Oracle® Retail Financial Integration Cloud Service for Oracle Retail Merchandise Operations Management and Oracle Financials Installation Guide

Installation Guide

ORACLE®

Oracle Retail Financial Integration Cloud Service for Oracle Retail Merchandise Operations Management and Oracle Financials Installation Guide Installation Guide, Release 23.1.401.0

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Oracle® Retail Financial Integration Cloud Service for Oracle Retail Merchandise Operations Management and Oracle Financials Installation Guide, Release 23.1.401.0

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If you require training or instruction in using Oracle software, then please contact your Oracle local office and inquire about our Oracle University offerings. A list of Oracle offices is available on our Web site at `http://www.oracle.com`.

Preface

Oracle Retail Installation Guides contain the requirements and procedures that are necessary for the retailer to install Oracle Retail products.

Audience

This Installation Guide is for the following audiences:

- Database administrators
- System analysts and programmers
- Integrators and implementation staff personnel

Documentation Accessibility

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When contacting Customer Support, please provide the following:

- Product version and program/module name
- 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

Review Patch Documentation

When you install the application for the first time, you install either a base release (for example, 19.1) or a later patch release (for example, 19.1.1). If you are installing the base release and additional patch releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch releases can contain critical information related to the base release, as well as information about code changes since the base release.

Improved Process for Oracle Retail Documentation Corrections

To more quickly address critical corrections to Oracle Retail documentation content, Oracle Retail documentation may be republished whenever a critical correction is needed. For critical corrections, the republication of an Oracle Retail document may at times not be attached to a numbered software release; instead, the Oracle Retail document will simply be replaced on the Oracle Technology Network Web site, or, in the case of Data Models, to the applicable My Oracle Support Documentation container where they reside.

Oracle Retail product documentation is available on the following web site:

https://docs.oracle.com/en/industries/retail/index.html

An updated version of the applicable Oracle Retail document is indicated by Oracle part number, as well as print date (month and year). An updated version uses the same part number, with a higher-numbered suffix. For example, part number E123456-02 is an updated version of a document with part number E123456-01.

If a more recent version of a document is available, that version supersedes all previous versions.

Oracle Help Center (docs.oracle.com)

Oracle Retail product documentation is available on the following web site:

https://docs.oracle.com/en/industries/retail/index.html

(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
Preinstallation Tasks

This chapter explains the tasks required prior to installation.

> **Note:**
>
> Oracle Retail assumes that the retailer has applied all required fixes for supported compatible technologies.

Requesting Infrastructure Software

If you are unable to find the necessary version of the required Oracle infrastructure software (database server, application server, WebLogic, etc.) on the Oracle Software Delivery Cloud, you should file a non-technical 'Contact Us' Service Request (SR) and request access to the media. For instructions on filing a non-technical SR, see My Oracle Support Note 1071023.1 - *Requesting Physical Shipment or Download URL for Software Media*.

Check Supported Database Server Requirements

General requirements for a database server running Oracle Retail Financial Integration Pack include:

Table 1-1   Database Server Requirements

Supported on:	Versions Supported:
Database Server OS	OS certified with Oracle Database 12c Release 1 Enterprise Edition or 19c (19.3.0+) Enterprise Edition. Options are:
	• Oracle Linux 6 or 7 for x86-64 (Actual hardware or Oracle virtual machine).
	• Red Hat Enterprise Linux 6 or 7 for x86-64 (Actual hardware or Oracle virtual machine).
	• AIX 7.1 (Actual hardware or LPARs)
	• Solaris 11.x SPARC (Actual hardware or logical domains)
	• HP-UX 11.31 Integrity (Actual hardware, HPVM, or vPars)

Table 1-1   (Cont.) Database Server Requirements

Supported on:	Versions Supported:
Database Server 12c	Oracle Database Enterprise Edition 12c Release 1 (12.1.0.2) with the following specifications: **Components:** • Enterprise Edition • Examples CD **Oneoff Patches:** • 20846438: ORA-600 [KKPAPXFORMFKK2KEY_1] WITH LIST PARTITION • LIST PARTITION 19623450: MISSING JAVA CLASSES AFTER UPGRADE TO JDK 7 • 20406840: PROC 12.1.0.2 THROWS ORA-600 [17998] WHEN PRECOMPILING BY 'OTHER' USER • 20925154: ORA-39126: WORKER UNEXPECTED FATAL ERROR IN KUPW$WORKER GATHER_PARSE_ITEMS JAVA • 19672263: Patch 19672263: GTT SESSION LEVEL STATISTICS RETURNS ORA-20006 **RAC Only:** • 21260431: APPSST 12C: GETTING ORA-4031 AFTER 12C UPGRADE • 21373473: INSTANCE TERMINATED AS LMD0 AND LMD2 HUNG FOR MORE THAN 70 SECS **Other Components:** • Perl interpreter 5.0 or later • X-Windows interface • JDK 1.8 with latest security updates
Database Server 12c	Oracle Database Enterprise Edition 19c (19.3.0+) with the following specifications: **Components:** • Enterprise Edition • Examples CD **Other Components:** • Perl interpreter 5.0 or later • X-Windows interface • JDK 1.8

> **Note:**
>
> By default, JDK is at 1.7, upgrade JDK to 1.8.

> **Note:**
>
> Bash Shell is supported and usage of any other shell may have adverse impact on the app functions.

Check Supported Application Server Requirements

General requirements for an application server capable of running the Oracle Retail Financial Integration application include the following:

Table 1-2   Application Server Requirements

Supported on	Versions Supported
Application Server OS	OS supported with Oracle Fusion Middleware 12.2.1.4.0. Options are: • Oracle Linux 6 or 7 for x86-64 (Actual hardware or Oracle virtual machine). • Red Hat Enterprise Linux 6 or 7 for x86-64 (Actual hardware or Oracle virtual machine). • AIX 7.1 (Actual hardware or LPARs) • Solaris 11.x SPARC (Actual hardware or logical domains) • HP-UX 11.31 Integrity (Actual hardware, HPVM, or vPars)
Application Server	Oracle Fusion Middleware 12.2.1.4.0 **Components:** • Oracle WebLogic Server 12c (12.2.1.4.0) • Java: JDK 8 with latest security updates+ 64 bit **Oneoff Patches:** • 22648025: Java.lang.IllegalStateException. **Note:** • If there is an existing WebLogic installation on the server, you must upgrade to WebLogic 12.2.1.4.0. All middleware components associated with WebLogic server 10.3.3 or 10.3.4 should be upgraded to 12.2.1.4.0. Back up the weblogic.policy file ($WL_HOME/ server/lib) before upgrading your WebLogic server, because this file could be overwritten. Copy over the weblogic.policy backup file after the WebLogic upgrade is finished and the post patching installation steps are completed. • The installer can fail because of missing .jar in $ORACLE_HOME/utils/ccr/lib. This issue occurs only when the application is being installed on the same WebLogic server on which forms based applications are installed. It is valid only for Linux 64-bit. • WebLogic 12c domain for ORFI needs JRF to be installed. Choose the JRF option at the domain creation. JRF needs an RCU schema for its runtime. This schema must be created prior to domain creation using the RCU tool. Weblogic 12.2.1.4.0 needs OWSM for Policy A and C to work. The owsm template choice while creating the wls domian, will give an option to deploy wsm-pm application to admin server. This app is required for policies to work.

Check Supported Client PC and Web Browser Requirements

Table 1-3   Supported Client PC and Web Browser Requirements

Requirement	Version
Operating system	Windows 7
	Note: Oracle Retail assumes that the retailer has ensured its Operating System has been patched with all applicable Windows updates.
Display resolution	1024x768 or higher
Processor	2.6GHz or higher
Memory	1GByte or higher
Networking	intranet with at least 10Mbps data rate
Oracle (Sun) Java Runtime Environment	1.8.0+
Browser	Mozilla Firefox 45+

Supported Oracle Retail Products

Table 1-4   Supported Oracle Retail Products

Requirement	Version
Oracle Retail Merchandising Cloud Services	23.0.000
Oracle Retail Invoice Matching (ReIM)	23.0.000
Oracle Retail Integration Bus (RIB)	23.0.000
Oracle Retail Bulk Data Integration (BDI)	23.0.000

UNIX User Account Privileges to Install the Software

A UNIX user account is needed to install the software. The UNIX user that is used to install the software should have write access to the WebLogic server installation files.

For example, oretail.

> **Note:**
>
> Installation steps will fail when trying to modify files under the WebLogic installation, unless the user has write access.

Supported Oracle Applications

Table 1-5   Supported Oracle Applications

Requirement	Version
Oracle Financials Cloud(General Ledger and Accounts Payable)	Oracle Financials Cloud Release 13 Update 19B integration is supported using the Oracle Financial Operations Control Integration Pack for Oracle Retail Merchandising Suite and Oracle Financials Cloud.

> **Note:**
>
> The release cycle of Cloud Fusion Financials (CFIN) does not align with Oracle Retail's Enterprise release cycle. Because of this discrepancy, the certification of newer versions of Cloud Financials with the Oracle Retail suite of applications can be delayed. Because the Oracle Retail Financial Integration (RFI) product aligns its release with the Oracle Retail Enterprise release cycle, Oracle Retail Development will attempt to certify RFI, and other Oracle Retail applications, with newer versions of CFIN in every major (.0), not minor (.x), release of Oracle Retail applications.
>
> Though they are not officially certified with Oracle Retail applications, the minor version patches of Cloud Financials (that are higher than that which is certified with Oracle Retail applications) may be compatible and function properly.
>
> Oracle Support will attempt to help customers to resolve issues that arise in these implementations that do not include documented, certified versions. Oracle Retail will try to duplicate the issues on certified versions of the integration, and if the issues can be duplicated in the certified versions, Oracle Retail will strive to fix and resolve the issues. If there arises an issue that cannot be resolved in an uncertified implementation, Oracle Retail maintains final discretion on its actions. In such situations, Oracle Support will try to help customers resolve their issues. Note, however, that in an uncertified version combination, SEV-1 escalations would not be allowed.

