Oracle® Retail Demand Forecasting

Installation Guide

Release 13.3

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Value-Added Reseller (VAR) Language

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Oracle Retail Demand Forecasting Installation Guide, Release 13.3

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- Are the implementation steps correct and complete?

- Did you understand the context of the procedures?

- Did you find any errors in the information?

- Does the structure of the information help you with your tasks?

- Do you need different information or graphics? If so, where, and in what format?

- Are the examples correct? Do you need more examples?

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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.

> **Note:** Supplemental installation guides are referenced in this document. The *Oracle Retail Predictive Application Server Installation Guide*, *Oracle RPAS Administration Guide for the Classic Client*, *Oracle RPAS Administration Guide for the Fusion Client*, 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.

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

Our goal is to make Oracle products, services, and supporting documentation accessible to all users, including users that are disabled. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Accessibility standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For more information, visit the Oracle Accessibility Program Web site at http://www.oracle.com/accessibility/.

Accessibility of Code Examples in Documentation

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

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Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/support/contact.html or visit http://www.oracle.com/accessibility/support.html if you are hearing impaired.

Related Documents

For more information, see the following documents in the Oracle Retail Demand Forecasting Release 13.3 documentation set:

- *Oracle Retail Demand Forecasting Release Notes*

- *Oracle Retail Demand Forecasting Configuration Guide*

- *Oracle Retail Demand Forecasting Implementation Guide*

- *Oracle Retail Demand Forecasting Online Help for the RPAS Fusion Client*

- *Oracle Retail Demand Forecasting User Guide for the RPAS Classic Client*

- *Oracle Retail Demand Forecasting User Guide for the RPAS Fusion Client*

- Oracle Retail Predictive Application Server documentation

Supplemental Documentation

The following document is available through My Oracle Support at the following URL:

https://support.oracle.com

Oracle Retail Demand Forecasting 13.3 Cumulative Fixed Issues (Note ID 1391815.1)

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, 13.1) or a later patch release (for example, 13.1.2). 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.

Oracle Retail Documentation on the Oracle Technology Network

Documentation is packaged with each Oracle Retail product release. Oracle Retail product documentation is also available on the following Web site:

http://www.oracle.com/technology/documentation/oracle_retail.html

(Data Model documents are not available through Oracle Technology Network. These documents are packaged with released code, or you can obtain them through My Oracle Support.)

Documentation should be available on this Web site within a month after a product release.

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

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	13.3
Required Software	Java Development Kit (JDK) 1.6
	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 Integration Technologies

The following Oracle integration technology is supported:

Oracle Data Integrator 10.1.3.5

Supported Oracle Retail Products

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

RDF Supported Oracle Retail Products

The following Oracle Retail products are supported for RDF:

Table 1–2   RDF Supported Oracle Retail Products

Requirement	Version
Oracle Retail Analytic Parameter Calculator for Replenishment Optimization (APC-RO)	13.2.2
Analytic Parameter Calculator for Regular Price Optimization (APC-RPO)	13.2.3
Oracle Retail Merchandising System (RMS)	13.2.2
Oracle Retail Promotion Intelligence and Promotion Planning and Optimization (PI-PPO)	13.2.2
Oracle Retail Replenishment Optimization (RO)	13.2.3
Oracle Retail Regular Price Optimization (RPO)	13.2.3

Curve Supported Oracle Retail Products

The following Oracle Retail products are supported for Curve:

Table 1–3   Curve Supported Oracle Retail Products

Requirement	Version
Allocation	13.2

Grade Supported Oracle Retail Products

The following Oracle Retail products are supported for Grade:

Table 1–4   Grade Supported Oracle Retail Products

Requirement	Version
Oracle Retail Merchandising System (RMS)	13.2.2

Installing RDF 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 RDF Installer automates the following tasks:

- Installs the RDF mock install configuration

- Installs RDF plug-ins for the Configuration Tools

- Installs Language Translation files

- Creates a sample RDF domain

> **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 ".":

. /<base_directory>/retaillogin.ksh

> **Note:** The preceding period and space (". ") must be included at the beginning of the command when executing 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, you need to set the 64-bit Configuration Tools environment variable for Java as shown:

```
export RIDE_OPTIONS=-d64
```

Downloading and Extracting the RDF Media Pack

The following procedure provides information about extracting the RDF Media Pack and its contents:

1. Create a directory to store the RDF 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 file:

   - RDF.zip - This file contains the RDF 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*.

Extracting the RDF Installation Package

Complete these steps to extract the installation package:

1. Create a directory to store the RDF 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 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

Complete these steps to install RDF:

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 executed with the preceding period and forward 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.

