Oracle® Retail Demand Forecasting

Installation Guide

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Oracle Retail Demand Forecasting Installation Guide, Release 15.0.3

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Oracle Retail Demand Forecasting Installation Guide, Release 15.0.3.

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Preface

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

This document provides detailed instructions on how to install an RDF domain using a configuration created with the RPAS Configuration Tools. This document does not describe how to create the actual configuration. Refer to the *Oracle Retail Demand Forecasting Configuration Guide* for information on creating a configuration.

Supplemental Installation Guides

Supplemental installation guides are referenced in this document. These guides must be obtained before beginning the installation process:

- *Oracle Retail Predictive Application Server Installation Guide*
- *Oracle Retail Predictive Application Server Administration Guide for the Classic Client*
- *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*
- *Oracle Retail Predictive Application Server Configuration Tools User Guide*

Read these documents in their entirety before starting the installation.

Audience

This document is intended for an Management Information System (MIS) administrator that needs to install the RPAS software and create RDF domains.

This Installation Guide is written for the following audiences:

- Database administrators (DBA)
- System analysts and designers
- Integrators and implementation staff

Documentation Accessibility

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`http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info` or visit

http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Related Documents

For more information, see the following documents in the Oracle Retail Demand Forecasting Release 15.0.3 documentation set:

- *Oracle Retail Demand Forecasting Installation Guide*
- *Oracle Retail Demand Forecasting Release Notes*
- Oracle Retail Predictive Application Server documentation

The following documentation may also be needed when implementing RDF:

- *Oracle Retail Planning Batch Script Architecture Implementation Guide*

Supplemental Documentation

The following document is available through My Oracle Support at the following URL: https://support.oracle.com

Oracle Retail Demand Forecasting 15.0.3 Cumulative Fixed Issues (Note ID 2271540.1)

This document details the fixed issues and defects for all RDF, Curve, and Grade patch releases prior to and including the current release.

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

https://support.oracle.com

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
- Screenshots 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, 15.0) or a later patch release (for example, 15.0.3). If you are installing the base release, additional patch, and bundled hot fix releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch and bundled hot fix 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.

This process will prevent delays in making critical corrections available to customers. For the customer, it means that before you begin installation, you must verify that you have the most recent version of the Oracle Retail documentation set. Oracle Retail documentation is available on the Oracle Technology Network at the following URL:

`http://www.oracle.com/technetwork/documentation/oracle-retail-100266.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 Retail Documentation on the Oracle Technology Network

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

`http://www.oracle.com/technetwork/documentation/oracle-retail-100266.html`

(Data Model documents are not available through Oracle Technology Network. You can obtain them 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

Full Installation

This document provides instructions on installing Oracle Retail Demand Forecasting. It provides detailed instructions on how to install a Demand Forecasting (RDF) domain using a configuration created through the RPAS Configuration Tools. This document does not describe how to create the actual configuration.

> **Note:** Supplemental installation guides are referenced in this document. The *Oracle Retail Predictive Application Server Installation Guide* and *Oracle Retail Predictive Application Server Configuration Tools User Guide* must be obtained before beginning the installation process. Read these documents in their entirety before starting the installation.

Read through this document completely before performing the installation steps.

Hardware and Software Requirements

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

Table 1–1 provides information on the hardware and software requirements for RDF, Curve, and Grade:

Table 1–1 Hardware and Software Requirements

Requirement	Details
Supported RPAS Version	15.0.3
Oracle Retail Batch Script Architecture (BSA)	15.0.3
Required Software	Java Development Kit (JDK) 1.8u131 **Note:** There are specific JDK versions needed for each of the supported operating systems for the Oracle Retail Predictive Application Server (RPAS). For the list of JDK versions, see the *Oracle Retail Predictive Application Server Installation Guide*. **Note:** When installing Java, avoid enabling AutoUpdate because it may update the Java version without prompting.

Note: RPAS applications, such as RDF, run on the Oracle Retail Predictive Application Server (RPAS) platform. For information about the hardware and software requirements for RPAS, see the supported RPAS version of the *Oracle Retail Predictive Application Server Installation Guide*.

Supported Oracle Retail Products

This sections lists the supported Oracle Retail products for RDF, Curve, and Grade.

RDF Supported Oracle Retail Products

Table 1–2 provides information about the supported Oracle Retail products for RDF.

Table 1–2 RDF Supported Oracle Retail Products

Product	Version
Oracle Retail Advanced Inventory Planning	15.0.3
Oracle Retail Analytic Parameter Calculator for Replenishment Optimization (APC-RO)	15.0.3
Oracle Retail Analytic Parameter Calculator for Regular Price Optimization (APC-RPO)	15.0.3
Oracle Retail Merchandising System (RMS)	15.0.3
Oracle Retail Replenishment Optimization (RO)	15.0.3
Oracle Retail Regular Price Optimization (RPO)	15.0.3
Oracle Retail Advanced Science Engine (ORASE)	15.0.3
Oracle Retail Cross Promotion Effects Module (CPEM)	15.0.3

Curve Supported Oracle Retail Products

Table 1–3 provides information about Oracle Retail products that are supported for Curve.

Table 1–3 Curve Supported Oracle Retail Products

Product	Version
Oracle Retail Allocation	15.0.3

Grade Supported Oracle Retail Products

Table 1–4 provides information about Oracle Retail products that are supported for Grade.

Table 1–4 Grade Supported Oracle Retail Products

Product	Version
Oracle Retail Merchandising System (RMS)	15.0.3

Requesting Infrastructure Software

If you are unable to find the necessary version of the required Oracle infrastructure software (database server, application server, WebLogic, and so on.) 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*.

Installing RDF on UNIX Environments

> **Note:** Oracle Retail Batch Scripting Architecture (BSA) must be installed prior to installing RDF. For information about installing BSA, see the *Oracle Retail Batch Script Architecture Implementation Guide*.

The installation of the server-side RPAS components on UNIX operating systems is accomplished using Java-based installation programs that are included with the installation package.

The RPAS Installer automates the following tasks:

- Installs the RPAS server components
- Installs Configuration Tools on the server
- Defines the DomainDaemon port

The RDF Installer automates the following tasks:

- Installs the RDF configuration
- Installs RDF plug-ins for the Configuration Tools
- Installs Language Translation files
- Creates a sample RDF domain

> **Note:** Refer to chapter, "Creating a Multi-solution Taskflow" in the *Oracle Retail Predictive Application Server Configuration Tools User Guide* for information about the Multi-solution Taskflow.

> **Note:** This document assumes that the RPAS Installer process (from the *Oracle Retail Predictive Application Server Installation Guide*) has been completed prior to using the RDF Installer.

Preparation

The RPAS server components required prior to this installation process are available from Oracle's E-Delivery web site, http://edelivery.oracle.com, and My Oracle Support, https://support.oracle.com.

> **Note:** Before installing RDF, confirm that RPAS and all subsequent patches have been successfully applied.

Environment Variable Setup Script

Before running the solution installer, source your `retaillogin.ksh` script. The script is located in the root of the base directory where RPAS was installed unless the default was overwritten when specifying directory paths.

Source the script from inside the directory where the script is located:

. ./retaillogin.ksh

or

Include the full path after the period and space ". ":

. /<base_directory>/retaillogin.ksh

Note: The preceding period and space (". ") must be included at the beginning of the command when running the script.

Note: Include this path and script in the `.profile` in your home directory (`~/.profile`) if you want to have this environment setup script run during login.

This script sets up environment variables, such as RPAS_HOME and RIDE_HOME, which are required for RPAS to run properly.

HP Itanium

If you are installing any RPAS solution on HP Itanium or Sun 10, you need to set the 64-bit Configuration Tools environment variable for Java as shown:

```
export RIDE_OPTIONS=-d64
```

Downloading and Extracting the RDF/CPEM Media Pack

The following procedure provides information about extracting the RDF/CPEM media pack and its contents:

1. Create a directory to store the RDF/CPEM media pack and download the media pack to this location. This directory will be referred to as **[RDF Installation]**.
2. Extract the media pack to this location. Once extracted, two directories appear, **CDROM** and **DOCS**.

   The **CDROM** folder contains the following ZIP files:

   - `RDF.zip` - This file contains the RDF solution.
   - `CPEM.zip` - This file contains the CPEM solution.

   The **DOCS** folder contains the RDF documentation. Within the DOCS you can find the RDF Guides, including:

   - Release Notes - This folder contains the *Oracle Retail Demand Forecasting Release Notes*.
   - Installation Guide - This folder contains the *Oracle Retail Demand Forecasting Installation Guide*.

   Note: Files contained within the installation package are intended to be used by the installer only.

Extracting the RDF/CPEM Installation Package

Complete these steps to extract the installation package:

1. Create a directory to store the RDF/CPEM media pack on the target server. This directory will be referred to as **[RDF Installation]**. It is the location where the RDF installation routine is run.
2. Using FTP in binary mode, transfer the RDF/CPEM media pack to the **[RDF Installation]** directory on the target server.
3. Extract the package to the **[RDF Installation]** directory.

   ```
   cd [RDF Installation]
   unzip [RDF Package]
   ```

4. Extract the RDF Installer.

   ```
   cd CDROM
   unzip RDF.zip
   ```

Installation Instructions

Perform the following steps to install RDF.

> **Note:** This product's installer includes Ant. If Ant is already installed on your system and is version 1.6.5 or earlier, then you must run `unset ANT_HOME` on the command line to ensure that the installer uses the included version. The `unset ANT_HOME` command must be run before `./install.sh`.

1. Begin the Installer by first changing to the root of the **[RDF Installation]** directory and running the following command:

   ```
   ./install.sh
   ```

   > **Note:** The command must be run with the preceding period and slash (./).

   If this process is being run on an X-Windows emulator (such as Exceed), a GUI to the Installer appears. If you are running in console mode through a terminal emulator, a text interface to the Installer appears.

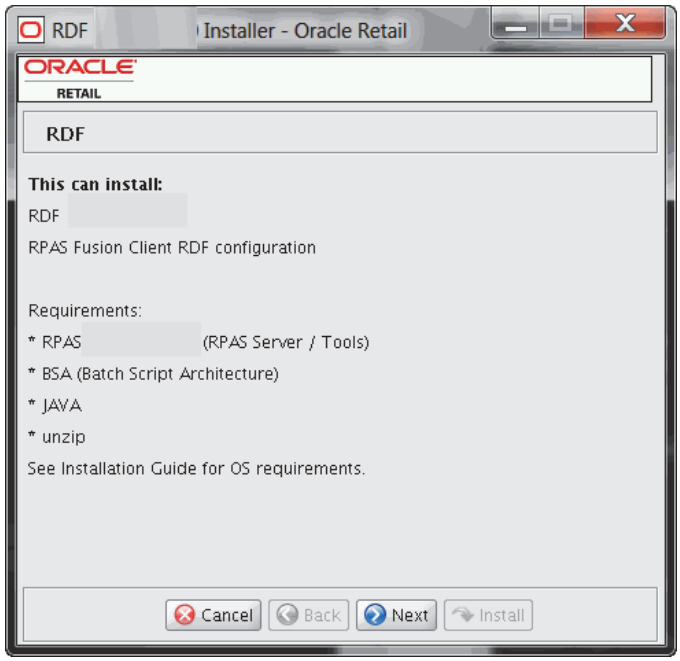
   In both cases, the requested information is identical, but displayed differently. In the GUI, a check box may appear to signal whether or not you want a component installed. In text mode, a response of yes or no may be required.

   > **Note:** In text mode, the default value appears in square brackets. To use the default value and continue, click **Enter**. If you want to use a different value, enter the new value. When prompted to create a directory, respond with **Y** or yes and click **Enter**.

2. The RDF Installer Window opens and shows the components that are installed during installation process as well as other required components. Click **Next** to continue.

Note: Oracle Retail Batch Scripting Architecture (BSA) must be installed prior to installing RDF. For information about installing BSA, see the *Oracle Retail Batch Script Architecture Implementation Guide*.

Figure 1–1 RDF Installer Window

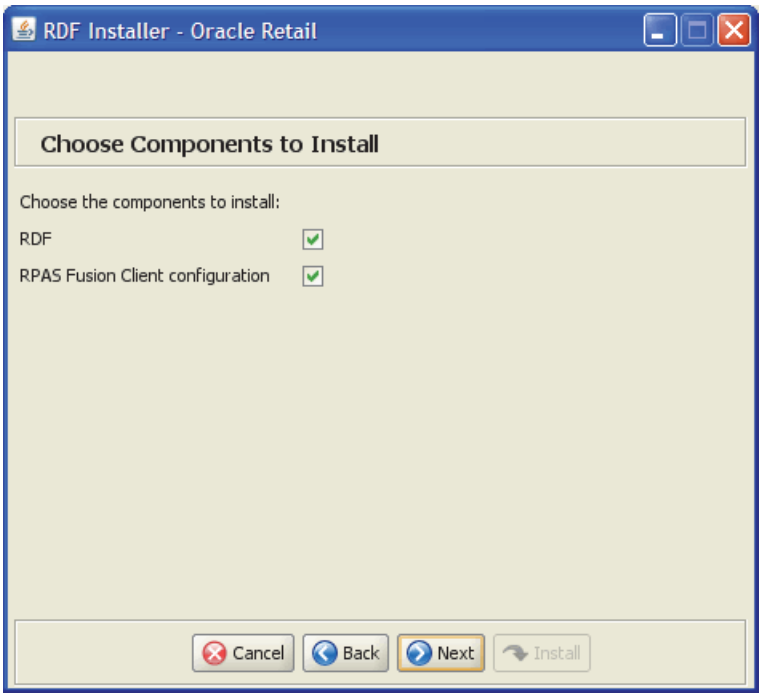


Note: When logging is on and the verbose setting is used for the new 3rd party approved version of Java Secure Channel (JSch), the following message displays, "*Caught an exception, leaving main loop due to Socket closed*".

This message has no impact on the installer and should be ignored.

3. The RDF Choose Components to Install Window opens.

Figure 1–2 RDF Choose Components to Install Window



Select one or both of the following options:

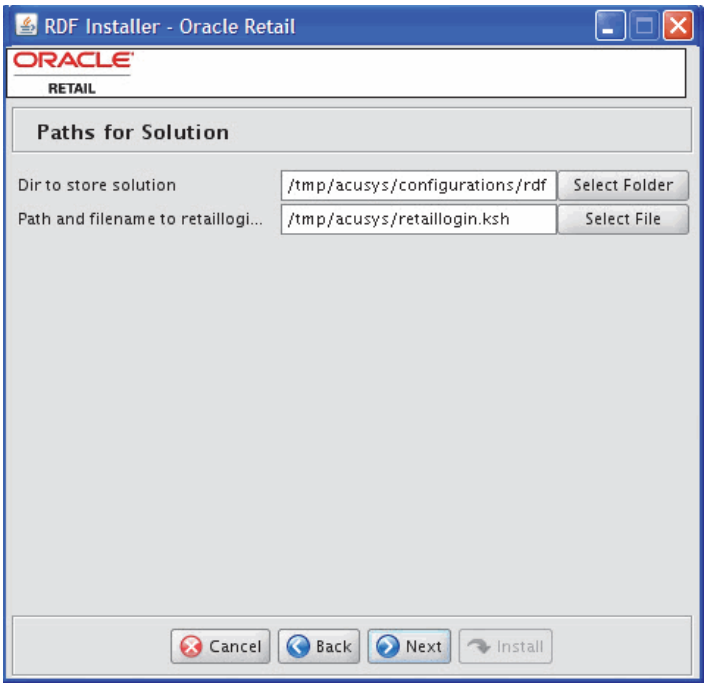
- **RDF** – Select this option to install the RDF solution with the domain.
- **RPAS Fusion Client configuration** – Select this option to install the RPAS Fusion Client RDF configuration.

