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Integration Console User Guide

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Primary Author: Sanal Parameswaran

Contributing Author: Rakhee Prabhudesai

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Preface

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

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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Related Documents

For more information, see the following documents in the Oracle Retail Service Backbone documentation set:

- *Oracle Retail Service Backbone Developers Guide*
- *Oracle Retail Service Backbone Security Guide*
- *Oracle Retail Service Backbone Implementation Guide*
- *Oracle Retail Service Backbone Installation Guide*
- *Oracle Retail Service Backbone Release Notes*

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- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

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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 or the Oracle Service Bus (OSB) 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 OSB and 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).

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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

In RSB 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.*

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RIC Kernel

The RIC Kernel has the following directory structure:

```
  ric-home
|
|     |---- bin
|     |     |---- ric-app-compiler.sh
|     |     `---- ric-app-deployer.sh
|     |---- conf
|     |     |---- commons-logging.properties
|     |     |---- log4j.properties
|     |     |---- logging.properties
|     |     |---- ric-deployment-env-info.json
|     |     |---- ric-internal-trust-store.jks
|     |     |---- simplelog.properties
|     |---- dist
|     |     |---- integration-guide-15.0.0.war
|     |     |---- rsb-admin-15.0.0.ear
|     |---- lib
|     |---- target
```

- Inside ric-home we have bin, conf, dist, lib and target directories.
- bin: It contains the RIC compiler and deployer script files.
- conf: It contains the configuration files for RIC.
- dist: It contains the RIC components which are rsb-admin-<version>.ear and integration-guide-<version>.war.
- lib: It contains the libraries required by RIC.
- target: This is a place holder directory. It contains the rsb-admin-<version>.ear, which is the output of the RIC compiler.

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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 and RSB is out-of-scope for your integration.	"ribEnable":"true", "rsbEnable":"false", "ddiEnable":"true",
RSB ONLY	RIC is configured to collect and display only RSB data.	If RSB is in-scope and RIB is out-of-scope for your integration	"ribEnable":"false", "rsbEnable":"true", "ddiEnable":"true",
DUAL (RIB+RSB)	RIC is configured to collect and display both RIB and RSB data.	If both RIB and RSB are in-scope for your integration.	"ribEnable":"true", "rsbEnable":"true", "ddiEnable":"true",

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

Retailer's site -specific integration topology must drive this decision. Customers that use both RIB and RSB must configure the RIC to run with Dual (RIB + RSB) mode. This configuration yields maximum visibility of integration system and is the recommended mode. Customers that use only messaging infrastructure for integration (RIB) must configure RIC with RIB_ONLY mode. Lastly, when only service oriented integration (RSB) is used then, you must configure RIC with RSB_ONLY mode.

DDI is enabled by default in all RIC modes, irrespective of the value of ddiEnable flag in the configuration file.

The value of the properties ribEnable and rsbEnable 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:@//dbserver.example.com:1521/pdb",
                "jdbcUserAlias":"ricDataSourceUserAlias",
                "jdbcUser":"GET_FROM_WALLET",
                "jdbcPassword":"GET_FROM_WALLET"
            },
        },
        "MiddlewareServerDef":{
            "RicAppServer":{
                "weblogicDomainName":"ric_domain",
    "weblogicDomainHome":"/user/local/Oracle/Weblogic12.1.3/user_
projects/domains/ric_domain"
                "weblogicDomainAdminServerUrl":"t3://example.com:7001",
                "weblogicDomainAdminServerProtocol":"t3",
                "weblogicDomainAdminServerHost":"example.com",
                "weblogicDomainAdminServerPort":"7001",