Figure 1–1   RDF Installer Window

3. The Choose Components to Install Window opens.

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 7 and 8.
Not installing the RDF solution, but are installing the RPAS Fusion Client RDF configuration.	1. Select the RDF check box and clear the RPAS Fusion Client configuration check box.
	2. After installation, you must update the domain-path entry in the ProfileList.xml on the RPAS Fusion Client server.
	3. In the ProfileList.xml, change ${input.RDF.dir} to your RDF domain path.

Click **Next** to continue.

Figure 1–2   Choose Components to Install Window
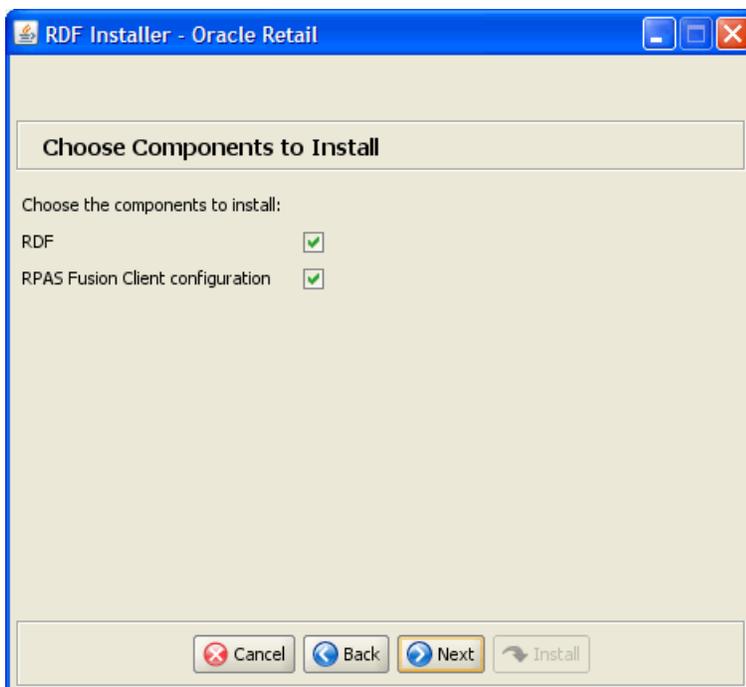
4. The Base Paths for Solution Window opens.

Figure 1–3   Base Paths for Solution Window
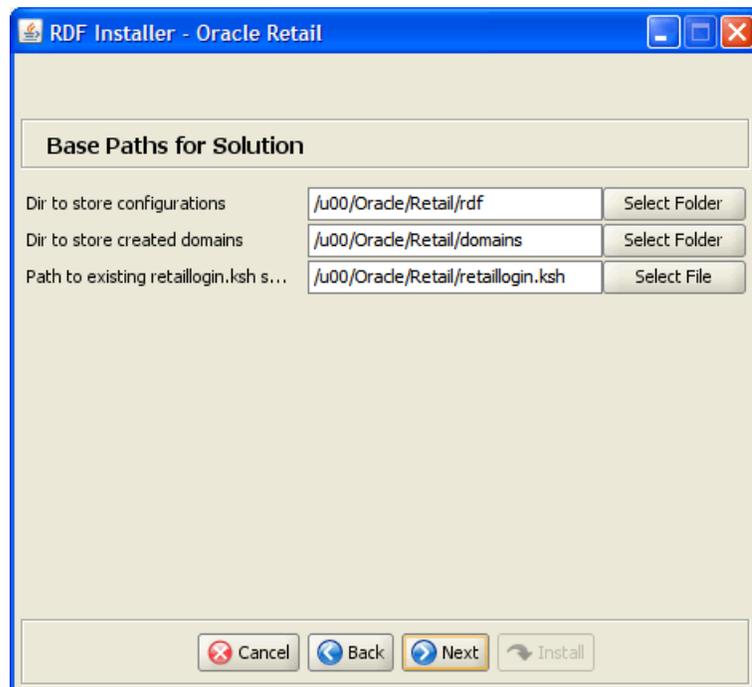
> **Note:**   Ensure that the installation paths are located outside of the installer directory [RDF_Installer].

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 Domain Installation Paths Window opens.

