Oracle® Retail Integration Bus

Release Notes

Release 13.2

January 2011

This document highlights the major changes for Release 13.2 of Oracle Retail Integration Bus.

Product Overview

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

Oracle Retail Integration Bus Release 13.2 is major release follow-up to the RIB 13.1 release, with enhancements to the core Oracle Retail Integration Bus and roll-up of defect fixes since RIB 13.1. The enhancements include the following:

- Certification of RIB to run on Oracle WebLogic Server 11g (10.3.3)
- Certification of the RIB for support of Oracle Database 11gR2
- Enhancements to RIB Tools (Functional Artifact Generator, RSE, PL/SQL and Java EE api-simulators, RDMT)
- New security additions
- New RIB Hospital Administration (RIHA) application
- Support of multiple Java Message Services (JMS) for the Integration Gateway Services (IGS)
- Inclusion of a new RIB Pak, RIB for RFM (for Brazil localization only)
- Payload changes and TAFR changes to take advantage of new integration points between specific Oracle Retail applications (see the *Oracle Retail Integration Bus Integration Guide* and documentation for other applications for new integrations for this release)
- Localization enhancements added to the RIB kernel, and extensions/placeholders in the RIB payloads, to take advantage of locale-specific customizations
- Enhancements to the RIB kernel and Artifact Generator to accommodate the new localization enhancements

The RIB 13.2 release includes numerous functional and technical changes; The following Oracle Retail applications participate in enterprise functional integration using RIB:

- Oracle Retail Merchandising System (RMS)
- Oracle Retail Financial Management (ORFM)/RMS Brazil localization
- Oracle Retail Store Inventory Management (SIM)
- Oracle Retail Price Management (RPM)

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

Oracle Retail Integration Bus Release 13.2 introduces the following functional enhancements.

Localization Enhancements

Localization enhancements were added to the RIB kernel and extensions/placeholders in the RIB payloads to take advantage of locale-specific customizations. These localization enhancements are for use only by Oracle Retail and its partners; they are not for use by customers.

The approach implements a single localization hook per predefined business object complex type. There are placeholders for localization teams to add implementations as needed.

Each region has a placeholder for localizations. Localization teams or partners can add new regions and localizations as needed between releases. This approach allows base releases to be independent of localization branches, but a localization can be added easily to the base, following the same pattern introduced for customization and extension in RIB 13.1.

This approach permits the forward port of a regional localization to a new base release at a customer site to be as simple as a file save and restore.

The delivery of localizations will be from a code branch as a localization pack, never as a base. The only aspect of localizations in a base will be the placeholders.

For more information, see:

- *Oracle Retail Integration Bus Implementation Guide*
- *Oracle Retail Integration Bus Installation Guide*
- *Oracle Retail Integration Bus Operations Guide*

Support for Multiple Java Message Services

The RIB Integration Gateway Services support multiple Java Message Services (JMS). See the *Oracle Retail Integration Bus Implementation Guide* for more information.

Payload Changes

Payload changes have been made to take advantage of new integration points between specific Oracle Retail applications. See the *Oracle Retail Integration Bus Integration Guide*, and documentation for individual applications, for new integrations for this release.

Technical Enhancements

The following technical enhancements are included in Oracle Retail Integration Bus Release 13.2.

Oracle Exadata Database Machine X2 Support

Oracle Exadata Database Machine X2 is a combination of smart software and industry-standard hardware. It provides database-aware storage services, such as the ability to offload database processing from the database server to storage, transparently, without affecting SQL processing and your database applications.

RIB Release 13.2 is supported on Oracle Exadata Database Machine X2 through the binary compatibility with Oracle Linux Release 5 Update 3 and Oracle Database 11g Release 2 Enterprise Edition on Oracle Real Application Clusters (RAC) 11g.

Oracle WebLogic Server 11g (Java 6)

For Release 13.2, Oracle Retail Integration Bus and the Oracle Retail merchandising operations management product suite use Oracle WebLogic Server 11g, which replaces Oracle Application Server used in previous releases. Oracle WebLogic Server 11g is the industry's most comprehensive, standards-based platform for developing, deploying, and integrating enterprise applications. It provides the foundation for an application grid, an architecture that enables enterprises to pool and share resources with dynamic adjustment across multiple applications, to lower operational costs.

Security Enhancements

RIB 13.2 uses the Oracle Credential Store Framework (CSF) to store and retrieve passwords from a wallet (cwallet.sso) secure credential store. For more information see the *Oracle Retail Integration Bus Installation Guide* and *Oracle Retail Integration Bus Operations Guide*.