"weblogicDomainAdminServerUserAlias":"ricAppServerAdminServerUserAlias",
                "weblogicDomainTargetManagedServerName":"ric-server"
                "ricUiUrl":"http://example.com:7002/rsb-admin"
                "ricUiUserGroup":"RicAdminGroup"
                "ricUiUserAlias":"ricAdminUiUserAlias"
                "ricUiUser":"GET_FROM_WALLET"
                "ricUiPassword":"GET_FROM_WALLET"
            },
            {
                "dataSourceName":"AqDataSource3",
                "dataSourceClass":"oracle.jdbc.pool.OracleDataSource",
                "dataSourceJndiName":"jdbc/AqDataSource3",
                "jdbcUrl":"jdbc:oracle:thin:@//host.example.com:1521/pdborcl",
                "jdbcUserAlias":"aqDataSourceUserAlias3",
                "jdbcUser":"GET_FROM_WALLET",
                "jdbcPassword":"GET_FROM_WALLET"
            }
            ]
        },
            "IntegrationProduct":{
                "ribEnable":"true",
              "rsbEnable":"true",
              "ddiEnable":"true",
                "ribHome":"user@example.com:/home/dev02/15.0.0/rib-home",
           "rsbHome":"user@example.com:/home/dev02/15.0.0/rsb-home"
                "ddiHome":"user@example.com:/home/dev02/15.0.0/rsb-home",
        },
        "RicApplication":{
            "ricAppUses":[
                "RicDataSource",
                "RicAppServer"
            ]
        }
    }
}
```

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

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, in other words both must reside in the same file system.

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

1. Download RicKernel15.0.0ForAll15.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.
    1. Set the value of the ribEnable property in the configuration file to True.
    2. Set the value of the ribHome property in the configuration file to point to rib-home.
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.
    1. 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.

RSB Only Mode

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

1. RSB must be deployed.
2. rsb-home must be accessible to ric-home, in other words both reside in the same file system.

Note: If the RIB is already installed, we recommend configuring the RIC in a DUAL mode which provides visibility into the RIB and RSB systems. For more information, see DUAL Mode (RIB and RSB).

Take the following steps to deploy the RIC in a RSB only mode:

1. Download RicKernel15.0.0ForAll15.x.xApps_eng_ga.zip to a location (for example, RIC-APP-BUILDER) on yourthe computer which has your rsb-home.
2. Edit the ric-deployment-env-info.json configuration file located in the ric-home/conf/ folder.
3. Modify the DataSourceDef, MiddlewareServerDef, and the IntegrationProduct with information that is specific to your environment.
    1. Set the value of the rsbEnable property in the configuration file to True.
    2. Set the value of the rsbHome property in the configuration file to point to rsb-home.
    3. Set the value of the ddiHome property in the configuration file to point to rsb-home.
    4. Set the value of the RicDataSource : jdbcUrl property to the same as that of the service-infrastructure-db.jdbc-url property in rsb-home/deployment-home/conf/rsb-deployment-env-info.properties.
    5. Set the value of the RicAppServer fields to point to the environment where you want to deploy the RIC.

    Note: make sure RicDataSource and RsbDataSource point to the same database schema.

4. 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.
    1. When prompted by the compiler, enter the user name and password for WebLogic server, RicDataSource, and the RIC admin user. The RIC admin user is used to log in to the RIC.
5. From the same folder, run the deployer script to create the user and group and deploy the RIC on the WebLogic server as follows: $ sh ric-app-deployer.sh –deploy-ric-app.

DUAL Mode (RIB and RSB)