If You Are...	Then....
Not installing the RPAS Fusion Client RDF configuration.	Clear the RPAS Fusion Client configuration check box and skip steps 6 and 7.
Not installing the RDF solution, but are installing the RPAS Fusion Client RDF configuration.	1. Clear the RDF check box and select the RPAS Fusion Client configuration check box. 2. After installation, you must update the domain-path entry in the `Foundation.xml` on the RPAS Fusion Client server. 3. In the `Foundation.xml`, change `${input.RDF.dir}` to your RDF domain path.

Click **Next** to continue.

4. The RDF Base Paths for Solution Window opens.

Figure 1–3 RDF Base Paths for Solution Window



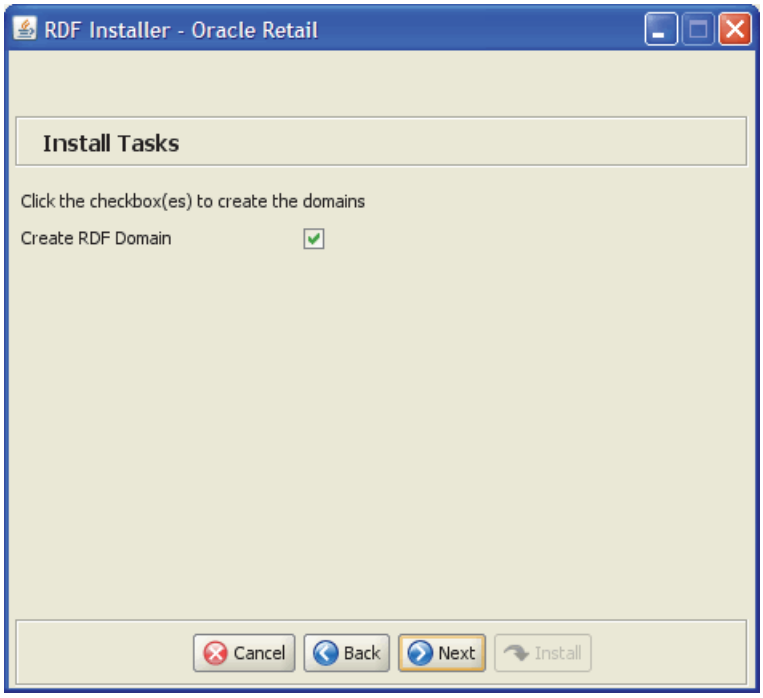
Note: Ensure that the installation paths are located outside of the installer directory **[RDF_Installer]**.

Enter the following path information and click **Next**:

- **Dir to store configurations** - Enter the target directory to store the configurations.
- **Dir to store created domains** - Enter the target directory used to store created domains.
- **Path and file name to the retaillogin.ksh script** - Enter the path and file name where the `retaillogin.ksh` script was created during RPAS installation.

5. The RDF Install Tasks Window opens.

Figure 1–4 RDF Install Tasks Window



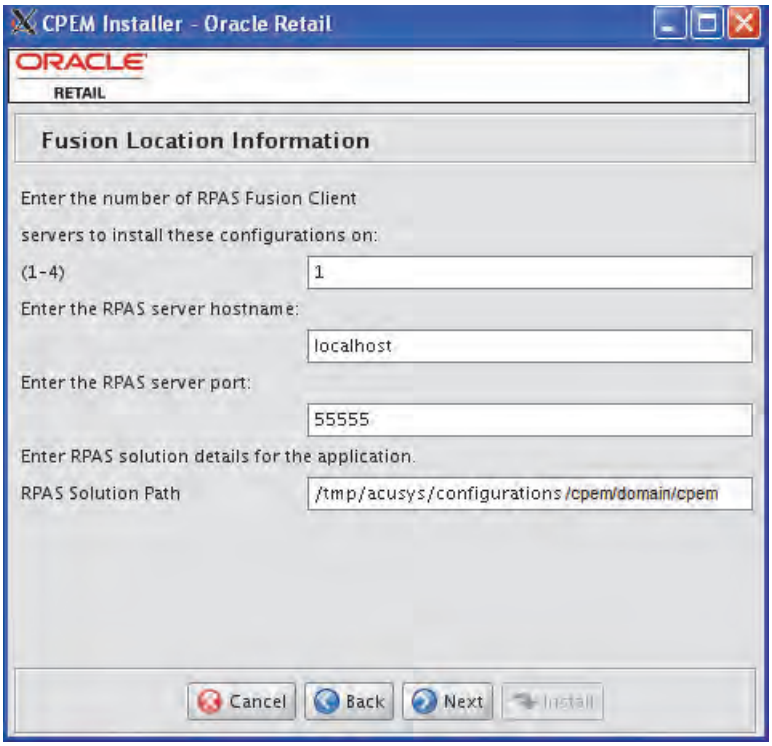
If You Want to....	Then....
Create the RDF domain	Select **Create RDF Domain** and click **Next**.
Install all required components to support the RDF domain, but not create the actual RDF domain	Clear the **Create RDF Domain** check box and click **Next**.

Note: Domain builds use the environment specified in the `retaillogin.ksh` environment setup script. If you change any environment details, edit the `retaillogin.ksh` script and any subsequent scripts called by `retaillogin.ksh`.

For more information about the `retaillogin.ksh` script, refer to the section: "Environment Variable Setup Script".

6. The RDF Fusion Location Information Window opens.

Figure 1–5 RDF Fusion Location Information Window



Enter the relevant information in the following fields:

Field	Description
Enter the number of RPAS Fusion Client servers to install these configurations on: (1-4)	Enter the number of servers running the RPAS Fusion Client where you want to install the RDF configuration. In case the RPAS Fusion Client is running on a single server, enter *1*. If you have a clustered installation, you can enter up to four servers
Enter the RPAS server hostname:	Enter the hostname of the RPAS server.
Enter the RPAS server port:	Enter the port number of the RPAS server.
RPAS Solution Path	Enter the location of the RPAS domain for RDF.

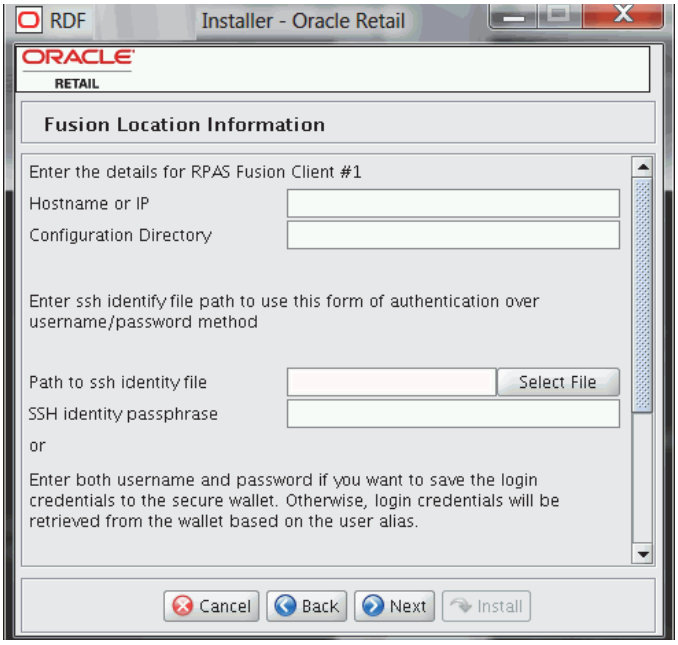
Note: The RDF Fusion Location Information Window opens when you select the RPAS Fusion Client configuration check box on the Choose Components to Install Window.

If you are not installing the RPAS Fusion Client configuration, proceed to step 8.

Click **Next** to continue.

7. Based on the number of servers you entered, the RDF Fusion Location Information (Details) Window opens.

Figure 1–6 RDF Fusion Location Information (Details) Window



Enter the server details in the following set of fields for each configuration.

Note: The authentication provided needs to be either:

Path to SSH identity file and SSH identity passphrase

or

Login username, Login password, and Login username alias

Field	Description
Hostname or IP	Enter the host name or IP address of the server where the RPAS Fusion Client is installed.
Configuration Directory	Enter the location of the config directory available at the location where the RPAS Fusion Client is installed.
Path to SSH identity file	Enter the location of the SSH identity file to be used for authentication to the server where the RPAS Fusion Client is installed.
SSH identity passphrase	If your SSH identity is secured with a passphrease, then enter the passphrase. If not, then leave this field empty.
Login username	Enter the user name to log on to the server where the RPAS Fusion Client is installed.
Login password	Enter the password associated with the user name.
Login username alias	Specify an alias name for the administrative user. Specifying an alias name for the administrative user enhances the security for the application. When left blank, the alias name defaults to the administrative user name.

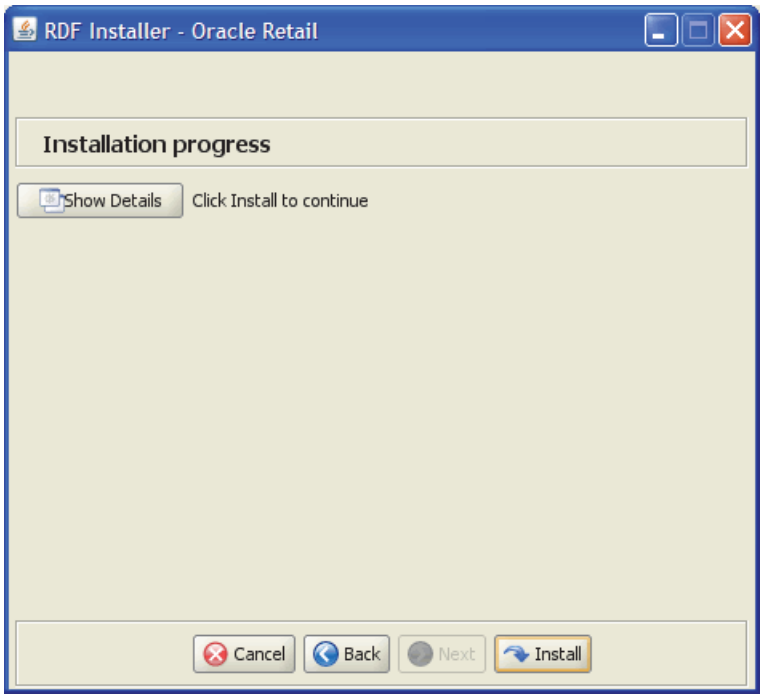
Note: Information such as user credentials for the RPAS Fusion Client is encrypted and stored in a secure location in the application installation directory. This location is called the Oracle Wallet.

When the installation starts, the administrative user credentials are retrieved from the Oracle Wallet based on the alias name specified in this window.

Click **Next** to continue.

8. The RDF Installation Progress Window opens.

Figure 1–7 RDF Installation Progress Window



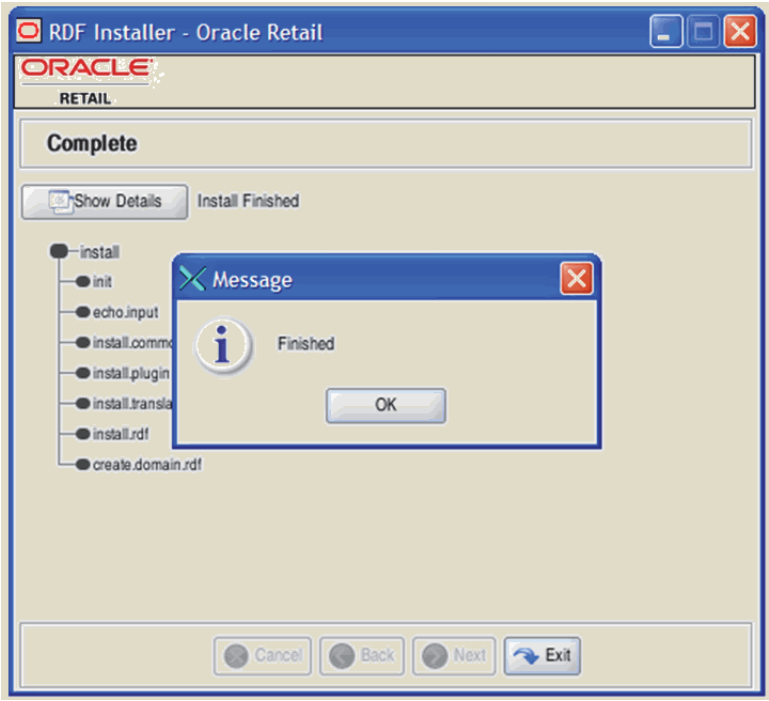
To display the progress of the components and tasks being performed by the Installer, click **Show Details**. Click **Install** to start the installation process.

You can view the detailed mode at any time during or after the installation.

Note: If you chose to create the RDF global domain, installation time might take 30 to 60+ minutes depending on server specifications.

9. When the installation process is complete, the RDF Complete Window opens a Message dialog box. Click **OK** to close the dialog box.

Figure 1–8 RDF Complete Window



10. To view the installation details, click **Show Details**. The window displays two tabs, the Output tab and the Error tab. It is recommended that you review these tabs for any issues that may have occurred during the installation process.

    If you wish to view the log again at a later date, a text copy was saved in the directory **[RDF Installation]**. The log file is named based on the product and time installer, followed by the `.log` extension.

    The `make_domain.rdf` file, located in the **[Configurations Install Dir]** entered during the install, is created during the installation process. This file contains all of the required parameters needed to support domain installation. If necessary this file may be modified if the default parameters are not appropriate for your particular environment.

    Note: When reviewing Installer output or logs, you may see the following message: *[scp] Caught an exception, leaving main loop due to Socket closed*. This message is harmless and does not indicate failure.

    Note: The domain install process also includes postinstallation data loading scripts specific to the RDF configuration. These scripts may also be modified.

11. Click **Exit** to close the Installer.

Postinstallation Tasks

After you have installed RDF, perform the following postinstallation tasks.

- Start the DomainDaemon.

- Set $RDF_HOME

  export RDF_HOME=$RPAS_HOME

- If you are on AIX and you have re-installed RDF, you must edit a help file to use the RDF online help in the RPAS Fusion Client. Manually edit the `[fusion client installation dir]/config/Help/ohwconfig.xml` file by removing the following duplicate line:

  ```
  <helpSet xmlns="" id="<shortProductName>"
  location="<shortProductName>/<shortProductName>-help.hs"/>
  ```

  Caution: If this duplicate line is not removed, a "500 Page Not Found" error occurs when attempting to access the online help in the RPAS Fusion Client.

Configuration Files for the RPAS Fusion Client

This section describes the optional installation method that involves setting up the RPAS Fusion Client configuration and online help for the RDF configuration. If you chose to install the Fusion Client configuration files using the RDF installer, you can skip this section.

Note: Before proceeding, ensure that you have appropriate access privileges on the server running the RPAS Fusion Client.

Along with the files to install the RDF solution and domain, the RDF/CPEM installation media pack also includes the RPAS Fusion Client configuration and online help files that you must install if you want to use RDF on the RPAS Fusion Client.

These files are available at the following location within the **[RDF Installation]** directory:

[RDF Installation]/rdf/fusion

<server-name>{RPASServerName}</server-name>

During the RDF installation, these files are automatically copied over to the configuration directory where the RPAS Fusion Client is installed. The installation also ensures that the following RPAS Fusion Client configuration files are updated to reflect the RDF installation:

- `Foundation.xml` - Located in the **[RPAS Fusion Client Installation]/ config/rpas** directory, this XML file includes the domain configuration available for use with the RPAS Fusion Client.
- `ohwconfig.xml` - Located in the **[RPAS Fusion Client Installation]/config/Help** directory, this XML file includes the online help configuration for the RPAS Fusion Client.