2

ORFI Installation

This guide details the steps needed to perform an installation of ORFI. This will cover the configuration of the Cloud Financials Supplier Sync Service. Along with the ORFI layer setup and integration with BDI.

Before validating integration services, you must ensure that Oracle Retail Merchandising System (RMS), Oracle Retail Invoice Matching (ReIM), and Oracle Retail Sales Audit (RESA) are set up properly to integrate with ORFI. For more information, see the Oracle Retail Invoice Matching Operations Guide, and the Oracle Retail Merchandising System Operations Guide, , for setting up the Oracle Retail applications for Financials integration. Details to validate include verifying that RMS supplier services is up and running. For AP/GL/ Procurement integrations to work, ensure that proper GL Account validation is properly configured.

The following chapters document the installation process:

- ORFI Database Installation Tasks
- ORFI Application Installation Tasks
- Cloud Financials Setup Tasks

> **Note:**
>
> After you have installed your supporting Oracle Retail applications and confirmed that they are functioning, you can begin the installation of ORFI

3
ORFI Database Installation Tasks

This chapter includes:

- Expand the ORFI Installer Distribution
- Database Schema Topology
- Create Tablespaces
- Create the ORFI Database User
- Run the ORFI Database Schema Installer
- Verification

Expand the ORFI Installer Distribution

1. Log in to the UNIX server as a user who has sufficient access to run sqlplus from the Oracle Database installation.

2. Create a new staging directory for the ORFI installer distribution (RetailFinancialIntegrationPak23.0.000ForRfi23.0.000_eng_ga.zip). There should be a minimum of 50 MB disk space available for the application and database schema installation files. This location is referred to as INSTALL_DIR for the remainder of this chapter.

3. Copy RetailFinancialIntegrationPak23.0.000ForRfi23.0.000_eng_ga.zip to <INSTALL_DIR> and extract its contents.

Database Schema Topology

This topology diagram shows how different schemas are integrated with each other.

Figure 3-1   RFI Database Schema Topology (Cloud Financials)
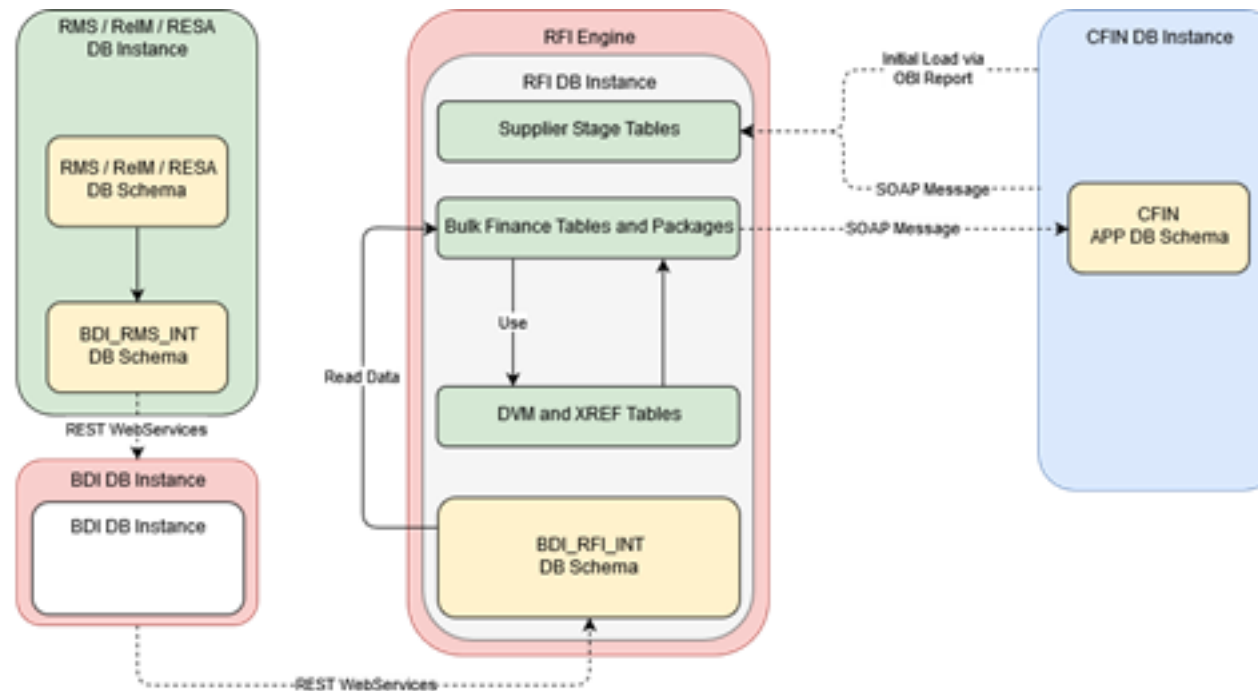
Create Tablespaces

Before you run the ORFI database schema installer, make sure that the RFI_DATA tablespace has been created in the database.

Below is an example of tablespace creation statement for the RFI_DATA tablespace. Oracle Retail recommends the use of locally managed tablespaces with automatic extent and segment space management.

> **✎ Note:**
>
> These tablespaces are not sized for a production environment. The customer's Database Administrator should create the tablespace based on their datacenter database architecture and size it appropriately based on expected data volume for their peak data usage.

```
CREATE TABLESPACE RFI_DATA DATAFILE
'<datafile_path>/rfi_data01.dbf' SIZE 500M
AUTOEXTEND ON NEXT 100M MAXSIZE 2000M
EXTENT MANAGEMENT LOCAL
SEGMENT SPACE MANAGEMENT AUTO
;
```

Create the ORFI Database User

The user in the database who will own the ORFI tables must be created prior to running the ORFI database schema installer. A create_user.sql script has been provided that can be used for this:

```
$INSTALL_DIR/retail-financial-integration-solution/service-based-integration/setup-
data/ddl/create_user.sql
```

After installation is completed, a detailed database user creation log file is created:

$INSTALL_DIR/retail-financial-integration-solution/service-based-integration/setup-data/ddl/create_user.log

The script takes three arguments on the command line in sqlplus: username, password and ORFI tablespace name. For example:

SQL> @create_user.sql *<RFI Schema> <RFI Schema Password> <RFI Tablespace Name>*

Review this script and run it as a user with adequate permissions, such as SYSTEM.

> **Note:**
>
> The same RFI DB Schema can be used later for receiver service, job xml and RFI Batch job admin. RFI BDI Job Admin and RFI should share the same schema.

Run the ORFI Database Schema Installer

This installer installs the ORFI database schema, compiles ORFI objects, and inserts ORFI data.

1. Set the following environment variables:
    *   Set the ORACLE_HOME to point to an installation that contains sqlplus. It is recommended that this be the ORACLE_HOME of the ORFI database.
    *   Set the PATH to: $ORACLE_HOME/bin:$PATH
    *   Set the ORACLE_SID to the name of your database
    *   Set the NLS_LANG for proper locale and character encoding

    For example: NLS_LANG=AMERICAN_AMERICA.AL32UTF8

2. If you are using an X server such as Exceed, set the DISPLAY environment variable so that you can run the installer in GUI mode (recommended). If you are not using an X server, or the GUI is too slow over your network, unset DISPLAY for text mode.

3. When integrating Oracle Financials application is Cloud Financials run the initial setup script for CFIN available in $INSTALL_DIR/retail-financial-integration-solution/service-based-integration/bin/. After installation is completed, a detailed installation log file is created: $INSTALL_ DIR/retail-financial-integration-solution/service-based-integration/bin/<timesta mp>.log.

    For example:

    For CFIN integration, run the prompt

$ sh cfin-load-initial-setup-data-into-integration-schema.sh

The installer prompts for the following details:

- Enter the ORFI database schema details

    Enter ORFI Userid:

    Enter ORFI Passwd:

- Enter the ORFI database server name

    Enter Database Server Name or IP address:

- Enter the ORFI database server port

    Enter Database Port Number:

- Enter the ORFI database server SID

    Enter Database SID:

Verification

Log in to the ORFI database schema in the database and query

```
"SELECT * FROM TAB WHERE TNAME LIKE 'RFI%'"
```

This query should list the following tables:

- RFI_ODI_LOGS
- RFI_SUPP_CONTACTS_STAGE
- RFI_SUPP_SITES_STAGE
- RFI_SUPP_STAGE
- RFI_XREF_DVM
- EXT_FIN_SYSTEM_FILES_CONTENT
- RFI_SYSTEM_OPTIONS
- EXT_FIN_FILE_CONTENT_DETAIL
- RFI_CFIN_STATUS_DESC
- STG_FIF_GL_DATA
- STG_FIF_GL_DATA_HIST
- RFI_CFIN_RMS_ACCOUNT_ENTRY
- RFI_CFIN_RMS_ACNT_ENTRY_STATUS
- IM_FINANCIALS_STAGE
- IM_FINANCIALS_STAGE_HIST
- RFI_CFIN_REIM_ACCOUNT_ENTRY
- RFI_CFIN_REIM_ACNT_ENTRY_STATUS
- IM_AP_STAGE_HEAD
- IM_AP_STAGE_DETAIL
- IM_AP_STAGE_HEAD_HIST

- IM_AP_STAGE_DETAIL_HIST
- RFI_CFIN_AP_INV_INTERFACE
- RFI_CFIN_AP_INV_LINE_INTERFACE
- RFI_CFIN_AP_INV_INT_STATUS
- RFI_RUNTIME_CONFIG_OVERRIDE

4
ORFI Application Installation Tasks

This chapter includes:

- Prerequisite
- Expand the ORFI Installer Distribution
- Configure the Deployment Info for JSON File
- Service Consumer Security
- Verification

Prerequisite

Before proceeding you must install Oracle WebLogic Server 12c 12.2.1.4.0 and any patches listed related to Weblogic Server 12c 12.2.1.4.0. Create a WebLogic domain called rfi_domain. This WebLogic domain must be of a base domain type. Create a managed server (for example, rfi-server) inside this rfi_domain. The ORFI application will be installed into the WebLogic managed server (for example, rfi-server). It is assumed that the Oracle database has already been configured and loaded with the appropriate ORFI /BDI details for your installation. This server is referred to as RFI_SERVER in this document.

