Bus (RIB) Enhancements**

The following were enhancements for the on-premises Release 16.0 of the Oracle Retail Integration Bus. They are provided here for reference purposes.

This release of Oracle Retail Integration Bus (RIB) includes changes in architecture, technology stack, and deployment.

The major highlights of this release are as follows:

- Enhanced Retail Business Objects (RBO) with new data types and concepts
- The addition of a significant number of new RBOs
- An updated technical stack
- Enhancements in supporting tools

**RIB Functional Enhancements**

The functional enhancements below are included in this release.

**New Payloads**

Thirty-three new payloads were added to the RIB in this release.

**New Subscribers**

Seven new subscribers for the new Oracle Commerce Retail Extension Module (RXM) application have been added in this release. For more information, see the Oracle Retail RXM documentation library.
New Publisher Adapter
A new publisher adapter for the XAlloc message family has been added for AIP.

RIB Technical Enhancements
The technical enhancements below are included in this release.

Hybrid Cloud Support
To support Oracle Retail deployments that could be either on premise or in the cloud, additional communication protocols for publish and subscribe messages have been introduced.

New Application Support for Oracle Commerce Retail Extension Module (RXM)
The new Oracle Retail converged commerce application, RXM) has been added to the RIB integration footprint. For more information, see the Oracle Retail RXM documentation library.

Oracle Retail Service Backbone (RSB) Functional Enhancements
The following overview was provided for the on-premises Release 16.0 of the Oracle Retail Service Backbone (RSB). It is provided here for reference purposes.

Overview
Common integration patterns used for interoperability of the applications include asynchronous messaging (fire and forget), request response, and bulk data transfer. In Oracle Retail, Retail Integration Bus (RIB) is used for asynchronous messaging and ODI is used for bulk data transfer. Retail Service Backbone (RSB) uses the request-response style of Enterprise Integration in Oracle Retail. RSB uses Web services as the mechanism for the request/reply style of integration. RSB products include pre-built services and flows and the integration API end points for all of the Oracle Retail Application’s Web services and the Enterprise Solution Web service integration points and contracts for external application to connect to as part of the Solution business processing. RSB is an uptake of Oracle Service Bus (OSB) for Retail domain.

Both RSB and RIB use Retail Business Object (RBO) for the messages. This ensures consistency and interoperability between the integration patterns. In addition to this, there are common tools like Retail SOA Enabler (RSE), Retail Integration Console (RIC) that work with both styles of integration products.

In other words, Oracle Retail Service Backbone (RSB) is a product comprised of a set of Web services, an enterprise service bus (ESB) and security tools that standardize the deployment and runtime of Web service flows within Oracle Retail Suite of applications.

RSB can also be viewed as a set of pre-built Web service integration API end points delivered by Oracle Retail.

RSB Functional Enhancements
The functional enhancements below are included in this release.
Converge Commerce Solution Pack
A solution pack has been added to RSB to support the new solution, Oracle Commerce Retail Extension Module (RXM). This solution pack allows the converged commerce solution, RXM, to communicate with Oracle Retail Customer Engagement.

For more information about RXM, see its documentation library on the Oracle Retail documentation site.

Oracle Retail Bulk Data Integration (BDI) Enhancements
The following overview was provided for the on-premises Release 16.0 of Oracle Retail Bulk Data Integration (BDI). It is provided here for reference purposes.

Overview
Bulk Data Integration (BDI) is the Oracle Retail Enterprise Integration Infrastructure product designed to address the complexities of the movement of bulk data between Oracle Retail Applications and third-party applications.

BDI is designed to provide the bulk data integration to meet the modern needs of cloud and on-premise movement of large data sets in deployments of Oracle Retail applications and support both fully on-premises configurations and on-cloud configurations in a hybrid cloud/on-premise deployment.

BDI Functional Enhancements
The functional enhancements below are included in this release.

BDI Applications
BDI consists of a suite of applications. They are described in the following sections.