If you did not install the Fusion Client configuration files during the RDF installation, you can choose to do one of the following tasks:

- Run the RDF installer again, and select to install only the RPAS Fusion Client configuration.
- Run the RPAS Fusion Client installer again, and specify the RDF domain configuration. For more information on the RPAS Fusion Client installation, refer to the *Oracle Retail Predictive Application Server Installation Guide*.

- Configure the RPAS Fusion Client for RDF manually. For more information, refer to the "Configuring Additional Domains" section in the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*.

Taskflow Files

This section provides information about the files needed for taskflow configuration.

If you selected the option to build a domain, you will find two taskflow files (`taskflow.xml` and the `taskflowBundle.properties` resource file) in the fusionClient subdirectory within the domain. For information about how to use these files to configure the Multi-solution Taskflow, refer to the section, "Postinstallation Configuration" in the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client.*

If you selected the option to install the fusion client configuration, the translation files for the taskflow have been copied to [RPAS Fusion Client Installation]/resources. For information about how to use these files with the Multi-solution Taskflow, refer to the section, "Creating a Multi-solution Taskflow" in the *Oracle Retail Predictive Application Server Configuration Tools User Guide*.

2

Patch Installation

When upgrading RDF, use the upgrade option that corresponds best to your system's requirements. Refer to Upgrade Scenarios for additional information.

> **Note:** Before patching an RDF domain, refer to Appendix A, "Patching RDF Domains."

This chapter includes the following sections:

- RDF Upgrade Prerequisites
- Upgrade Scenarios
- Upgrade Process
- Upgrades for Versions Earlier than 13.0.4.18
- Upgrade for the New Item Solution

RDF Upgrade Prerequisites

In order to upgrade RDF, first verify the following criteria for the RPAS system:

- Verify that RPAS is currently installed and is at Release 13.3 or later. If not, refer to the section, Upgrade to Key RPAS Versions.
- Verify that the UNIX operating system is updated to the currently supported version. Refer to the "Hardware and Software Requirements" section of the Oracle Retail Predictive Application Server Installation Guide.
- Verify that the environment variables are correctly set for both the server and PC; if they are not, follow these instructions to set them:
  - Change directories to the original RPAS installation directory (such as the one created by the most recent installer), and run `retaillogin.ksh` to set all environment variables. For example:

    ```
    $ cd /retail
    $ ../retaillogin.ksh
    ```
- Remove the empty workbook tab as described in the section, Tab Removal.

Notes: Once you have run the script, verify that the environment variables all point to the correct locations on your environment.

If you have updated Java since the last installation of RPAS, verify that the JAVA_HOME path is correct. If not, update your `retaillogin.ksh` script and source it again as previously outlined.

- If applicable, perform the procedure described in the section, Key Steps to Build or Upgrade the RDF Domain Prior to Running the RPAS Installer.

Tab Removal

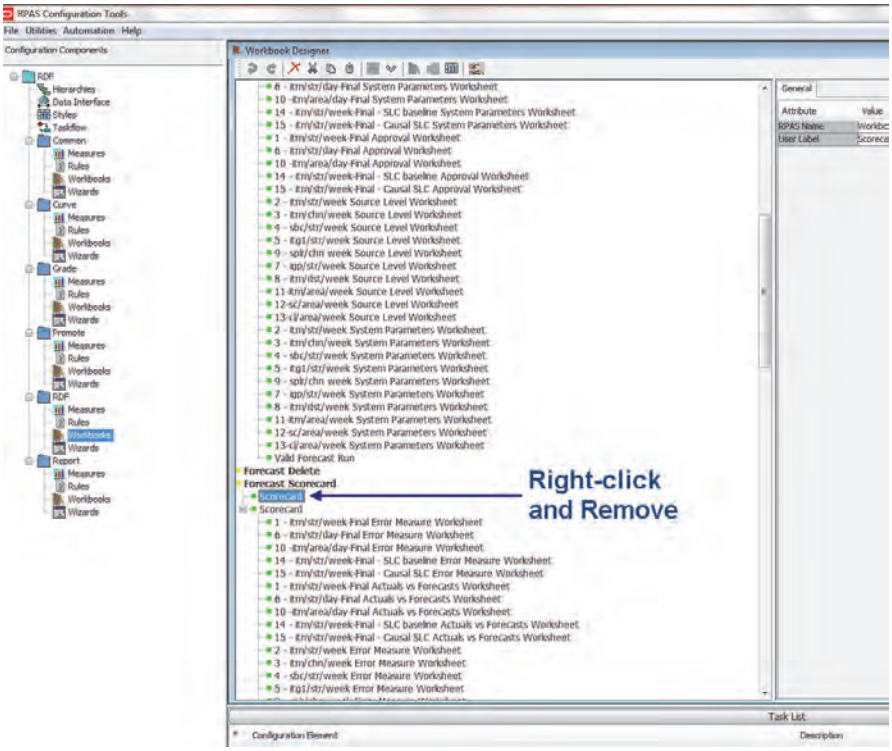
With the generally available (GA) configuration of pre-13.4 versions of RDF, an empty workbook tab exists that does not perform a function in the forecast scorecard workbook. This tab is not deleted by the plug-in regeneration because it does not exist in the master template. It is thus considered a customization. The new taskflow generation code in 13.4.0 also creates a task for it. The empty workbook tab in the forecast scorecard workbook has been removed from the 13.4 GA configuration.

For information on using the RPAS Configuration Tools, refer to the *Oracle Retail Predictive Application Server Configuration Tools User Guide*.

Follow these steps to remove the empty workbook tab.

1. In Configuration Tools, locate the Forecast Scorecard workbook template under the **RDF** folder.
2. Locate the duplicate Scorecard workbook tab that does not have any worksheets. Right-click and **Remove** as shown in Figure 2–1.

Figure 2–1 Remove Workbook Tab



The empty workbook tab is removed from Configuration Tools.

Key Steps to Build or Upgrade the RDF Domain Prior to Running the RPAS Installer

Note: This procedure is only necessary if your RDF Domain is customized.

Before running the RPAS Installer, perform the following steps when building or upgrading the RDF Domain:

1. File Preparation for RDF
   a. Run `execPluginTask.sh` for RDF, which creates data files in the directory <input path>:

      ```
      execPluginTask.sh
      RDF:com.retek.labs.rdf.plugin.installer.InstallParameterDataGenerat
      ion <config path>/RDF/RDF.xml <input path>
      ```

      Note: The <input path> is the argument for `-in` of rpasInstall.

      Data files generated in this step include:

datasrcxlxb.ovr	fplantmp.ovr	slvlsxlxb.ovr
defreqmthtmp.ovr	prcelasxlxb.ovr	sprdproftmp.ovr
defsrctmp.ovr	prmliftovrintxlxb.ovr	pvarxlisd.csv.ovr
dtenablexlxb.ovr	promocanxlxb.ovr	pvarxlcovr.csv.ovr
fintxlxb.ovr	promohaloxlxb.ovr	pvarxlmuby.csv.ovr
flvlsxlxb.ovr	promolvlsxlxb.ovr	pvarxltvad.csv.ovr
fpdxlxb.ovr	seasproftmp.ovr	

   b. This step is only required for a patch installation, do not perform for a full installation.

      Manually copy the previously generated data files in Step 1a from directory `<input path>` to `directory <domain path>/RDF/input`:

      ```
      do
       orgFile=<input path>/${PatchFile}
       destFile=<domain path>/RDF/input/${PatchFile}

       if [[ -f "${orgFile}" ]]; then
         cp -f "${orgFile}" "${destFile}"
       fi
      done
      ```

2. File Preparation for Promote (optional)

Note: This step is only required if your RDF configuration contains Promote.

a. Run `execPluginTask.sh` for Promote, which creates data files in the directory <input path>:

```
execPluginTask.sh
Promote:com.retek.labs.promote.plugin.installer.PromotePosGenerator
<path to the configuration>/RDF/RDF.xml <path to the data files>
```

Note: The <input path> is the argument for `-in` of rpasInstall.

Data files generated in this step include:

cslh.dat

finalpromolvls.csv.ovr

prmh.dat

promomodeltype.csv.ovr

b. This step is only required for a patch installation, do not perform for a full installation.

Manually copy the previously generated data files in Step 2a from directory `<input path>` to `directory <domain path>/RDF/input`:

```
do
 orgFile=<input path>/${PatchFile}
 destFile=<domain path>/RDF/input/${PatchFile}


 if [[ -f "${orgFile}" ]]; then
   cp -f "${orgFile}" "${destFile}"
 fi
done
```

3. File Preparation for Curve (optional)

Note: This step is only required if your RDF configuration contains Curve.

a. Run `execPluginTask.sh` for Curve, which creates data files in the directory <input path>:

```
execPluginTask.sh
Curve:com.retek.labs.curve.plugin.installer.InstallParameterDataGen
eration <path to the configuration>/RDF/RDF.xml <path to the data
files>
```

Note: The <input path> is the argument for `-in` of rpasInstall.

Data files generated in this step include:

dataintxl.ovr	prfaggintxl.ovr
flprofxl.ovr	prfaprvintxl.ovr
pgdatatmp.ovr	prfintxl.ovr
pgdefapmthtmp.ovr	proftypexl.ovr
pgdefmasktmp.ovr	slprofxl.ovr
pgmthtwtmp.ovr	strintxl.ovr
pgnvtmp.ovr	

b. This step is only required for a patch installation, do not perform for a full installation.

Manually copy the previously generated data files in Step 3a from directory `<input path>` to `directory <domain path>/RDF/input`:

```
do
 orgFile=<input path>/${PatchFile}
 destFile=<domain path>/RDF/input/${PatchFile}

 if [[ -f "${orgFile}" ]]; then
  cp -f "${orgFile}" "${destFile}"
 fi
done
```

4. File Preparation for Grade (optional)

Note: This step is only required if your RDF configuration contains Grade.

---

a. Run `execPluginTask.sh` for Grade, which creates data files in the directory <input path>:

```
execPluginTask.sh
Grade:com.retek.labs.grade.plugin.GradeDataGenerator <path to the
configuration>/RDF/RDF.xml <path to the data files>
```

Note: The <input path> is the argument for `-in` of rpasInstall.

Building a Grade workbook requires a junk position in the cluster hierarchy. Therefore, a junk position must exist in the clsh.dat. The following is a sample of clsh.dat:

```
1       1 Cluster01
2       2 Cluster02
3       3 Cluster03
4       4 Cluster04
```

5	5 Cluster05
Junk	Junk Cluster

b. This step is only required for a patch installation, do not perform for a full installation.

Manually copy cluster hierarchy files in Step 4a from directory `<input path>` to `directory <domain path>/RDF/input`:

```
do
 orgFile=<input path>/${PatchFile}
 destFile=<domain path>/RDF/input/${PatchFile}

 if [[ -f "${orgFile}" ]]; then
  cp -f "${orgFile}" "${destFile}"
 fi
done
```

5. Run rpasInstall to patch the domain.

For details on using rpasInstall, refer to Appendix C, "Run rpasInstall to Install RDF Domains."

Example 2–1 Domain Patch - Sample Usage

```
rpasInstall -patchinstall -cn RDF -ch <config path> -in <input path> -log
<logDir>/<logFile> -dh <domain path> -verbose -p pgrp -updatestyles -rf
AppFunctions -rf RdfFunctions -rf ClusterEngine -rf LostSaleFunctions
```

Upgrade Scenarios

Considerations for determining your upgrade options are provided in Table 2–1.

Table 2–1 Upgrade Scenarios

Current Release Version	Upgrade Release Version	Scenario	Recommended Upgrade Process	Comments
13.0.4.18 and earlier	up to 13.2.3	RDF went live using a version prior to 13.0.4.18 and you have already gone through the Hierarchy Conversion Upgrade Process.	Upgrade and Patch RPAS Release 13.0.4.19 or Later to RPAS Release 13.2.3	You only have to apply the Hierarchy Conversion Upgrade Process once. Afterwards you can upgrade using the Upgrade and Patch RPAS Release 13.0.4.19 or Later to RPAS Release 13.2.3.
		RDF went live using a version prior to 13.0.4.18 and you want to make the conversion to the newer format for class and subclass position names.	Hierarchy Conversion Upgrade Process	This *is* recommended for versions prior to 13.0.4.18. All future RDF releases assume this change has been made. This process creates aliases for the existing class and subclass positions using the new format. This is a feature of RPAS, and data can be accessed normally using these new position name aliases. You only have to apply the Hierarchy Conversion Upgrade Process once. After that, upgrade using the Upgrade and Patch RPAS Release 13.0.4.19 or Later to RPAS Release 13.2.3
		RDF went live using a version prior to 13.0.4.18 and you want to retain the older format for class and subclass position names.	Hierarchy Retention Upgrade Process	This is *not* recommended for versions prior to 13.0.4.18, but may be potentially applicable for customers who have a custom integration from RDF to RMS that handles the class and subclass information in a way where adding the underscores would be problematic. This process does not add class and subclass position name aliases. Instead, it attempts to modify RETL schema files and domain configuration information to match what is in the domain. If this path is chosen, the Hierarchy Retention Upgrade Process must be applied as part of every upgrade.
13.0.4.19 to 13.2.3.x	13.0.4.19 to 13.2.3.x	RDF went live using a version of 13.0.4.19 or later.	Upgrade and Patch RPAS Release 13.0.4.19 or Later to RPAS Release 13.2.3	The results of Hierarchy Conversion Upgrade Process are automatically included in your domain. The Hierarchy Retention Upgrade Process does not apply. Use the Upgrade and Patch RPAS Release 13.0.4.19 or Later to RPAS Release 13.2.3 process.

Table 2–1 (Cont.) Upgrade Scenarios

Current Release Version	Upgrade Release Version	Scenario	Recommended Upgrade Process	Comments
13.2.3.x	13.3.0 or later	RDF went live on any version up to and including 13.2.3.x and you want to upgrade to 13.3.0.	Upgrade and Patch to RPAS Release 13.3 or Later	This is required if you are upgrading to 13.3 or later from any version after 13.2.3. RPAS 13.3 made significant performance enhancements. All domains using RPAS 13.3 or later must apply a conversion process to run on RPAS 13.3 or later to benefit from the enhancements.
Any	14.1 or later	RDF went live on any version up to 14.0 and you want to upgrade to a 14.1 or later version.	Upgrade to Version 14.1 or Later	This is required if you are upgrading to 14.1 or later from any version. In 14.1 RDF Causal Forecasting no longer uses an internal baseline and needs to be reconfigured to generate an external baseline.
Any	15.0	RDF went live on any version up to 14.1 (using Like Item/Store or Cloning) and you want to upgrade to a 15.0 or later version.	Upgrade for the New Item Solution	This upgrade is only necessary if you are upgrading to 15.0 and were previously using Like Item/Store or Cloning.

Upgrade Process

The following process outlines how to upgrade RDF from 13.0.4.19 to the current version using the RPAS Configuration Tools.

> **Note:** After upgrading a domain or loading a new calendar hierarchy into the RDF domain, ensure that the current date measures value is within the new calendar hierarchy.

Extraction

The steps in this section only apply if you have a previous version of RDF.

The first step in upgrading to the most recent installation is to download the current upgrade from the My Oracle Support Web site (`http://www.oracle.com/support/`) to a staging folder (such as **$PACKAGEDIR**) that is accessible to all components of your current RPAS/RDF environment.