Install the RIC in the DUAL mode to provide visibility into both RIB and RSB. 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. RSB must be deployed.
4. rib-home and rsb-home must be accessible to ric-home, in other words both must reside in the same file system.

Take the following steps to deploy RIC in DUAL mode:

1. Download RicKernel15.0.0ForAll15.x.xApps_eng_ga.zip to a location (for example, RIC-APP-BUILDER) on the computer which contains the rib-home and rsb-home.
2. Edit the ric-deployment-env-info.json configuration file located in the ric-home/conf/ folder.
3. Modify the DataSourceDef, MiddlewareServerDef, and the IntegrationProduct with information that is specific to your environment.
    1. Set the value of ribEnable and rsbEnable property in the configuration file to True.
    2. Set the value of ribHome property in the configuration file to point to rib-home.
    3. Set the value of rsbHome property in the configuration file to point to rsb-home.
    4. Set the value of ddiHome property in the configuration file to point to rsb-home.
    5. Set the value of RicDataSource : jdbcUrl property to the same as that of the service-infrastructure-db.jdbc-url property in rsb-home/deployment-home/conf/rsb-deployment-env-info.properties.
    6. Set the value of the RicAppServer fields to point to the environment where you want to deploy the RIC.

    Note: make sure RicDataSource and RsbDataSource point to the same database schema.
4. 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.
    1. When prompted by the compiler, enter the user name and password for WebLogic server, RicDataSource, and RIC admin user. The RIC admin user is used to log in to the RIC.
5. From the same folder, run the deployer script to create the user and group and deploy the RIC on the WebLogic server as follows: $ sh ric-app-deployer.sh –deploy-ric-app.

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.

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RIC Technical Design Overview

The following is an overview of the technical design of RIC product:

- RIC is an ADF UI application.
- RIC reads and uses the RIB and/or RSB configurations, if RIB and/or RSB are enabled.
- RIC uses the WebLogic Diagnostic framework to forward all of the logs pertinent to RSB.
- RIC summarizes and displays data collected by the RIB Integration monitoring and JMS monitoring services to display RIB run time information.
- All RSB paks are created using the RSE tool. The tool includes instrumentation with OSB configurations.
- The RSB instrumentation is asynchronously writing events to RSB schema.
- RIC uses the RSB service activity schema and OSB instrumentation to present data and data summaries to the UI.
- RIC directly integrates with the RRA/IG through context hyperlinks.

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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.

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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.

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.

8

RSB Integration Summary

The RSB Integration Summary page shows a one page view of the overall RSB integration infrastructure. This page shows transaction counts by application, service execution success and failure counts by application, average service call response time by application, top problematic interfaces and CPU and memory usage of RSB servers. The summary information is for applications that are in scope and servers for the last 24 hours.

The Auto Refresh checkbox, if checked, would poll for data for the first six graphs for every 10 seconds and polls for data for the last three graphs (Server Info graphs) every 5 minutes.

Transaction Counts by Application: A pie graph that shows the total number of transactions for each application in the last 24 hours from the database.

