Oracle® Retail Integration Cloud Service

Integration Console User Guide

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Oracle Retail Integration Console User Guide

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Preface

The *Oracle Retail Integration Console User Guide* describes the integration and configuration information for Oracle Retail Integration Cloud Service.

Audience

This guide is for:

- Systems administration and operations personnel
- Systems analysts
- Integrators and implementers
- Business analysts who need information about Product processes and interfaces

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(Data Model documents can be obtained through My Oracle Support.)

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1 Introduction

This chapter provides an overview of the Retail Integration Console (RIC) product.

Operations Management

Most tools, such as administration consoles similar to the WebLogic Administration Console, are designed to get the product up and running and for general configuration and administration purposes of a single domain. They are not intended as a solution to monitor and manage the entire integration infrastructure (that is, Databases, Hosts, Message Queues, Service Buses, and so on) at once. They routinely don't provide any historical metrics or real 24/7 diagnostics.

Infrastructure administrators do not want to be in a situation where a problem occurred an hour ago and they no longer have any information on it because they only have real-time data; both real-time and historical monitoring and diagnostics capabilities are required.

Administrators routinely have to be able to answer the usual question that comes up when everything was running fine one day and fails to perform on the next, which is, “what has changed?" Administrators need historical information to refer to at all tiers of the infrastructure including the hosts as well as visibility across the stack including both monitoring and configuration data to answer that question.

In production environments, it becomes extremely difficult to reproduce such issues as the load, network, application environment, and overall intermittent behavior of all of the tiers and how it affects the business. Correlating events, both systemic and business errors and coming to a quick conclusion is key to ensure optimal service levels in a production environment for end-users. That means a full stack 24/7 real-time and historical monitoring solution that can also provide meaningful diagnostics across the entire application system stack.

The Retail Integration Console is designed to provide historical and real-time configurations and metrics 24/7 across all tiers and for the Oracle Retail integration infrastructure components, and to provide these in the business context of the Oracle Retail applications.

Infrastructure Product Consoles

The Oracle Retail Integration Console (RIC) participates in the Oracle product set console domain. RIC has been designed to integrate with other Oracle product consoles from a look-and-feel perspective.

RIC is the user interface application designed to provide a unified view of the RTG Integration products within the business context of the Oracle Retail applications.

RIC is architected to understand and leverage the Retail Technology Group (RTG) infrastructure configuration for the Retail Integration Bus (RIB) products and presents all data in user friendly way in terms of retail and business entities and flows.

For this release RIC is used only for monitoring (in other words, read-only operation).

Accessibility

Accessibility involves making your application usable for differently-abled persons, such as low vision or blindness, deafness, or other physical limitations. This means creating applications that can be used without a mouse (keyboard only), used with a screen reader for blind or low-vision users, and used without reliance on sound, color, or animation and timing.

RIC provides the ability to support the above accessibility in the applications.

Users should be able to navigate to all parts and functions of the application using the Tab and arrow keys, without using any keyboard shortcuts. In addition to that, keyboard shortcuts provide additional ways to access a function quickly.

Keyboard shortcuts provide an alternative to pointing devices for navigating the page. There are five types of keyboard shortcuts that can be used in ADF Faces applications:

- **Tab traversal, using Tab and Shift+Tab keys:** Moves the focus through UI elements on a screen.
- **Accelerator keys (hot keys):** Bypasses menu and page navigation, and performs an action directly. For example, Ctrl+C for Copy.
- **Access keys:** Moves the focus to a specific UI element. For example, Alt+F for the File menu.
- **Default cursor/focus placement:** Puts the initial focus on a component so that keyboard users can start interacting with the page without excessive navigation.
- **Enter key:** Triggers an action when the cursor is in certain fields, or when the focus is on a link or button.

2
Concepts

This chapter describes few concepts relevant to the RIC product.

Integration Flow

In an integrated environment the consumer and provider of computational services are linked through the integration layer. The consumer request can flow through multiple components before it reaches the provider. For the purpose of this document, the flow of request from consumer to provider through the intermediate components is called an integration flow.

Message Family

The retail business objects (RBO) are classified into different categories based on the business function it serves. These are called message families. Examples of message families include Item, ItemLoc, ASNIn and so on.

SLA Alert and Business Alert

When the message flows through the system, it may encounter conditions that are set to alert the user. Some of the conditions are service level agreement (SLA) conditions like response time. Some of them may be business conditions like an order for more than a certain amount. If the message meets any of the alert conditions, the system generates the corresponding alert. Users or applications interested in the alert can subscribe to alert notifications.

Event

RIB messages flow from publishing application to the subscribing applications, TAFRs, and error hospitals in the RIB system. Sometimes messages are rolled back due to application or system errors. Each attempted message delivery, whether failed or successful, is called an Event. Also, any changes in the adapter status, error hospital data, and server resource utilization are considered Events.

Commit

Successful transactions, including but not limited to messages being successfully consumed, as reported by the managed server.

Rollback

Unsuccessful transactions, including but not limited to messages being placed in the error hospital due to data errors, as reported by the managed server. This count does not include messages going to the hospital because of dependencies. This is because, by design, the dependent messages are not treated as errors in the RIB system.

Error Count

Number of events that result in an error. Error count is sourced from the error hospital tables. Error count includes dependent messages in the error hospitals. For more information, see the *Oracle Retail Integration Bus Implementation Guide.*

3
Configuration and Deployment

This chapter provides an overview of RIC modes and provides instructions for configuring and installing RIC. The RIC installation steps differ for different RIC modes. RIC can be deployed in three modes in this release, the following table shows RIC modes:

Supported Models	Description	When to use?	Settings in the deployment file
RIB ONLY	RIC is configured to collect and display only RIB data.	If RIB is in-scope for your integration.	"ribEnable":"true", "bdiEnable":"true",

How do you decide the mode in which you should run RIC?

To use only messaging infrastructure for integration (RIB) must configure RIC with RIB_ONLY mode.

BDI is disabled by default in all RIC modes and is out of scope for this release. The value of the properties ribEnable in the RIC configuration file ric-deployment-env-info.json inside ric-home/conf/ folder decides RIC mode.

Configuring RIC

Take the following steps to configure RIC:

1. Edit the ric-deployment-env-info.json as follows:

   cd ric-home/conf/

   vi ric-deployment-env-info.json

   The following is an example configuration:

```
{
    "RicDeploymentEnvInfo":{
        "DataSourceDef":{
            "RicDataSource":{
                "dataSourceName":"RicDataSource",
                "dataSourceClass":"oracle.jdbc.pool.OracleDataSource",
                "dataSourceJndiName":"jdbc/RicDataSource",
                "jdbcUrl":"jdbc:oracle:thin:@//richost.com:1521/orcl",
                "jdbcUserAlias":"ricDataSourceUserAlias",
                "jdbcUser":"GET_FROM_WALLET",
                "jdbcPassword":"GET_FROM_WALLET"
            }

        },
        "MiddlewareServerDef":{
            "RicAppServer":{

                "weblogicDomainName":"TOOLS_Domain",
                "weblogicDomainHome":"/scratch/u00/webadmin/WLS12.2.1.4/
user_projects/domains/TOOLS_Domain/",
```

```
                "weblogicDomainAdminServerUrl":"t3://richost.com:24001",
                "weblogicDomainAdminServerProtocol":"t3",
                "weblogicDomainAdminServerHost":"richost.com",
                "weblogicDomainAdminServerPort":"24001",

"weblogicDomainAdminServerUserAlias":"ricAppServerAdminServerUserAlias",
                "weblogicDomainTargetManagedServerName":"ric-server",

                "ricUiUrl":"http://richost.com:24012/rsb-admin",
                "ricUiUserGroup":"RicAdminGroup",
                "ricUiUserAlias":"ricAdminUiUserAlias",
                "ricUiUser":"GET_FROM_WALLET",
                "ricUiPassword":"GET_FROM_WALLET",
                "secureCookie":"false"
            }
        },
        "IntegrationProduct":{
            "ribEnable":"true",
            "bdiEnable":"true",
            "ribHome":"../../../RIB/rib-home/",
            "bdiHome":"../../ric-home"
        },
        "RicApplication":{
            "ricAppUses":[
                "RicDataSource",
                "RicAppServer"
            ]
        },
                "BdiBatchJobAdminInfo":{
            "BdiRmsAdmin":{
                "batchJobAdminUrl": "http://bdihost:8080/bdi-rms-batch-job-
admin",
                "optional":"true"
            },
            "BdiSimAdmin":{
                "batchJobAdminUrl": "http://bdihost:8080/bdi-sim-batch-job-
admin",
                "optional":"true"
            },
 "BdiOcdsAdmin":{
                "batchJobAdminUrl": "http://bdihost:8080/bdi-ocds-batch-job-
admin",
                "optional":"true"
            }
        },
        "BdiProcessFlowAdminInfo":{
            "processFlowAdminUiUrl":"http://bdihost:7001/bdi-batch-process-
flow-admin",
            "optional":"true"
        },
        "BdiSchedulerAdminInfo":{
            "schedulerAdminUiUrl":"http://bdihost:7001/bdi-batch-scheduler-
admin",
            "optional":"true"
        }
    }
}
```

2. Modify the DataSourceDef, the MiddlewareServerDef, and the IntegrationProduct with information that is specific to your environment.