You need to execute the steps in the Expand the ORFI Installer Distribution section if the UNIX environments for the ORFI database and WebLogic Server are different.

1. Update $WEBLOGIC_HOME/server/lib/weblogic.policy file with the following:

> **Note:**
>
> - If copying the following text from this guide to UNIX, ensure that it is properly formatted in UNIX. Each line entry beginning with "permission" must terminate on the same line with a semicolon.
> - <WEBLOGIC_ HOME> in the below example is the full path to where WebLogic has been installed. "rfi_server" is the managed server created for the App and "retail-financial-integration-ear-<version>.ear" correlates to the value entered for the application deployment name/context root of the application during installation. See the example. There should not be a space after file: in the following:
>
>   File:<WEBLOGIC_HOME>.

```
grant codeBase
"file:<WEBLOGIC_HOME>/user_projects/domains/rfi_domain/servers/rfi-server/tmp/
_WL_user/ retail-financial-integration-ear-<version>.ear/-" {permission
java.security.AllPermission;permission
oracle.security.jps.service.credstore.CredentialAccessPermission
"credstoressp.credstore", "read,write,update,delete";permission
```

```
oracle.security.jps.service.credstore.CredentialAccessPermission
"credstoressp.credstore.*", "read,write,update,delete";}
```

An example of the full entry that might be entered is:

```
grant codeBase
"file:/u00/rfi1/Oracle/Middleware/user_projects/domains/rfi_domain/servers/
rfi-server/tmp/_WL_user/ retail-financial-integration-ear-21.0.000.ear/-"
{permission java.security.AllPermission;permission
oracle.security.jps.service.credstore.CredentialAccessPermission
"credstoressp.credstore", "read,write,update,delete";permission
oracle.security.jps.service.credstore.CredentialAccessPermission
"credstoressp.credstore.*", "read,write,update,delete";};
```

> **Note:**
>
> - The path "tmp/_WL_user/retail-financial-integration-ear-<version>.ear" will not be available before the deployment.
> - The domain must be bounced for the above change to take affect.

> **Note:**
>
> The nodemanager.properties file is created after NodeManager is started for the first time. It will not be available before that point. The NodeManager must be restarted after making changes to the nodemanager.properties file.

Expand the ORFI Installer Distribution

1. Log in to the UNIX server where the WebLogic server is installed as a user who has sufficient access to deploy an application from the Oracle WebLogic installation.

2. Create a new staging directory for the ORFI installer distribution (RetailFinancialIntegrationPak23.0.000ForRfi23.0.000_eng_ga.zip). There should be a minimum of 50 MB disk space available for the application and database schema installation files. This location is referred to as INSTALL_DIR for the remainder of this chapter.

3. Copy RetailFinancialIntegrationPak23.0.000ForRfi23.0.000_eng_ga.zip to <INSTALL_DIR> and extract its contents.

> **Note:**
>
> Before proceeding with below installation, read through the below instructions and ensure follow the same during installation:
>
> a. It is highly recommended that customer first try to get it deployed with security policy "unsecure", do some mock test and only when everything is working, reconfigure to use "policyA".
>
> b. If "policyA" is specified then SSL port must be enabled and proper https protocol has to be specified in the correct URLs. If it is not done WebLogic deployment fails with cryptic errors.
>
> c. RFI ear hosted services providers can be configured only with policyA (no policyB) as PLSQL applications cannot call services secured with policyB. But RFI can call services secured with policyB

Configure the Deployment Info for JSON File

The rfi-deployment-env-info.json file serves multiple purposes. It is used by the installation process and it also acts as a single master configuration file that describes the entire topology of the integration system. The values in this file must be accurate for the system to work properly. All values in the file are not user editable; the installation process needs these fixed names to match what the compiled runtime code already expects. Some examples of these fixed values that must not be changed are constants like "GET_FROM_WALLET"; jndi name like "jdbc/RfiDataSource" and so on.

You need to configure the following list of deployment information to run the ORFI deployment script. This file can be found under $INSTALL_DIR/retail-financial-integration-solution/service-based-integration/conf/.

> **Note:**
>
> • Do not change "Alias" Names or any other values other than the details given below.
>
> • You should remove the symbols "<" and ">" while entering the actual/valid values for below configurations.

Update the following details from RfiDeploymentEnvInfo -> integratingToEbsOrPsftOrCfin, mentioned Cloud Financials

• If integration is with Cloud Financials, the value should be integratingToEbsOrPsftOrCfin":"CFIN"

> **Note:**
>
> Default configuration would be integratingToEbsOrPsftOrCfin":"CFIN".

Update the following details from RfiDeploymentEnvInfo -> DataSourceDef configuration:

The integration is with Cloud Financials so enter the below mentioned details against corresponding datasource names.

1. In RfiDataSource, enter the ORFI database connection details:

```
"jdbcUrl":"jdbc:oracle:thin:@//<Server Name>:<Port>/<SID>"
```

2. Update the following details from RfiDeploymentEnvInfo -> MiddlewareServerDef -> RfiAppServer configuration:

   • Enter the WebLogic domain name:

   ```
   "weblogicDomainName":"<RFI Domain Name>",
   ```

   • Enter the RFI Domain Home:

   ```
   "weblogicDomainHome":"<RFI Domain Name>",
   ```

   • Enter the RFI Domain Server URL:

   ```
   "weblogicDomainAdminServerURL":"t3://Server Host name:port",
   ```

   • Enter the WebLogic admin server protocol:

   ```
   "weblogicDomainAdminServerProtocol":"t3",
   ```

   • Enter the WebLogic admin server host name:

   ```
   "weblogicDomainAdminServerHost":"<Server Host Name>"
   ```

   • Enter the WebLogic server port:

   ```
   "weblogicDomainAdminServerPort":"<port>"
   ```

   • Enter the WebLogic Managed Server Name:

   ```
   "weblogicDomainTargetManagedServerName":"<Server Name>"
   ```

   • Enter the End point URL for GlAccount Service:

   ```
   "glAccountValidationServiceEndPointUrl":"http://myhostname:7001/
   GlAccountValidationBean/GlAccountValidationService?WSDL",
   ```

   For integration is with Cloud Financials enter the End point URL for below mentioned services.

   a. Enter the End point URL for Supplier Service:

   ```
   supplierExportOutboundServiceEndPointUrl":"http://myhostname:7001/
   SupplierBusinessEventHandlerServiceBean/
   SupplierBusinessEventHandlerService?WSDL",
   ```

   • Enter the ORFI UI URL host name and port details:

   ```
   "rfiAdminUiUrl":"http://<host>:<port>/retail-financial-integration-web",
   ```

   • Enter the SMTP server host:

   ```
   "smtpServerHost":"<SMTP Server Host>"
   ```

   • Enter the SMTP server port:

   ```
   "smtpServerPort":"<SMTP Server Port>"
   ```

   • Enter the SMTP server type (for example, SSL or TSL):

   ```
   "smtpServerListenerType":"<SMTP Server Type>"
   ```

   • Enter "true" if authentication required for SMTP server, else "false":

   ```
   "smtpAuthenticationRequired":"<true/false>"
   ```

- Enter the From Email Address:

  `"smtpMailFromAddress":"<From Address>"`

- Enter the Comma (,) separated To Address list:

  `"smtpMailToAddressList":"<To Address Email Id's>"`

  For example:

  `"smtpMailToAddressList":"<`[ToAddr1@example.com,ToAddr2@example.com](mailto:ToAddr1@example.com)`>"`

3. Update RfiDeploymentEnvInfo -> MiddlewareServerDef -> RmsAppServer details for Supplier Service.

   Enter the Supplier service End point URL:

   `"supplierServiceEndPointUrl":"<Supplier URL>"`

4. For integrating with CFIN, Update RfiDeploymentEnvInfo -> MiddlewareServerDef -> CfinAppServer

   - Enter the Financial Util Service End Point URL:

     `"financialUtilServiceEndPointUrl":"http://serve.example.com/fscmService/
     ErpIntegrationService?WSDL",`

   - Enter the General Ledger Account Validation Service End Point URL:

     `"financialUtilServiceEndPointUrl":"http://serve.example.com/fscmService/
     AccountCombinantionService?WSDL",`

   - Enter the number of retention days for Bulk Finance data in RFI:

     `"autoPurgeDelay":"30d",`

5. The supported configuration is for Unsecured and Policy A configuration.

6. Update the application security configuration for your environment. ORFI application is certified with Policy-A (UsernameToken over HTTPS). Add one of the key words policyA or Unsecured to service settings based on the nature of security selected at the service level.

   Example:

   For Supplier Service, Policy A (HTTPS) setting, update the JSON file with policy Name to policyA:

   `"supplierServiceEndPointSecurityPolicyName":"policyA".`

   For Supplier Service, Unsecured setting, update the JSON file with policyName to spaces:

   `"supplierServiceEndPointSecurityPolicyName":" unsecure".`

Refer to Appendix: JSON in Tabular Format for complete JSON configuration in Tabular format.