BDI Job Administrator
BDI Job Admin is a Web application that provides the runtime and GUI for managing batch jobs. It provides the following high level functionality:

- RESTful service to start/restart jobs, check their status, and so on.
- RESTful service to stream data from a source system to destination system.
- The Infrastructure for various bulk data integration jobs. This includes a database that keeps track of data, and a batch database that contains information about jobs.
- The User Interface provides the ability to perform the following:
  - Start/restart, and track status of jobs
  - Track data
  - Manage options at job and system level
  - View the logs

BDI Process Flow
BDI Process Flow Admin is a Web application that provides the runtime and GUI for managing process flows. A process flow is comprised of one or more activities. It is written in a domain-specific language (DSL) script that contains all the activities that make a data flow from source to destination complete.
A process flow is a generic concept and is not limited to BDI. However, all the out-of-box process flows are for data transfers from a retail application to one or more retail applications.

**BDI Scheduler**

BDI Scheduler is a Web application that provides the runtime and GUI for managing batch schedules. The Scheduler application in the Bulk Data Integration (BDI) product suite assists in scheduling batch processes to run at predefined configured intervals of time. A schedule determines when a job or a process or any program needs to be executed and the frequency of execution.

**BDI Command Line Job Executor**

BDI Command Line Interface (CLI) Job Executor is a standalone command line utility that helps in the basic operation of BDI batch jobs through commands. It uses the REST services that BDI Batch Job Admin provides to list jobs and executions, to get the status of a job, and to start, stop, and restart a batch job.

**BDI Command Line Transmitter**

BDI CLI Transmitter is a standalone command line tool to transmit batch interface data files to a destination BDI receiver system. It is particularly used where the source system is non-BDI (that is, the source system does not have or use a BDI Batch Job Admin application) but needs to send interface data files to a receiver system running the BDI Job Admin application.

Because the tool uses the BDI Job Admin Receiver REST service URL to transmit the data to the destination system, it is necessary that the destination system run the BDI Job Admin application to use the tool.

**Supported Bulk Data (BDI) Flows**

BDI releases with preconfigured integration flows, between specific applications and specific retail entities. BDI Release 16.0 supports these preconfigured integration flows and these applications.

Supported applications in Release 16.0:

- Oracle® Commerce Retail Extension Module (RXM) and Oracle Retail Merchandising System (RMS).

Preconfigured and supported Release 16.0 integration flows between RMS (sender) and RXM (receiver):

- Diffs
- DiffGrps
- InvAvailStore
- InvAvailWH
- ItemHdr
- ItemLoc
- MerchHier
- OrgHier
- RelatedItem
- Store
- StoreAddr

BDI 16.0 releases with the same entities preconfigured to a generic application endpoint:
- Oracle Retail Merchandising System (RMS) to External

As part of BDI packaging, additional entities are defined and made available for field enablement and custom implementation. In future releases these entities and flows will be released in a controlled fashion and GA supported. They are included with 16.0 artifacts to provide direction and guidance.

Support Considerations

For product support and logged defects, the new product identifier for the Oracle Retail Integration Cloud Service is 13314. Each logged defect will be analyzed to determine the source of the reported issue. Note that this Cloud Service product code also includes RSB and BDI functionality.

Related Documentation

For more information, see the following documents in the Oracle Retail Integration Cloud Service 16.0 documentation set:
- Oracle Retail Integration Cloud Services Administration Guide
- Oracle Retail Integration Cloud Services Administrator Action List

RIB Related Documentation

For more information, see the following documents in the Oracle Retail Integration Bus 16.0 documentation set:
- Oracle Retail Integration Bus Implementation Guide
- Oracle Retail Integration Bus Operations Guide
- Oracle Retail Integration Bus Hospital Administration Guide
- Oracle Retail Integration Bus Support Tools Guide
- Oracle Retail Functional Artifacts Guide
- Oracle Retail Service-Oriented Architecture Enabler Tool Guide
- Oracle Retail Integration Bus Integration Gateway Services Guide

RSB Related Documentation

For more information, see the following documents in the Oracle Retail Service Backbone 16.0 documentation set:
- Oracle Retail Service Backbone Developers Guide
- Oracle Retail Service Backbone Implementation Guide
- Oracle Retail Integration Console (RIC) User Guide
BDI Related Documentation
For more information, see the following documents in the Oracle Retail Bulk Data Integration 16.0 documentation set:

- Oracle Retail Bulk Data Integration Implementation Guide

Documentation Accessibility
For information about Oracle’s commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

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