3. In order to hide host and port wherever exposed in RIC, set the below java option to TRUE in the Weblogic instance startup.

   ```
   JAVA_OPTIONS="${JAVA_OPTIONS} -DMaskServerInfo.appServerHostPort=true"
   ```

4. For the masking of the jdbc url in RIC, set the below java option to TRUE in the Weblogic instance startup.

   ```
   JAVA_OPTIONS="${JAVA_OPTIONS} -DMaskServerInfo.db=true"
   ```

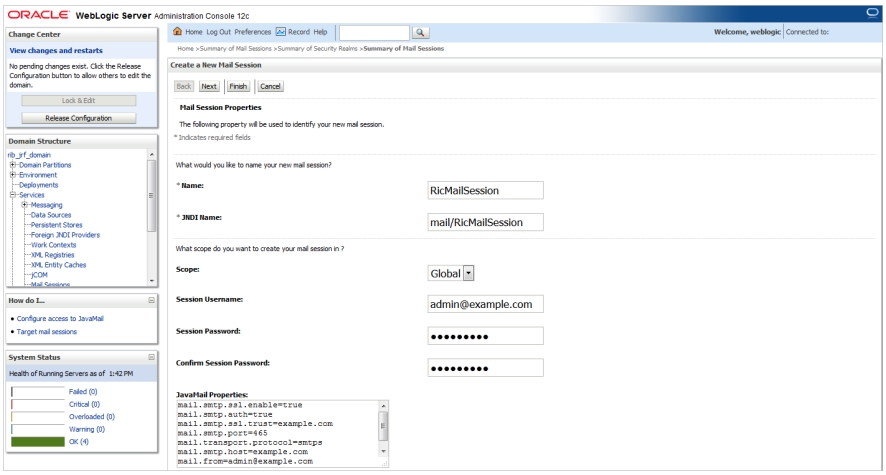
Installing RIC

After configuring the RIC, follow the installation steps according to the selected RIC mode.

RIB Only Mode

Install the RIC in the RIB only mode to provide visibility into the RIB. The following pre-requisites must be met:

1. RIB must be deployed.
2. JMS Console must be deployed from the rib-home/tools-home/.
3. rib-home must be accessible to ric-home, that is both must reside in the same file system.
4. The rib-deployment-env-info.xml must have a correct notification configuration for every rib-app in scope. RIC will use this email address to send notifications related to RIB.
5. Configure a new mail session as below on the Weblogic server where you deploy RIC. This is for RIC to send notification emails on exceeding the error thresholds.
   a. Login to the Weblogic admin console.
   b. Navigate to **Admin Console > Services > Mail Sessions**.
   c. Create a new mail session with the JNDI Name as "mail/RicMailSession".
   d. Add the below JavaMail properties:
      - mail.smtp.ssl.enable=true
      - mail.smtp.auth=true
      - mail.smtp.ssl.trust=example.com
      - mail.smtp.port=465
      - mail.transport.protocol=smtps
      - mail.smtp.host=example.com
      - mail.from=admin@example.com



Take the following steps to deploy the RIC in RIB only mode:

1. Download RicKernel21.0.000ForAll19.x.xApps_eng_ga.zip to a location (for example, RIC-APP-BUILDER) on the computer which has your rib-home.
2. Edit the ric-deployment-env-info.json configuration file located in the ric-home/conf/ folder.
3. Modify MiddlewareServerDef and IntegrationProduct with information that is specific to your environment.
    a. Set the value of the ribEnable property in the configuration file to True.
    b. Set the value of the ribHome property in the configuration file to point to rib-home.
    c. Set the value of secureCookie to true if the cookies has to be secure.
4. Set the value of the RicAppServer fields to point to the environment where you want to deploy RIC.
5. Go to the ric-home/bin/ folder and run the compiler to update the RIC ear as follows: $ sh ric-app-compiler.sh -setup-credentials.
    a. When prompted by the compiler, enter the user name and password for WebLogic server and RIC admin user. The RIC admin user is used to log in to the RIC.
6. From the same folder, run the deployer script to create the user and group and deploy RIC on the WebLogic server as follows: $ sh ric-app-deployer.sh –deploy-ric-app.

    Restrict access to the $RIC-HOME folder:

    cd $RIC-HOME

    chmod -R 700 .

Testing the Deployment

After you deploy the RIC successfully on the WebLogic server, you can access it using the following URL: http://<server>:<port>/rsb-admin.

4
Login

RIC login takes the username and password created at compile time using the ric-app-compiler.sh -setup-credentials script. The username and password information is configured in a secure credential store and is for Web application security.

The RIC login screen is accessed through the URL http://<host name>:<port>/rsb-admin

Browser Compatibility: RIC is supported on FireFox v22 and later.

5

RIB Integration Summary

The RIB Integration Summary page shows a one page view of the overall RIB integration infrastructure. This page shows event counts, commits vs rollbacks count, current integration performance, most active adapter since midnight, most recent activity count, top problematic interfaces, top 10 problematic JMS topics, and server CPU and memory usage. The summary information is for applications and servers that are in scope. The Auto Refresh checkbox, if checked, polls for data for the graphs and tables every 10 seconds.

Data Collected At: Displays the time the data is collected from the RIB.

Event Count for Applications in Scope: This table shows event count, status and up since time, for all the applications in scope. The event count shown here is the total event count from the time displayed in Up Since column. The application with the highest event count is on the top.

Commits vs Rollbacks Count for Applications in Scope: This bar graph shows the event commits and rollbacks for the applications in scope. The commit and rollback count refers to the information maintained by WebLogic server for the EJBs transactions. RIB monitoring system interrogates the JMX MBeans for the commit and rollback counts and updates the local repository. A single message may result in more than one commit and/or rollback, depending upon various scenarios of failures.

Current Integration Performance for Applications in Scope: This bar graph shows the comparison of minimum and maximum execution time for the applications in scope.

Adapter Execution Time: For a subscriber adapter, the time is noted when the message arrives and again at the end of the Message method. The difference is calculated. An Adapter Execution Time event is created, which is used (if applicable) to set the minimum, maximum and last adapter execution time for the hour of the day.

For a publisher adapter, the time is noted at the beginning and end of the publishing method and the difference is calculated. An Adapter Execution Time event is created, which is used (if applicable) to set the minimum, maximum and last adapter execution time for the hour of the day.

API Execution Time: For a subscriber adapter, the time is noted around the API call and the difference is calculated. An API Execution Time event is created, which is used (if applicable) to set the minimum, maximum and last api execution time for the hour of the day.

There is no API execution time event for publisher adapters.

Most Active Adapter since Midnight: This bar graph shows the most active adapters since midnight. The adapter with highest event count after midnight is at the top of the graph.

Most Recent Activity Count: This table shows adapter's today's event count, total event count and most recent event time for the applications in scope. The adapter with the most recent event is at the top.

Top Problematic Interfaces: This table shows error hospital data for the applications in scope, with details of adapter class def, family name, total, and dependent messages in error hospital. The adapter with the most messages in error hospital is shown on top. For every rib-<app> in scope of integration, an email notification is sent upon exceeding the error hospital threshold count of 100 error messages per family.