> **Note:**
>
> By default the maximum number of in-memory sessions for WebLogic web applications is unlimited. This setting can be misused by external attackers to create unlimited number of sessions by accessing the web application. In such cases it is possible that the WebLogic server run out of memory and eventually crash. So it is required to limit the number of sessions to a reasonable number (e.g., 100). The settings can be changed through the admin console of the WebLogic server. Follow the steps below to change this configuration setting:
>
> 1. Login to Admin Console.
> 2. Click **Deployments**.
> 3. Click the war application (or war module if it is inside an ear application).
> 4. Click **Configuration**.
> 5. Set Maximum in-memory Sessions to 100.
> 6. Save the changes. Activate the session, if needed.
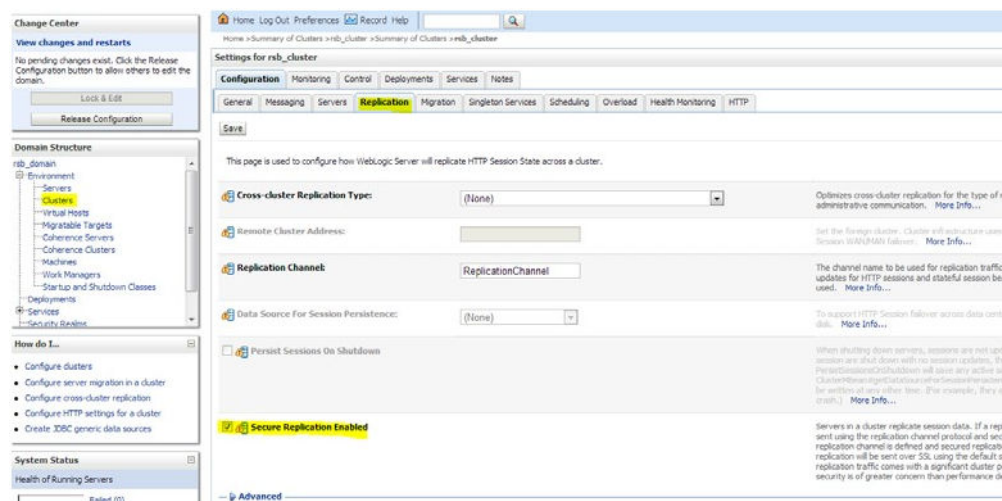
Service Consumer Security

ORFI can be secured with policy-A (UsernameToken over HTTPS), if the service hosted by the ORFI application is secured, then the consumer of the service (Example: RMS) must be configured such that it can invoke the secured service. For more information on Service consumer configuration for Policy A, see the Oracle Retail Services Backbone Security Guide.

If cluster server is SSL enabled only, enable secure replication.

If secure application is not enabled and if managed server is started, managed server will move to ADMIN mode.

Enable the Secure Replication Enabled option available in Environment --> Clusters --> <cluster name> --> Configuration --> Replication.

> **Note:**
>
> Due to known vulnerabilities, SSLv3.0 is not considered secure and should be disabled in WLS. For secured installations the latest TLS version is recommended. Use -DWebLogic.security.SSL.minimumProtocolVersion=TLSv1.2-Dweblogic.security.SSL.protocolVersion=TLS1.

WebLogic 12.2.1.4.0, needs OWSM for Policy A and C to work. The OWSM template choice while creating the wls domian will provide an option to deploy the wsm-pm application to the admin server. This application is required for policies to work. If http ports are disabled in the server, then wsm-pm app will not be reachable , unless its configured to use SSL port. To configure SSL ports for wsm-pm, EM has to be deployed.

Perform the following procedure to configure the RIB domain:

1. Select the following RIB domain creation template options (check similar option in latest recommended version):
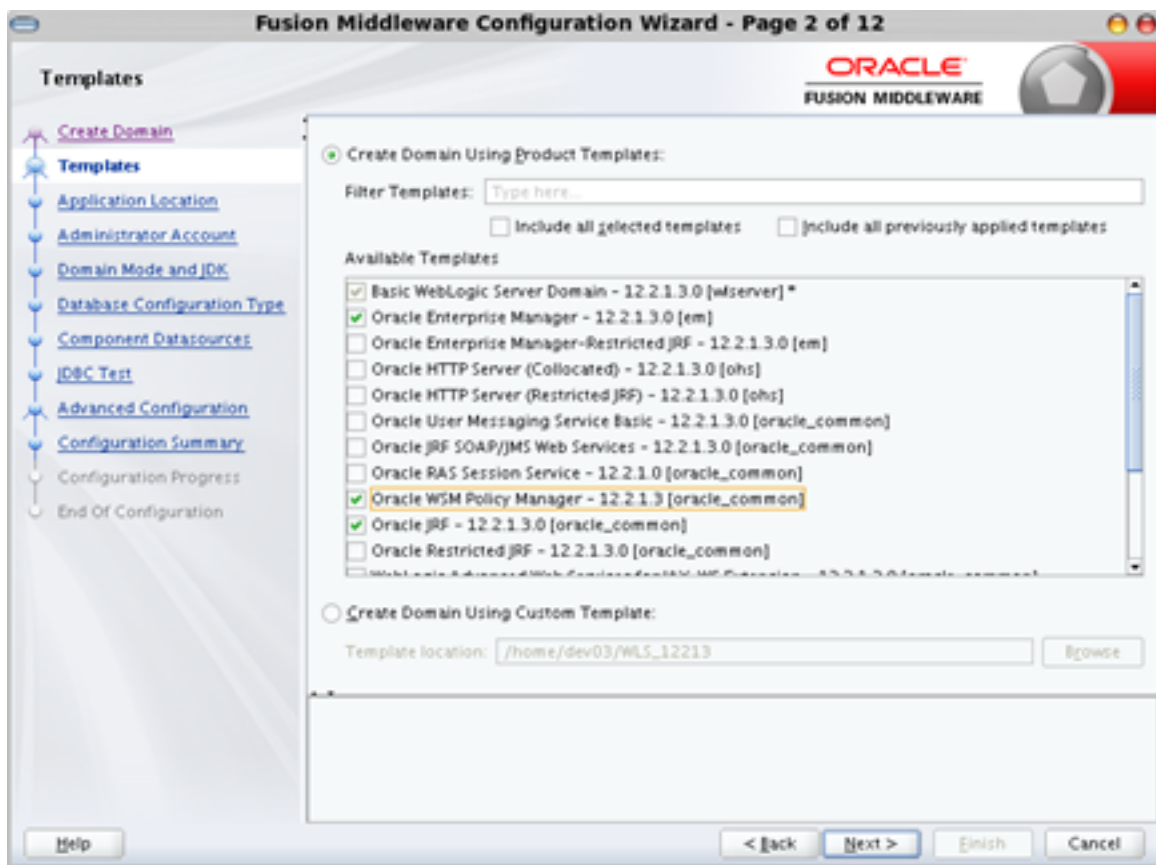
2. Access the enterprise Manager URL of WebLogic.

   For example: https://<host>:<port>/em

3. From the navigation pane, expand WebLogic Domain and select the domain to be configured.

4. From the WebLogic Domain menu, select Web Services, then WSM Domain Configuration.

5. Select the Policy Access tab.

6. In the Policy Manager section of the page, clear the Auto Discover check box. The PM URL Edit button is enabled.

7. Click the PM URL Edit button.

8. In the Edit PM URL Values page, click the sign and enter the URL for the Administration Server, such as t3s://host:*admin_port*/wsm-pm.

   For example, t3s://localhost:9002/wsm-pm.

9. Click OK to close the window.
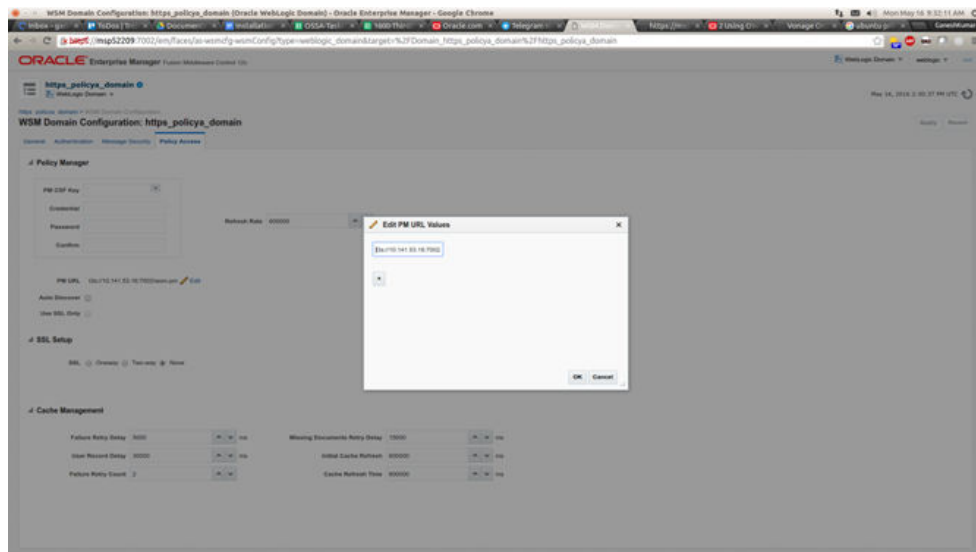
10. Click Apply on the Policy Access page.

Deploy the ORFI Application for Cloud Financials

> **Note:**
>
> • The steps mentioned in this section should be performed only if you are integrating with Cloud Financials as Oracle Financials applications.
>
> • Ensure JAVA_HOME and WL_HOME variables are set in the environment. WL_HOME points to folder location till <WebLogic Installed folder>/wlserver

1. Run the rfi-deployer.sh (available in $INSTALLDIR/retail-financial-integration-solution/service-based-integration/bin/) script to deploy the ORFI application to the WebLogic server. This script considers all the configuration values defined in previous processes.

   The script takes two arguments on the command line: -setup-credentials and -deploy-rfi-app.

   For example: prompt$ sh rfi-deployer.sh - setup-credentials -deploy-rfi-app

2. After successful deployment of the ORFI application, restart the WebLogic server.

3. Restrict access to RFI-HOME:

```
cd $RFI-HOMEchmod -R 700 .
```

Verification

Log in to the WebLogic console and verify the deployments. The ORFI application ear (retail-financial-integration-ear-<version>.ear) should be available.

> **Note:**
>
> The ORFI console now includes a new page "Manage DVM" for searching, viewing, creating, updating and deleting the Cross References (XREF) and DVM records setup in ORFI.