Figure 1–4   Domain Installation Paths Window
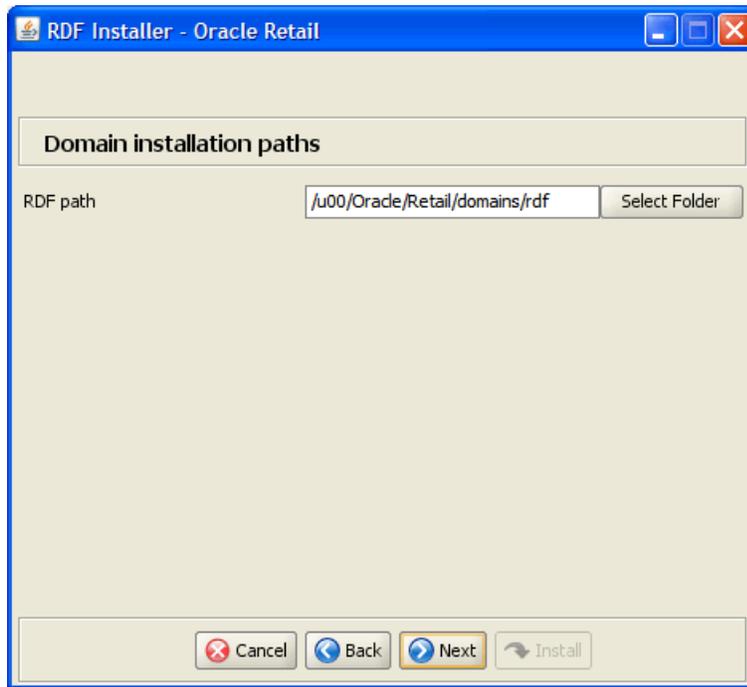
Enter the path where the RDF domain will be created, and click **Next**.

6. The Install Tasks Window opens.

Figure 1–5   Install Tasks Window
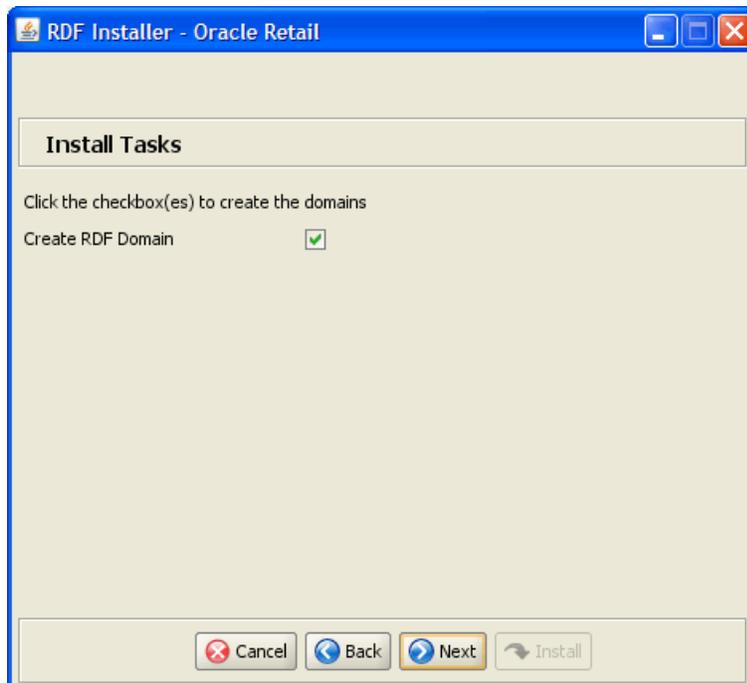
If you want to....	Then....
Create the RDF domain	Select **Create RDF Domain** and click **Next**.
Install all required components to support the RDF domain, but not create the actual RDF domain	Clear the **Create RDF Domain** check box and click **Next**.

> **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".

7. The Fusion Location Information Window opens.

- Enter the number of servers running the RPAS Fusion Client where you want to install the RPAS Fusion Client RDF configuration. If 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 host name and port number of the RPAS server.

Click **Next** to continue.

> **Note:** The 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 9.

Figure 1–6   Fusion Location Information Window

8. Based on the number of servers you entered, the Fusion Location Information Window opens with the following set of fields for each server configuration:

   - **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.

   - **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.