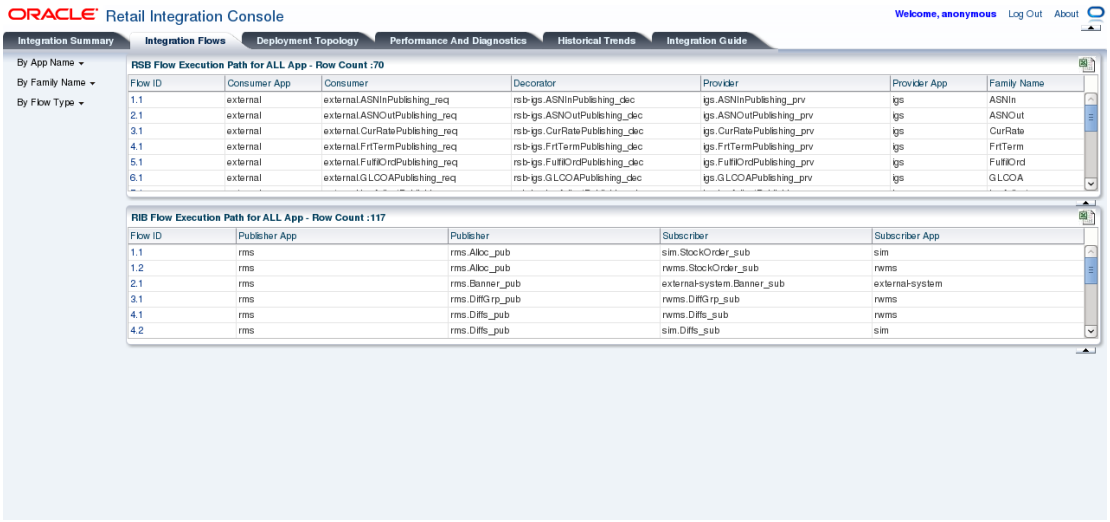
CPU Usage of RIB Servers: This graph shows the CPU usage of RIB servers, for applications in scope.

Memory Usage of RIB Servers: This graph shows, current, maximum and free memory statistics of RIB application servers in scope.

Top 10 Problematic JMS Topics: This graph shows the 10 JMS topics with the most messaging waiting. The topic with most messages waiting is shown on top.

6
Integration Flows

The RIB and BDI integration flows are displayed in three different tables. The menu on the left side helps to filter the flow entries by App Name, Message Family Name, or Type of flow.



RIB Flow Execution Path

The table shows the following columns:

- Flow ID: This is a unique ID assigned to each integration flow.
- Publisher Application: The application that publishes the message to a topic.
- Publisher: The qualified name of the publisher topic.
- Subscriber: The qualified name of the subscriber topic.
- Subscriber Application: The application that subscribes to the topic.

When a row in the table (BDI or RIB) is selected, a panel appears below the table and gets populated with detailed information of the selected flow.

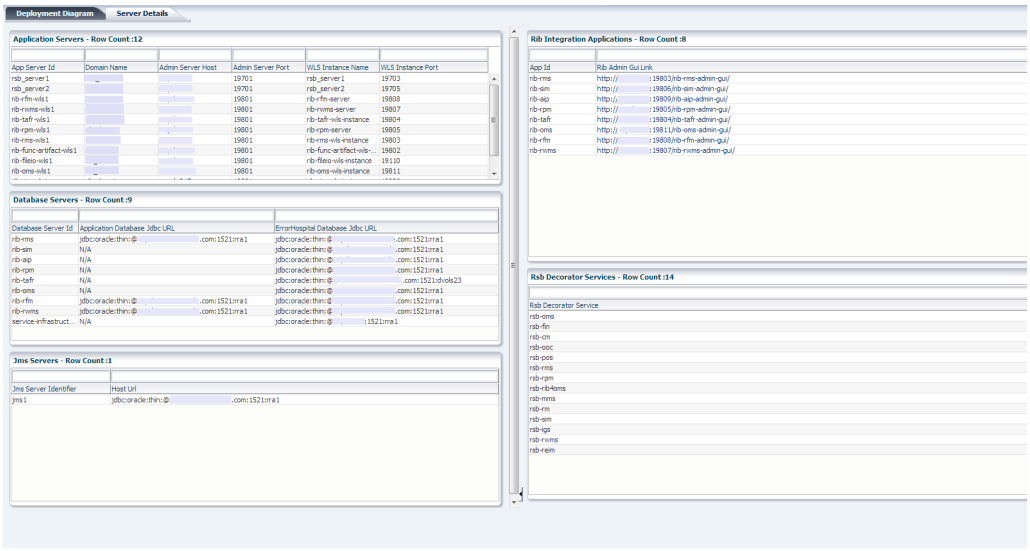
RIB Flow Details

When a RIB flow is selected, the following additional panel is displayed.

This panel contains the two tabs: Flow Details and Metrics Graph.

Flow Details Tab

This tab shows the Flow Diagram, its details, adapter status, JMS subscriber activity, error hospital activity and the Family, Message, and Payload information table.



Flow Diagram displays the diagram of request flow from publisher, topic (or TAFR) and subscriber in sequence.

- Publisher is responsible for creating the messages.
- Topic is where the publisher publishes its messages to.
- TAFR is a RIB component that could transform, filter and route the message.
- Subscriber receives the message.

RIB Adapter Status: This table displays the status of the adapters participating in the selected flow.

JMS Subscriber Activity: This table displays the messages waiting and messages processed for the JMS topic participating in the selected flow.

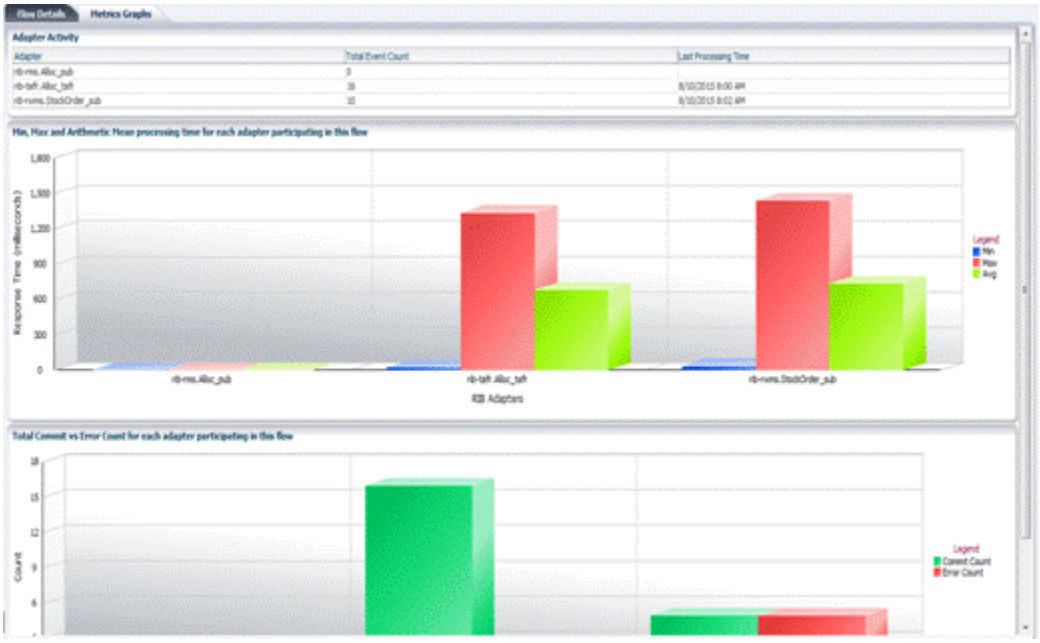
Error Hospital Activity: This table displays the family, total, and dependent messages in error hospital, for the adapters participating in the flow.

Family, Message and Payload Information: This table displays the family, message, and payload information for the selected message flow:Message Family: Contains information specific to a related set of operations on a business entity or related business entities. For example, Order message family contains information about purchase order events.Message Type: A message family may contain multiple message types. Each message type encapsulates the information specific to a business entity within one or more business events. For example, the order message family is published for events such as Delete PO, Create PO.Payload Information: the Retail Business Object (RBO) type for the Message Type.

Application API Information: Each PL/SQL based application uses a Message Family Manager specific API for publishing all messages within a specific message family. API is an interface to stored procedure package and wrapper to the staging table and additional business logic surrounding the message publication.