Success versus Failure Count by Application: This graph shows the number of successful transactions and the number of failed transaction for each application. The number of success count versus failure count for an application is distinguished by activity_state in database table. If the activity_state value is RESPONSE, it is a successful invocation. If it is ERROR, it is counted as a failure.

Average Response Time by Application: This graph displays the average response time taken by each application to process the requests. The time is shown in seconds.

Top Problematic Interfaces: This table displays the number of faults for each proxy service, along with data about the application that the proxy service belongs to and the time of the most recent transaction failure.

All the data is displayed in descending order showing the proxy service with maximum number of faults first.

Recent Activity: This table shows the list of proxy services with latest invocation time and the total number of requests processed by it. This table is sorted by the last activity time (latest first).

System Alerts and Business Alerts by Application: This bar graph displays SLA alert and business alert count for each application. These alerts are retrieved from OSB console using JMX API.

SLA alerts are automated responses to violations of Service Level Agreements (SLAs). These alerts are displayed on the Oracle Service Bus dashboard. They are generated when the service violates the service level agreement or a predefined condition. Business alerts (Pipeline alerts) can be generated in a message flow whenever you define an alert action under the reporting category in the message flow and the alert condition is met.

Show Server Information: This section contains the information about the server usage.

RSB Server Details: This table displays the list of servers in the RSB cluster (Admin server and managed servers) and their statuses.

CPU Usage for RSB Servers: This graph displays the CPU usage for each server in the RSB cluster.

Memory Usage for RSB Servers: This graph displays the memory usage (Current memory, max memory and free memory) for each server in the cluster.

9

Integration Flows

The RSB, RIB, and DDI 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.

RSB Flow Execution Path

The table shows the following columns:

- Flow ID: This is a unique ID assigned to each integration flow.
- Consumer Application: The application that consumes the service.
- Consumer: The qualified name of the consumer service.
- Decorator: The name of the decorator service.
- Provider: The qualified name of the provider service.
- Provider Application: The name of the application that provides the service.
- Family Name: The name of the message family of the service.

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.

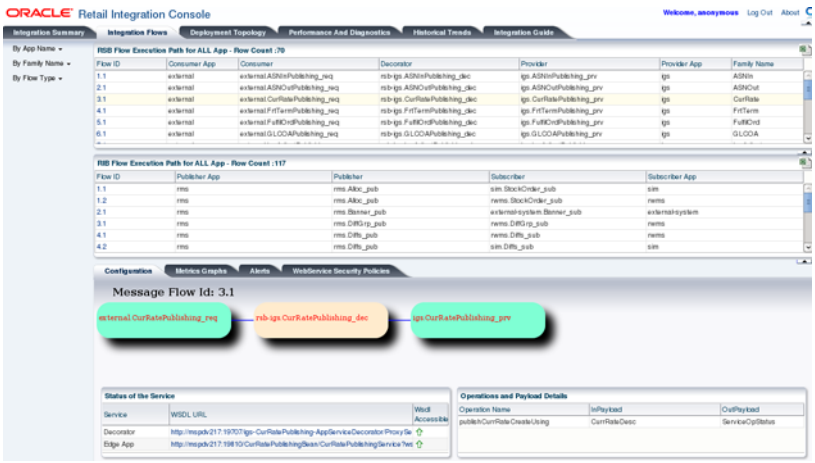
- Subscriber Application: The application that subscribes to the topic.

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

RSB Flow Details

When an RSB flow is selected, four additional tabs are displayed.

Configuration Tab



This panel displays the diagram of request flow from consumer, decorator service and provider in sequence.

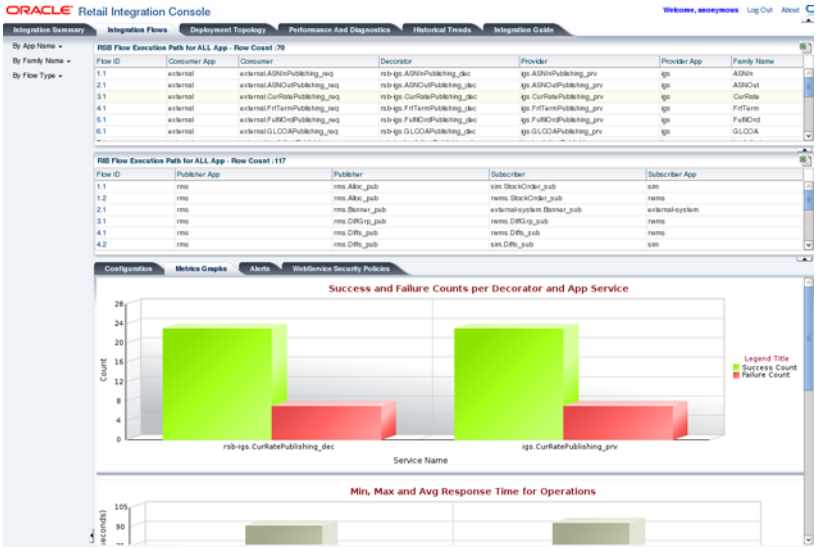
Status of Service

This table displays the type of service, the WSDL URL for the service, and the accessibility status of the WSDL.

Operations and Payloads Details

This table displays the operation names, their respective input payload and output payload Retail Business Object (RBO) types.

Metrics Graphs Tab



This table shows three graphs of collected metric information.

Success and Failure counts per Decorator and App Service

This graph displays the number of success and failure counts for decorator and Edge App Service.

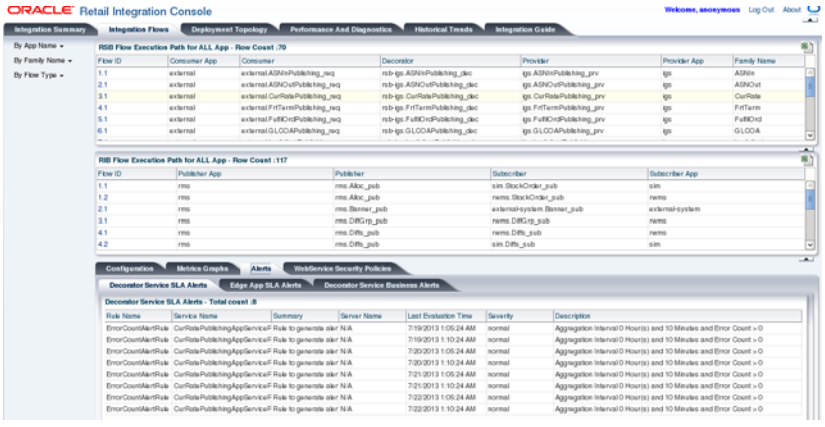
Min, Max, and Average Response Time for Operations

This graph displays the minimum, maximum and average response time taken by Business services to process each request for operations specified.

Success and Failure Count for Operations