5

Cloud Financials Setup Tasks

As part of cloud integration solution, the Oracle Retail Financial Integration (RFI) layer serves as an intermediate thin layer of application between the financial applications (CFIN) and Oracle Retail.
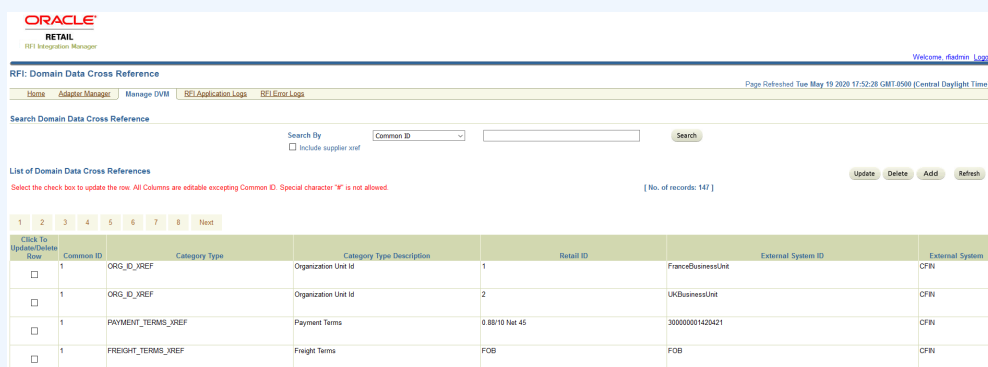
This chapter includes:

- Prerequisites
- Setup the RFI User in CFIN
- Configure the CFIN Supplier Sync Service
- Importing the CFIN Public Certificate into RFI
- Verify the CFIN SOAP Services
- Start or Run Initial Load of Supplier Parties from CFIN

Prerequisites

It is assumed CFIN has already been configured and implemented. It is also assumed the user performing the installation has been provisioned access to the required functions and data in CFIN e.g. "IT Security Manager", "Application Developer", etc.

Setup the RFI User in CFIN

In order to enable and secure the integrations between RFI and CFIN an RFI user needs to be created at the CFIN end which is in turn used to authenticate and secure RFI as an authorized source of data to being integrated to CFIN.

CFIN provides multiple ways to manage users but this type of users which are meant to be used for integration purposes are created in the CFIN Security Console.

The Security Console is used to manage application security in your Oracle Applications Cloud service. Use the IT Security Manager role to perform security-related tasks pertinent to role management, role analysis, user-account management, and certificate management.

The creation of the RFI user should follow the same process as any other user of the system which starts by the creation of the username, password and other details and then follows through to the provisioning roles to that user which is the most relevant part of the process with regards to the integration with RFI.

The privileges required to enable the integration to CFIN from RFI are under the following roles:

- "Financial Integration Specialist" (ORA_FUN_FINANCIAL_INTEGRATION_SPECIALIST_JOB) or;
- "Integration Specialist" (ORA_FND_INTEGRATION_SPECIALIST_JOB)

In order to segregate the RFI role from the above generic and standard roles it is recommended that the IT Security Manager creates, beforehand, a new role specifically for

RFI by copying its privileges from the Financial Integration Specialist and then name it Financial Integration Specialist for RFI (ORA_FUN_FINANCIAL_INTEGRATION_SPECIALIST_JOB_FOR_RFI).

Once this role is created the IT Security Manager should add the following privileges to the newly created role (if not yet included):

- "FSCM Load Interface Administration" (ORA_FUN_FSCM_LOAD_INTERFACE_ADMIN_DUTY)

The new role should then be provisioned to the RFI user.

Configure the CFIN Supplier Sync Service

Oracle CFIN Supplier Model provides a Supplier Outbound Synchronization Service feature that will generate a supplier record snapshot for any external supplier repository to consume. This enables customers to use the Oracle Fusion Supplier Model as a master repository where all supplier profile data is maintained. Near real-time synchronization of Fusion supplier records allows a downstream application to leverage the Fusion supplier data to drive other transaction flows. When any update is made to a supplier record the synchronization service will generate a snapshot of the supplier record in an XML file that models the Fusion supplier structure and transport the document over HTTPS to a single server destination.

Configure Supplier Outbound Synchronization Service

* URL	https://www.advantagegroup.com/advantageGrou
Security Policy	oracle/wss_username_token_over_ssl_client_policy
* User Name	administrator
* Password	••••••

To configure Supplier Outbound Synchronization Service use task Configure Supplier Outbound Synchronization Service in CFIN Setup Manager to define the server location of the Supplier Export Outbound web service.

> **✎ Note:**
>
> Please note that the URL to be setup in the above screen is the URL of the RFI Supplier Consumer Service and the username and password is the RFI owner.

If you decide not to use supplier outbound synchronization service for your business, you can remove the data entry for this setup task. Oracle CFIN Supplier Model will no longer generate the XML file for supplier profile data during profile creation or update.

Supplier XML document is transported using the Supplier Export Outbound web service over HTTPS. This is an SSL session that always begins with an exchange of messages called SSL handshake. The handshake allows the server to authenticate itself to the client by using public-key techniques. The server's public certificate should be imported into the trusted key store that is used by the client before the document transport.

Importing the CFIN Public Certificate into RFI

Certificates establish keys for the encryption and decryption of data that CFIN applications exchange with other applications

In order to enable the integrations between RFI and CFIN the CFI public certificate needs to be imported into RFI. Use the Certificates page in the Security Console functional area to work with certificates in either of two formats, PGP and X.509. For each format, a certificate consists of a public key and a private key.

Once the certificate is generated and exported from CFIN it must be imported by RFI.

Verify the CFIN SOAP Services

For the inbound to CFIN integrations RFI relies on two standard SOAP Webservices as follows:

- The CFIN Account Combination Validation Service which is a SOAP Web Service for the validation of the CoA account code combination:
  - QName: {http://xmlns.oracle.com/apps/financials/generalLedger/accounts/codeCombinations/accountCombinationService/}AccountValidationInput
  - Service WSDL URL: https://(FADomain,FSCMServices)/fscmService/AccountCombinationService?WSDL
- The CFIN ERP Integration Service which provides external operations for ERP integration scenarios to execute end-to-end inbound and outbound data flows.
  - QName: {http://xmlns.oracle.com/apps/financials/commonModules/shared/financialUtilService/}FinancialUtilService

As part of this installation it should be checked whether these services are enabled and running in CFIN.

For more information on these services and to discover the public external SOAP web services in CFI you can use the SOAP Web Services guides for the appropriate Oracle Applications Cloud service, Developer Connect, or the Service Catalog Service. Information includes public external services for a specific cloud instance and new services that are introduced in patches and customizations.

Setting up Weblogic SSL with a Valid Certificate

As CFIN will only call the Supplier Sync Service if the service is under a SSL port with a valid certificate, we need to setup Weblogic with a valid certificate. To perform this configuration, the following steps should be executed:

1. Generate a new keystore:

```
keytool -genkey -v -alias <alias> -keyalg RSA -keysize 2048 -sigalg SHA256withRSA
-keypass <private_key_password> -validity 365 -keystore <key_store_file_name>.jks -
storepass <key_store_password>
```

2. Generate a Certificate Signing Request (CSR):

```
keytool -certreq -alias <alias> -keyalg RSA -file <csr_file_name>.csr -
keystore <key_store_file_name>.jks
```

3. Request the certificate from a certificate Authority (CA) using the generated CSR file.

4. Import the certificate provided by the CA into the keystore:

```
keytool -import -alias <alias> -keystore <key_store_file_name>.jks -
trustcacerts -file <generated_certificate>.crt
```

5. If CA provides more than one certificate, import all those certificates into keystore.

6. Change the Weblogic Custom Identity Keystore, to point to the new keystore (<key_store_file_name>.jks)
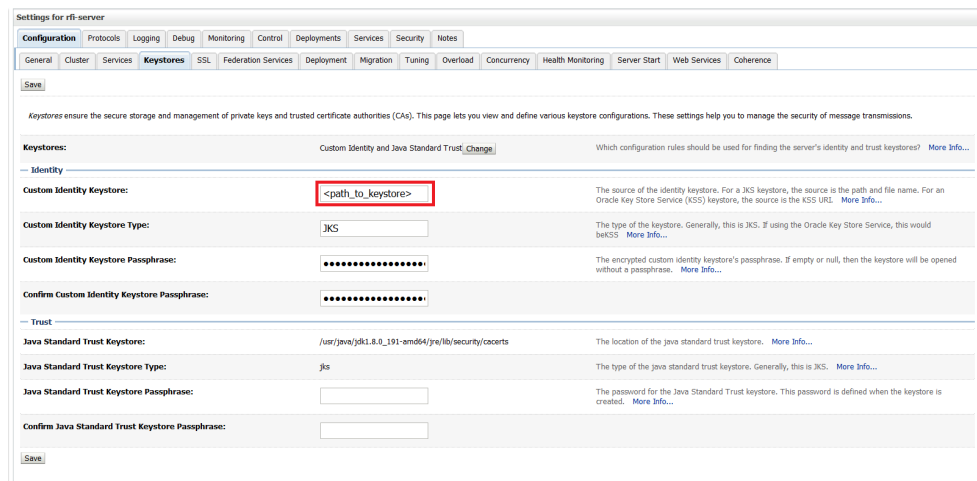
7. Enable SSL on managed server where RFI application is deployed and restart the servers.

Start or Run Initial Load of Supplier Parties from CFIN

The purpose of this flow is to load the existing active Suppliers, Supplier Sites, and Supplier Contacts from CFIN into Retail.

These are the steps to load the Supplier details initially from Oracle CFIN to Retail.

Download supplier data from CFIN: the first step is to extract the supplier profile data from CFIN. This can be done as follows.