Metrics Graph Tab

This tab shows adapter activity, min, max and arithmetic mean processing time and total commit vs error count for each adapter participating in this flow.



Adapter Activity: This table displays the total event count and last processing time for all the adapters participating in the selected flow.

Min, Max, and Arithmetic Mean processing time for each adapter participating in this flow: This bar graph shows the minimum, maximum and arithmetic mean processing time statistics for each adapter participating in the selected flow.

Total Commit vs Error Count for each adapter participating in this flow: This bar graph shows the total commit and error count comparison for each adapter participating in the selected flow.

> **Note:**
>
> See the *Oracle Retail Integration Bus Implementation Guide* for more details.

BDI Flow Details

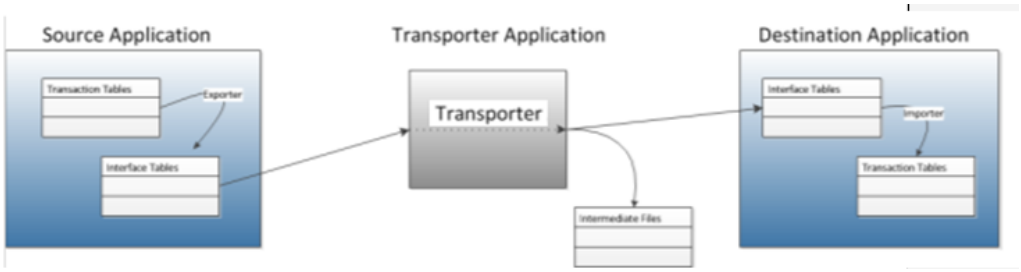
BDI Flow stands for Bulk Data Integration Flow. These flows represent a third type of integration in Retail applications. The message oriented asynchronous flows are represented by the RIB message flows. BDI represents batch oriented bulk data integration flows in Retail application eco-system.

Previously, RIC showed only the RIB message flows. With this release, RIC displays the BDI flows used in the retail environment.

BDI flows are not monitored. RIC shows the BDI flows in Retail applications for informational purposes only. Also, not every batch or bulk integration is shown in the RIC. There could be other functional batch integrations that are not shown in the RIC.

The BDI integration flow information comes from a static XML file (bdi-integration-flows.xml) in the rsb-home. During the RSB compilation step, the information in this file is used to create the diagrams and other details shown in the RIC.

A generic BDI flow can be represented by the following diagram:

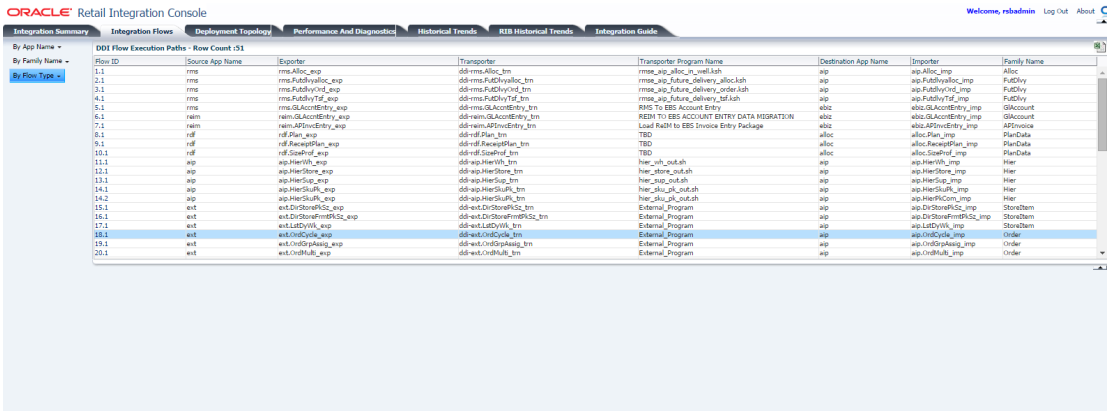


The Source Application provides the data. There may be an exporter program(s) in the source application that extracts the business data from the transactional tables and updates the interface tables in the integration schema. Interface tables are generally de normalized flatter simpler tables designed to make interaction with external programs easier.

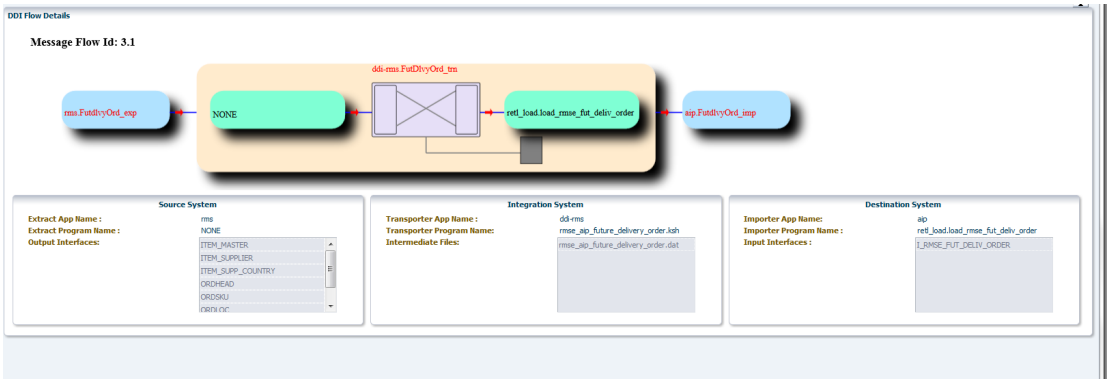
The Transporter Application receives the data of the source application from the interface tables in integration schema and loads the data to the Interface tables in the integration schema of the Destination Application. During this time, it may use intermediate storage, like flat files.

The Destination Application is the consumer of the data. There may be an importer program in the Destination Application that takes data from the interface tables, runs through the validation code, executes the business logic process, and finally updates the data in the transaction tables.

In RIC, the BDI flows can be filtered for viewing by selecting the menu **By Flow Type --> BDI**. You can also export the BDI flow list to a spreadsheet format.



Each of the BDI flows is given a unique Flow ID. The Source Application Name is the name of the application that acts as the source of data and the Destination Application Name is the name of the application that consumes the data. The Transporter is the intermediate application (batch job) that takes data from the source application's interface table(s) and updates the destination application.



The above diagram shows one of the BDI flows in the Retail system.

Source Application

Source Application Name: The application that acts as the source of data. In this case, it is the RMS.

Exporter Program Name: In this case, the Transporter is taking the data directly from the source system tables. Since there is no program in the source system that takes data from the application tables and updates the staging tables, the Exporter Program Name is shown as NONE.

Interfaces Tables: The Transporter sources data from these tables.

Transporter Application

Transporter Application Name: The application that owns and executes the Transporter Program.

Transporter Program Name: It is the batch job program that transmits data from the source interface tables to the interface tables of the Destination Application.

Intermediate Files: These are the names of flat files created by the Transporter program.

Destination Application

Destination Application Name: This is the name of the consumer application.

Importer Program Name: The name of the program that takes the data from the Interface tables and updates the transaction tables.