This graph displays success and failure count for each operation.

Alerts Tab



This tab has 3 additional sub-tabs that display the Decorator Service SLA alerts, Edge App SLA Alerts and Decorator Service Business alerts.

Decorator Service SLA Alerts

These are generated when the decorator service violates the service level agreement or a predefined condition.

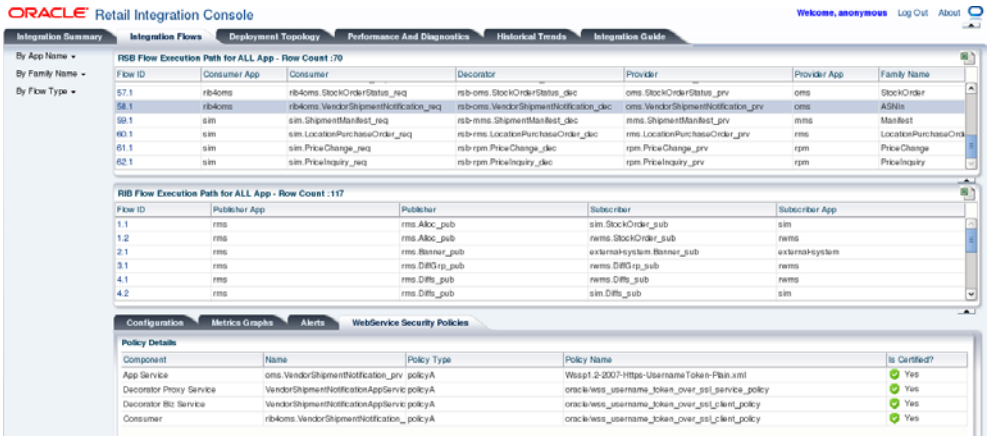
Edge App SLA Alerts

These are generated when the edge app service violates the service level agreement or a predefined condition.

Decorator Service Business Alerts

These are generated in a message flow whenever you define an alert action under the reporting category in the message flow and the alert condition is met.

Web Service Security Policies Tab



This tab displays a table of the following columns:

Component: The components that are secured in the flow.

Edge Application Service: The retail application in RIB. For example, RMS.

Proxy Service and Business Service: RSB components in OSB.

Consumer: The retail application that is either internal or external.

Name: The names of the components used in the flow.

Policy Type: This is the name of the web service policy configuration. Possible values are:

- PolicyUnsecured
- PolicyA
- PolicyB

Note: The security policies certified by Oracle Retail are:

- Policy A: SSL plus UsernameToken
- Policy B: Message Protection plus UsernameToken

Policy Name: The policy security configuration used to secure the component.

For Policy A, the Policy Name is `Wssp1.2-2007-Https-UsernameToken-Plain.xml`.

For Policy B, the Policy Name is `Wssp1.2-2007-Wss1.1-UsernameToken-Plain-EncryptedKey-Basic128.xml`, `Wssp1.2-2007-EncryptBody and Wssp1.2-2007-SignBody.xml`.

Is Certified?: Displays whether the security policy is supported.

> **Note:** See the *Oracle Retail Service Backbone Security Guide* for more details.

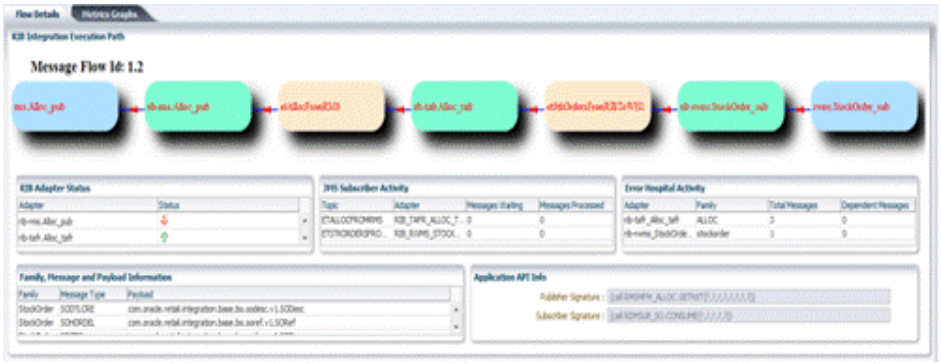
RIB Flow Details

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.

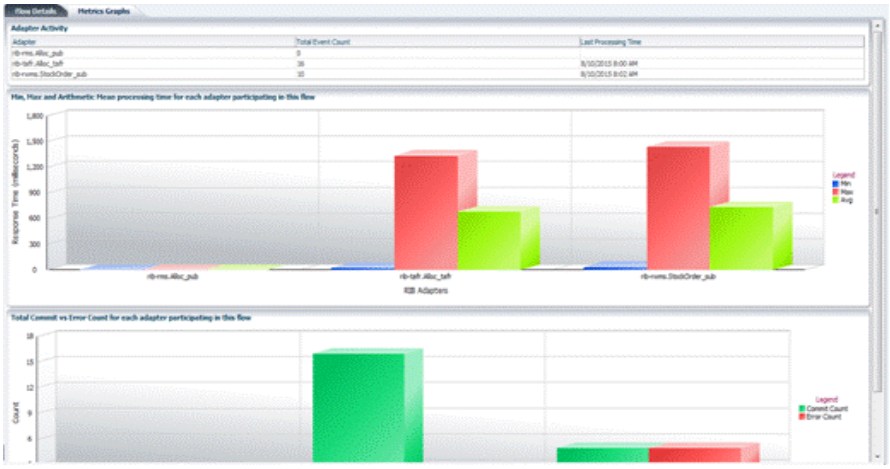
Message Type: A message family may contain multiple message types. Each message type encapsulates the information specific to a business entity within one or more business events. For example, the order message family is published for events such as Delete PO, Create PO.

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.

DDI Flow Details

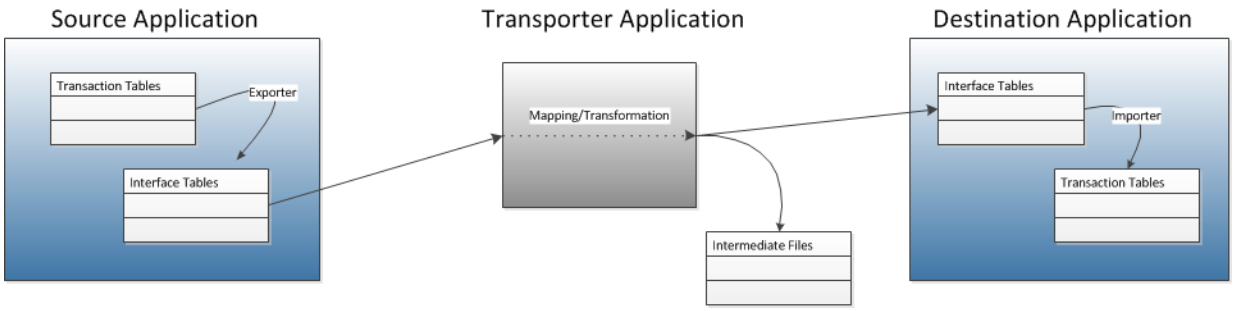
DDI Flow stands for Direct Data Integration Flow. These flows represent a third type of integration in Retail applications. The message oriented asynchronous flows are represented by the RIB message flows while the service oriented synchronous flows are represented by the RSB message flows. DDI represents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

Previously, RIC showed only the RIB message flows and RSB service flows. With this release, RIC displays the DDI flows used in the retail environment.

DDI flows are not monitored or instrumented in the RSB environment. RIC shows the DDI 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 DDI integration flow information comes from a static XML file (ddi-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 DDI flow can be represented by the following diagram:

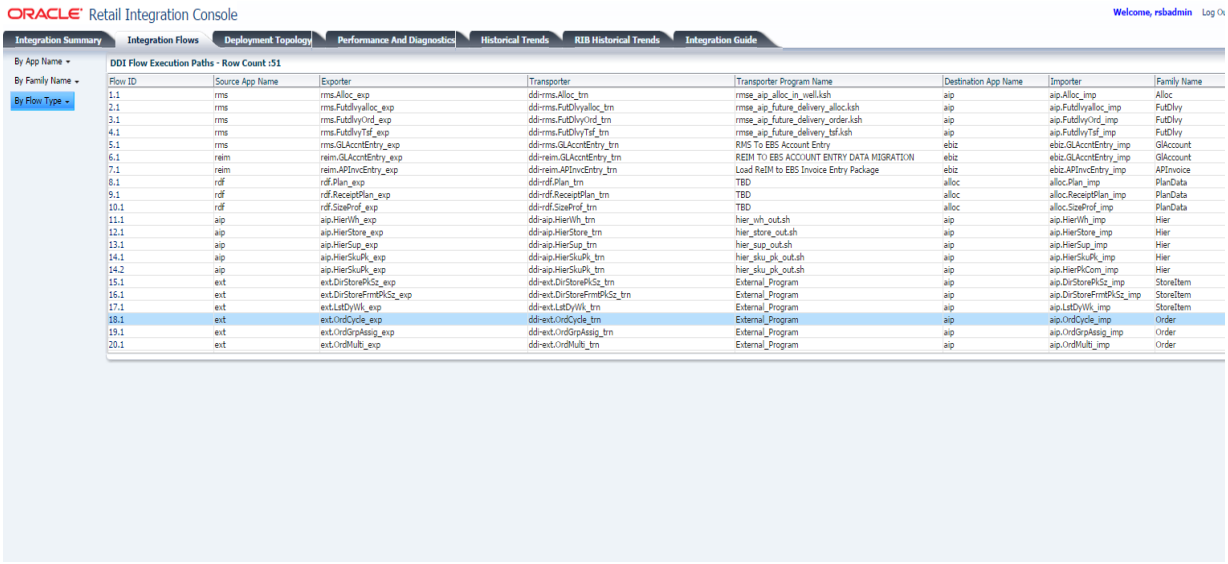


The Source Application provides the data. There may be an exporter program(s) in the source application that extracts the business data from the transactional tables and updates the interface tables. Interface tables are generally de normalized flatter simpler tables designed to make interaction with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

The Transporter Application receives the data from the interface tables of the Source Application, performs any required mapping or transformation and stores the data in the Interface tables of the Destination Application. During this time, it may use intermediate storage, like flat files.

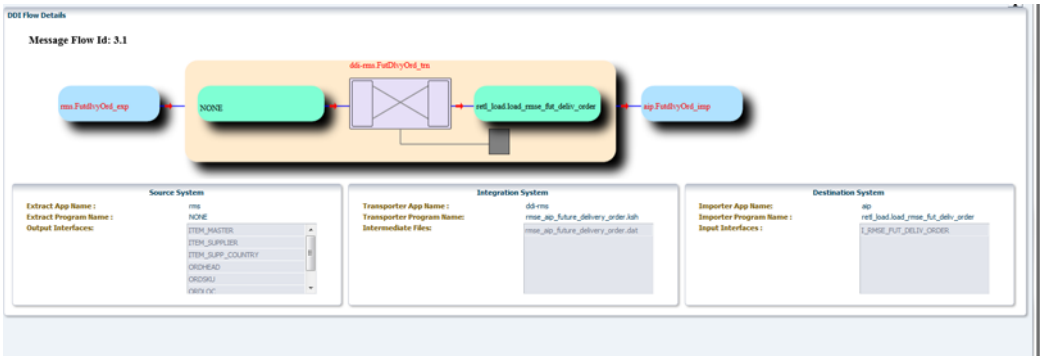