Figure 1–7   Fusion Location Information Window
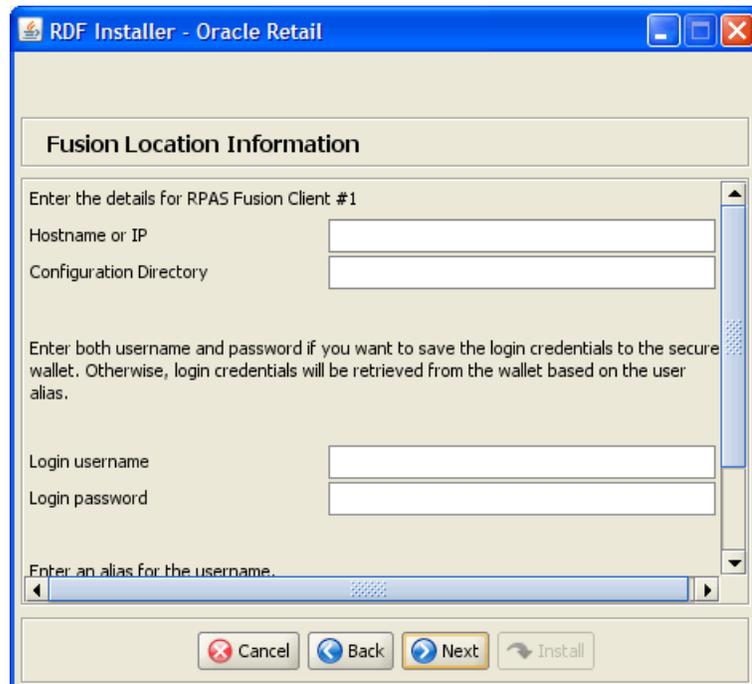
> **Note:**   As part of the Oracle Software Security Assurance, sensitive information such as user credentials for the RPAS Fusion Client are encrypted and stored in a secure location in the application installation directory. This location is called the Oracle Wallet.
>
> When the installation starts, the administrative user credentials will be retrieved from the Oracle Wallet based on the alias name specified in this window.

9. The Installation Progress Window opens.

Figure 1–8   Installation Progress Window
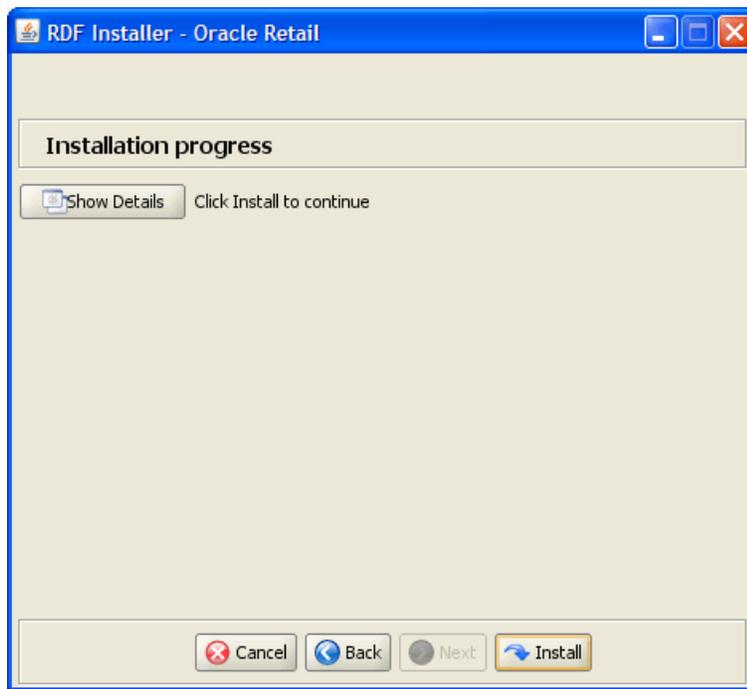
To display the progress of the components and tasks being performed by the Installer, select **Show Details**. Click **Install** to start the installation process.

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

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

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

Figure 1–9   Complete Window
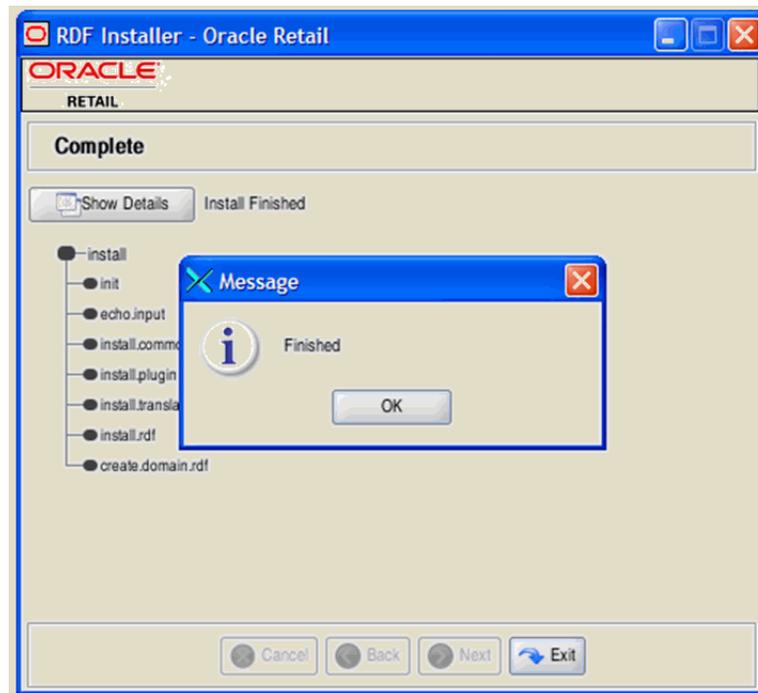
11. To view the installation details, click **Show Details**. The window displays two tabs, the Output tab and the Error tab. It is recommended that you review these tabs for any issues that may have occurred during the installation process.

