Oracle® Retail Integration Bus

Release Notes

Release 13.1

June 2009

This document highlights the major changes for Oracle Retail Integration Bus (RIB) Release 13.1. RIB 13.1 includes functional, technical, integration, and documentation enhancements.

> **Note:** Oracle Retail Integration Bus Release 13.1 is a full product installation that is not downward-compatible with previous versions of RIB. It is not downward-compatible at the message level. Changes to the RIB 13.1 payload structure affect third-party integrations and require regeneration of clients that integrate using messages.

Product Overview

The Oracle Retail Integration Bus (RIB) provides application integration message processing for the retail application suite. RIB is comprised of a set of adaptors and messages that allow an enterprise to integrate both Oracle Retail and third-party applications together in a scalable and supportable fashion.

The components built on the Oracle Fusion Middleware platform to create the Oracle Retail Integration Bus include the following:

- Publishing adapters create messages from the information captured by the applications. These publishing adapters are designed to publish events from a single message family. Each is specific to an Oracle Retail application, such as Oracle Retail Merchandising System (RMS).
- Subscribing adapters are used to consume messages. These are specific to Oracle Retail and are designed to consume all messages from a specific message family.
- Transformation and Address Filter/Router (TAFR) adapters transform message data and route messages. There are multiple TAFRs specific to message families. Different TAFR adapters can be active on different message families or on the same message family, depending on the needs of an application. Not all message families require TAFRs.
- RIB database objects are Oracle objects and tables to support the PL/SQL message family API stored procedures that are called by the publishing and subscribing adapters. They are part of a specific PL/SQL Oracle Retail application, such as RMS.
- RIB Hospital database tables are to store and retry problem messages. Each PL/SQL or Java application has a dedicated Hospital. The RIB Hospital Administration application (RIHA) is the administration tool.

Release Overview

This release of Oracle Retail Integration Bus (RIB) includes many changes in architecture, the technology stack, and deployment. There are several technical and operational improvements. Major highlights of this release are as follows:

- Enhanced RIB Object (payload) namespace and packaging structure were introduced to support versioning and extensibility.
- The Oracle Retail Artifact Generator has been enhanced to support the new RIB object payload changes.
- A new RIB component, Integration Gateway Services (IGS), provides a tested set of Web service providers and the configurations to connect to RIB 13.1.
- The RIB Deployment Configuration File Editor is introduced. This editor is an application to modify the rib-deployment-env-info.xml file after the initial installation process.
- The Retail SOA Enabler (RSE) tool is introduced to support the creation of Web services, using Oracle Retail functional artifacts or custom artifacts.
- Numerous documentation enhancements are introduced.

These release features are described later in this document.

Hardware and Software Requirements

See the *Oracle Retail Integration Bus Installation Guide* for information about the following:

- Hardware and software requirements
- Oracle Retail application software compatibility

Functional Enhancements

The following are RIB objects that changed to support the Oracle Retail Enterprise 13.1 program functional enhancements. These enhancements include multi-unit pricing, GMT in RMS, manufacture country of origin, consignment and concession items, and inner pack. See Oracle Retail application documentation for details about these and other enhancements.

AllocDesc
ClrPrcChgRef
CountryDesc
CountryRef
CustRetDesc
DeliverySlotDesc
DeliverySlotRef
DSDReceiptDesc
InvAdjustDesc
InvReqDesc
ItemDesc
ItemHdrDesc
ItemLocDesc
ItemSupCtyDesc
ItemSupCtyMfrDesc
ItemSupCtyMfrRef

PrcChgDesc
PrcChgExcDtl
PrmPrcChgDesc
PromotionDesc
ReceiptDesc
RegPrcChgRef
SODesc
SOStatusDesc
StoreDesc
SupplierDesc
TsfDesc
VendorHdrDesc
WHTransDesc
WOInDesc
WOInRef
WOOutDesc
WOOutRef
WOStatusDesc
XAllocDesc
XItemDesc
XItemRef
XItemSupCtyMfrRef
XItmSupCtyMfrDesc
XStoreDesc
XStoreRef

Technical Enhancements

The following are technical enhancements for RIB 13.1.

RIB Business Objects

RIB Business Objects have been enhanced to support artifact versioning and enable customer extensibility. As part of the Oracle Application Integration Architecture (AIA) implementation, all Business Objects (RIB payloads) have been moved to the same model of versioning and extensibility that Oracle AIA Enterprise Business Objects employ.

Changes were made to the XSD namespace and the packaging to reflect the namespace. There are new extension Business Objects that match base Business Objects that are placeholders for customization and extension. There are corresponding changes to the RIB kernel to understand the new namespaces. This means that 13.1 RIB adapters do not accept prior release RIB message formats.

See the *Oracle Retail Functional Artifacts Guide* for details and the standards used in the new objects.

RIB Deployment Configuration File Editor

The RIB Deployment Configuration File Editor is an application to configure the rib-deployment-env-info.xml file after the initial installation process. The editor simplifies how you interact with the XML file, by hiding the raw text form of XML. It provides a user interface to add, remove, and rearrange the elements of the RIB configuration.

See the *Oracle Retail Integration Bus Operations Guide* for more information.

Artifact Generator

The Oracle Retail Artifact Generator has been enhanced to support the new RIB object payload changes. The Artifact Generator is the core tool used to customize and extend the Business Objects used by the RIB, and Web services generated by the Retail SOA Enabler tool (RSE).