The Destination Application is the consumer of the data. There may be an importer program in the Destination Application that takes data from the interface tables, runs through the validation code, executes the business logic process, and finally updates the data in the transaction tables.

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



Flow ID	Source App Name	Exporter	Transporter	Transporter Program Name	Destination App Name	Importer	Family Name
1.1	rms	rms.Alloc_exp	ddi-rms.Alloc_trn	rmse_aip_alloc_in_well.ksh	aip	aip.Alloc_imp	Alloc
2.1	rms	rms.FutDlvyalloc_exp	ddi-rms.FutDlvyalloc_trn	rmse_aip_future_delivery_alloc.ksh	aip	aip.FutDlvyalloc_imp	FutDlvy
3.1	rms	rms.FutDlvyOrd_exp	ddi-rms.FutDlvyOrd_trn	rmse_aip_future_delivery_order.ksh	aip	aip.FutDlvyOrd_imp	FutDlvy
4.1	rms	rms.FutDlvyTsf_exp	ddi-rms.FutDlvyTsf_trn	rmse_aip_future_delivery_tsf.ksh	aip	aip.FutDlvyTsf_imp	FutDlvy
5.1	rms	rms.GLAccntEntry_exp	ddi-rms.GLAccntEntry_trn	RMS To EBS Account Entry	ebiz	ebiz.GLAccntEntry_imp	GlAccount
6.1	reim	reim.GLAccntEntry_exp	ddi-reim.GLAccntEntry_trn	REIM TO EBS ACCOUNT ENTRY DATA MIGRATION	ebiz	ebiz.GLAccntEntry_imp	GlAccount
7.1	reim	reim.APInvcEntry_exp	ddi-reim.APInvcEntry_trn	Load ReIM to EBS Invoice Entry Package	ebiz	ebiz.APInvcEntry_imp	APInvoice
8.1	rdf	rdf.Plan_exp	ddi-rdf.Plan_trn	TBD	alloc	alloc.Plan_imp	PlanData
9.1	rdf	rdf.ReceiptPlan_exp	ddi-rdf.ReceiptPlan_trn	TBD	alloc	alloc.ReceiptPlan_imp	PlanData
10.1	rdf	rdf.SizeProf_exp	ddi-rdf.SizeProf_trn	TBD	alloc	alloc.SizeProf_imp	PlanData
11.1	aip	aip.HierWh_exp	ddi-aip.HierWh_trn	hier_wh_out.sh	aip	aip.HierWh_imp	Hier
12.1	aip	aip.HierStore_exp	ddi-aip.HierStore_trn	hier_store_out.sh	aip	aip.HierStore_imp	Hier
13.1	aip	aip.HierSup_exp	ddi-aip.HierSup_trn	hier_sup_out.sh	aip	aip.HierSup_imp	Hier
14.1	aip	aip.HierSkuPk_exp	ddi-aip.HierSkuPk_trn	hier_sku_pk_out.sh	aip	aip.HierSkuPk_imp	Hier
14.2	aip	aip.HierSkuPk_exp	ddi-aip.HierSkuPk_trn	hier_sku_pk_out.sh	aip	aip.HierPkCom_imp	Hier
15.1	ext	ext.DirStorePkSz_exp	ddi-ext.DirStorePkSz_trn	External_Program	aip	aip.DirStorePkSz_imp	StoreItem
16.1	ext	ext.DirStoreFrmtPkSz_exp	ddi-ext.DirStoreFrmtPkSz_trn	External_Program	aip	aip.DirStoreFrmtPkSz_imp	StoreItem
17.1	ext	ext.LstDyWk_exp	ddi-ext.LstDyWk_trn	External_Program	aip	aip.LstDyWk_imp	StoreItem
18.1	ext	ext.OrdCycle_exp	ddi-ext.OrdCycle_trn	External_Program	aip	aip.OrdCycle_imp	Order
19.1	ext	ext.OrdGrpAssig_exp	ddi-ext.OrdGrpAssig_trn	External_Program	aip	aip.OrdGrpAssig_imp	Order
20.1	ext	ext.OrdMulti_exp	ddi-ext.OrdMulti_trn	External_Program	aip	aip.OrdMulti_imp	Order

Each of the DDI 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 that takes data from the source application's interface table(s) and updates the destination application.



The above diagram shows one of the DDI 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 program that updates 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.

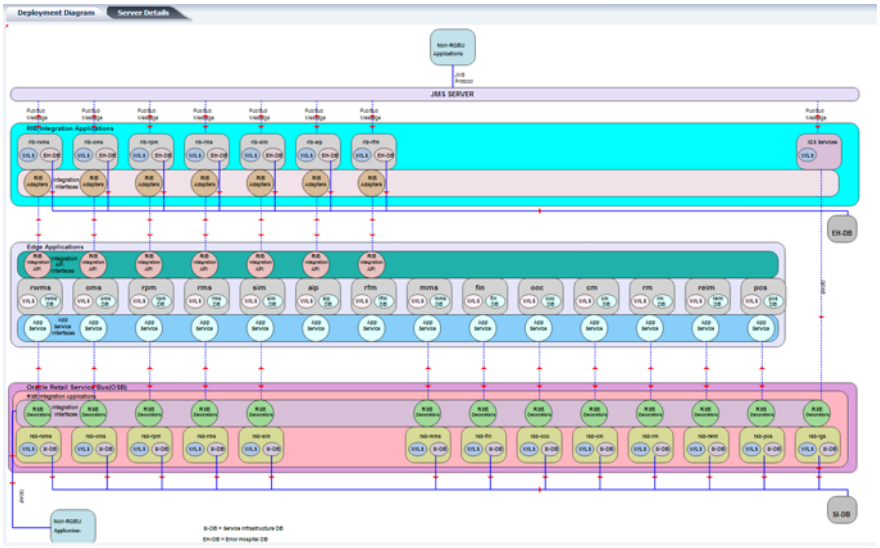
Interface Tables: These are the interface table(s) in the destination application.

10

Deployment Topology

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

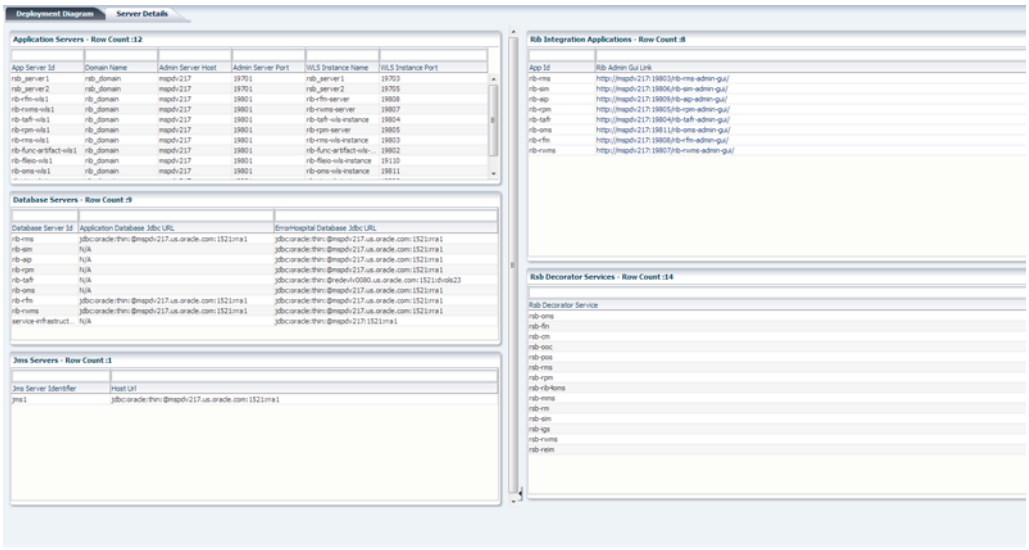
Deployment Diagram



The deployment diagram is dynamically generated based on the RSB and 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, RIB integration applications and RSB decorator services, 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.

RSB Decorator Services

This panel lists all the service requestors and service providers in scope.

11

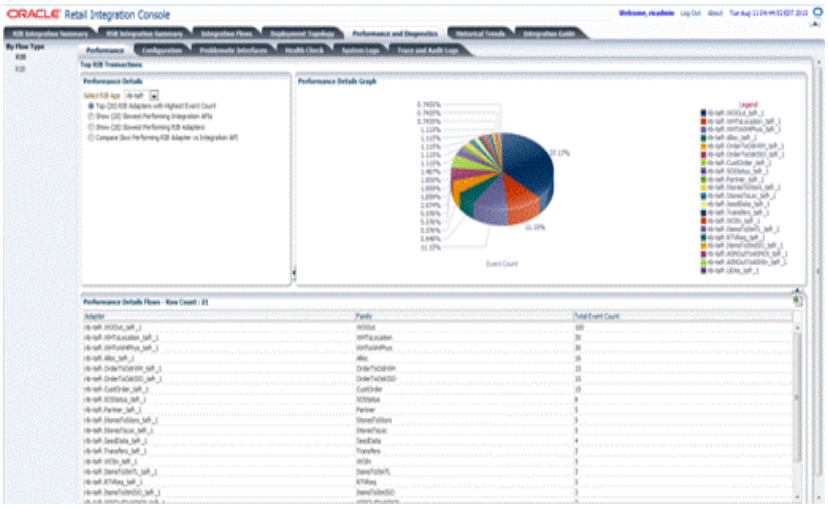
Performance and Diagnostics

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 and RSB. Depending on the selection RSB or 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.

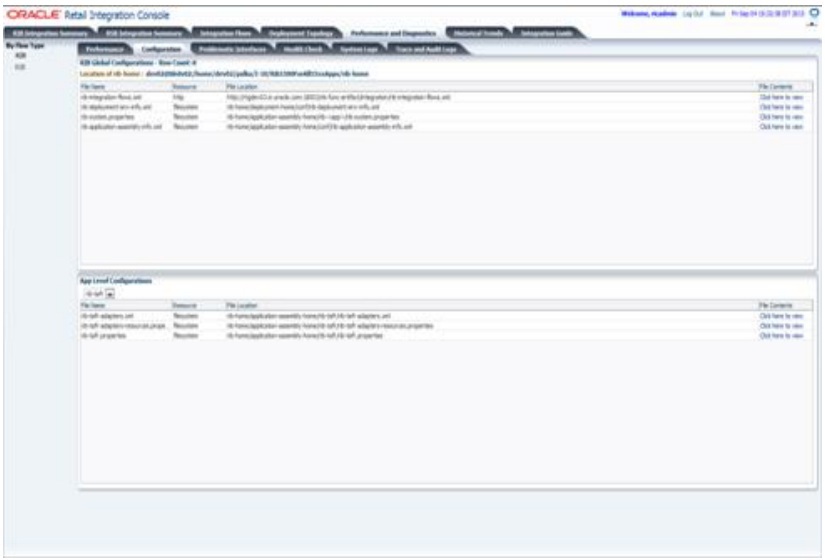
Show (20) Slowest Performing RIB Adapters: Performance details graph for this metric displays a pie graph showing the execution time for the 20 slowest RIB adapters