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

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

Post Installation Tasks

After you have installed RDF, perform the following post installation tasks.

- Before starting the DomainDaemon, you must first source the solution's environment.ksh script. This loads all environment variables required by RPAS to interact with your solution's workbooks. To do this, either in shell or with an addition to your **.profile**, add **. [Solution Install Dir]/bin/environment.ksh**.

- 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/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 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:

- `ProfileList.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*.

A

Manually Installing RDF

This section provides the manual processes for building the RDF mock installation or other RDF configurations. The following components must be installed before manually installing RDF:

- RPAS Client

- RPAS Server - Also referred to as $RPAS_HOME

- RPAS Configuration Tools - Also referred to as $RIDE_HOME

- Java - Also referred to as $JAVA_HOME

> **Note:** See the *Oracle Retail Predictive Application Server Installation Guide* for instructions on the above components.

Manually Installing RDF

Complete the following steps to manually install RDF.

> **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 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 Media Pack to the [RDF Installation] directory on the target server.

   c. Extract the package to the [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 directory. 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 Installation] directory.

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

3. Run rpasInstall to build RDF.

   The following command may be used to install the RDF configuration using the -p option to specify the partition dimension (pgrp) configured in this global domain environment:

   ```
   rpasInstall -fullinstall -dh <path to the domain> -cn RDF -ch
   <path to the configuration> -in <path to the data files> -log
   <path to the location and name of the installation log> -rf
   AppFunctions -rf RdfFunctions -rf LostSaleFunctions -rf
   ClusterEngine -p pgrp
   ```

   > **Note:** The RDF installation requires the AppFunctions and RdfFunction functions. This configuration also includes the Grade solution, which requires both AppFunctions and ClusterEngine.
   >
   > Refer to the *Oracle Retail Predictive Application Server Administration Guide for the Classic Client* or the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client* for information on rpasInstall.
   >
   > Whether or not you are taking the latest configuration, a configuration patch must be run over the domain to ensure compatibility with the latest RPAS version. Refer to the *Oracle Retail Predictive Application Server Administration Guide for the Classic Client* or the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*.

Example A–1   Install the RDF Configuration

```
rpasInstall -fullinstall -dh C:\RDF\Domains -cn RDF -ch C:\RDF\configurations -in
C:\RDF\input -log C:\RDF\configurations\install.txt -rf AppFunctions -rf
RdfFunctions -rf LostSaleFunctions -rf ClusterEngine -p pgrp
```

4. Load the sales measures.

   a. After the domain installation has completed, the sales data must be loaded into the domain using the loadmeasure utility.

   b. Open a command prompt from the master domain (/RDF) and type the following commands:

   loadmeasure -d . -measure dpos

   loadmeasure -d . -measure rsal

   loadmeasure -d . -measure csal

   loadmeasure -d . -measure psal

5. Use mace to calculate the Weekly Sales measures.

    a. Open a command prompt from the local domain (/RDF/ldom0) and type the following command:

       mace -d . -run -group common_batch

    b. Repeat this step for each of the remaining local domains (`/RDF/ldom1` and `/RDF/ldom2`).

B

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 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 Media Pack to the [RDF Installation] directory on the target server.

    c. Extract the package to the [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. 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.

4. 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.

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

See the *Oracle Retail Predictive Application Server Administration Guide for the Classic Client* or the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client* for information on the upgradeDomain utility.

6. Run rpasInstall to patch the RDF domain.

The following command may be used to patch the RDF configuration using the -p option to specify the partition dimension (pgrp) configured in this global domain environment:

```
rpasInstall -patchinstall -dh <path to the domain> -cn RDF
-ch <path to the configuration> -in <path to the data files>
-log <path to the location and name of the installation log>
-rf AppFunctions -rf RdfFunctions -rf LostSaleFunctions -rf
ClusterEngine -p pgrp
```

> **Note:** The RDF installation requires the AppFunctions and RdfFunction functions. This configuration also includes the Grade solution, which requires the AppFunctions and ClusterEngine functions.
>
> See the *Oracle Retail Predictive Application Server Administration Guide for the Classic Client* or the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client* for information on rpasInstall.