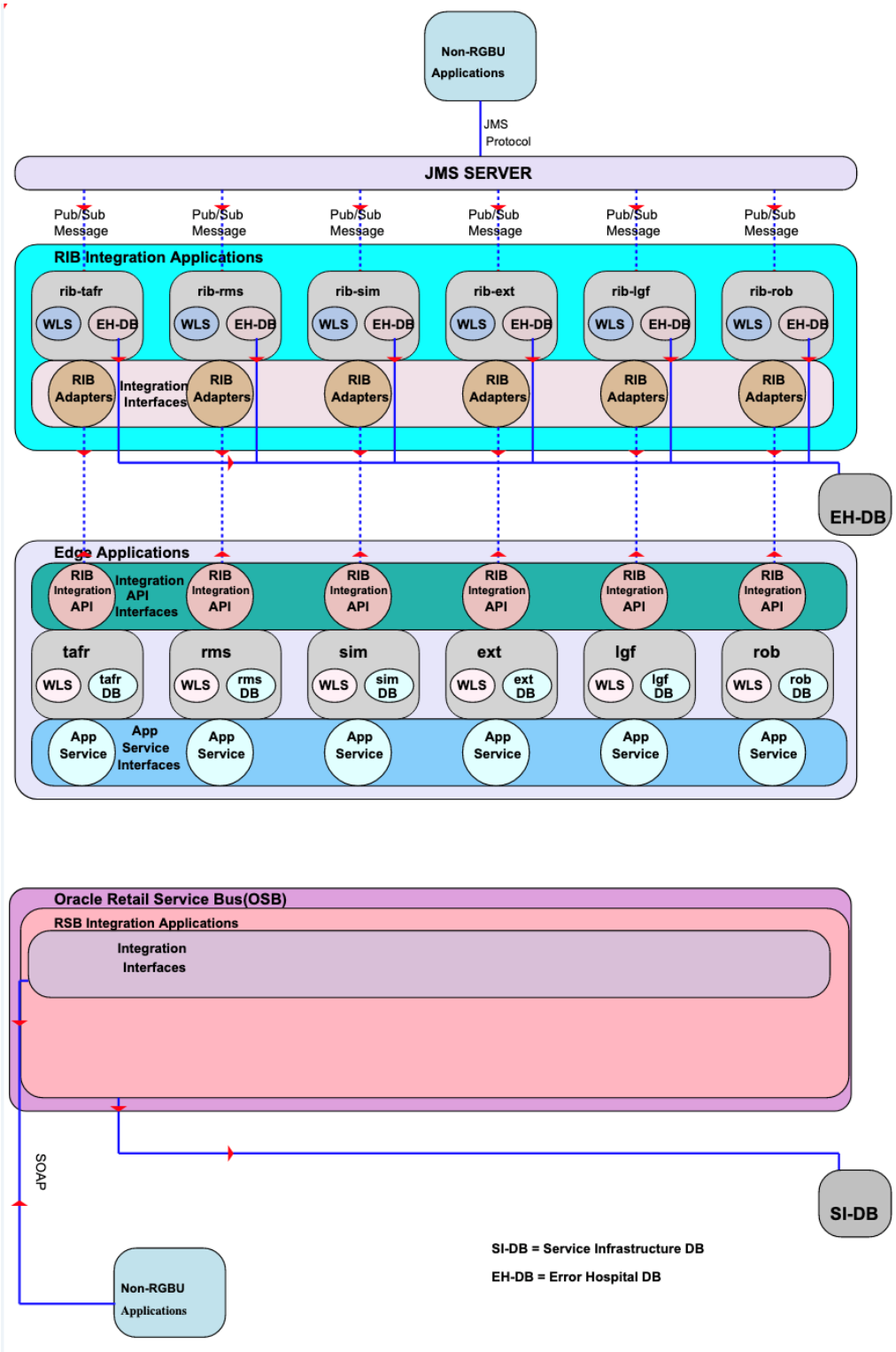
Interface Tables: These are the interface table(s) in the destination application.

7

Deployment Topology

This chapter describes the Deployment tab. This tab has two sub-tabs; **Deployment Diagram** and **Server Details**.

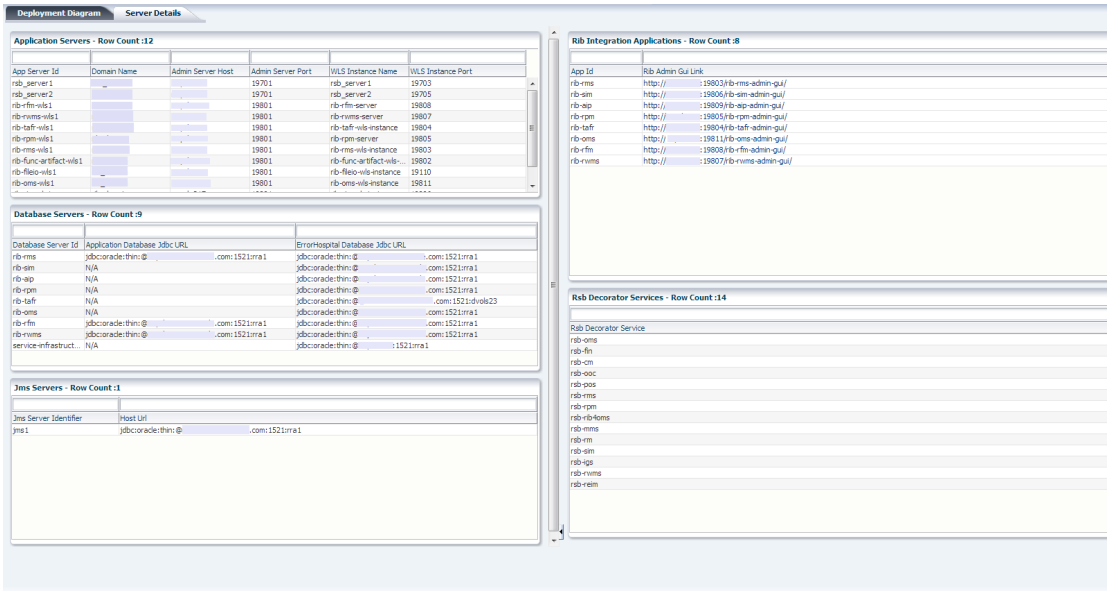
Deployment Diagram



The deployment diagram is dynamically generated based on the RIB home installation configuration files. The diagram shows the physical and logical relationships among the various application servers, database servers, JMS servers and clusters in the deployment environment. The diagram also shows the software components and RIB integration applications installed on them.

You can click a component in the deployment diagram to view its details in **Server Details** tab.

Server Details



This tab shows the deployment information and relationships in a tabular form.

The Server Details page contains the following panels:

Application Servers

This panel lists application server details including App server ID, domain in which server instance is created, administrator server host name and port, WebLogic instance name and port.

Database Servers

This panel lists all database instances configured in the system and includes related details such as server ID, application database JDBC URI and the corresponding error hospital JDBC URI.

JMS Servers

This panel lists all the JMS server instances and their ID, and host URL information.

RIB Integration Applications

This panel lists all the RIB applications in scope and the link to administration GUI pages in the deployed environment.

8

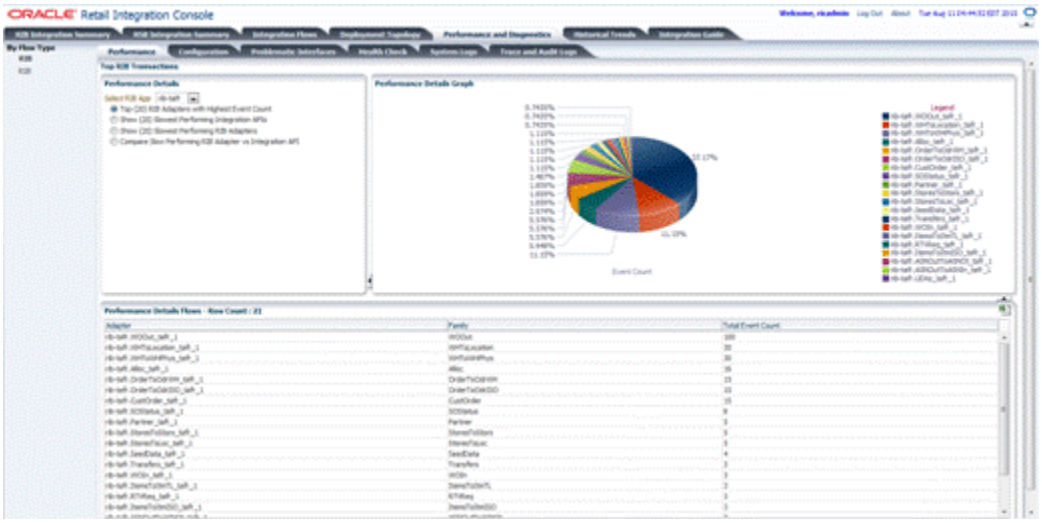
Performance and Diagnostics

Performance and diagnostics page shows performance graphs, configuration files, problematic interfaces and logs in addition to the ability to ping services.

The left hand menu allows choosing between RIB. Depending on the selection, RIB related pages are displayed. By default, we show the RIB Performance page.

RIB Performance

The drop-down lists all the applications in scope. The data displayed on this tab is at an application level. A graphical and tabular view of the data is provided for the following metrics:



Top (20) RIB Adapters with Highest Event Count: Performance details graph for this metric displays a pie graph showing the event counts for top 20 RIB adapters for the selected application, performance details flows table displays family and total event count for all the adapters of the selected application.