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.

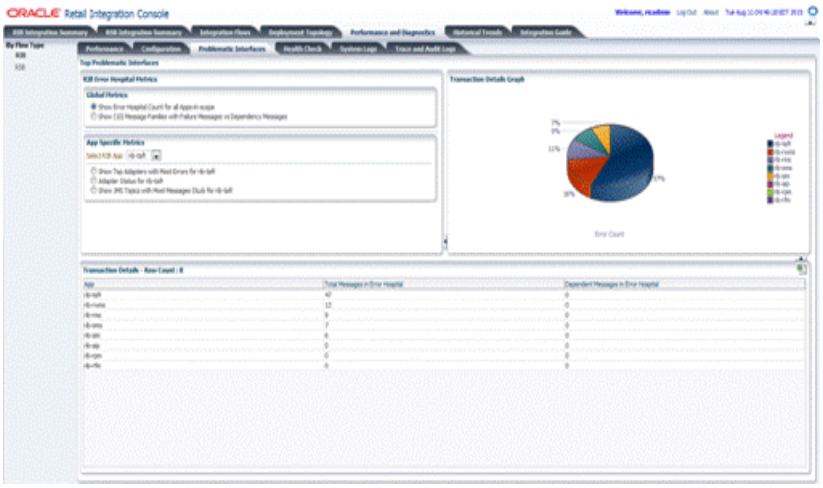


RIB Global Configuration: This table displays the global level files related to RIB.

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.

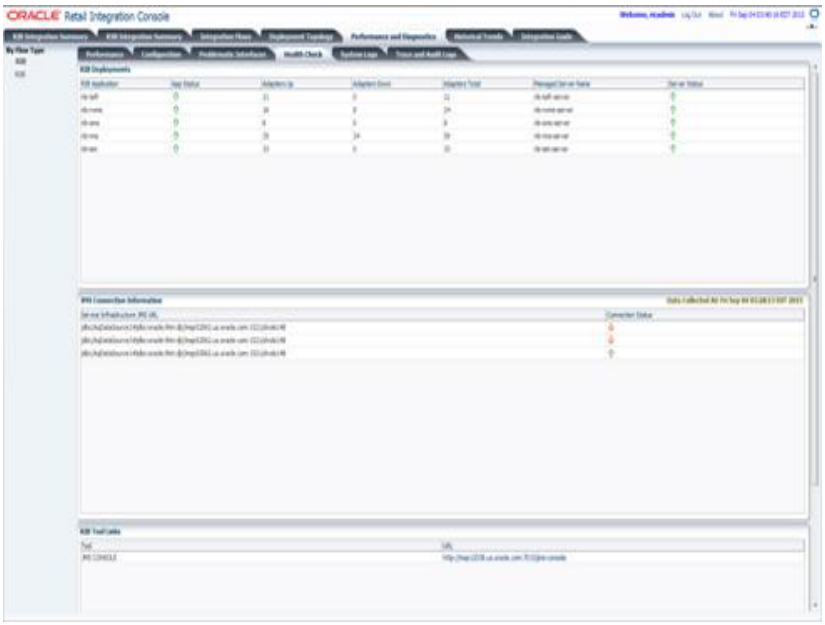
Show Top Adapters with Most Errors for <rib-app>: Transaction details graph for this metric displays a bar graph showing failure vs dependency messages error counts for the top 10 adapters with maximum messages in error hospital of the selected application. Transaction details table displays total messages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



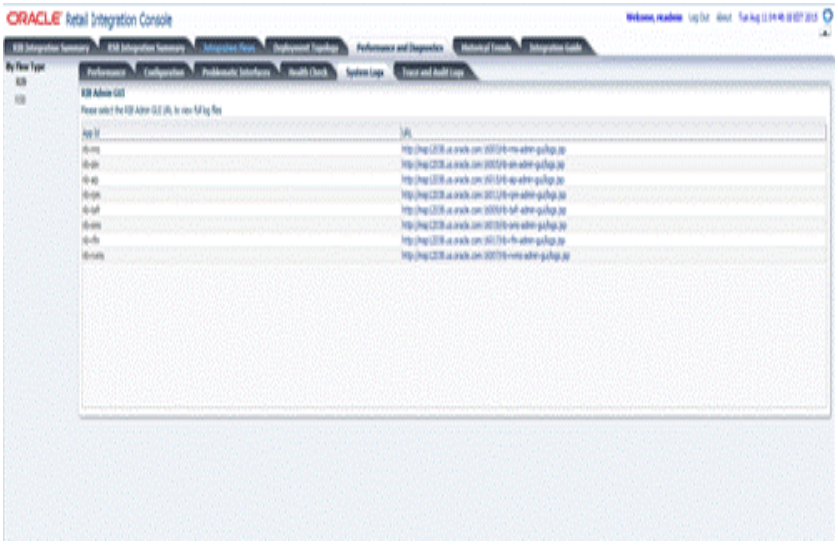
RIB Deployment: This table shows status, number of running, down and total adapters, managed server names and their status for all applications in scope.

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.

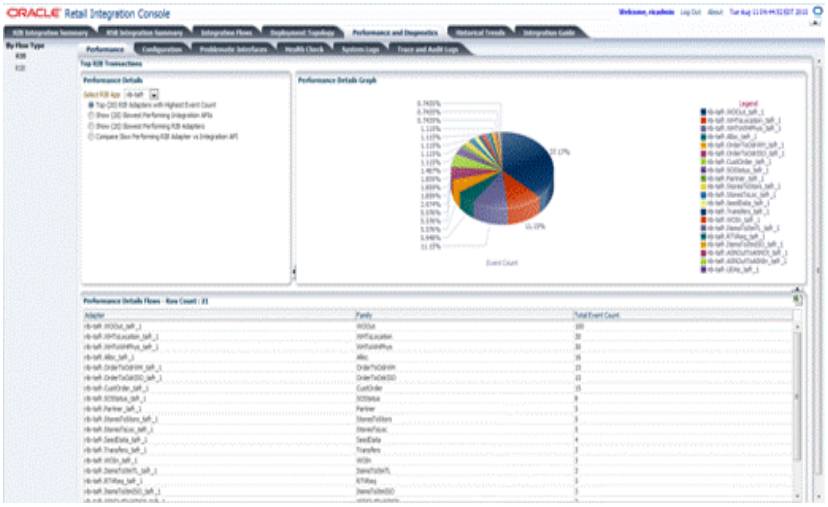
RIB Tool Links: This table displays the URL to JMS console.

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.



RSB Performance

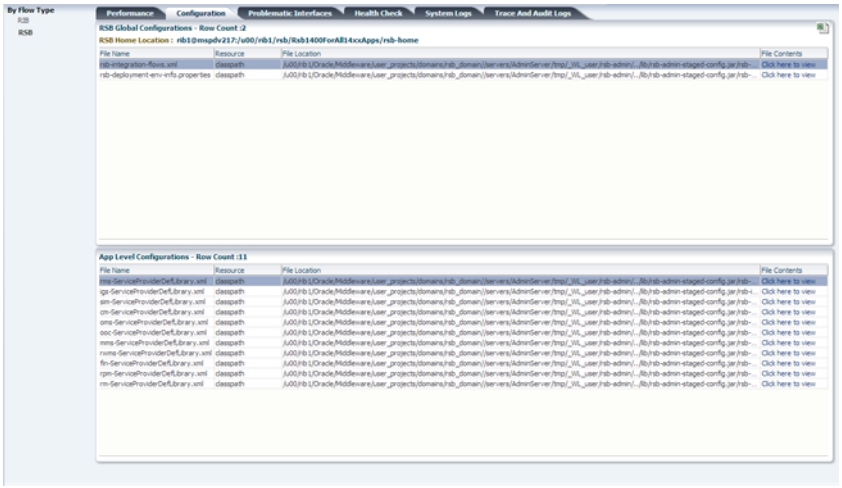


This tab is only for RSB. It contains the performance details for decorator services. Depending on the choice selected, corresponding performance details graph and performance details table are shown.

If all flows have count equal to zero, the table displays all flows. If one flow has message count greater than zero, the table displays only the top 20 flows per choice selected.

RSB Configuration

This tab displays the rsb-home, where the RSB kernel is located.

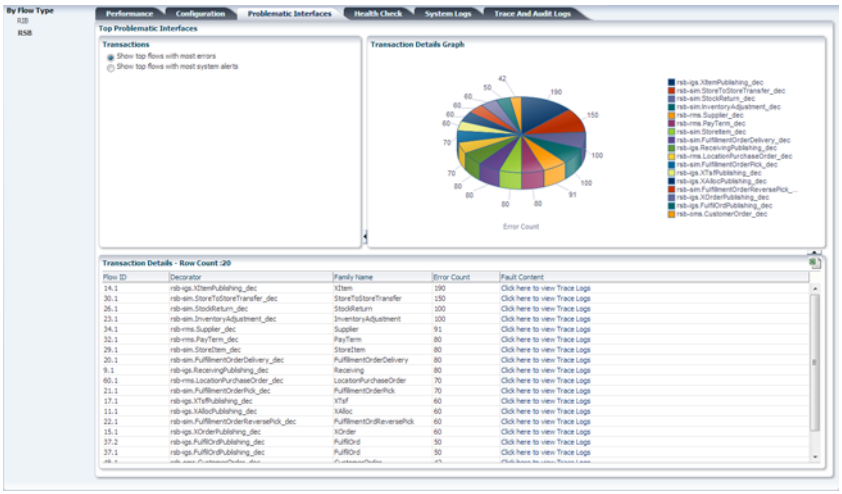


RSB Global Configuration: This table displays the global configuration files related to RSB.

Application Level Configurations: This table displays the application specific files for applications that are in scope.

RSB Problematic Interfaces

This tab is only for RSB. This page shows the flows with most errors or system alerts.



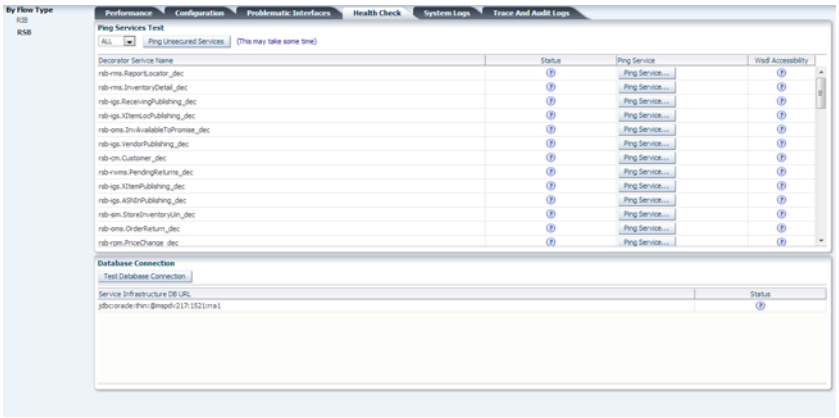
Transactions: Users can choose between two options: top flows with most errors or top flows with most system alerts.

Transaction Details Graph: It shows the errors or system alerts for decorator services in form of pie chart. The services are listed next to the graph.

Transaction Details Table: It shows the columns for flow ID, decorator name, message family name, error count and a link to trace logs. The link takes the user to the Trace and Audit Logs page for the selected decorator.

RSB Health Check

This tab allows pinging services as well as database connectivity. When a ping operation is called, the service invocation goes through edge app service through decorator and back. The user can also test database connectivity in this page.



Ping Services Test

The page has a drop-down list that contains all the applications that are in scope. The default value is “ALL”. By default, the table shows all the decorator services in scope. When we choose an application from the drop-down list, all the services related to that application are displayed.

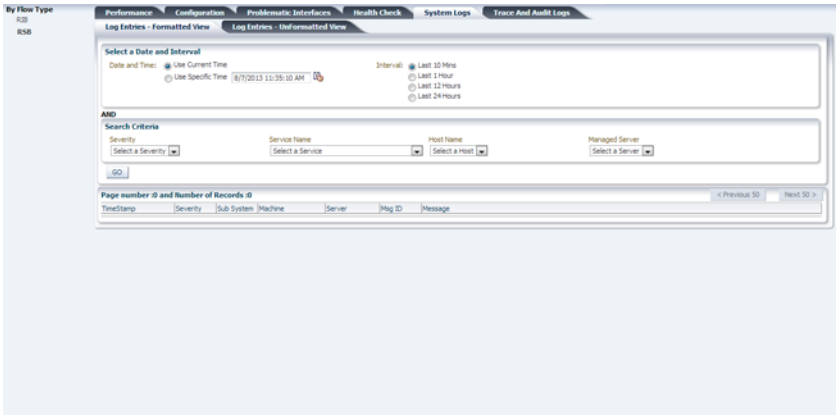
Ping Unsecured Services: Invokes ping operation for all the services that are not secured.

The table in the page contains the decorator name, Status, Ping Service button and WSDL Accessibility. Initially the statuses of the service and WSDL are shown as unknown. When the Ping Service button is clicked, a popup screen is displayed. The popup has service details including WSDL URL, decorator name, web service policy name and the input message. If the service is secured, it has additional input fields: edge app service user name and password that are needed to ping that service. The statuses are shown as UP or DOWN depending on whether the services are available or not.

Database Connection

Test Database Connection: Checks whether the database is up. Table displays the database URL and status icon.

RSB System Logs