Example B–1

```
rpasInstall -patchinstall -dh C:\RDF\Domains -cn RDF -ch C:\RDF\configurations -in
C:\RDF\input -log C:\RDF\configurations\install.txt -rf AppFunctions -rf
RdfFunctions -rf LostSaleFunctions -rf ClusterEngine -p pgrp
```

C

Creating a Global Domain Configuration Directory (Optional)

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`. The following example 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 C–1

```
<?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 above example 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 above.

D

Run rpasInstall to Install RDF Domains

The `rpasInstall` utility is used to install domains that support RDF. Refer to the *Oracle Retail Predictive Application Server Administration Guide for the Classic Client* or the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client* for more information on using rpasInstall.

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

- AppFunctions
- RdfFunctions

Examples

Example D–1   Installing a Simple domain environment by using a simple domain configuration

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

Example D–2   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 D–3   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
```

> **Note:**   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.
>
> See the *Oracle Retail Predictive Application Server Administration Guide for the Classic Client* or the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client* for information on using `rpasInstall`.

E

Upgrade Process

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. Refer to Table E–1 for recommendations.

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.

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

Determining Your Upgrade Option

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 E–1:

Table E–1   Upgrade Scenarios

Scenario	Recommended Upgrade Process	Comments
RDF went live using a version of 13.0.4.19 or later.	Typical RDF Upgrade	The results of Upgrade 1 Process are automatically included in your domain. The Upgrade 2 Process does not apply.
		Use the Typical RDF Upgrade process.
RDF went live using a version prior to 13.0.4.18 and you have already gone through Upgrade 1 Process.	Typical RDF Upgrade	You only have to apply the Upgrade 1 Process once. Afterwards you can upgrade using the Typical RDF Upgrade.
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.	Upgrade 1 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 Upgrade 1 Process once. After that, upgrade using the Typical RDF Upgrade
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.	Upgrade 2 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 Upgrade 2 Process must be applied as part of every upgrade.
RDF went live on any version up to and including 13.2.3.x and you want to upgrade to 13.3.0.	13.3 Upgrade Process	This is required if you are upgrading to 13.3.0 from any previous version.
		RPAS 13.3 made significant performance enhancements. All domains using RPAS 13.3 must apply a conversion process to run on RPAS 13.3 and benefit from the enhancements.

Typical RDF Upgrade

This section describes how to upgrade RDF from 13.0.4.19 or later to the current release. Refer to Table E–1 as to which upgrade version to use.

Extraction

The steps in this section only apply if the user has 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 simply *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 above 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 RDF Environment and Domain Upgrade Process section.

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 RDF Environment and Domain Upgrade Process section.

RDF Upgrade Prerequisites

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

- Verify that RPAS is currently installed.

- Verify that the UNIX operating system is updated to the currently supported version, which can be found in the "Hardware and Software Requirements" section of the supported RPAS version 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 execute retaillogin.ksh to set all environment variables. For example:

    ```
    $ cd /retail
    $ ../retaillogin.ksh
    ```

    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 outlined above.

RDF Environment and Domain Upgrade Process

The following process outlines how use the RPAS Configuration Tools to upgrade to the new version of RDF.

For the PC

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, RDF and Promote (if applicable) by performing the following:

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

Figure E–1   Curve Automation in RPAS Configuration Tools
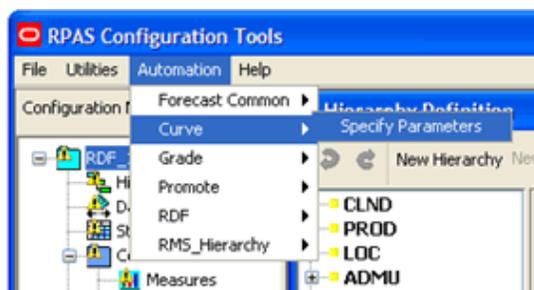
The Forecasting Parameters window opens. Click **OK**.