Show (20) Slowest Performing Integration APIs: Performance details graph for this metric displays a pie graph showing the execution time for the 20 slowest RIB integration APIs for the selected application, performance details flows table displays family and execution time (in milliseconds) for all the APIs of the selected application.

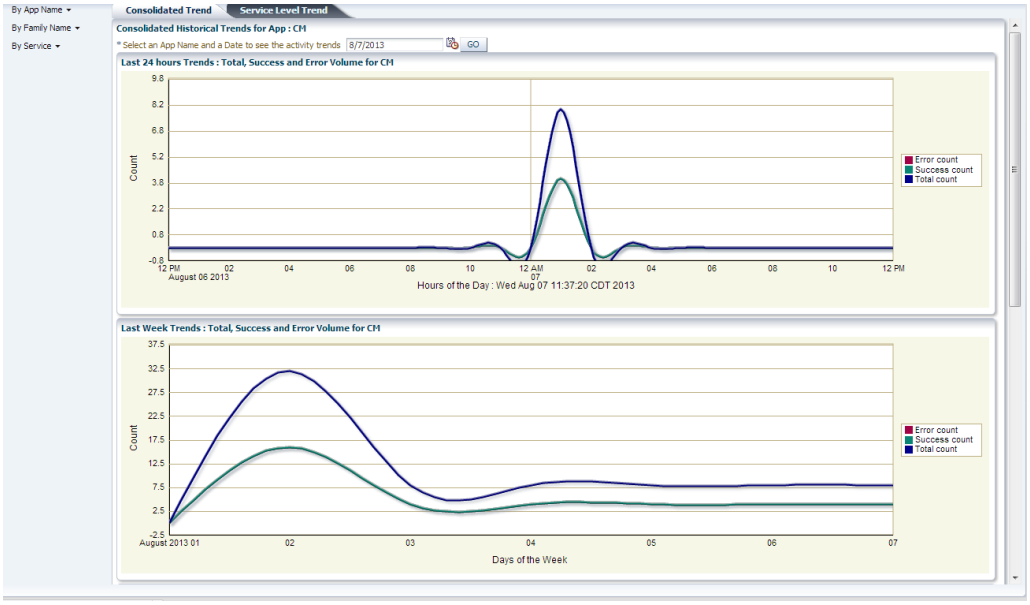
Show (20) Slowest Performing RIB Adapters: Performance details graph for this metric displays a pie graph showing the execution time for the 20 slowest RIB adapters for the selected application, performance details flows table displays family and execution time (in milliseconds) for all the adapters of the selected application.

Compare Slow Performing RIB Adapter vs Integration API: Performance details graph for this metric displays a clustered bar graph showing the comparison of execution time for the

20 slowest RIB adapters and the integration APIs for the selected application, performance details flows table displays adapter execution time (in milliseconds), API execution time (in milliseconds) and difference in adapter and API execution time (in milliseconds) for all the adapters of the selected application.

RIB Configuration

This tab displays the rib-home, where the RIB kernel is located.

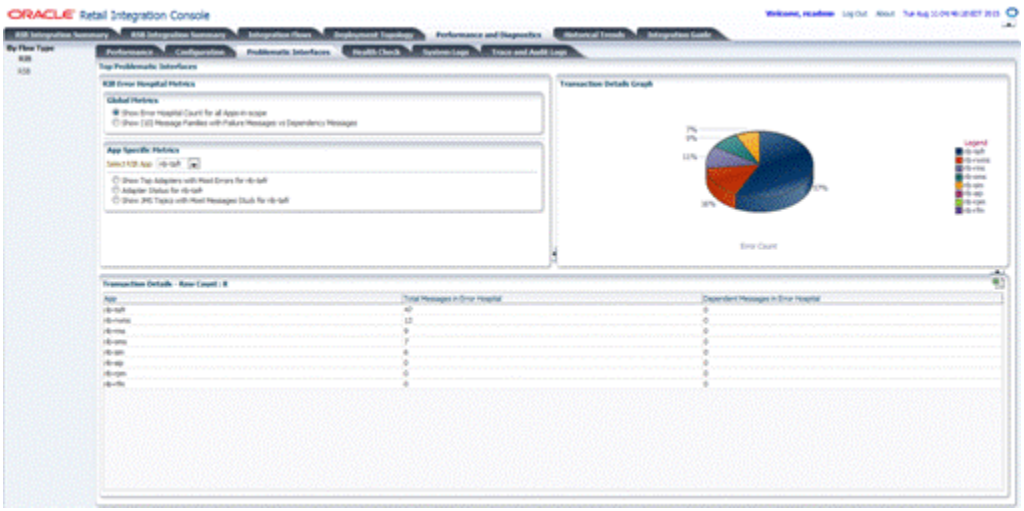


RIB Global Configuration: This table displays the global level files related to RIB.

Application Level Configurations: This table displays the application specific files for applications that are in scope. There is a drop-down that has list of applications in scope. Depending on the app selected, it displays the files specific to that app. The columns in the tables are filename, resource, location of the file and a hyperlink which, when clicked, opens a pop-up window with the file contents.

RIB Problematic Interfaces

This tab displays the RIB error hospital data at Global and Application level metrics.



Global Metrics: Transaction details graph and table is displayed for the following global metrics on selecting the respective radio button.

Show Error Hospital Count for all Apps-in-scope: Transaction details graph for this metric displays a pie graph showing the error counts for all the applications in scope, transaction details table displays total messages and dependent messages in error hospital for all the applications in scope.

Show (10) Message Families with Failure Messages vs Dependency Messages: Transaction details graph for this metric displays a bar graph showing failure vs dependency messages error counts for the message families which have highest total messages in error hospital. Each bar in the graph shows the aggregation of the messages in error hospitals for all the adapters for a message family. Transaction details table displays total messages and dependent messages in error hospital for all the adapters of the applications in scope.

App Specific Metrics: There is a drop-down that has list of applications in scope. Transaction details graph and table is displayed for the following app specific metrics on selecting the respective radio button.

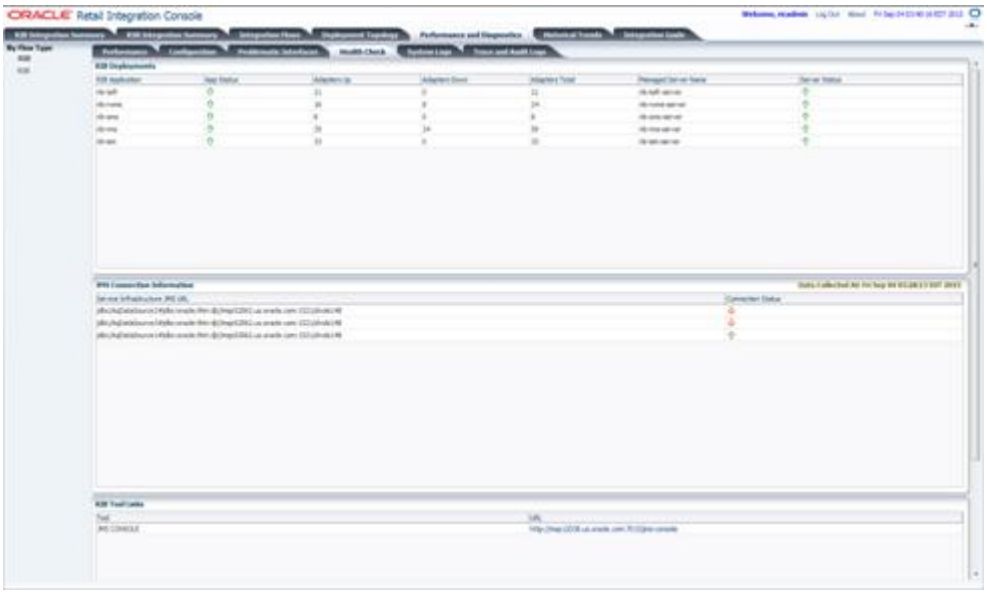
Show Top Adapters with Most Errors for <rib-app>: Transaction details graph for this metric displays a bar graph showing failure vs dependency messages error counts for the top 10 adapters with maximum messages in error hospital of the selected application. Transaction details table displays total messages and dependent messages in error hospital for all the adapters of the selected application.