A graphical user interface has been developed to augment the command-line versions. The interface is a Web application on Oracle WebLogic Server. Oracle Application Server is not supported for the Artifact Generator interface. The command-line versions are supported on all operating systems on which RIB is certified.

See the *Oracle Retail Functional Artifacts Generator Guide* for more information.

Integration Enhancements

The following are integration enhancements for RIB 13.1.

Integration Gateway Services Component

A new RIB component, Integration Gateway Services (IGS), has been added. IGS provides an integration infrastructure for external system (third-party) connectivity to RIB in the form of a tested set of Web service providers and the configurations to connect to RIB 13.1.

The 13.1 release of IGS exposes 18 RIB message family interfaces. These interfaces are those most commonly used by for custom integration with legacy systems. Each services exposes as operations the message types that the RIB message family supports.

IGS is deployed on Oracle WebLogic Server as a Web application. Oracle Application Server is not supported for IGS.

Retail SOA Enabler Tool

The Retail SOA Enabler (RSE) tool has been added to aid in the adoption of service-oriented architecture (SOA). The RSE tool was developed for use by customers in the creation of Web services. The tool allows a level of abstraction higher than that provided by Web Service Definition Language (WSDL). The tool is intended for business and functional analysts.

The RSE tool is designed to avoid some of the pitfalls of many SOA projects. It addresses many common issues such as versioning, contract design, security, consistency, reuse, documentation, governance, compliance, and customization. It provides an ease of use and level of abstraction so that domain experts or subject matter experts are not required to understand code to design services.

SOA developers can focus on implementing business logic code behind the service, and they do not have to be concerned with SOA infrastructure issues such as versioning and customization.

Documentation Enhancements

The following documentation enhancements are included in the RIB 13.1 release:

- The *Oracle Retail Integration Bus Implementation Guide* has a new chapter about RIB customization and extension.
- The *Oracle Retail Integration Bus Integration Guide* has been updated with new diagrams and message-based integration catalogs.
- Documentation about the Artifact Generator was moved from the Operations Guide to the *Oracle Retail Artifacts Generator Guide* and enhanced, to reflect changes to the tool as part of the implementation of the new Business Objects.
- The following new documents were added:
  - *Oracle Retail Functional Artifacts Guide*
  - *Oracle Retail Functional Artifacts Generator Guide*
  - *Oracle Retail Service-Oriented Architecture Enabler Tool Guide*

Known Issues

The following are known issues in RIB 13.1.

Integration

RIB 13.1 does not integrate with the following:

- PeopleSoft Enterprise Financials
- Oracle E-Business Suite

Other Known Issues

Internal Reference	Summary
Enterprise_13_1 #110	Support for multi-channel configuration. Currently, none of the publishing APIs of RWMS support multithreading. Flows that involve RWMS publishing cannot be multi-channeled. See the RMS 13.1 and RWMS 13.1 documentation for details. The *Oracle Retail Integration Bus Operations Guide* includes a list of RMS APIs that support multi-channel processing.
Enterprise_13_1 #475	Transfer data does not flow to RWMS when an internal finisher is used (from store to warehouse)
HPQC 1558	An "unable to resolve type" error occurs. Sometimes this error occurs even though the Oracle objects are valid. This issue seems to go away after a few retries, or after the objects are recompiled while RIB is shut down.
HPQC 2091	Unable to resolve type SYS.AQ$_JMS_HEADER. The issue can be resolved by restarting the OC4J instance.

Internal Reference	Summary
HPQC 2129	A sample payloads field value with multibyte characters encounters database issues. This issue is related to the configuration of the database settings. See the *Oracle Retail Integration Bus Implementation Guide*, "Pre-Implementation Considerations for Multibyte Deployments," for more details.
HPQC 2144	RIHA support for multibyte characters. Do not use Notepad or Wordpad to edit messages that contain multibyte characters. These are ASCII editors that do not support Unicode characters, and they do not handle multibyte characters correctly. Use a Unicode-compatible editor such as UltraEdit.
HPQC 2170	When configuring additional application instances, do not append a number (for example, rib-rwms2 or rib-rms2). The pattern should be rib-<*app*>, where *app* must be alphabetic characters only, with no numerals, symbols, or special characters.
HPQC 2178	The Artifact Generator GUI is only supported in Firefox Web browsers. Microsoft Internet Explorer does not support the latest MIME type used to send multiple ZIP files back to the client.
Web_services #8	In the body of a message payload, any spaces between the tags, and comments between tags, should be removed.

Related Documentation

For more information, see the following documents in the Oracle Retail Integration Bus Release 13.1 documentation set:

- *Oracle Retail Integration Bus Data Model*
- *Oracle Retail Integration Bus Hospital Administration Online Help*
- *Oracle Retail Integration Bus Hospital Administration User Guide*
- *Oracle Retail Integration Bus Implementation Guide*
- *Oracle Retail Integration Bus Installation Guide*
- *Oracle Retail Integration Bus Integration Guide*
- *Oracle Retail Integration Bus Licensing Information*
- *Oracle Retail Integration Bus Operations Guide*

Also see the following integration documents provided with the RIB 13.1 release:

- *Oracle Retail Functional Artifacts Guide*
- *Oracle Retail Functional Artifacts Generator Guide*
- *Oracle Retail Service-Oriented Architecture Enabler Tool Guide*