1. Login to CFIN. You need to have access to the Oracle ERP Cloud Procurement module to perform this task.
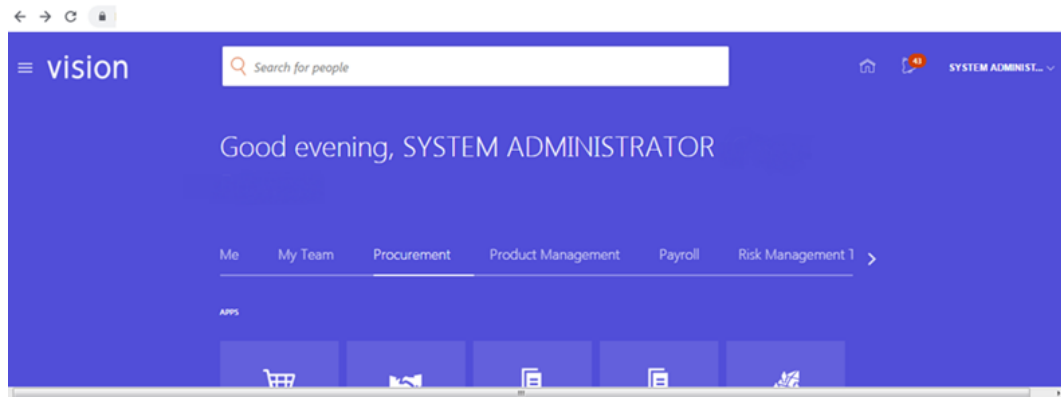
2. On the left-hand side menu go to Tools and then Reports and Analysis.
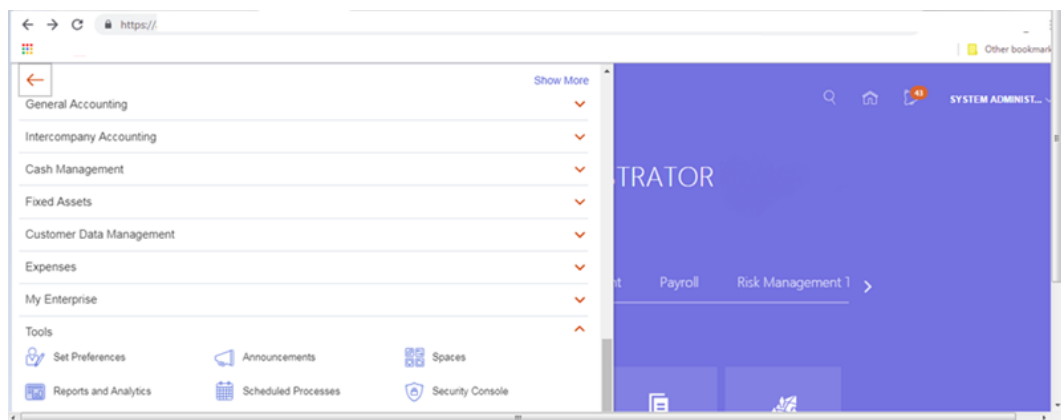
3. Then Shared Folders:

4. Then Procurement - Embedded Content:
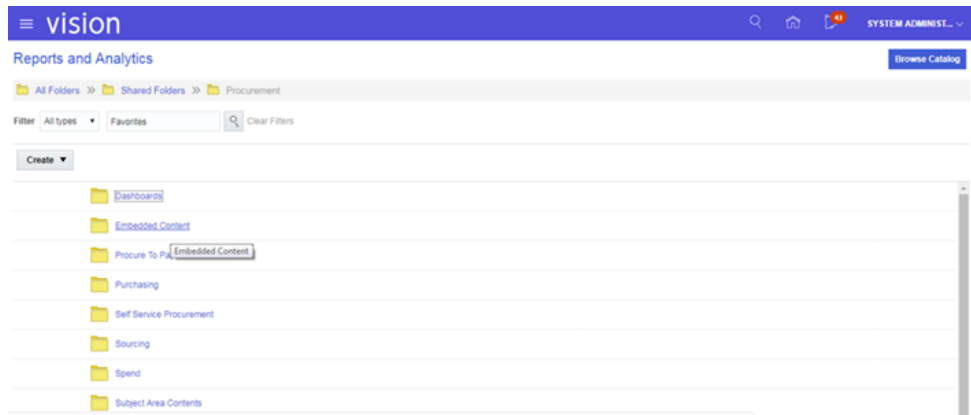
5. Then Supplier Export Reports:

6. Then you need to extract four data entities as follows:

    a. Supplier data

    b. Supplier Address data

    c. Supplier Site data

    d. Supplier Site Assignments data
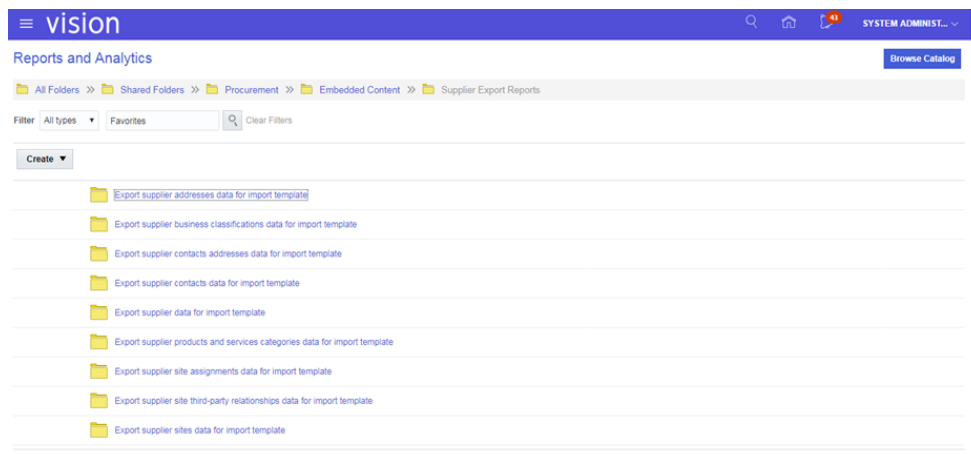
7. For each data entity, once you click the folder icon the following screen will be displayed.

8. At the right-hand bottom there is an option to export the data to an XML file.

9. Use that option to export the data in XML format.

Upload supplier data to RFI CFIN

The purpose of this flow is to load the existing active Suppliers, Supplier Sites, and Supplier Contacts from CFIN into Retail.

These are the steps to load the Supplier details initially from Oracle CFIN to Retail.

1. A wrapper script supplier_initial_load.sh is provided to load the existing Suppliers, Supplier Sites, and Supplier Contacts from a flat file extracted from CFIN to RFI Staging table. These files are available in the RFI pack, folder - - $INSTALL_DIR/cloud-financial / install/setup-data/dml.

2. An extraction for the supplier data should be generated in CFIN for the supplier data to be loaded. This extraction should follow the same format as the CFIN Supplier Sync Service XML with five flat files that contain the following information.

   • Supplier

- Supplier Site
- Supplier Contacts
- Supplier Address
- Supplier Contacts Address

> **Note:**
>
> Currently only XML files are supported for this flow.

3. Run the supplier_initial_load.sh (available in $INSTALL_DIR/cloud-financial / install/setup-data/dml.

> **Note:**
>
> $JAVA_HOME and $INSTALL_DIR environment variables need to be set prior running the script.
>
> The extracted files from CFIN should not contain any spaces in the file name otherwise the script will not run as wanted.

The script will prompt for several information, necessary to run the load correctly:

- ORFI database host
- ORFI database port
- ORFI database sid
- ORFI database username
- ORFI database password
- Extracted CFIN supplier flat file location
- Extracted CFIN supplier site flat file location
- Extracted CFIN supplier Contacts flat file location
- Extracted CFIN supplier Address flat file location
- Extracted CFIN supplier Contact Address flat file location

4. Extracted data is loaded into temporary tables.

5. Suppliers, Supllier Sites, Supplier Contacts records are pushed to RFI Staging tables RFI_SUPP_STAGE, RFI_SUPP_SITES_STAGE, and RFI_SUPP_CONTACTS_STAGE respectly.

6. Temporary tables are dropped in case of success.

> **Note:**
>
> The script is only ready to run once. In case of failure check if temporary tables are populated with correct data, drop temporary tables and truncate the staging tables, after that the script is ready to run again.

7. Once the initial supplier details are moved to RFI Staging tables, the records are sent to Retail similar to the Supplier Incremental Loading process.

6

BDI Application Installation Tasks

BDI Cloud Support

As part of all cloud integration between retail applications and Financial system (CFIN), the retail applications are present on cloud and CFIN is also present in cloud. The Oracle Retail Financial Integration (RFI) layer serves as an intermediate thin layer of application between the financial application (CFIN) and Oracle Retail. This integration remains synchronized with the new releases of the edge applications.

This integration is supported only between Cloud Retail apps to cloud Fusion Finance apps. A hybrid or on premise integration is not available for the CFIN.

All Cloud Deployment Topology

All cloud deployment provides computing environment which uses cloud services with orchestration between multiple cloud services. Complete cloud service provide more flexibility and scalability for all the connecting applications.

- Retail Applications (i.e. RMS/ReIM) are on cloud and Financial Applications (CFIN) is on cloud too.
- Only Service-based integration works fine.
- n Topology for this setup requires RFI and CFIN to be in different cloud and will talk through each other via services.

Table 6-1

Applications to be installed	All Cloud Topology
RMS-EDGE	Required
BDI-RFI	Required
BDI-PROCESSFLOW	Required
BDI-SCHEDULER	Optional
ODI	N/A
RFI	Required
EBS	N/A
CFIN	Required
RIB, RIB-RMS	Required

Rms-edge is a sender side app to be installed in the retail cloud. Bdi-rfi is the receiver side app to be installed on cloud side as well along with RFI.

Prerequisites

Rms-Edge-App: Please refer to RMS 23.0.000 install guide and create a RMS environment that includes BdiEdgeAppJobAdminPakForRms.

The app can be deployed in any domain but it is recommended to deploy it in the existing RMS domain with separate managed server.