Adapter Status for <rib-app>: Transaction details graph for this metric displays a pie graph showing the running and stopped adapters of the selected application. Transaction details table displays the status for all the adapters of the selected application.

Show JMS Topics with Most Messages Stuck for <rib-app>: Transaction details graph for this metric displays a pie graph showing the messages waiting on the JMS topics for the selected application. Transaction details table displays the subscriber and messages waiting for the JMS topics of the selected application.

RIB Health Check

This tab displays RIB deployment, JMS connection, and RIB tools data in tabular format.



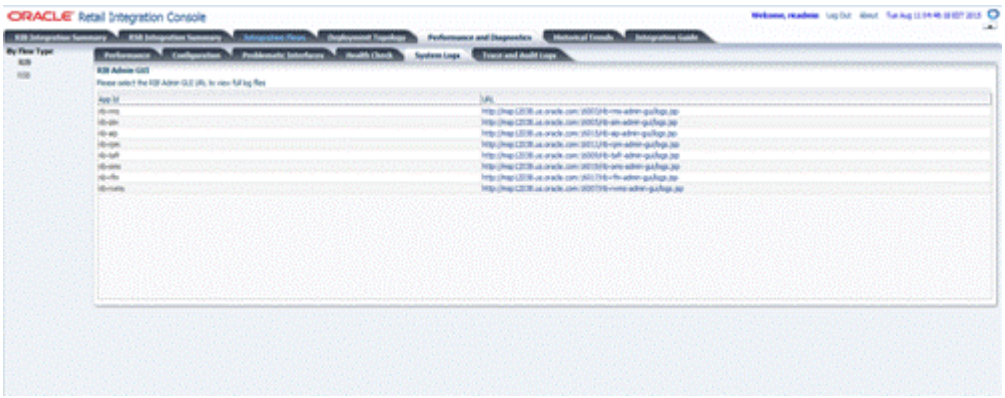
RIB Deployment: This table shows status, number of running, down and total adapters, managed server names and their status for all applications in scope.

JMS Connection Information: This table shows service infrastructure JMS URL and connection status for all the JMS which are configured for JMS console. The **Data Collected At** label displays the time when data was most recently collected from JMS console monitoring services.

RIB Tool Links: This table displays the URL to JMS console.

RIB System Logs

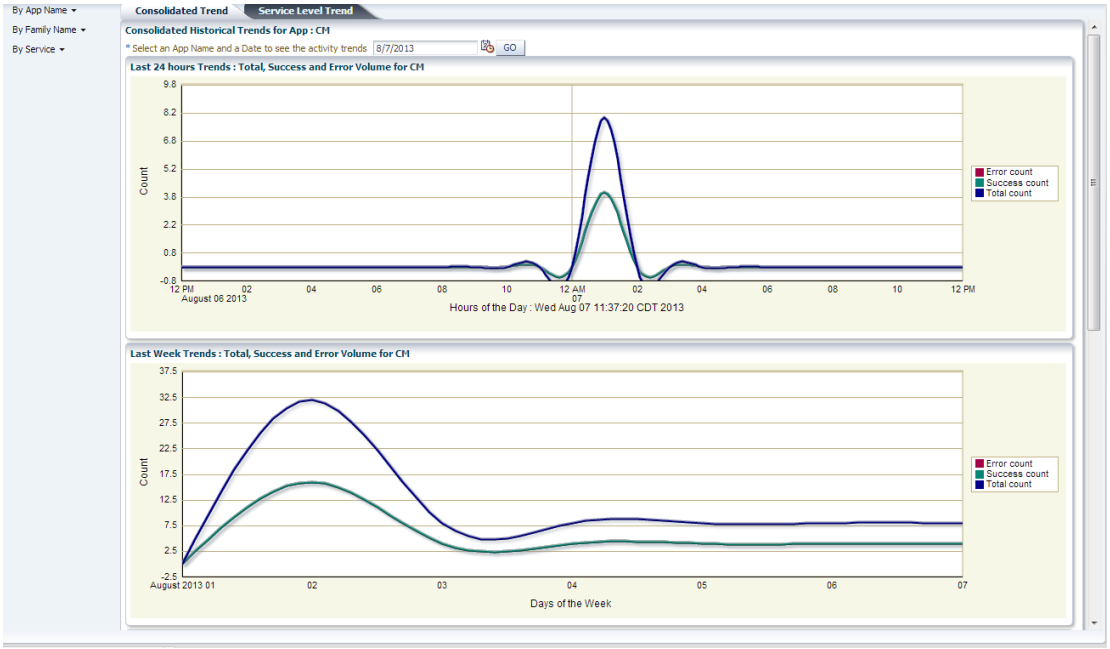
This tab displays links to the RIB Admin GUI logs for all applications in scope, for ease of navigation between RIC and RIB Admin GUI.



9

Historical Trends

Historical trend displays the trends for the selected application or message family or services for the last 24 hours, last week, last 3 months, or last year. In this release, the RIC doesn't show the RIB historical trends.



Left side menu has options 'By App Name', 'By Family Name' and 'By Service'.

- **By App Name**: The trends graphs are shown for all the services that belong to the selected application.
- **By Family Name**: The trends graphs are shown for all the services that belong to the selected message family.
- **By Service**: The user needs to pick the services they want to graph the trend.

On the right hand there are two tabs; Consolidated Trend and Service Level Trend.

By default, the consolidated trend for the first app name in the By App Name menu is shown. When the user wants to select a different app name or Family Name or Service, all the graphs are reset to blank. Then the user will have to click on the GO button to generate the graphs for current selection.

Date field is preselected to current date. If the user wants a previous date they can use the date picker to select the date.

Consolidated Trend

Each graph displays the total count (both successes and failure), success count, and failure count for all services that belong to the selected application, family, or service. The page has 4 graphs that have total count, success count and error count lines.

- Graph 1 displays the last 24 hours trends from the selected date and time.
- Graph 2 displays the last week trends from the selected date and time.
- Graph 3 displays the last month trends from the selected date and time.
- Graph 4 displays the last year trends from the selected date and time.

Consolidated Historical Trends By Service

This is slightly different from the other two options.

It contains a shuttle box with list of available services. User can pick the 5 services they want and click on GO button. Shuttle box only allows 5 services at a time. If more than 5 are picked, a warning message is displayed and the GO button is disabled.

The graphs are different too; the graph shows total count, success count and error count for each of the selected services.

Service-Level Trend

Service Level Trends shows the trends for each service in the application, family, or service.

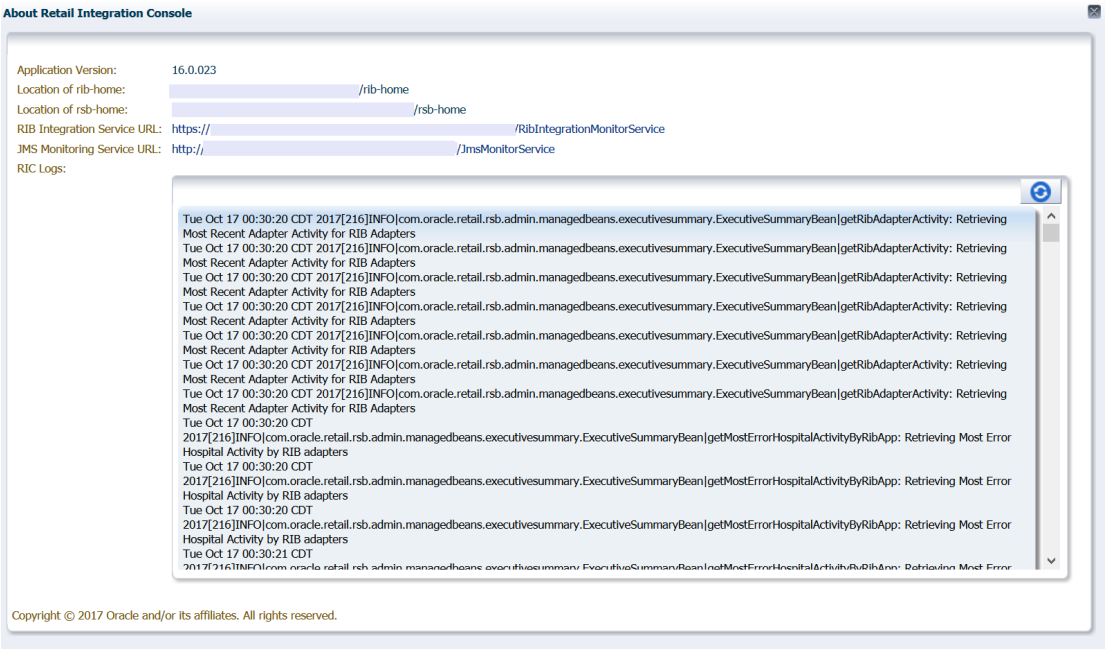
You can search by the app name or family name. The date field has a current date by default and a list of radio buttons (24 hours, last week, last month and last year from the date selected). Twenty-four hours is the default selected interval option. Click **GO** after the selection is made. Three different graphs are generated.