In this section, some steps must be performed on a server as well as on a Windows PC that has RPAS Configuration Tools installed. For brevity, the server is referred to as *server* and the Windows PC with RPAS Configuration Tools is referred to as *PC*.

Server Package Extraction

The following example describes a sample upgrade extraction to the server. These sample server commands are provided to guide you through the file extraction process and to identify the files provided in this upgrade.

1. Open a terminal session on the server that contains the RPAS environment.
2. Enter the following commands:

   ```
   $ mkdir packagedir
   $ cp RDF.zip packagedir
   $ cd packagedir
   $ export PACKAGEDIR=`pwd`
   $ unzip RDF.zip
   ```

   The following files and directories may be extracted to the current directory:

   - `Configurations.zip`
   - `PlugIn.zip`
   - `Data.zip`
   - `README.html`
   - `DOCS/`

3. Unzip the files from Step 2 by running the following commands:

   ```
   $  unzip Configurations.zip
   $  unzip PlugIn.zip
   $  unzip Data.zip
   ```

   The following directories are extracted to the current directory:

   - `configurations/`

- resources/
- data/

4. Leave the terminal session window open for the RDF upgrade process described in the section, Upgrade and Patch to RPAS Release 13.3 or Later.

PC Package Extraction

The following example describes a sample upgrade extraction to a PC. These sample commands are provided to guide you through the file extraction process and to identify the files provided in this upgrade.

1. Using Cygwin, enter the following commands:

```
$ mkdir packagedir
$ cp RDF.zip packagedir
$ cd packagedir
$ export PACKAGEDIR=`pwd`
$ unzip RDF.zip
```

The following files and directories may be extracted to the current directory:

- Configurations.zip
- PlugIn.zip
- Data.zip
- README.html
- DOCS/

2. Unzip the PlugIn.zip file by running the following commands:

```
$  unzip PlugIn.zip
```

The following directory is extracted to the current directory:

- resources/

3. Leave the Cygwin window open for the RDF upgrade process discussed in the section, Upgrade and Patch to RPAS Release 13.3 or Later.

Upgrade to Key RPAS Versions

Before you upgrade to a Release 13.3 or later, ensure that you have upgraded and patched to RPAS Release 13.2.3. Additionally, you may need to initially upgrade and patch to RPAS Release 13.0.4.19 before you can upgrade and patch to RPAS Release 13.3 or later.

Note: If your domain is 13.0.4.18 or earlier then begin with an upgrade described in Upgrades for Versions Earlier than 13.0.4.18.

Note: If your domain is already upgraded and patched to RPAS Release 13.3, then continue with the typical upgrade described in Upgrade and Patch to RPAS Release 13.3 or Later.

This list defines the upgrade process that is described in the following sections.

1. Upgrade and Patch RPAS Release 13.0.4.19 or Later to RPAS Release 13.2.3
2. Convert for Integer Indexing
3. Upgrade and Patch to RPAS Release 13.3 or Later
4. Upgrade to Version 14.1 or Later

Upgrade and Patch RPAS Release 13.0.4.19 or Later to RPAS Release 13.2.3

This section describes how to upgrade RDF from 13.0.4.19 or later to 13.2.3. Refer to Table 2–1 as to which upgrade version to use.

Upgrading your domain to a 13.3 RPAS domain requires that you first upgrade it to a 13.2.3 domain. For additional information instructions, see the "Upgrading and Patching Domains" section in the 13.2.3 release of either the Classic Client or Fusion Client version of the *Oracle Retail Predictive Application Server Administration Guide*.

After upgrading, you must run a configuration patch over the domain to ensure compatibility with the RPAS version, regardless of whether there are any configuration changes.

Convert for Integer Indexing

Upgrading to a 13.3 RPAS domain requires the use of the convertDomain utility, which may not copy the entire contents of the source domain to the destination domain. For files that are not copied by convertDomain, you may need to copy them manually.

For information about what is and is not copied, see the "convertDomain" section in the 13.3 release of either the Classic Client or Fusion Client version of the *Oracle Retail Predictive Application Server Administration Guide*.

Upgrade and Patch to RPAS Release 13.3 or Later

The following process outlines how to upgrade RDF to the RPAS domain Release 13.3 or later using the RPAS Configuration Tools.

In addition, if there is a setup directory in the original domain, you must manually copy the setup directory into the converted destination domain (master and local domains).

The RDF and Curve custom hooks will not work correctly if the setup directory is not manually moved. For additional information, refer to the steps listed in the section, For the Server.

Note: After upgrading, you must run a configuration patch over the domain to ensure compatibility with the latest RPAS version, regardless of whether there are any configuration changes.

PROR Hierarchy for Release 13.4 and Later

With Release 13.4 or later, it is necessary to have a PROR hierarchy for an RDF configuration even if the regular price effect or cross promotional effect are not enabled. The PROR hierarchy is a duplicate of PROD hierarchy and they can share the same hierarchy data file. When the regular price effect or cross promotional effects are not enabled, the PROR hierarchy loading file can be set up as a dummy file with one line of record.

To upgrade a RDF domain to Release 13.4 or later, the configuration needs to add a PROR hierarchy if it does not currently exist. The configuration needs to be regenerated by:

1. Upgrading to Release 13.4 or later.
2. Using the new configuration to patch the domain.

Relative Week Hierarchy (RLTV) for Release 14.0 and Later

The hierarchy order of the RLTV should occur after the Calendar Hierarchy, and before the Product and Location Hierarchy. If you have not configured the Life Cycle Profile in Curve, then RLTV is not used.

If you would like to add a Life Cycle Profile in Curve or have already implemented a Life Cycle Profile in Curve, then the hierarchy order in your current configuration needs to be modified prior to configuration regeneration. The RPAS domain requires must be rebuilt from the beginning because a hierarchy order change is not upgradable.

For the PC

Follow these steps for the PC to upgrade to the current version.

1. In Cygwin, copy the RDF plug-ins to the RPAS Configuration Tools.

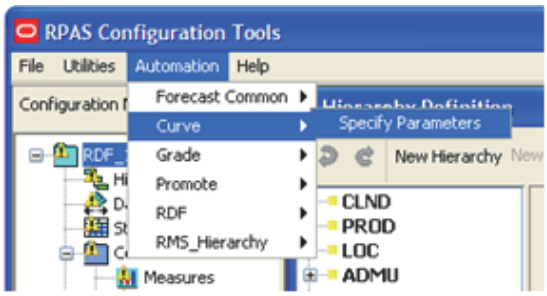
   ```
   $ cp -R $PACKAGEDIR/resources $RIDE_HOME/
   ```

2. Open RPAS Configuration Tools.
3. In RPAS Configuration Tools, load the RDF configuration:
   a. From the Configuration Tools File menu, select **Open**.
   b. From the Open window, locate the configuration file and click **Open**.
4. Automate Curve (optional), RDF and Promote (if applicable) by performing the following:

   Note: Promote Automation must be run last - after RDF Automation.

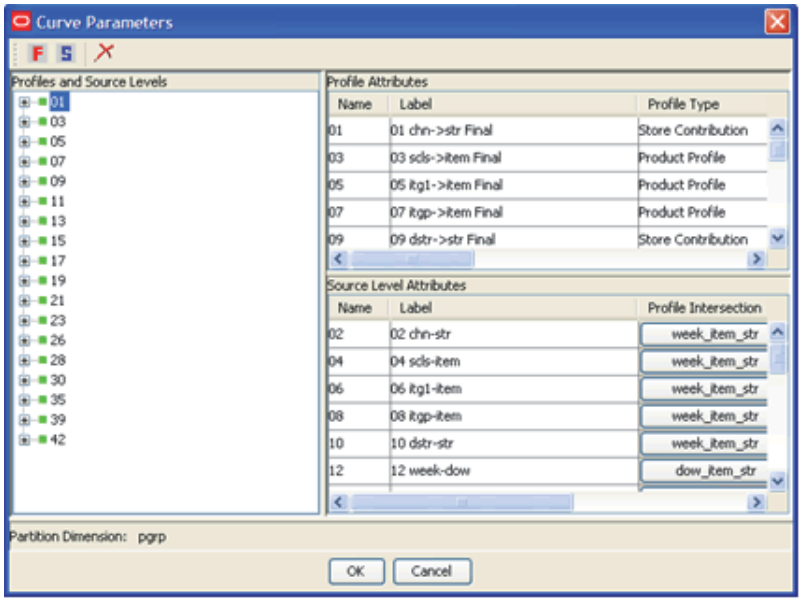
   a. For Curve: from the Automation menu, select **Curve**, then **Specify Parameters**.

Figure 2–2 Curve Automation in RPAS Configuration Tools



The Curve Forecasting Parameters window opens. Click **OK**.

Figure 2–3 Curve Forecasting Parameters

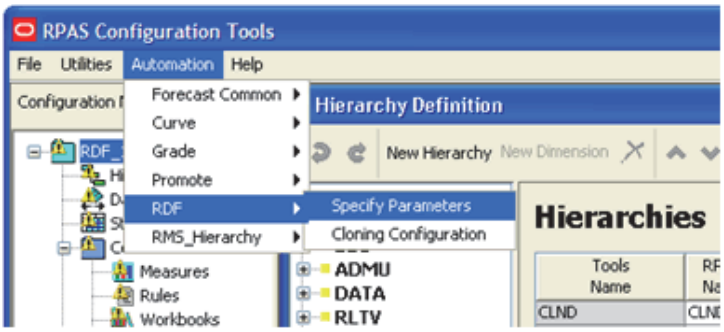


b. For RDF, set:

- Specify Parameters
- Cloning Configuration

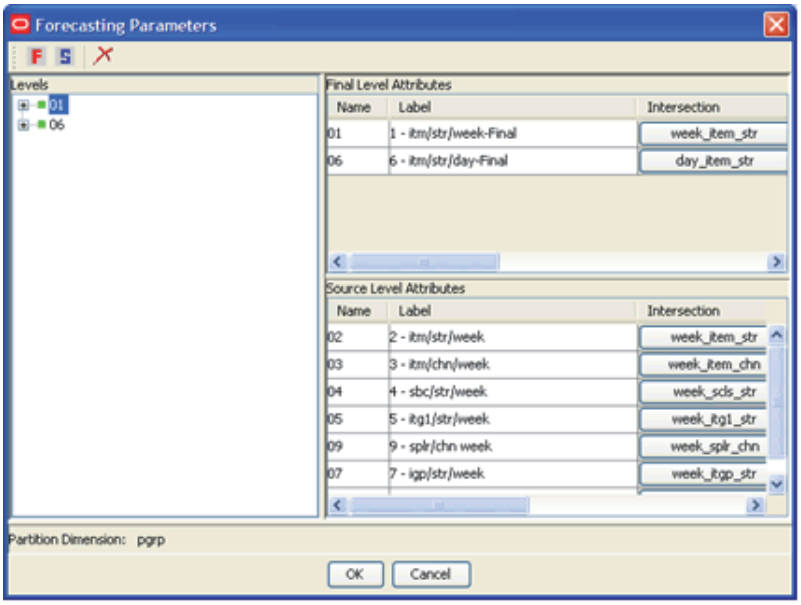
From the Automation menu, select **RDF**, and then **Specify Parameters**.

Figure 2–4 RDF Automation in RPAS Configuration Tools



The Forecasting Parameters window opens. Click **OK**.

Figure 2–5 Forecasting Parameters

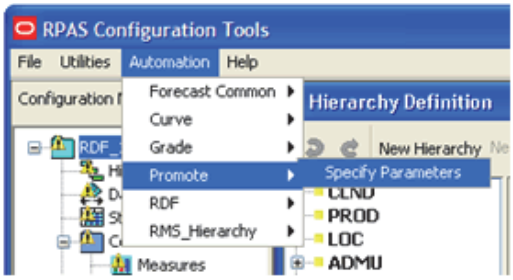


From the Automation menu, select **RDF**, and then **Cloning Configuration**.

The Cloning Configuration window opens. Click **OK**.

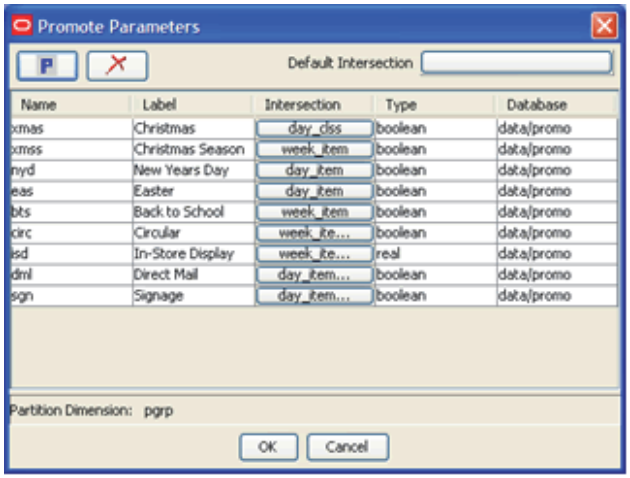
c. For Promote: from the Automation menu, select **Promote**, then **Specify Parameters**.

Figure 2–6 Promote Automation in RPAS Configuration Tools



The Forecasting Parameters window opens. Click **OK**.

Figure 2–7 Promote Forecasting Parameters



5. In the RPAS Configuration Tools File menu, click **Save** to save the configuration.
6. Zip the configuration in Cygwin and transfer the `.zip` file to the RPAS server. Note where it is saved. You will need this configuration for Step 2 of the section, For the Server.

For the Server

Follow these steps for the server to upgrade to the current version.

> **Note:** For the upgrade, take note of the following steps:
>
> - Step 1 was already completed in the section, For the PC.
> - Step 2 is required when changes have been made to the configuration and are ready to be propagated to the domains.

1. Copy the RDF plug-ins to the RPAS Configuration Tools.

   ```
   $ cp -R $PACKAGEDIR/resources $RIDE_HOME/
   ```

2. Unzip the updated configuration and note where it is extracted. You saved this configuration in Step 6 of the section, For the PC.
3. To upgrade the prior version of your RDF domain to the current release, you must manually copy the setup directory into the converted destination domain (master and local domains). The RDF and Curve custom hooks will not work correctly if the setup directory is not manually moved.
4. To use the regular price effect functionality when upgrading a previous version of RDF to Release 13.3 or later, perform these steps:

   a. Add a PROR hierarchy into your hierarchy. The PROR hierarchy is a duplicate of PROD hierarchy and they can share the same data file.

   b. Prior to patching the domain, the PROR hierarchy data file needs to be included into the input directory of the domain.

> **Note:** This release requires a PROR hierarchy as described in "PROR Hierarchy for Release 13.4 and Later".

5. Upgrade your RDF domain using the 15.0.3 RDF package that contains a sample script named `buildRDF.sh`. The script, `buildRDF.sh`, can be used to build or upgrade an RDF domain:

   ```
   buildRDF.sh -c <config path> -i <input path> -l <log path> -d <domain path> [-m <max process#>] [-f: <log file>] -p
   ```

Table 2–2 Flags for the Script buildRDF.sh

Flag	Where:	Is the Path for the:	Default Value*
-c	<config path>	configurations	$PWD/../DomainCfg/Version11.0/Promote
-i	<input path>	input files	$PWD/../DomainBuild/to_rpas
-l	<log path>	log file	$PWD/../
-d	<domain path>	domain	$PWD/../domain
-m	<max process#>	number of max processes for loading measures	1
-f	<log file >	log file	build_domain.log
-p	<make patch build >	domain patching	none
-u	<show usage of this script>	show usage of this script	none
-n	<configName>	configuration name	RDF
-r	<partionDimension>	partion dimension	pgrp
* Where $PWD is the current directory			

Note: The flag `-p` must be used for domain patching.