This tab displays the system logs retrieved from under `<weblogic-home>/<domain-name>/servers/AdminServer/logs/<domain-name>.log`.

Log Entries - Formatted View

There are two search panels that can be used as search criteria. Fields in the first search panel are mandatory, current time is the default value for the Date and Time field and Last 10 mins is the default value for the Interval field. The second search panel has Severity, Service Name, Host Name, and Managed Server drop-down lists. These are optional fields to filter the result.

When you click **GO**, the table displays the data matching the search criteria.

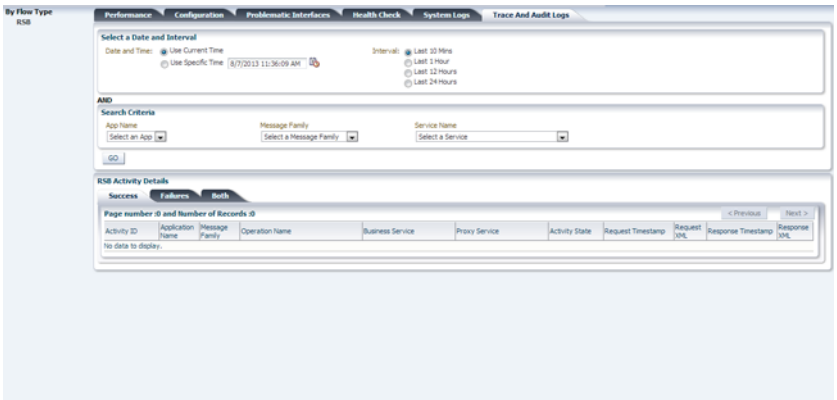
Log Entries - UnFormatted View

This tab displays the plain text format of the same contents as formatted view except no search criteria can be used here.

RSB Trace and Audit Logs

There are two search panels that can be used as search criteria. Fields in the first search panel are mandatory, Current Time is the default value for Date and Time and Last 10 Mins is the default value for Interval. The second Search panel has Severity, Service

Name, Host Name and Managed Server drop-down lists. All these dropdowns are optional fields.



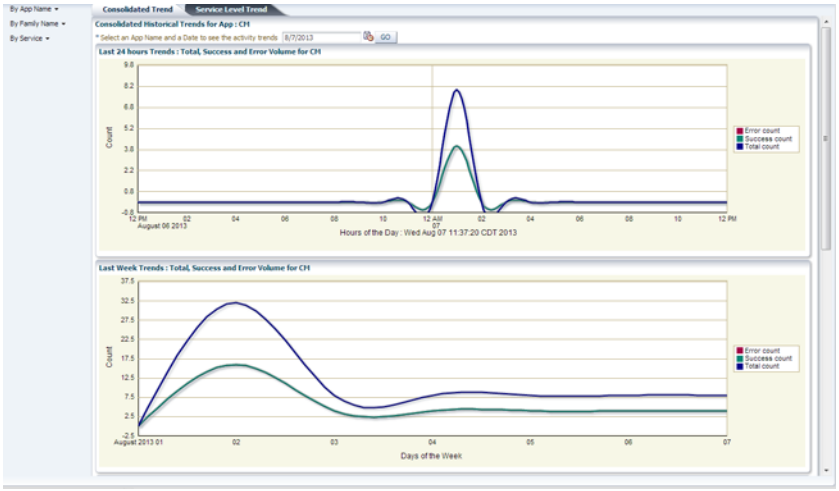
On click of the GO button, the table displays the data matching the search criteria. There are three tabs in the result panel.

- Success: This tab shows only the success entries
- Failures: This tab displays only failed invocations
- Both: This tab displays both the success and failure logs

12

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. Only the RSB historical trends are shown.



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.

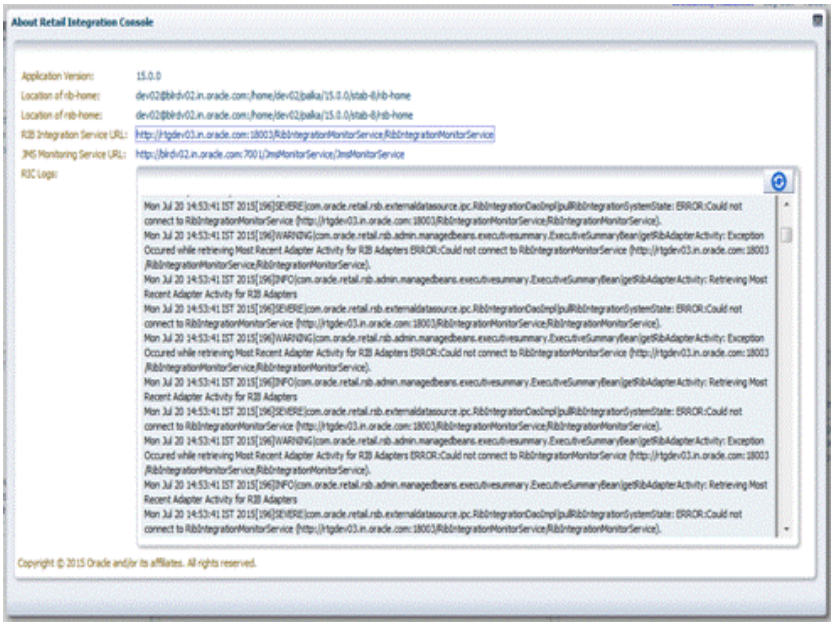
- Graph 1 displays total transaction count
- Graph 2 displays total success count
- Graph 3 displays total error count

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.

13

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.

Location of rsb-home: Displays the location of rsb-home, from the RIC configuration file. The location of rsb-home is shown only if the RSB 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.

14

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, IGS and RSB. 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.

15

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
jdbcUrl	JDBC URL used by RIC application to connect to the database	Yes	jdbc:oracle:thin:@//dbserver.example.com:1521/pdb
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/Weblogic12.1.3/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

Property Name in the JSON file	Description	Editable ?	Sample Value
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
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
ricUiUrl	RIC UI URL, URL to access RIC application GUI	Yes	http://example:7002/rsb-admin
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
IntegrationProduct			
ribEnable	Flag to enable or disable RIB for RIC. Edit this property to change RIB mode	Yes	true/false
rsbEnable	Flag to enable or disable RSB for RIC. Edit this property to change RSB mode	Yes	true/false
ddiEnable	Flag to enable or disable DDI for RIC. This property value is not used in current version of RIC. By default, true.	NO	N/A - DO NOT CHANGE THE DEFAULT VALUE

Property Name in the JSON file	Description	Editable?	Sample 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
rsbHome	RSB home path, this property should point to valid rsb-home on the same machine if rsbEnable is set to true. The value should be in the specified format in sample value.	Yes	user@example.com:/user/local/integration/rsb-home
ddiHome	DDI home path, this property should point to valid ddi-home on the same machine if ddiEnable is set to true. The value should be in the specified format in sample value. By default, can be same as rsbHome.This property value is not used in current version of RIC.	NO	N/A - DO NOT CHANGE THE DEFAULT VALUE