Deploying BDI RFI Batch Job Admin

Preparing the Database for BDI RFI Batch Job Admin Installation

Before you begin installing BDI RFI Batch Job Admin, make sure you have the database schema created for BDI RFI Batch Job Admin.

Please follow the below naming convention during schema creation for BDI RFI or use RFI app schema.

Example, BDI_RFI_EDGE_SCHEMA

Preparing the WebLogic Domain for BDI Batch Job Admin for RFI

1. Assuming that WebLogic 12.2.1.4.0 and JRF domain are installed as part of ORFI installation.

Deploying BDI RFI Batch Job Admin on the WebLogic

To deploy the BDI RFI Batch Job Admin war, take the following steps.

1. Download BdiEdgeJobAdminPak21.0.000ForRfi21.0.000_eng_ga.zip to $BDI_HOME.

2. Unzip the downloaded archive. The BDI Job home directory will be created under the current directory.

   ```
   Unzip BdiEdgeJobAdminPak21.0.000ForRfi21.0.000_eng_ga.zip.
   ```

3. Edit bdi-job-admin-deployment-env-info.json as follows:

   ```
   cd bdi-edge-rfi-job-home/conf
   vi bdi-job-admin-deployment-env-info.json
   ```

4. Provide the following values in the JSON file.

Table 6-2

Configuration Property	Description
BdiRfiJobAdminDataSource ->jdbcUrl	The JDBC URL for the Oracle database where the RFI Retail Proxy schema resides.
	Suggested schema user BDI_RFI_EDGE_SCHEMA
BdiRfiReceiverServiceDataSource -> jdbcUrl	The JDBC URL for the Oracle database where the RFI Retail Proxy schema resides.

Table 6-2   (Cont.)

Configuration Property	Description
BatchInfraDataSource -> jdbcUrl	The JDBC URL for the schema created using RCU. The schema user is <prefix>_ WLS (e.g. INT_WLS). The value of prefix that you provided in schema creation using RCU.
JobAdminAppServer -> weblogicDomainName	The domain name where BDI RFI Admin app is deployed
JobAdminAppServer -> weblogicDomainHome	The domain home directory of WebLogic where BDI RFI Admin app is deployed
JobAdminAppServer -> weblogicDomainAdminServerUrl	Admin Server URL of the BDI RFI Admin App - http://<Admin host>:<Admin port>
JobAdminAppServer->weblogicDomainA dminServerProtocol	AdminServer protocol which is by default t3, For SSL deployment update to t3s.
JobAdminAppServer -> weblogicDomainAdminServerHost	Host Name of the BDI RFI Admin Server
JobAdminAppServer -> weblogicDomainAdminServerPort	BDI RFI Admin Server Port
JobAdminAppServer -> weblogicDomainTargetManagedServerNa me	Managed Server Name where BDI RFI Admin App is installed (e.g.bdi-rfi-server)
JobAdminAppServer -> jobAdminUiUrl	Job Admin URL of BDI RFI http://<host>:<bdi rfi managed server port>/ bdi-rfi-batch-job-admin
RmsJobAdminAppServer -> jobAdminUiUrl	Job Admin URL of BDI RMS http://<host>:<rms edge managed server port>/rms-batch-job-admin
SystemOptions->Name	Name of the odi domain home SystemOptions ->Value Replace with local odi_domain_home directory

5. Run the deployer script to create the data sources and deploy BDI RFI Batch Job Admin.

```
cd bdi-edge-rfi-job-home/bin
bdi-job-admin-deployer.sh -setup-credentials -deploy-job-admin-app
```

6. Enter the values prompted by the script for the following credential aliases. JobAdmin user has more privileges (e.g. change configuration and run jobs from JobAdmin UI) than JobOperator user. JobOperator can run batch jobs where as JobMonitor has just read privileges.

Table 6-3

Alias	Description
bdiAppServerAdminServerUserAlias	WebLogic admin server credentials
bdiJobAdminUiUserAlias	Credentials for Admin Role user for Job Admin app
bdiJobOperatorUiUserAlias	Credentials for Operator Role user for Job Admin app

Table 6-3   (Cont.)

Alias	Description
bdiJobMonitorUiUserAlias	Credentials for Monitor Role user for Job Admin app
bdiJobAdminDataSourceUserAlias	Credentials for the Data Source of the Job Admin Schema
bdiRfiReceiverServiceDataSourceUserAlias	Credentials for the Data Source of the Job Receiver Schema
batchInfraDataSourceUserAlias	Credentials for the Data Source of the Batch Infra Schema
rmsJobAdminBaseUrlUserAlias	RMS edge job admin app credentials

> **Note:**
>
> The alias names in the configuration files should not be changed.

7. Deployer script deploys BDI RFI Batch Job Admin to the server.

8. Restrict access to the bdi-int-rfi-job-home folder:

```
cd bdi-edge-rfi-job-home
chmod -R 700 .
```

Creating Inbound Interface tables for BDI RFI

1. Go to $BDI_HOME/bdi-edge-rfi-job-home/setup-data/ddl folder.

2. Run the sql script bdi_rfi_ddl.sql provided in this folder in the BDI RFI database schema.

3. DDL generates the necessary retail and inbound interface tables along with the database packages for RFI.

Deploying BDI Process Flow

Preparing the Database for Process Flow Installation

Before you begin installing Process Flow App, make sure you have the database schema created for Process Flow.

Please follow the below naming convention during schema creation for process flow.

Example, BDI_PROCESS_INT_SCHEMA

Install the Process Flow Application

Perform the following procedure to install the Process Flow application:

1. Download the process flow archive BdiProcessFlow23.0.000ForAll23.x.xApps_eng_ ga.zip

2. Unzip the downloaded archive. The Process Home directory will be created under the current directory.

```
unzip BdiProcessFlow23.0.000ForAll23.x.xApps_eng_ga.zip
```

3. Modify process flow configuration file (conf/bdi-process-flow-admin-deployment-env-info.json) to match the deployment environment. While you can change many values to match your requirements, here is a table of a minimum set of configuration values that you need to modify for process flow application.

> **Note:**
>
> The alias names in the configuration files should not be changed.

Table 6-4

Configuration Field	Description
ProcessFlowAdminDataSource ->jdbcUrl	JDBC URL for the process flow schema. Change this value to match the environment. Suggested schema user BDI_PROCESS_INT_SCHEMA
ProcessFlowAdminAppServer->weblogicDomainName	Name of the WebLogic domain where the process flow application is deployed
ProcessFlowAdminAppServer->weblogicDomainHome	WebLogic Domain home directory
ProcessFlowAdminAppServer- > weblogicDomainProtocol	WebLogic admin server protocol is by default t3, if SSL configured then update to t3s.
ProcessFlowAdminAppServer ->weblogicDomainAdminServerUrl	WebLogic Admin server URL
ProcessFlowAdminAppServer ->weblogicDomainAdminServerHost	Host name of WebLogic Admin Server
ProcessFlowAdminAppServer ->weblogicDomainAdminServerPort	WebLogic admin server port
ProcessFlowAdminAppServer ->weblogicDomainTargetManagedServerName	Managed Server name where Process Flow is hosted
ProcessFlowAdminAppServer->processFlowAdminUiUrl	Process Flow admin app URL. Update only the host and port
SimJobAdminAppServer ->jobAdminUiUrl	BDI SIM app job admin URL
SimAppJobAdminAppServer->jobAdminUiUrl	BDI SIM job admin URL
OcdsAppJobAdminAppServer->jobAdminUiUrl	BDI Ocds job admin URL
RpasAppJobAdminAppServer->jobAdminUiUrl	BDI Rpas job admin URL
RfiJobAdminAppServer-->jobAdminUiUrl	BDI RFI job admin URL
ExternalAppJobAdminServer-> BDI External job admin URL jobAdminUiUrl	BDI External job admin URL
RmsAppJobAdminAppServer -> jobAdminUiUrl	RMS APP job admin URL

4. Determine which flows are in scope for your deployment. Copy the flows from bdi-process-home/setup-data/dsl/available_process_flow_options to bdi-process-home/setup-data/dsl/flows-in-scope.

For example, for integration between RMS and RFI, the rms_rfi-no_split_Flows files would be copied:

```
cp bdi-process-home/setup-data/dsl/available_process_flow_options/rms_rfi-no-
split-flows/* bdi-process-home/setup-data/dsl/flows-in-scope/.
```

5. Run the deployer. Make sure that the WebLogic server is running before issuing the following command.

```
cd bin
bdi-process-flow-admin-deployer.sh -setup-credentials
-deploy-process-flow-admin-app
```

The process flow deployer will prompt for username and password for the following credential aliases:

Table 6-5

Alias	Description
bdiAppServerAdminServerUserAlias	WebLogic admin server credentials
processFlowAdminBaseUrlUserAlias	Credentials for Admin Role user for Process Flow Admin app
processFlowOperatorBaseUrlUserAlias	Credentials for Operator Role user for Process Flow Admin app
processFlowMonitorBaseUrlUserAlias	Credentials for Monitor Role user for Process Flow Admin app
bdiProcessFlowAdminDataSourceUserAlias	Credentials for the Data Source of the Process Flow Schema
rfiJobAdminBaseUrlUserAlias	BDI RFI job admin app credentials
rmsappJobAdminBaseUrlUserAlias	RMS APP job admin credentials
simJobAdminBaseUrlUserAlias	SIM job admin app credentials
simAppJobAdminBaseUrlUserAlias	SIM app job admin app credentials
ocdsAppJobAdminBaseUrlUserAlias	OCDS app job admin app credentials
externalAppJobAdminBaseUrlUserAlias	EXTERNAL app job admin app credentials
rpasAppJobAdminBaseUrlUserAlias	RPAS APP job admin credentials

6. Make sure the deployment step shows deployment success message at the end.

7. Restrict access to the bdi-process-home folder:

```
cd bdi-process-home
chmod -R 700 .
```

See the *Oracle Retail Bulk Data Integration Implementation Guide* for the operation details of the Process Flow application.