The flag `-m` is optional and if it is not used, then **1** is the default value for number of processes.

Upgrade to Version 14.1 or Later

This section describes how to upgrade RDF to 14.1 or later. Refer to Table 2–1 as to which upgrade version to use.

This is required if you are upgrading to 14.1 or later from any version. In 14.1 RDF Causal Forecasting no longer uses an internal baseline and needs to be reconfigured to generate an external baseline.

Follow these steps to upgrade RDF to 14.1 or later:

1. Before regenerating, open the RDF plug-in and modify the **Spread Profile** field for source levels.

If the Spread Profile Field Contains...	Then...
A curve level (for example, **01**)	Clear the field.
A measure name	Leave the field as it is.
A curve level and a measure name (for example, **01,measure_name**)	Update the curve level (for example, **apvp01,measure_name**.

2. If any Final Levels have Cross Promotion Effects turned on, then update these fields with measure names:
   - Promo Halo Ratio
   - Promo Max Halo Ratio
   - Promo Cann Ratio
   - Promo Max Cann Ratio

   Note: These measures are outputs from CPEM.

3. If there is Causal Forecasting configured using an internal baseline, then an extra Final Level needs to be configured to generate an external baseline. In 14.1 or later, Causal Forecast only supports an external baseline.

   The Approved Forecast of the new Final Level is set as the causal external baseline measure in the Forecast Administration workbook.

4. Configure preprocessing to provide proper input data preprocessing for the Causal Forecast and Baseline Forecast.

   The data source for Baseline Forecast must not include out of stock, promotional spike, and other unwanted events.

   The data source for Causal Forecast must not include out of stock, seasonal effects and other unwanted events.

   Any data source change needs to be modified through the RDF plug-in.

Upgrades for Versions Earlier than 13.0.4.18

When upgrading RDF, use the upgrade option that corresponds best to your system's requirements and which format you want to use for your class and subclass position names. For additional information refer to About Class and Subclass Hierarchy Information.

The old and new position names are considered distinct by RPAS. There are a special considerations for customers wishing to upgrade from a pre-13.0.4.18 version of RDF to a later version. These considerations along with the recommended upgrade process are summarized in Table 2–1, " Upgrade Scenarios".

In RDF 13.0.4.19, positions in the location hierarchy were renamed to ensure unique position names based on the RMS data. Due to these product hierarchy changes, customers upgrading from RDF 13.0.4.18 or prior versions who use the standard integration between RMS and RDF should use the product hierarchy conversion process before integrating with RMS as described in the Hierarchy Conversion Upgrade Process.

Customers upgrading from RDF 13.0.4.18 or prior versions who want to retain their existing displayed class and subclass information should follow the Hierarchy Retention Upgrade Process.

About Class and Subclass Hierarchy Information

In release 13.0.4.18, Oracle modified the way that class and subclass hierarchy information received from RMS through the RETL process is treated. The change was to insert an underscore "_" character between the RMS department, class, and subclass

values. This was done as a precautionary measure to prevent potential data mapping issues.

With integration between RMS and RDF, it is crucial to keep data at class or subclass levels distinct. This upgrade process makes explicit the mapping of items at the class and subclass level between RMS and RDF.

As an example, assume that in RMS the department has a value of 11, the class has a value of 22, and the subclass has a value of 33. The following table shows the old and new values that the RETL process uses for the department, class, and subclass position names in RDF.

Field	RMS	RDF Pre 13.0.4.18	RDF Post 13.0.4.18
Department	11	11	11
Class	22	1122	11_22
Subclass	33	112233	11_22_33

Hierarchy Conversion Upgrade Process

Refer to Table 2–1, " Upgrade Scenarios" as to which upgrade version to use.

Typically, you will use this process when:

- Upgrading from RDF versions prior to 13.0.4.18 up to 13.2.3
- Using standard integration between RMS and RDF
- Storing data at class or subclass levels

> **Note:** Users upgrading from a version prior to 13.0.4.18 must apply this process. In the future, if you are already on 13.0.4.18 or later, this process need not be followed again.

Hierarchy Conversion Upgrade Steps

Follow these steps to complete the Hierarchy Conversion Upgrade Process.

1. Point environment variable RPAS_HOME to the new RPAS_HOME.
2. Run the script `$RPAS_HOME/rfx/src/rmse_rpas_merchhier.ksh` to generate the `rmse_rpas_merchhier.dat` file. This file generates the new class and subclass position names.
3. Run `repos.ksh` with the **-a n** flag to produce the position rename file and run renamePositions without actually applying the changes.
4. Examine the log file `PRODrename.log` for errors.
5. When you are ready, run the `repos.ksh` script without the **-a y** flag to apply the changes.

Hierarchy Retention Upgrade Process

Refer to Table 2–1, " Upgrade Scenarios" as to which upgrade version to use.

Typically, you will use this process when:

- Upgrading to 13.0.4.18 or later (from any version) up to 13.2.3
- You want to retain your existing displayed class and subclass information

Hierarchy Retention Upgrade Components

Table 2–3 lists the environment variables needed for the Hierarchy Retention Upgrade Process.

Table 2–3 Environment Variables

Environment Variables	Description
UPGRADE_HOME	This variable should point to the path of Upgrade scripts where configuration files are present: ▪ `updateschemafiles.ksh` ▪ `updatetoolsconfiguration.ksh`
RDF_DOMAIN_PATH	The Path of RDF Domain which you are going to patch. The dimension field length of this RDF Domain is taken and applied to the Configuration and Schema files.
RDF_SCHEMA_DIR	The RETL RDF Schema files directory. It must be the latest release directory, which you are using for patching. It points to the Schema files location in the release, which you are using for patching the RDF domain.
TOOLS_CONFIG_DIR	The Configuration Tools XML files directory. It points to the directory where the `hierarchy.xml` file is present. It must be the latest release directory which you are using for patching.
UPGRADE_BACKUP_DIR	A backup of Schema and `hierarchy.xml` files is kept in this directory.

Table 2–4 lists the scripts needed for the Hierarchy Retention Upgrade Process.

Table 2–4 Upgrade Scripts

Script	Description
updateschemafiles.ksh	Updates the dimension field length of schema files to the length as available in the domain.
updatetoolsconfiguration.ksh	Updates the dimension field length of configuration files to the length as available in the domain.

Hierarchy Retention Upgrade Steps

Follow these steps to complete the Hierarchy Retention Upgrade Process.

1. Export the environment variables listed in Table 2–3, " Environment Variables".
2. Change the directory to UpgradeScripts directory:

   ```
   $ cd UpgradeScripts
   ```

3. Run the `updatetoolsconfiguration.ksh` script to update the `hierarchy.xml` file.

   ```
   $ ./updatetoolsconfiguration.ksh
   ```

4. Run the `updateschemafiles.ksh` script to update the RETL RDF Schema files

   ```
   $ ./updateschemafiles.ksh
   ```

Upgrade for the New Item Solution

Note: This upgrade is only necessary for customers who are upgrading to Release 15.0.3 and were previously using Like Item/Store or Cloning.

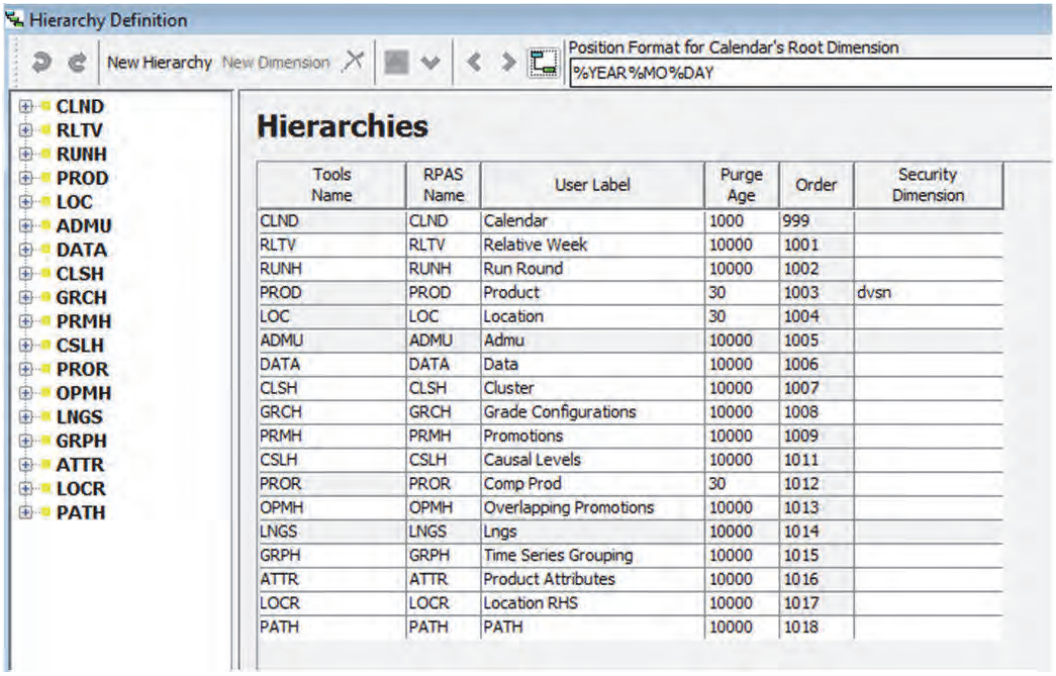
Complete the following steps to upgrade and patch the RDF 14.1 Domain to RDF 15.0.3 Domain with the New Item Solution.

1. Open an existing RDF 14.0 or 14.1 configuration using the RDF 15.0.3 Configuration Tools.
2. Create new hierarchies to be used by the New Item and Grouping solution.

Note: LOCR hierarchy has same hierarchical structure as LOC hierarchy.

New Hierarchy	Dimensions	Description
ATTR - Product Attributes	atn	Attribute Name
LOCR - Location RHS	strr	Store RHS
	dsrr	District RHS
	rgnr	Region RHS
	arer	Area RHS
	chnr	Chain RHS
	cmpr	Company RHS
	sfmr	Store Format RHS
	stcr	Store Class RHS
	srg1	Store Grouping 1 RHS
	srg2	Store Grouping 2 RHS
GPRH - Grouping	grpd	Group Dimension

Figure 2–8 New Hierarchies for the New Item and Grouping Solution



3. Create labeled intersections to be used by the New Item solution. Verify that intersections are correct after running the plug-in.

   The following labeled intersections are used to define measures used by the New Item solution. They need to be created and customized before upgrading.

Labeled Intersection	Dimensions
NIT_ATT	atn
NIT_SKU_ATT	item_atn
NIT_SIM_ATT	item_iter_atn
NIT_ATT_WGT	clss_atn
NIT_SIM_ATT_PART	pgrp_iter_atn

4. Create labeled intersections to be used by the Grouping solution.

Labeled Intersection	Dimensions
GrpLevel	item_str

5. Copy the PrepDemandCommon and Grouping solutions to the RDF 15.0.3 configuration.
6. Create labeled intersections to be used by Preprocessing. Select Hierarchy and then click **Open Label Intersection**.

Labeled Intersection	Dimensions
SLS_INTX	week_item_str
PRE_LO	item_str
PRE_HI	clss_str

7. Add the New Item solution related activities to the taskflow. Perform manually or copy the taskflow file from the GA configuration.
8. Delete or rename old activities before running regeneration.

   The RDF plug-in regeneration generates task flow activities with the same label as the old activities. So either delete or rename the old activities before running regeneration so that RDF can distinguish the old activities from the new ones
9. Run the RDF 15.0.3 plug-in regeneration

   Using the RDF 15.0.3 plug-in regeneration, auto-generate in the following order for the implemented solutions:

   - Preprocessing —refer to Figure 2–9
   - New Item (Attribute Based: NO) —refer to Figure 2–10
   - Forecast Common (Configuration Type: On-Premise)
   - Curve (if implemented)
   - RDF —refer to Figure 2–11

     a. Verify that Causal levels cannot have any other Forecast Methods.

     b. Verify that Spreading Profiles are cleared.

- Promote
- Grade (if implemented)

Leave the other solutions as is, and then click **OK**.

Figure 2–9 Auto-generate Preprocessing

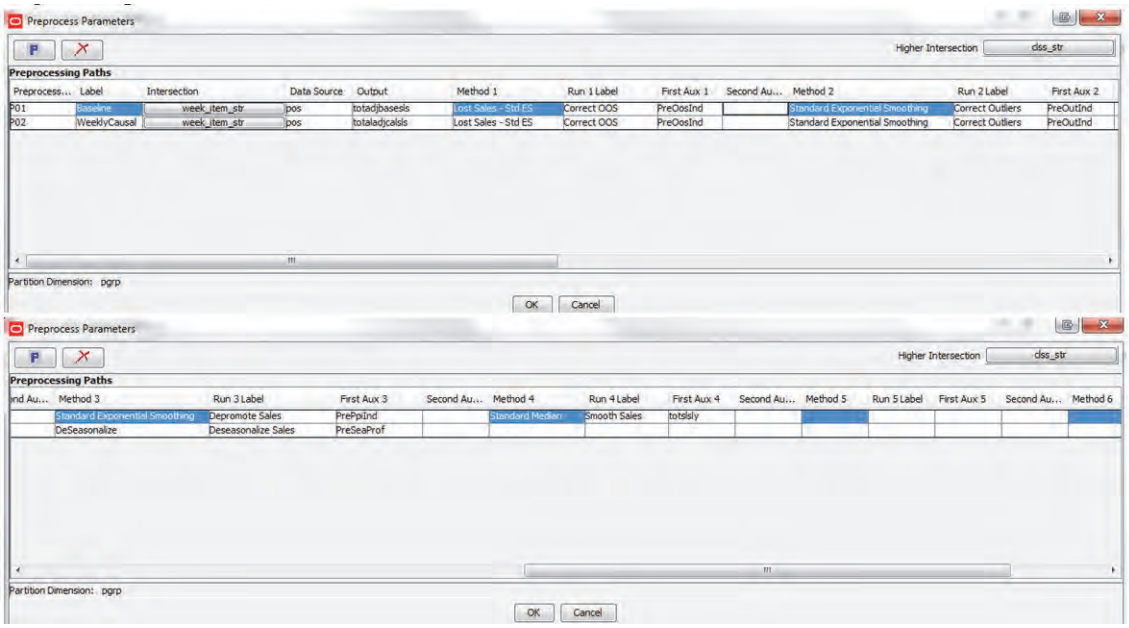


Figure 2–10 Auto-generate New Item

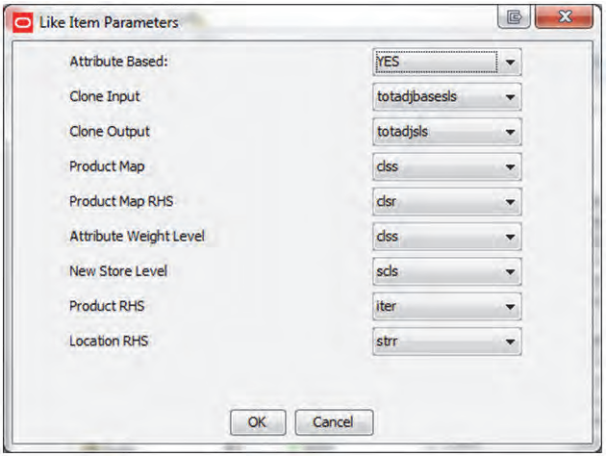
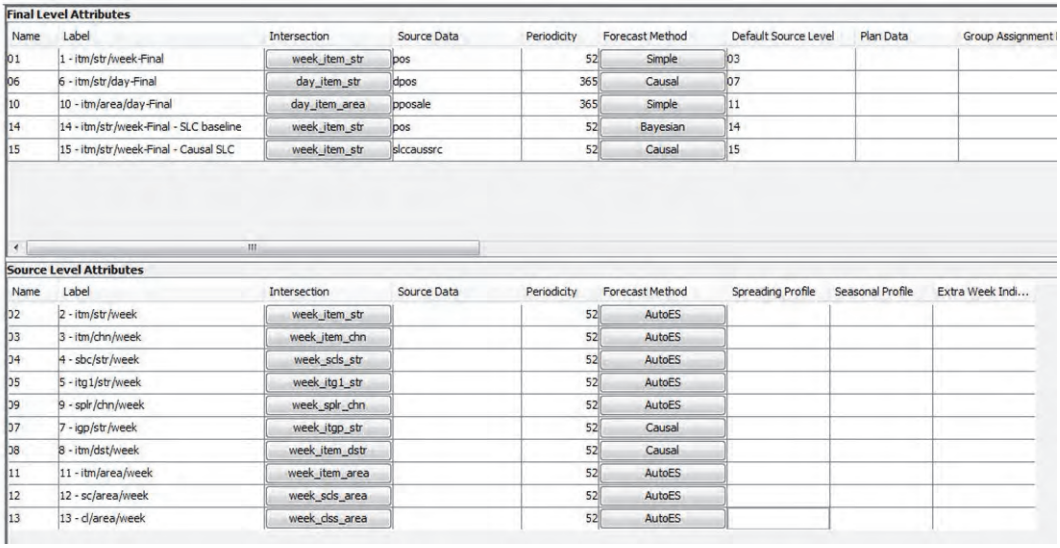