- Graph 1 displays total transaction count
- Graph 2 displays total success count
- Graph 3 displays total error count

The time intervals vary depending on the radio button selected. If the user selected for last 7 days, all three graphs (total, success and error) display the trends for the last 7 days for each selected service.

10
About

As the name indicates, the About pop-up window displays the useful information and logs of the current RIC application. The About pop-up can be opened by clicking the About link from any tab on RIC.



Application Version: Displays the version of RIC application.

Location of rib-home: Displays the location of the rib-home, from the RIC configuration file. The location of rib-home is shown only if the RIB is enabled.

RIB Integration Service URL: Displays the URL to the RIB integration monitoring service. The RIB integration monitoring service is consumed by RIC to populate the RIB monitoring data. The URL to the service is shown only if the RIB is enabled.

JMS Monitoring Service URL: Displays the URL to the JMS monitoring service. JMS monitoring service is consumed by RIC to populate the RIB monitoring data. The URL to the service is shown only if RIB is enabled.

RIC Logs: The RIC application logs are displayed in the About pop-up by clicking the provided button. This operation could take a few minutes depending on the log file size and the network speed.

11

Enterprise Integration Guide

The RIC application has the *Oracle Retail Enterprise Integration Guide* built in, for ease of access. This tab is an entry point to the Integration Guide.

The Integration Guide is the master document that has in-depth information about Oracle Retail Integration Interfaces including RIB, RSL, and IGS. This gives an enterprise view of integration points across different integration patterns. You can find the information on a particular message flow/an application/or an integration pattern.

For detailed information about a particular message flow execution path in the Integration Guide, you can select the flow ID. The control navigates to Flow information in the Integration guide tab.

12 Internationalization

Internationalization is the process of creating software that can be translated more easily. Changes to the code are not specific to any particular market. This section describes configuration settings and features of the software that ensure that the base application can handle multiple languages.Oracle Retail applications have been internationalized to support multiple languages.

Translation

Translation is the process of interpreting and adapting text from one language into another. Although the code itself is not translated, components of the application that are translated include the following:

- Graphical User Interface (GUI)
- Error Messages

The following components are not translated:

- Documentation (online help, release notes, installation guide, user guide, operations guide)
- Batch programs and messages
- Log files
- Configuration tools
- Reports
- Demonstration data
- Training materials

The user interface has been translated into the following languages:

- Chinese (Simplified)
- Chinese (Traditional)
- Croatian
- Dutch
- French
- German
- Greek
- Hungarian
- Italian
- Japanese
- Korean
- Polish

- Portuguese (Brazilian)
- Russian
- Spanish
- Swedish
- Turkish

Setting the User Language

Change the Web browser locale settings to reflect the relevant language settings in the application user interface using the following steps:

1. Launch Mozilla Firefox.
2. In the **Options** menu, choose **Options**. The Options window appears.
3. In the Options window, choose the **Content** tab.
4. Under the **Languages** heading, click **Choose**. The Languages window appears.
5. In the Languages window, click **Select a language to add…** to add the required language.
6. Select the language you added and use the Move Up or Move Down buttons to set up the order of preference.
7. In the Languages window, click **OK**.
8. In the Options window, click **OK**.

RIC displays content it receives from other applications and sources besides its own internal interface. The content from sources outside of the RIC may or may not be translated. Therefore, it is quite possible to see content in multiple languages.

A

Appendix: RIC Installation Checklist

Property Name in the JSON file	Description	Editable?	Sample Value
RicDataSource			
dataSourceName	Name of the datasource, the installer will create to connect to the database	NO	N/A - DO NOT CHANGE THE DEFAULT VALUE
dataSourceClass	DataSource class, the installer will use to configure the data source	NO	N/A - DO NOT CHANGE THE DEFAULT VALUE
dataSourceJndiName	JNDI name used by RIC application to connect to the database	NO	N/A - DO NOT CHANGE THE DEFAULT VALUE
dbcUrl	DBC URL used by RIC application to connect to the database	Yes	jdbc:oracle:thin:@// dbserver.example.com:1521/ pdborcl
jdbcUserAlias	JDBC User Alias used by RIC application to connect to the database	NO	N/A - DO NOT CHANGE THE DEFAULT VALUE
jdbcUser	JDBC User Name used by RIC application to connect to the database	NO	N/A - DO NOT CHANGE THE DEFAULT VALUE
jdbcPassword	JDBC Password used by RIC application to connect to the database	NO	N/A - DO NOT CHANGE THE DEFAULT VALUE
RicAppServer			
weblogicDomainName	Name of the Weblogic domain on which RIC application will be deployed	Yes	ric_domain
weblogicDomainHome	Absolute path to the Weblogic domain	Yes	/user/local/Oracle/ Middleware_home/ Weblogic12.2.1.4.0/21.0.000 user_projects/domains/ ric_domain
weblogicDomainAdminServerUrl	Weblogic Admin Server URL of the domain being used for deployment of the app.	Yes	t3://example.com:7001
weblogicDomainAdminServerProtocol	Weblogic Domain Admin Server Protocol, the protocols used for the deployment of the app.	Yes	t3/t3s
weblogicDomainAdminServerHost	Name of the host machine where Weblogic server is installed.	Yes	example.com

Property Name in the JSON file	Description	Editable?	Sample Value
weblogicDomainAdminServerPort	Weblogic Domain Admin Server Port	Yes	7001
weblogicDomainAdminServerUserAlias	Weblogic Domain User Alias, installer will use to bind the user to the Weblogic server admin user	NO	N/A - DO NOT CHANGE THE DEFAULT VALUE
weblogicDomainTargetManagedServerName	Weblogic Domain Managed Server Name, the name of the managed server on which RIC application will be deployed	Yes	ric-server
ricUiUserGroup	RIC UI User Group, the name of the User Group authorized to access RIC GUI	NO	N/A - DO NOT CHANGE THE DEFAULT VALUE
ricUiUserAlias	RIC UI User Alias, installer will use the alias to bind the user with the application	NO	N/A - DO NOT CHANGE THE DEFAULT VALUE
ricUiUser	RIC UI User, installer will retrieve the username from wallet and create the user on Weblogic. This user name should be used to login to the app.	NO	N/A - DO NOT CHANGE THE DEFAULT VALUE
ricUiPassword	RIC UI Password, installer will retrieve the password from wallet and create the user on Weblogic. This password should be used to login to the app.	NO	N/A - DO NOT CHANGE THE DEFAULT VALUE
secureCookie	Flag to secure Cookies.	Yes	true/false
IntegrationProduct			
ribEnable	Flag to enable or disable RIB for RIC. Edit this property to change RIB mode	Yes	true/false
bdiEnable	Flag to enable or disable BDI for RIC. This property value is not used in current version of RIC. By default, false.	NO	N/A - DO NOT CHANGE THE DEFAULT VALUE
ribHome	RIB home path, this property should point to valid rib-home on the same machine if ribEnable is set to true. The value should be in the specified format in sample value.	Yes	user@example.com:/user/local/integration/rib-home

Property Name in the JSON file	Description	Editable?	Sample Value
bdiHome	BDI home path, this property should point to valid bdi-home on the same machine if bdiEnable is set to true. The value should be in the specified format in sample value. By default, can be same as ricHome.This property value is not used in current version of RIC.	NO	N/A - DO NOT CHANGE THE DEFAULT VALUE