Enabling Email Notification Alerts

Process Flow can send email alerts upon success or failure of process executions as specified in the process definitions.

Follow the instructions in the *BDI Installation Guide* to configure email notification alerts.

Deploying BDI Batch Scheduler

POM is the BDI batch Scheduler to trigger the pre-configured BDI process flows and should be available on the MFCS domain.

A

Appendix: JSON in Tabular Format

Table A-1   Legend

Grey: No editable configuration	White: Needs update.

Table A-2   Cloud Financials – JSON Configuration

RFI Configuration Property Name	Description	Example Value/Default Value	Value Editable?
RfiDeploymentEnvInfo			
integrationToEbsOrPsft OrCfin		CFIN	N
DataSourceDef			
RfiDataSource	RFI database connection details		
dataSourceName	Name of the datasource that the installer creates to connect to RMS	RfiDataSource	N
dataSourceClass	DataSource class the installer will configure for the data source	oracle.jdbc.xa.client.OracleXADat aSource	N
dataSourceJndiName	JNDI name used by the RFI application to connect to the database	jdbc/RfiDataSource	N
jdbcUrl	RFI JDBC connection URL. Please specify the connection URL for your RFI DB.	jdbc:oracle:thin:@// rfidbhost.exa mple.com:1521/ orcl	Y
jdbcUserAlias	User name alias. Do not change the default value.	rfiDataSourceUserAlias	N
jdbcUser	User (schema name) for the RFI database.	GET_FROM_WALLET	N
jdbcPassword	Password for the RFI database.	GET_FROM_WALLET	N
MiddlewareServerDef			
RfiAppServer	RfiAppServer- WebLogic domain configuration details		
weblogicDomainName	RfiAppServer configuration, WebLogic domain name	RFIDomain	Y
weblogicDomainHome	RFI domain home.	<WLS-HOME>/user_projects/ domains/RFIDomain	Y
weblogicDomainAdminServerUrl	WebLogic domain admin serverURL.	t3:// rfiserver.example.com:19301	Y

Table A-2   (Cont.) Cloud Financials – JSON Configuration

RFI Configuration Property Name	Description	Example Value/Default Value	Value Editable?
weblogicDomainAdmi nServerProtocol	WebLogic admin server protocol.	t3	N
weblogicDomainAdmi nServerHost	Weblogic server host name.	rfiserver.example.com	Y
weblogicDomainAdmi nServerPort	Port information of weblogic server.	19301	Y
weblogicDomainAdmi nServerUserAlias	Weblogic server UserAlias name. Do not change defaults	rfiAppServerAdminServerUse rAl ias	N
weblogicDomainTarg etManagedServerNa me	Weblogic Domain TargetManaged Server name.	rfi-server	Y
glAccountValidationS erv iceEndPointUrl	End point URL for GL account validation Service	http://myhostname:7001/ GlAcc ountValidationBean/ GlAccountV alidationService? WSDL	Y
glAccountValidationS erv iceEndPointUserAlias	User alias information for GL account validation service. Do not change the default value.	glAccountValidationServiceE ndPointUserAlias	N
glAccountValidationS erv iceEndPointUser	End point User name.	GET_FROM_WALLET	N
glAccountValidationS erv iceEndPointPassword	End point User password. This information is sourced from a container that is used for storing authentication and signing credentials and is managed by Security Admins.	GET_FROM_WALLET	N
glAccountValidationS erv iceEndPointSecurityP oli cyName	Security policy for the service. Valid values are PolicyA, PolicyB and unsecure. (Note: Use https for Policy A setting)	unsecure	Y
supplierExportOutbou ndServiceEndPointUrl	URL information that will be used in connection for Supplier Export Outbound Service.	http://myhostname:7001/ Suppli erExportOutboundService/Su pplierExportOutboundServi ce?WSDL	Y
supplierExportOutbou ndServiceEndPointU serAlias	User Alias. Constant at Supplier Export Outbound Service User Alias.	supplierExportOutboundSe rviceEndPointUserAlias	N
supplierExportOutbou ndServiceEndPointUs er	Supplier Export OutboundService User name.	GET_FROM_WALLET	N
supplierExportOutbou ndServiceEndPointP assword	Supplier Export OutboundService End point User password.	GET_FROM_WALLET	N

Table A-2   (Cont.) Cloud Financials – JSON Configuration

RFI Configuration Property Name	Description	Example Value/Default Value	Value Editable?
supplierExportOutbou ndServiceEndPointS ecurityPolicyName	Indicates how the Policy is secured. Options are Policy A, Policy B or Unsecure. (Note: Use https for Policy A setting)	unsecure	Y
rfiAdminUiUrl	URL for RFI Admin UI.	http://myhostname:7001/ retail-f inancial-integration- web	Y
rfiAdminUiUserGroup	Admin user group. Do not change the default value.	RfiAdminGroup	N
rfiAdminUiUserAlias	RFI admin UI user name alias. Do not change the default value.	rfiAdminUiUserAlias	N
rfiAdminUiUser	RFI Admin UI User name.	GET_FROM_WALLET	N
rfiAdminUiPassword	End point User password.	GET_FROM_WALLET	N
rfiOperatorUiUserGro up	Operator user group. Do not change the default value.	RfiOperatorGroup	N
rfiOperatorUiUserAlia s	RFI Operator UI user name alias. Do not change the default value.	rfiOperatorUiUserAlias	N
rfiOperatorUiUser	RFI Operator UI User name.	GET_FROM_WALLET	N
rfiOperatorUiPasswor d	End point User password.	GET_FROM_WALLET	N
rfiMonitorUiUserGrou p	Monitor user group. Do not change the default value.	RfiMonitorGroup	N
rfiMonitorUiUserAlias	RFI Monitor UI user name alias. Do not change the default value.	rfiMonitorUiUserAlias	N
rfiMonitorUiUser	RFI Monitor UI User name.	GET_FROM_WALLET	N
rfiMonitorUiPassword	End point User password.	GET_FROM_WALLET	N
smtpServerHost	RFI SMTP (Simple Mail Transfer Protocol) server host information.	smtp.example.com	Y
smtpServerPort	RFI SMTP server port information.	465	Y
smtpServerListenerTy pe	RFI SMTP server listener type (for example, SSL or TSL).	SSL	N
smtpAuthenticationRe q uired	Enter "TRUE" if authentication required for SMTP server, else "FALSE".	TRUE	Y
smtpMailFromAddres s	Enter the sender email Address.	sender_email_address@exa mple.com	Y
smtpMailFromAddres sAlias	Alias for From Address. Do not change the default value.	smtpMailFromAddressAlias	N

Table A-2   (Cont.) Cloud Financials – JSON Configuration

RFI Configuration Property Name	Description	Example Value/Default Value	Value Editable?
smtpMailFromAddressPassword	Password for the from email address.	GET_FROM_WALLET	N
smtpMailToAddressList	Comma separated list of recipient email addresses.	receiver_email_address@abc.com, receiver_email_address2@abc.com	Y
RmsAppServer	RFI Integrated Gateway Services detail for Supplier service		
supplierServiceEndPointUrl	Supplier service endpoint URL information (with no RSB).	http://rmshostname.example.com:19203/SupplierBean/SupplierS ervice?WSDL	Y
	Supplier service endpoint URL (with RSB).	http://rmshostname.example.com:19203/rms-Supplier-AppServic eDecorator/ProxyService/SupplierAppServiceProxy?wsdl	Y
supplierServiceEndPointUserAlias	Alias for Supplier service. Do not change the default.	supplierServiceEndPointUserAlia s	N
supplierServiceEndPointUser	UserName for Supplier Service End point User.	GET_FROM_WALLET	N
supplierServiceEndPointPassword	Password for Supplier service.	GET_FROM_WALLET	N
supplierServiceEndPointSecurityPolicyName	Security policy for the service. Valid values are PolicyA, PolicyB and unsecure. (Note: Use https for Policy A setting)	unsecure	Y
supplierServiceEndPoint PolicyBSecurityPolicy.ws KeystorePasswordUserA lias	WSKeyStore Password User Alias for Supplier Service End point User Alias.	supplier#keystore-password-user- alias	N
supplierServiceEndPoint PolicyBSecurityPolicy.ws KeyPublicPrivateKey Ali as	WSKeyPublicPrivateKey Alias for Supplier Service End point User Alias.	supplier#remote-host-public-priv ate-key-alias	N
CfinAppServer	Cfin App Server Configuration Details		
financialUtilServiceEndPointUrl	Cfin Financial Util Service End Point URL	https://cfinhostname/fscmService/ErpIntegrationService?WSDL	Y
financialUtilServiceEndPointUserAlias	Cfin Financial Util Service User Alias	financialUtilServiceUserNam eAlias	N

Table A-2   (Cont.) Cloud Financials – JSON Configuration

RFI Configuration Property Name	Description	Example Value/Default Value	Value Editable?
financialUtilServiceEndPointUser	UserName for Financial Util Service End point User.	GET_FROM_WALLET	N
financialUtilServiceEndPointPassword	Password for Financial Util Service service.	GET_FROM_WALLET	N
financialUtilServiceEndPointSecurityPolicyName	Security policy for the service. Valid values are PolicyA, PolicyB and unsecure. (Note: Use https for Policy A setting)	unsecure	Y
glAccountValidationEndPointUrl	Cfin General Ledger Validation Service End Point URL	https://cfinhostname/fscmService/AccountCombinationService?WSDL	Y
glAccountValidationEndPointUserAlias	Cfin General Ledger Validation Service User Alias	glAccountValidationEndPointUserAlias	N
glAccountValidationEndPointUser	UserName for General Ledger Validation Service End point User.	GET_FROM_WALLET	N
glAccountValidationEndPointPassword	Password for General Ledger Validation Service service	GET_FROM_WALLET	N
glAccountValidationEndPointSecurityPolicyName	Security policy for the service. Valid values are PolicyA, PolicyB and unsecure. (Note: Use https for Policy A setting)	unsecure	Y