Figure 2–11 Auto-generate RDF



Final Level Attributes

Name	Label	Intersection	Source Data	Periodicity	Forecast Method	Default Source Level	Plan Data	Group Assignment
01	1 - itm/str/week-Final	week_item_str	pos	52	Simple	03		
06	6 - itm/str/day-Final	day_item_str	dpos	365	Causal	07		
10	10 - itm/area/day-Final	day_item_area	pposale	365	Simple	11		
14	14 - itm/str/week-Final - SLC baseline	week_item_str	pos	52	Bayesian	14		
15	15 - itm/str/week-Final - Causal SLC	week_item_str	slccaussrc	52	Causal	15		

Source Level Attributes

Name	Label	Intersection	Source Data	Periodicity	Forecast Method	Spreading Profile	Seasonal Profile	Extra Week Indi...
02	2 - itm/str/week	week_item_str		52	AutoES			
03	3 - itm/chn/week	week_item_chn		52	AutoES			
04	4 - sbc/str/week	week_scls_str		52	AutoES			
05	5 - itg1/str/week	week_itg1_str		52	AutoES			
09	9 - splr/chn/week	week_splr_chn		52	AutoES			
07	7 - igp/str/week	week_itgp_str		52	Causal			
08	8 - itm/dst/week	week_item_dstr		52	Causal			
11	11 - itm/area/week	week_item_area		52	AutoES			
12	12 - sc/area/week	week_scls_area		52	AutoES			
13	13 - cl/area/week	week_clss_area		52	AutoES			

10. Run the upgrade export script to export new item files from an existing RDF 14.1 domain.

    ```
    rdf_upgrade_new_item_store_export.ksh -d $DOMAIN_HOME/RDF -l <FLVLnn>
    ```

    For example. where *nn* is 01:

    ```
    rdf_upgrade_new_item_store_export.ksh -d $DOMAIN_HOME/RDF -l <FLVL01>
    ```

11. Upgrade the existing RDF 14.1 domain by using the RPAS 15.0.3 `upgradeDomain` command of:

    ```
    $ upgradeDomain -d $DOMAIN_HOME/RDF
    ```

12. Copy the new hierarchy files to the existing RDF 14.1 domain:

    ```
    copy attr.csv.dat, locr.csv.dat, runh.csv. and grph.csv.dat to $DOMAIN_
    HOME/input
    ```

13. Patch the RDF 14.1 domain by using the `buildRDF.sh` script:

    ```
    $ /$RDF_HOME/bin/rdf_build_domain.ksh -c $DOMAIN_HOME/configurations -i
    $DOMAIN_HOME/input -l $DOMAIN_HOME/log -f patch_domain.log -d $DOMAIN_
    HOME –p
    ```

14. Run the upgrade load script to load the New Item files to the upgraded RDF 15.0.3 domain:

    ```
    rdf_upgrade_new_item_store_load.ksh -d $DOMAIN_HOME/RDF
    ```

15. Manually upgrade the New Store configuration.

> **Note:** New Store configuration in a existing RDF 14.1 domain needs to manually upgraded by using the 15.0.3 RDF workbook, Forecaster Like Store.

Upgrade for the Grouping Solution

Regardless of whether Grouping functionality is required, the Group hierarchy (GRPH), needs to be implemented. For details, refer to the *Oracle Retail Demand Forecasting Implementation Guide*.

When using the GA version of the Grouping solution, verify that the GRPLEVEL labeled intersection is correctly defined with valid dimensions.

Upgrade for the Preprocessing Solution

Note: This upgrade is only necessary when implementing the new Preprocessing functionality.

Verify that the input/output measures used for preprocessing are registered. When using the GA version of PrepDemandCommon, ensure these labeled intersections are defined with the correct dimensions:

- SLS_INTX — week_item_str
- PRE_LO — item_str
- PRE_HI — clss_str

Upgrade for the RDF Solution

Beginning with Release 15.0, plug-ins are smarter about which measures are created and only create measures for the selected features. Due to this, after re-generating the configuration using the new plug-ins, some old custom rules may use previously unused measures which have now been removed. In Configuration Tools these are displayed as red and should be cleaned up prior to patching. The affected areas include:

- Regular Price
- Demand Transference
- Returns Forecasting
- Cross Promotion Effects

3

CPEM Installation

This document provides instructions on installing Oracle Retail Cross Promotion Effects Module (CPEM). It provides detailed instructions on how to install a CPEM domain using a configuration created through the RPAS Configuration Tools. This document does not describe how to create the actual configuration.

> **Note:** Supplemental installation guides are referenced in this document. The *Oracle Retail Predictive Application Server Installation Guide* and *Oracle Retail Predictive Application Server Configuration Tools User Guide* must be obtained before beginning the installation process. Read these documents in their entirety before starting the installation.

Read through this document completely before performing the installation steps.

Hardware and Software Requirements

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

Table 3–1 provides information on the hardware and software requirements for CPEM:

Table 3–1 Hardware and Software Requirements

Requirement	Details
Supported RPAS Version	15.0.3
Required Software	Java Development Kit (JDK) 1.8u131 **Note:** There are specific JDK versions needed for each of the supported operating systems for the Oracle Retail Predictive Application Server (RPAS). For the list of JDK versions, see the *Oracle Retail Predictive Application Server Installation Guide*. **Note:** When installing Java, avoid enabling AutoUpdate because it may update the Java version without prompting.

Note: RPAS applications, such as CPEM, run on the Oracle Retail Predictive Application Server (RPAS) platform. For information about the hardware and software requirements for RPAS, see the supported RPAS version of the *Oracle Retail Predictive Application Server Installation Guide*.

Supported Oracle Retail Products

This sections lists the supported Oracle Retail products for CPEM.

CPEM Supported Oracle Retail Products

Table 3–2 provides information about the supported Oracle Retail products for CPEM.

Table 3–2 CPEM Supported Oracle Retail Products

Product	Version
Oracle Retail Demand Forecasting (RDF)	15.0.3

Requesting Infrastructure Software

If you are unable to find the necessary version of the required Oracle infrastructure software (database server, application server, WebLogic, and so on.) 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*.

Installing CPEM on UNIX Environments

The installation of the server-side RPAS components on UNIX operating systems is accomplished using Java-based installation programs that are included with the installation package.

The RPAS Installer automates the following tasks:

- Installs the RPAS server components
- Installs Configuration Tools on the server
- Defines the DomainDaemon port

The CPEM Installer automates the following tasks:

- Installs the CPEM configuration
- Installs CPEM plug-ins for the Configuration Tools
- Installs Language Translation files
- Creates a sample CPEM domain

Note: Refer to chapter, "Creating a Multi-solution Taskflow" in the *Oracle Retail Predictive Application Server Configuration Tools User Guide* for information about the Multi-solution Taskflow.

Note: This document assumes that the RPAS Installer process (from the *Oracle Retail Predictive Application Server Installation Guide*) has been completed prior to using the CPEM Installer.

Preparation

The RPAS server components required prior to this installation process are available from Oracle's E-Delivery web site, `http://edelivery.oracle.com`, and My Oracle Support, `https://support.oracle.com.`

Note: Before installing CPEM, confirm that RPAS and all subsequent patches have been successfully applied.

Environment Variable Setup Script

Before running the solution installer, source your `retaillogin.ksh` script. The script is located in the root of the base directory where RPAS was installed unless the default was overwritten when specifying directory paths.

Source the script from inside the directory where the script is located:

. ./retaillogin.ksh

or

Include the full path after the period and space ". ":

. /<base_directory>/retaillogin.ksh

Note: The preceding period and space (". ") must be included at the beginning of the command when running the script.

Note: Include this path and script in the `.profile` in your home directory (**~/.profile**) if you want to have this environment setup script run during login.

This script sets up environment variables, such as RPAS_HOME and RIDE_HOME, which are required for RPAS to run properly.

HP Itanium

If you are installing any RPAS solution on HP Itanium or Sun 10, you need to set the 64-bit Configuration Tools environment variable for Java as shown:

```
export RIDE_OPTIONS=-d64
```

Downloading and Extracting the RDF/CPEM Media Pack

The following procedure provides information about extracting the RDF/CPEM media pack and its contents:

1. Create a directory to store the RDF/CPEM media pack and download the media pack to this location. This directory will be referred to as **[RDF Installation]**.

2. Extract the media pack to this location. Once extracted, two directories appear, **CDROM** and **DOCS**.

   The **CDROM** folder contains the following ZIP files:

   - `RDF.zip` - This file contains the RDF solution.
   - `CPEM.zip` - This file contains the CPEM solution.

   The **DOCS** folder contains the RDF documentation. Within the **DOCS** you can find the RDF Guides, including:

   - Release Notes - This folder contains the *Oracle Retail Demand Forecasting Release Notes*.
   - Installation Guide - This folder contains the *Oracle Retail Demand Forecasting Installation Guide*.

   Note: Files contained within the installation package are intended to be used by the installer only.

Extracting the RDF/CPEM Installation Package

Complete these steps to extract the installation package:

1. Create a directory to store the RDF/CPEM media pack on the target server. This directory will be referred to as **[CPEM Installation]**. It is the location where the CPEM installation routine is run.
2. Using FTP in binary mode, transfer the RDF/CPEM media pack to the **[CPEM Installation]** directory on the target server.
3. Extract the package to the **[CPEM Installation]** directory.

   ```
   cd [CPEM Installation]

   unzip [CPEM Package]
   ```

4. Extract the CPEM Installer.

   ```
   cd CDROM

   unzip CPEM.zip
   ```

Installation Instructions

Complete these steps to install CPEM:

1. Begin the Installer by first changing to the root of the **[CPEM Installation]** directory and running the following command:

   ```
   ./install.sh
   ```

   Note: The command must be run with the preceding period and slash (./).

   If this process is being run on an X-Windows emulator (such as Exceed), a GUI to the Installer appears. If you are running in console mode through a terminal emulator, a text interface to the Installer appears.

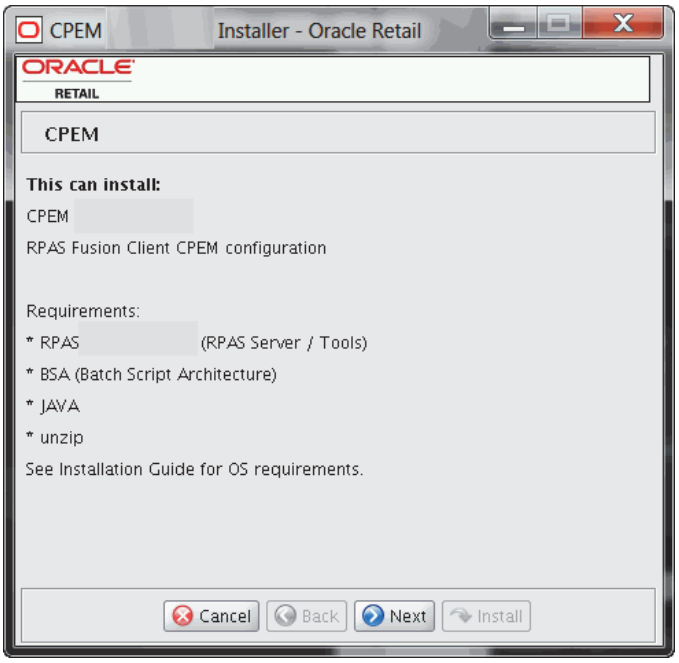
In both cases, the requested information is identical, but displayed differently. In the GUI, a check box may appear to signal whether or not you want a component installed. In text mode, a response of yes or no may be required.

Note: In text mode, the default value appears in square brackets []. To use the default value and continue, click **Enter**. If you want to use a different value, enter the new value. When prompted to create a directory, respond with **Y** or yes and click **Enter**.

---

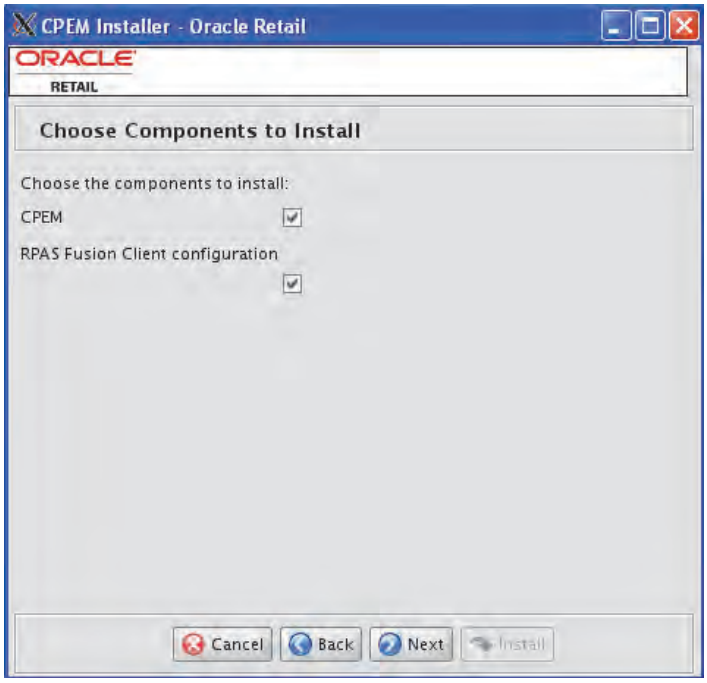
2. The CPEM Installer Window opens and shows the components that are installed during installation process as well as other required components. Click **Next** to continue.