Figure E–2   Curve Forecasting Parameters
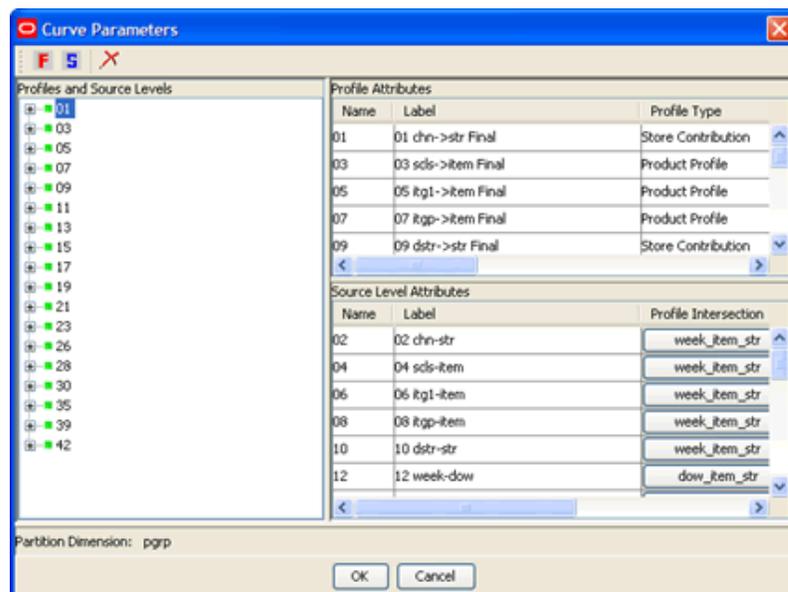
b. For RDF, set:

   – Specify Parameters

   – Cloning Configuration

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

Figure E–3   RDF Automation in RPAS Configuration Tools
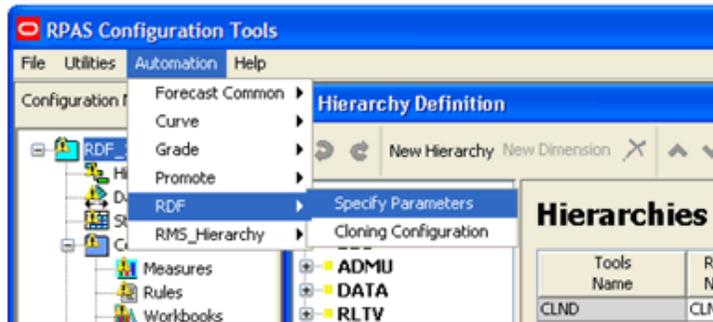
The Forecasting Parameters window opens. Click **OK**.

Figure E–4   RDF Forecasting Parameters
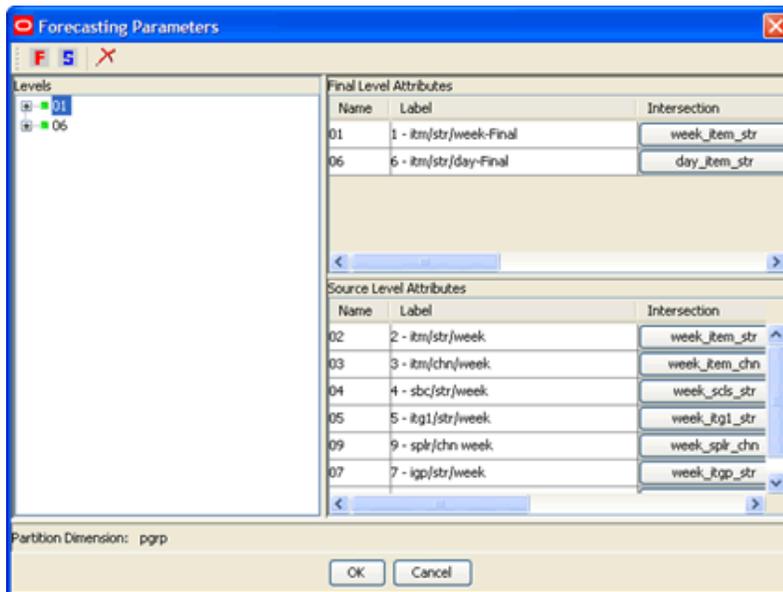
From the Automation menu, select **RDF**, and then **Cloning Configuration**.

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

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

Figure E–5 Promote Automation in RPAS Configuration Tools

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

Figure E–6 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

> **Note:** Follow these notes about upgrading to a 13.3 domain:
>
> - Upgrading your RDF domain to a 13.3 domain requires that you first upgrade it to a 13.2.3 domain. For instructions, refer to the section, "Upgrading and Patching Domains" in the 13.2.3 versions *Oracle Retail Predictive Application Server Administration Guide for the Classic Client* or the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*. Then, you must perform addition upgrade steps. For those instructions, see the "Upgrading and Patching Domains" section in the 13.3 versions of the *Oracle Retail Predictive Application Server Administration Guide for the Classic Client* or the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*.
>
> - Upgrading to 13.3 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 versions of the *Oracle Retail Predictive Application Server Administration Guide for the Classic Client* or the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*.
>
> - After the domain has been upgraded to 13.3, 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.