New RIB Hospital Administration Application

The RIB Hospital Administration (RIHA) application has been rewritten for the RIB 13.2 release. The application is now a Web-based thin-client application accessed through a browser. RIB Hospital Administration 13.2 was written using Oracle Application Development Framework (ADF) 11g.

For more information, see the *Oracle Retail Integration Bus Hospital Administration User Guide*.

Integration Enhancements

New RIB Pac RIBforRFM (Brazilian Localization)

RIB is used to integrate the Oracle Retail Fiscal Management (ORFM) to the other Oracle Retail 13.2 applications. Because ORFM is specific to Brazil localization support, RIBForRFM is an optional installation.

Known Issues

The following are known issues for Oracle Retail Integration Bus Release 13.2.

Defect 9523067 - Ability to Control Initial States of MDBs

RIB uses configuration files to control the startup state of RIB adapters. Message-driven beans (MDB) are used for subscribing adapters and TAFRs. This functionality has been in place for all releases of RIB to this point. Oracle WebLogic Server does not provide the ability to configure an initial state, or to read the configuration file in time to prevent an adapter from starting to process messages.

Workaround/Mitigation

This is an open bug. The issue will be faced whenever a RIB application is started. Whether desired or not, all adapters will begin processing messages from the Java Message Service (JMS) until they are shut down by the RIB management controls.

These are the major impact scenarios:

- Hospital flooding

  If an adapter is taken off-line for functional reasons and the RIB application is restarted, the adapters will immediately begin sending messages to the API. The potential impact is that all these messages fail and are sent to the RIB hospital.

- RMS batch

  During the RMS batch cycle, it is accepted practice to shut down all RIB subscribers. If the RIB application is restarted during this cycle, the RMS subscribers will come up processing JMS queued messages, potentially causing conflicts.

To mitigate problems, try to ensure that RIB application restarts are not performed when messages are queued to the JMS on message flows that cannot be manually shut down in time to prevent conflicts.

Poison Messages

When an adapter receives a poison message (a message that cannot be consumed under any conditions and that is rolled back continuously), it could take up to one minute for the adapter to shut down.

Installation with AIX - Java Version 1.6.0 64-Bit

When installing RIB Release 13.2 on the AIX platform, the specific Java version required is 1.6.0 64-bit.

Error During rib-app-builder Deployment Process

When running the rib-app-builder deployment process, you may encounter the following error while encrypting the password:

face java.lang.StringIndexOutOfBoundsException: String index out of range: -9

This error may occur because of a slow network connection to the Oracle WebLogic Server where the rib-app is being deployed. Retrying the deployment might fix the issue.

Known Issues for RIB Hospital Administration (RIHA) 13.2

The following are known issues for the RIB Hospital Administration application:

- Search fields are not updated with new records while the session is active, but search result tables will show all latest data from the tables when a search is performed.
- Importing a hospital entry as a new record can be done only one time per session. This has been identified as an Application Development Framework (ADF) issue, and an enhancement request will be submitted so that a fix can be provided.
- After the XML payload is expanded, the following error is sometimes displayed when any action is performed: "java.lang.IllegalStateException: ADF_ FACES-60003:Component with ID: pt1:pc1:cbx not registered for Active Data." Close all browser sessions and start a new browser session. This has been identified as an ADF issue and a defect has been logged. A fix will be provided.
- The table in the Message Viewer component tab becomes empty, for the first time and only once during a session, if the user performs any operation immediately after expanding the XML payload. If the search is performed again, everything works as expected. This happens only with the Firefox browser.

Related Documentation

For more information, see the following documents in the Oracle Retail Integration Bus Release 13.2 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 13.2 release:

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

Supplemental Documentation

The following documents are available through My Oracle Support. Access My Oracle Support at the following URL:

https://support.oracle.com

Oracle Retail Integration Bus Integration Guide **(ID 1277421.1)**

The RIB Integration Guide is an HTML document that summarizes the Oracle Retail messaging integration by functional area. Each functional area (or message family) includes the publishing and subscribing application's components, message documents, and TAFR operations (if applicable).

Oracle Retail Upgrade Guide 13.1 to 13.2 **(ID 1073414.1)**

Because the upgrade process varies among Oracle Retail applications, the *Oracle Retail Upgrade Guide* describes the approach that each Oracle Retail application takes for the upgrading, or uptaking, process, as well as product-specific upgrade assumptions and considerations. Actual procedures for the upgrade may be included in the application's Installation Guide.