Figure 3–1 CPEM Installer Window



3. The CPEM Choose Components to Install Window opens.

Figure 3–2 CPEM Choose Components to Install Window



Select one or both of the following options:

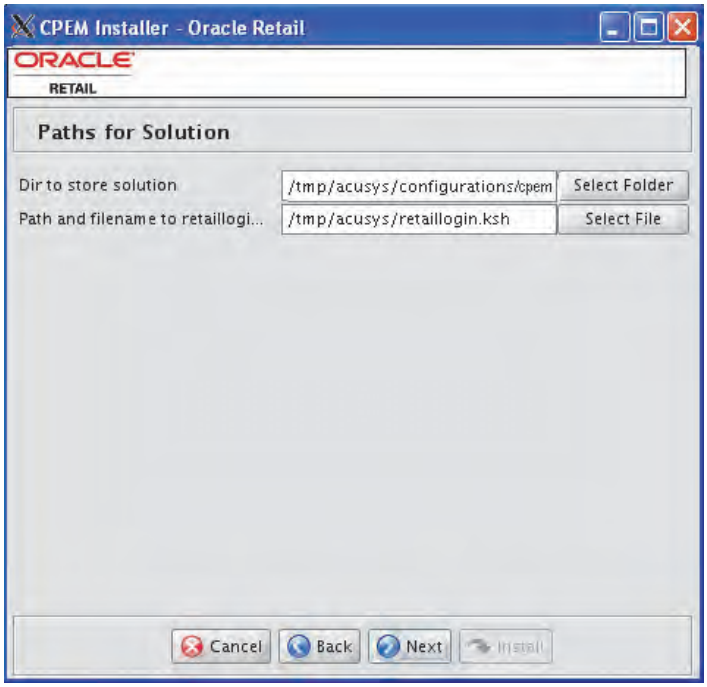
- **CPEM** – Select this option to install the CPEM solution with the domain.
- **RPAS Fusion Client configuration** – Select this option to install the RPAS Fusion Client CPEM configuration.

If You Are...	Then....
Not installing the RPAS Fusion Client CPEM configuration.	Clear the RPAS Fusion Client configuration check box and skip steps 6 and 7.
Not installing the CPEM solution, but are installing the RPAS Fusion Client CPEM configuration.	1. Clear the CPEM check box and select the RPAS Fusion Client configuration check box. 2. After installation, you must update the domain-path entry in the `Foundation.xml` on the RPAS Fusion Client server. 3. In the `Foundation.xml`, change ${input.CPEM.dir} to your CPEM domain path.

Click **Next** to continue.

4. The CPEM Base Paths for Solution Window opens.

Figure 3–3 CPEM Base Paths for Solution Window



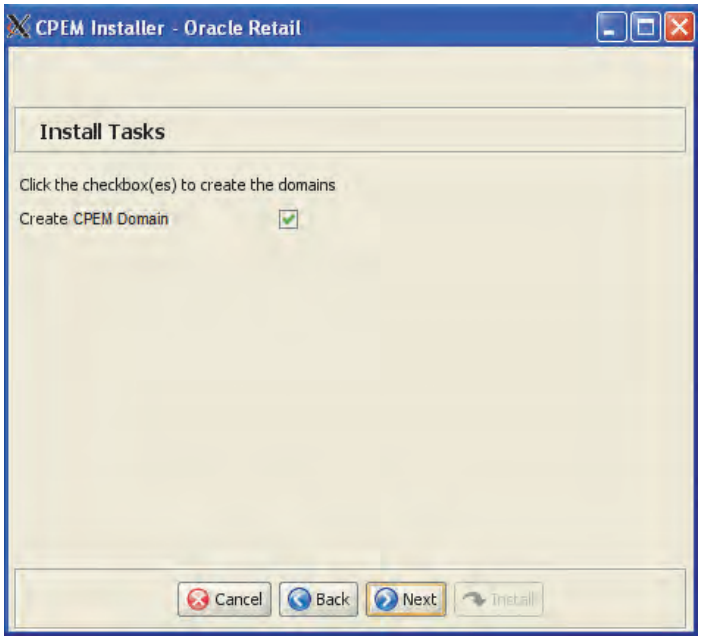
Note: Ensure that the installation paths are located outside of the installer directory **[CPEM_Installer]**.

Enter the following path information and click **Next**:

- **Dir to store configurations** - Enter the target directory to store the configurations.
- **Dir to store created domains** - Enter the target directory used to store created domains.
- **Path and file name to the retaillogin.ksh script** - Enter the path and file name where the `retaillogin.ksh` script was created during RPAS installation.

5. The CPEM Install Tasks Window opens.

Figure 3–4 CPEM Install Tasks Window



If you want to....	Then....
Create the CPEM domain	Select **Create CPEM Domain** and click **Next**.
Install all required components to support the CPEM domain, but not create the actual CPEM domain	Clear the **Create CPEM Domain** check box and click **Next**.

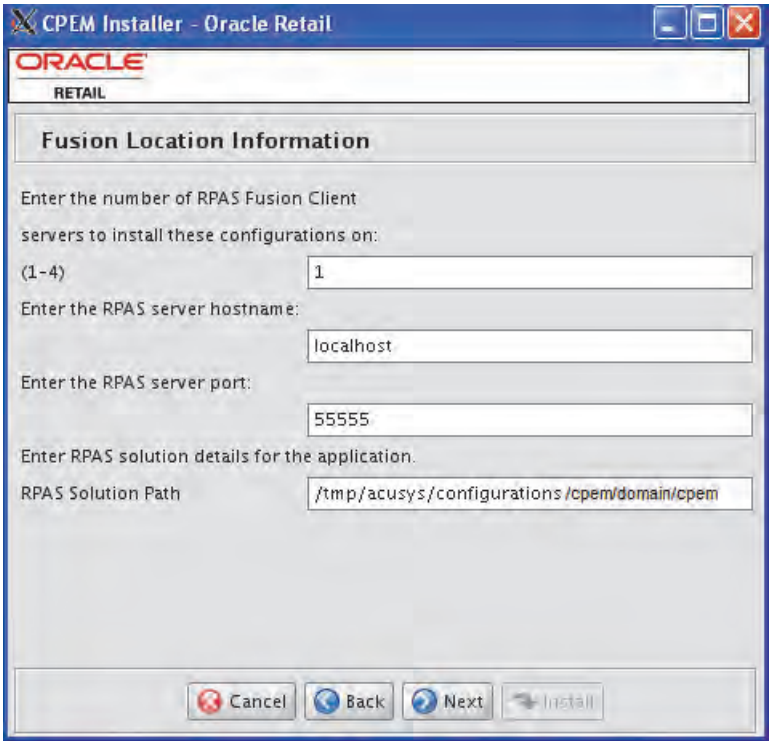
Note: Domain builds use the environment specified in the `retaillogin.ksh` environment setup script. If you change any environment details, edit the `retaillogin.ksh` script and any subsequent scripts called by `retaillogin.ksh`.

For more information about the `retaillogin.ksh` script, refer to the section: "Environment Variable Setup Script".

---

6. The CPEM Fusion Location Information Window opens.

Figure 3–5 CPEM Fusion Location Information Window



Enter the relevant information in the following fields:

Field	Description
Enter the number of RPAS Fusion Client servers to install these configurations on: (1-4)	Enter the number of servers running the RPAS Fusion Client where you want to install the CPEM configuration. In case the RPAS Fusion Client is running on a single server, enter *1*. If you have a clustered installation, you can enter up to four servers
Enter the RPAS server hostname:	Enter the hostname of the RPAS server.
Enter the RPAS server port:	Enter the port number of the RPAS server.
RPAS Solution Path	Enter the location of the RPAS domain for CPEM.

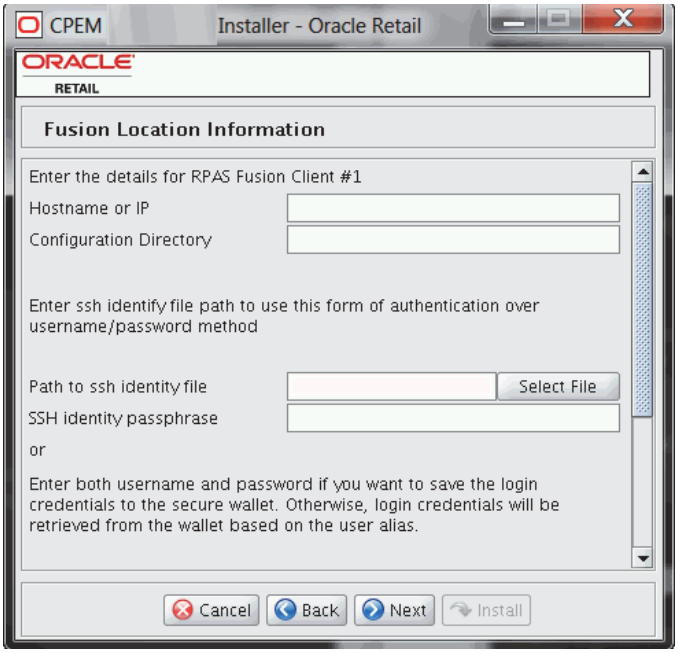
Note: The CPEM Fusion Location Information Window opens when you select the RPAS Fusion Client configuration check box on the Choose Components to Install Window.

If you are not installing the RPAS Fusion Client configuration, proceed to step 8.

Click **Next** to continue.

7. Based on the number of servers you entered, the CPEM Fusion Location Information (Details) Window opens.

Figure 3–6 CPEM Fusion Location Information (Details) Window



Enter the server details in the following set of fields for each configuration:

Field	Description
Hostname or IP	Enter the host name or IP address of the server where the RPAS Fusion Client is installed.
Configuration Directory	Enter the location of the config directory available at the location where the RPAS Fusion Client is installed.
Path to SSH identity file	Enter the location of the SSH identity file to be used for authentication to the server where the RPAS Fusion Client is installed.
SSH identity passphrase	If your SSH identity is secured with a passphrease, then enter the passphrase. If not, then leave this field empty.
Login username	Enter the user name to log on to the server where the RPAS Fusion Client is installed.
Login password	Enter the password associated with the user name.
Login username alias	Specify an alias name for the administrative user. Specifying an alias name for the administrative user enhances the security for the application. When left blank, the alias name defaults to the administrative user name.

Click **Next** to continue.

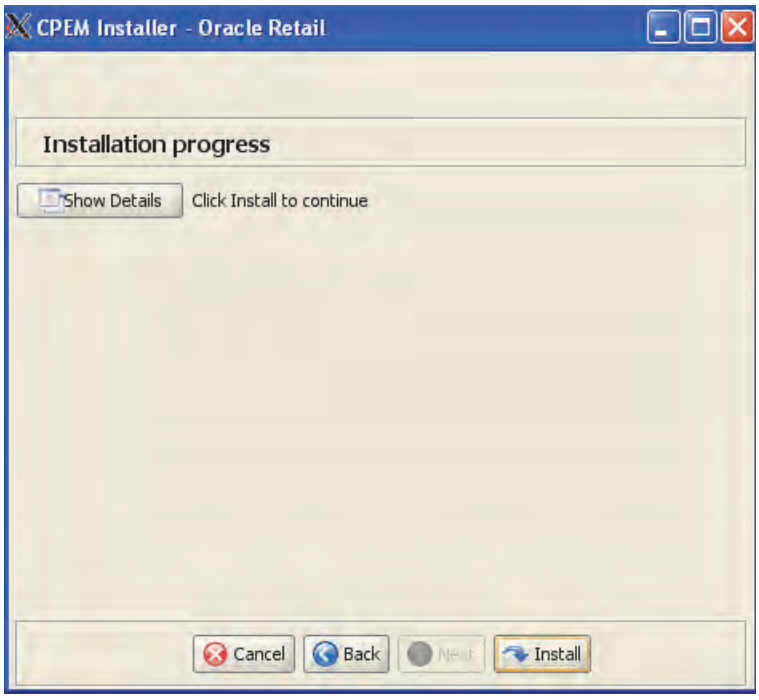
Note: Information such as user credentials for the RPAS Fusion Client is encrypted and stored in a secure location in the application installation directory. This location is called the Oracle Wallet.

When the installation starts, the administrative user credentials are retrieved from the Oracle Wallet based on the alias name specified in this window.

---

8. The CPEM Installation Progress Window opens.

Figure 3–7 CPEM Installation Progress Window



To display the progress of the components and tasks being performed by the Installer, select **Show Details**. Click **Install** to start the installation process.

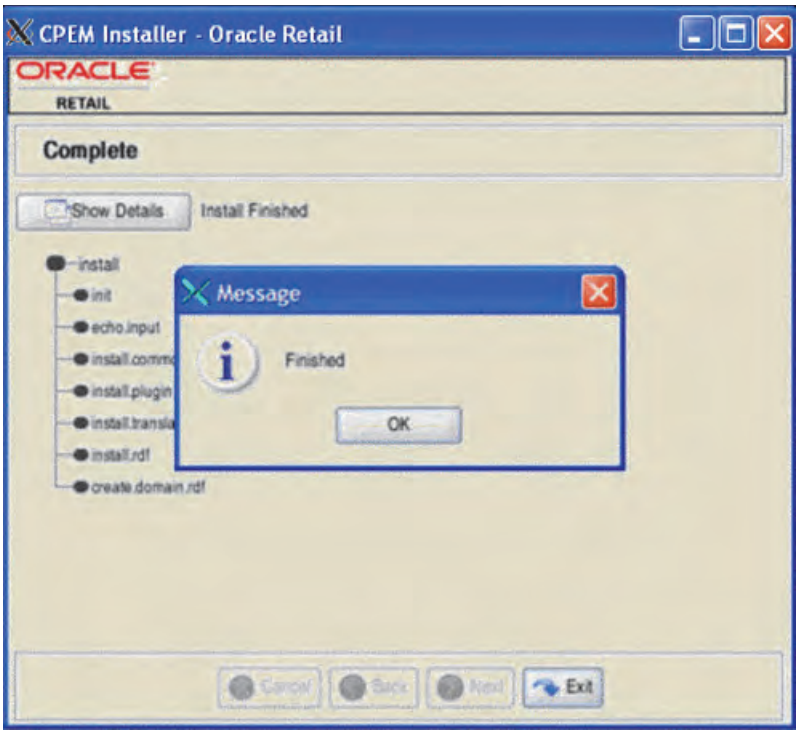
You can view the detailed mode at any time during or after the installation.

Note: If you chose to create the CPEM domain, installation time might take 30 to 60+ minutes depending on server specifications.

---

9. When the installation process is complete, the CPEM Complete Window opens with a Message dialog box. Click **OK** to close the dialog box.

Figure 3–8 CPEM Complete Window



10. To view the installation details, click **Show Details**. The window displays two tabs, the Output tab and the Error tab. It is recommended that you review these tabs for any issues that may have occurred during the installation process.

    If you wish to view the log again at a later date, a text copy was saved in the directory **[CPEM Installation]**. The log file is named based on the product and time installer, followed by the `.log` extension.

    The `make_domain.cpem` file, located in the **[Configurations Install Dir]** entered during the install, is created during the installation process. This file contains all of the required parameters needed to support domain installation. If necessary this file may be modified if the default parameters are not appropriate for your particular environment.

    Note: When reviewing Installer output or logs, you may see the following message: *[scp] Caught an exception, leaving main loop due to Socket closed.* This message is harmless and does not indicate failure.

    Note: The domain install process also includes postinstallation data loading scripts specific to the CPEM configuration. These scripts may also be modified.

11. Click **Exit** to close the Installer.

Postinstallation Tasks

After you have installed CPEM, perform the following postinstallation tasks.

- Start the DomainDaemon.

Configuration Files for the RPAS Fusion Client

This section describes the optional installation method that involves setting up the RPAS Fusion Client configuration and online help for the CPEM configuration. If you chose to install the Fusion Client configuration files using the CPEM installer, you can skip this section.