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 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. See the section, "13.3 Upgrade Process", for more information.

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

4. To use the regular price effect functionality when upgrading a previous version of RDF to Release 13.3, 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.

The following sections are intended for clients who are upgrading from:

- A version prior to 13.0.4.18, to any version after 13.0.4.18 (Upgrade 1 Process)

- Any version to 13.0.4.18 or later (Upgrade 2 Process)

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.

Upgrade 1 Process

Refer to Table E–1 as to which upgrade version to use.

Typically, you will use this process when:

- Upgrading from RDF versions prior to 13.0.4.18

- 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.

Upgrade 1 Execution Steps

Follow these steps to complete the Upgrade 1 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.

Upgrade 2 Process

Refer to Table E–1 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) and

- You want to retain your existing displayed class and subclass information

Upgrade 2 Components

Table E–2 shows the environment variables needed for the Upgrade 2 Process.

Table E–2   Environment Variables

Environment Variables	Description
UPGRADE_HOME	This variable should point to the path of Upgrade scripts where configuration files (as listed below) are present: ■ environment.ksh ■ 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 E–3 shows the scripts needed for the Upgrade 2 Process.

Table E–3   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.

Upgrade 2 Execution Steps

Follow these steps to complete the Upgrade 2 process.

1. Export the environment variables listed in Table E–2, " 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

13.3 Upgrade Process

When converting an older domain to a 13.3 domain, refer to the section, "Upgrading and Patching Domains" in either the *Oracle Retail Predictive Application Server Administration Guide for the Classic Client* or the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client* about upgrading a simple or global domain environment.

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 "For the Server" in the section, RDF Environment and Domain Upgrade Process.

F

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), Oracle Retail Sales Audit (ReSA), Optional: Oracle Retail Fiscal Management (ORFM)

   > **Note:** ORFM is an optional application for RMS if you are implementing Brazil localization.

2. Oracle Retail Service Layer (RSL)

3. Oracle Retail Extract, Transform, Load (RETL)

4. Oracle Retail Active Retail Intelligence (ARI)

5. Oracle Retail Warehouse Management System (RWMS)

6. Oracle Retail Allocation

7. Oracle Retail Invoice Matching (ReIM)

8. Oracle Retail Price Management (RPM)

   > **Note:** During installation of RPM, you are asked for the RIBforRPM provider URL. Since RIB is installed after RPM, make a note of the URL you enter. If you need to change the RIBforRPM provider URL after you install RIB, you can do so by editing the remote_service_locator_info_ribserver.xml file.

9. Oracle Retail Central Office (ORCO)

10. Oracle Retail Returns Management (ORRM)

11. Oracle Retail Back Office (ORBO) or Back Office with Labels and Tags (ORLAT)

12. Oracle Retail Store Inventory Management (SIM)

> **Note:** During installation of SIM, you are asked for the RIB provider URL. Since RIB is installed after SIM, make a note of the URL you enter. If you need to change the RIB provider URL after you install RIB, you can do so by editing the remote_service_locator_info_ribserver.xml file.

13. Oracle Retail Predictive Application Server (RPAS)

14. Oracle Retail Demand Forecasting (RDF)

15. Oracle Retail Category Management (CM)

16. Oracle Retail Replenishment Optimization (RO)

17. Oracle Retail Analytic Parameter Calculator Replenishment Optimization (APC-RO)

18. Oracle Retail Regular Price Optimization (RPO)

19. Oracle Retail Merchandise Financial Planning (MFP)

20. Oracle Retail Size Profile Optimization (SPO)

21. Oracle Retail Assortment Planning (AP)

22. Oracle Retail Item Planning (IP)

23. Oracle Retail Item Planning Configured for COE (IP COE)

24. Oracle Retail Advanced Inventory Planning (AIP)

25. Oracle Retail Integration Bus (RIB)

26. Oracle Retail Point-of-Service (ORPOS)

27. Oracle Retail Markdown Optimization (MDO)

28. Oracle Retail Clearance Optimization Engine (COE)

29. Oracle Retail Analytic Parameter Calculator for Markdown Optimization (APC-MDO)

30. Oracle Retail Analytic Parameter Calculator for Regular Price Optimization (APC-RPO)

31. Oracle Retail Promotion Intelligence and Promotion Planning and Optimization (PI-PPO)

32. Oracle Retail Workspace (ORW)