> **Note:** Before proceeding, ensure that you have appropriate access privileges on the server running the RPAS Fusion Client.

Along with the files to install the CPEM solution and domain, the RDF/CPEM installation media pack also includes the RPAS Fusion Client configuration and online help files that you must install if you want to use CPEM on the RPAS Fusion Client.

These files are available at the following location within the **[CPEM Installation]** directory:

[CPEM Installation]/cpem/fusion

<server-name>{RPASServerName}</server-name>

During the CPEM installation, these files are automatically copied over to the configuration directory where the RPAS Fusion Client is installed. The installation also ensures that the following RPAS Fusion Client configuration files are updated to reflect the CPEM installation:

- `Foundation.xml` - Located in the **[RPAS Fusion Client Installation]/ config/rpas** directory, this XML file includes the domain configuration available for use with the RPAS Fusion Client.
- `ohwconfig.xml` - Located in the **[RPAS Fusion Client Installation]/config/Help** directory, this XML file includes the online help configuration for the RPAS Fusion Client.

If you did not install the Fusion Client configuration files during the CPEM installation, you can choose to do one of the following tasks:

- Run the CPEM installer again, and select to install only the RPAS Fusion Client configuration.
- Run the RPAS Fusion Client installer again, and specify the CPEM domain configuration. For more information on the RPAS Fusion Client installation, refer to the *Oracle Retail Predictive Application Server Installation Guide*.
- Configure the RPAS Fusion Client for CPEM manually. For more information, refer to the "Configuring Additional Domains" section in the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*.

Taskflow Files

This section provides information about the files needed for taskflow configuration.

If you selected the option to build a domain, you will find two taskflow files (`taskflow.xml` and the `taskflowBundle.properties` resource file) in the fusionClient subdirectory within the domain. For information about how to use these files to configure the Multi-solution Taskflow, refer to the section, "Postinstallation

Configuration" in the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*.

If you selected the option to install the fusion client configuration, the translation files for the taskflow have been copied to [RPAS Fusion Client Installation]/resources. For information about how to use these files with the Multi-solution Taskflow, refer to the section, "Creating a Multi-solution Taskflow" in the *Oracle Retail Predictive Application Server Configuration Tools User Guide*.

A

Patching RDF Domains

Before patching an RDF domain, confirm that the necessary RPAS client, server and Configuration Tools patch updates have been successfully applied. Refer to the *Oracle Retail Predictive Application Server Installation Guide* for RPAS installation instructions.

Patching an RDF Domain

> **Note:** When patching an RDF domain, you need the same `-rf` arguments of rpasInstall as a full install of the domain
>
> (For example: `-rf AppFunctions -rf RdfFunctions -rf LostSaleFunctions -rf ClusterEngine`)

Complete the following steps to patch your RDF domain.

> **Note:** The RDF plug-in now supports changing forecast level intersections in patching. This enhances the currently existing ability to change forecast data sources. However, the RDF plug-in does not support addition or removal of forecast or promotion levels.

1. Extract the RDF patch.
   a. Create a directory to store the RDF/CPEM media pack on the target server. This directory will be referred to as **[RDF Installation]**. It is the location where the RDF installation routine is run.
   b. Download the package from My Oracle Support (`https://support.oracle.com`). Using FTP in binary mode, transfer the RDF/CPEM media pack to the **[RDF Installation]** directory on the target server.
   c. Extract the package to the folder **[RDF Installation]** directory.

      ```
      cd [RDF Installation]
      unzip [RDF Package]
      ```

   d. Extract the RDF Installer.

      ```
      cd CDROM
      unzip RDF.zip
      ```

2. Copy the RDF plug-in to the Configuration Tools.

The RDF plug-in enables the RDF solution to be configured using the RPAS Configuration Tools. It also supports the domain installation process.

a. Locate the plug-in directory by changing to the root of the **[RDF Patch Install]** directory.

b. Navigate to **[RDF Patch Install]/CDROM/rdf/rdf/plugin/** and copy the resources directory to the Configuration Tools installation ($RIDE_HOME).

3. Delete or rename old activities before running regeneration.

   The RDF plugin regeneration generates task flow activities with the same label as the old activities. So either delete or rename the old activities before running regeneration so that RDF can distinguish the old activities from the new ones.

   a. Locate the taskflow in the Configuration Tools.

   b. In the Taskflow Manager, right-click on each taskflow and change the name for each one as shown in the following images.

Figure A–1 Taskflow Name Change Before

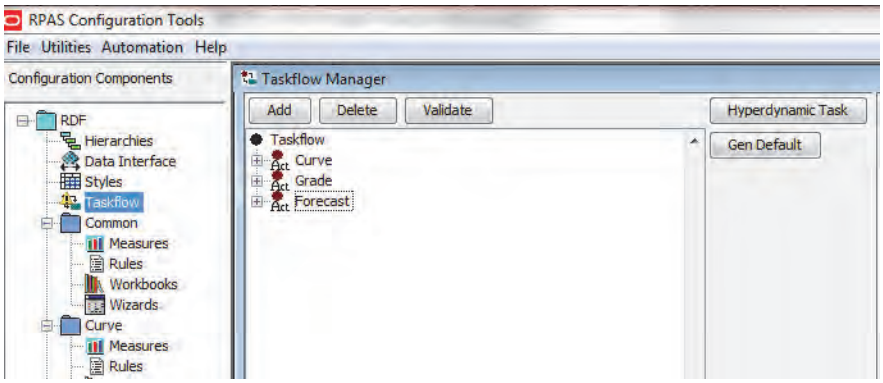
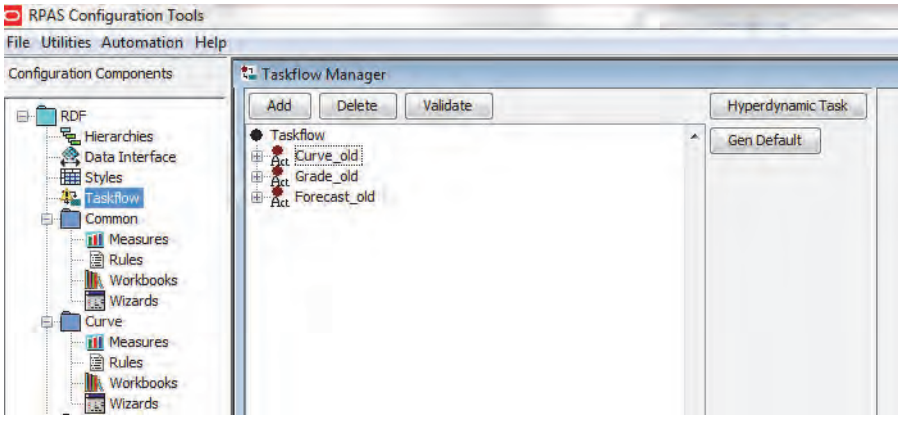


Figure A–2 Taskflow Name Change After



4. Using the Configuration Tools on a Windows machine, auto-generate the RDF, Curve, Promote, or Grade solutions that are implemented.

   It is necessary to open the configuration in the patched version of the RPAS Configuration Tools and autogenerate each of the existing solution extension configurations on a Windows machine. This auto-generation step is also required if you are making a change to your existing configuration of a RDF, Curve, Promote, or Grade solution.

5. Copy the configuration files to the domain server.

   - Copy the updated configuration files from the Windows machine to the domain server. The location on the domain server should have the same structure as the Windows machine used to autogenerate the solution extensions.
   - If you are using WinZip to archive the configuration files, you must use unzip `-a` to unzip the archive on the UNIX server.

6. If you do not specify domain paths during the RPAS patching process, then run the RPAS `upgradeDomain` utility.

   For information on the `upgradeDomain` utility, refer to either the Classic Client or Fusion Client version of the *Oracle Retail Predictive Application Server Administration Guide*.

7. To patch the RDF domain:

   a. Set $RDF_HOME

      export RDF_HOME=$RPAS_HOME

   b. Verify BSA/bsa folder exists within $RPAS_HOME/bin

   c. Edit the following path parameters, then copy/paste entire section on the command line (selecting either patch or build).

      Note: Run the script from the **$RPAS_HOME/bin** directory. For additional information about the `buildRDF.sh` parameters, refer to Table 2–2.

      [Patch]

      (m = # of maxProcesses) (p = indicates patchInstall)

      ```
      buildRDF.sh \
          -c /configPath \
          -i /inputPath \
          -l /logPath \
          -f patch_domain.log \
          -d /domainPath \
          -m 2 \
          -p
      ```

      [Build]

      ```
      buildRDF.sh \
      ```

```
-c /configPath \
-i /inputPath \
-l /logPath \
-f build_domain.log \
-d /domainPath \
-m 2
```

d. CD to BSA log file path, then tail to verify running successfully

```
/home/user/temp/logs
```

e. Verify that the rpasInstall script is called within the BSA log

Ex: 10:45:39: INFORMATION : buildRDF.sh[202] - _call run command 'rpasInstall -patchinstall -ch /vol.nas/rpas_qc/qc_testing/RDF/aix61/13.4/Rahman/patch/config -cn RDF -in /vol.nas/rpas_qc/qc_testing/RDF/aix61/13.4/Rahman/input -log /vol.nas/rpas_qc/qc_testing/RDF/aix61/13.4/Rahman/patch/domains/1323_1340/patch_domain.log -dh/vol.nas/rpas_qc/qc_testing/RDF/aix61/13.4/Rahman/patch/domains/1323_1340 -verbose -p pgrp -rf AppFunctions -rf RdfFunctions -rf ClusterEngine -rf LostSaleFunctions -rf ASOExpressions'

f. CD to log file specified in script parameters, then tail to verify successful run

```
$ tail -f patch_domain.log
```

B

Creating a Global Domain Configuration Directory (Optional)

This appendix describes the optional process to create a Global Domain Configuration Directory.

Using globaldomainconfig.xml to Partition and Label Domains

If you are installing a Global Domain environment, an xml file may be created to determine how the domains will be partitioned and the label of each domain. If you take this approach, the `-configdir` option should be used when running `rpasInstall`.

Example B–1 is the structure of the `globaldomainconfig.xml` file:

- **Path**

  The location of the root of the domain. For the RDF configuration, RDF is the root to the Master domain.

- **Partitiondim**

  The partition dimension.

For RDF pgrp (Group) is the dimension in which the local domains will be partitioned. There can only be one partition dimension.

- **Subpath**:

  The path and name of the local (sub-domain) that contains a specific partition position.

- **ldom+#**

  The default name given by RPAS to local domains. For the RDF configuration, postinstall scripts are pre-configured to install and load data to the domains named **ldom0ldom1**, and **ldom2**.

- **Subposition**

  The position from the partition dimension that will be located in the local domain.

The RDF configuration will create three local domains. For example, **ldom0** will include all product positions at or below **pgrp 1100**.

Example B–1 XML File Structure

```
<?xml version=1.0 encoding=UTF-8 standalone=yes ?>
<rpas>
    <globaldomain>
```

```
        <path>/Domains/RDF</path>
        <partitiondim>pgrp</partitiondim>
        <subdomain>
            <subpath>/Domains/RDF/ldom0</subpath>
            <subpositions>1100</subpositions>
        </subdomain>
        <subdomain>
            <subpath>/Domains/RDF/ldom1</subpath>
            <subpositions>1300</subpositions>
        </subdomain>
        <subdomain>
            <subpath>/Domains/RDF/ldom2</subpath>
            <subpositions>2500</subpositions>
        </subdomain>
    </globaldomain>
</rpas>
```

Note: If you use the Example B–1, "XML File Structure" to install the RDF configuration, only the Path and Subpath to the domains may be changed; but the local domains (**ldom0, ldom1, ldom2**), partition dimension (**pgrp**), and subpositions (**1100, 1300 and 2500**) must be the same as previously listed.

C

Run rpasInstall to Install RDF Domains

The `rpasInstall` utility is used to install domains that support RDF. For more information on using rpasInstall, refer to either the Classic Client or Fusion Client version of the *Oracle Retail Predictive Application Server Administration Guide.*

During installation, RDF requires the following functions to be registered:

- AppFunctions
- RdfFunctions

Examples

AppFunctions and RdfFunction are required functions needed for the installation of RDF. RDF configurations that include the Grade solution require ClusterEngine to be registered as well.

For information on using `rpasInstall`, refer to either the Classic Client or Fusion Client version of the *Oracle Retail Predictive Application Server Administration Guide*.

Example C–1 Installing a Global Domain environment by using a global domain configuration and the -p option to specify the partition dimension

```
rpasInstall -fullinstall -dh /Domain_Home -cn Global -ch /configurations -in /Data
-log /Log/InstallLog.txt -verbose -rf AppFunctions -rf RdfFunctions -p pgrp
```

Example C–2 Installing a Global Domain environment by using a global domain configuration and the -configdir option to specify the path to the globaldomainconfig.xml

```
rpasInstall -fullinstall -cn Global -ch /Configurations -in /Data -log
/Log/InstallLog.txt -verbose -rf AppFunctions -rf RdfFunctions -configdir
/ConfigDir
```

D

Appendix: Installation Order

This section provides a guideline for the order in which the Oracle Retail applications should be installed. If a retailer has chosen to use only some of the applications, the order is still valid, less the applications not being installed.

Note: The installation order is not meant to imply integration between products.

Enterprise Installation Order

1. Oracle Retail Merchandising System (RMS), Oracle Retail Trade Management (RTM)
2. Oracle Retail Sales Audit (ReSA)
3. Oracle Retail Extract, Transform, Load (RETL)
4. Oracle Retail Active Retail Intelligence (ARI)
5. Oracle Retail Warehouse Management System (RWMS)
6. Oracle Retail Invoice Matching (ReIM)
7. Oracle Retail Price Management (RPM)
8. Oracle Retail Allocation
9. Oracle Retail Mobile Merchandising (ORMM)
10. Oracle Retail Xstore Office
11. Oracle Retail Xstore Point-of-Service, including Xstore Point-of-Service for Grocery, and including Xstore Mobile
12. Oracle Retail Xstore Environment
13. Oracle Retail EFTLink
14. Oracle Retail Store Inventory Management (SIM), including Mobile SIM
15. Oracle Retail Predictive Application Server (RPAS)
16. Oracle Retail Batch Script Architecture (BSA)
17. Oracle Retail Demand Forecasting (RDF)
18. Oracle Retail Category Management Planning and Optimization/Macro Space Optimization (CMPO/MSO)
19. Oracle Retail Replenishment Optimization (RO)

20. Oracle Retail Analytic Parameter Calculator Replenishment Optimization (APC RO)
21. Oracle Retail Regular Price Optimization (RPO)
22. Oracle Retail Merchandise Financial Planning (MFP)
23. Oracle Retail Size Profile Optimization (SPO)
24. Oracle Retail Assortment Planning (AP)
25. Oracle Retail Item Planning (IP)
26. Oracle Retail Item Planning Configured for COE (IP COE)
27. Oracle Retail Advanced Inventory Planning (AIP)
28. Oracle Retail Integration Bus (RIB)
29. Oracle Retail Services Backbone (RSB)
30. Oracle Retail Financial Integration (ORFI)
31. Oracle Retail Data Extractor for Merchandising (ORFI)
32. Oracle Retail Clearance Optimization Engine (COE)
33. Oracle Retail Analytic Parameter Calculator for Regular Price Optimization (APC-RPO)
34. Oracle Retail Insights, including Retail Merchandising Insights (previously Retail Merchandising Analytics) and Retail Customer Insights (previously Retail Customer Analytics)