

Oracle® Retail Demand Forecasting
Installation Guide
Release 13.1.2

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Oracle Retail Demand Forecasting, Installation Guide, Release 13.1.2

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Your feedback is important, and helps us to best meet your needs as a user of our products. For example:

- 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?

If you find any errors or have any other suggestions for improvement, then please tell us your name, the name of the company who has licensed our products, the title and part number of the documentation and the chapter, section, and page number (if available).

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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 via the RPAS Configuration Tools. This document does not describe how to create the actual configuration. Refer to the RDF Configuration Guide for information on creating a configuration.

Supplemental installations guides are referenced in this document. The RPAS Installation Guide and RPAS Configuration 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 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

Related Documents

For more information, see the following documents in the Oracle Retail Demand Forecasting Release 13.1.2 documentation set:

- *Oracle Retail Demand Forecasting Release Notes*
- *Oracle Retail Demand Forecasting Implementation Guide*
- *Oracle Retail Demand Forecasting Configuration Guide*
- *Oracle Retail Demand Forecasting User Guide*
- Oracle Retail Predictive Application Server documentation

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
- Screen shots of each step you take

Review Patch Documentation

If you are installing the application for the first time, you install either a base release (for example, 13.0) or a later patch release (for example, 13.0.2). If you are installing a software version other than the base release, be sure to read the documentation for each patch release (since the base release) before you begin installation. Patch documentation can contain critical information related to the base release and code changes that have been made since the base release.

Oracle Retail Documentation on the Oracle Technology Network

In addition to being packaged with each product release (on the base or patch level), all Oracle Retail documentation is available on the following Web site (with the exception of the Data Model which is only available with the release packaged code):

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

Documentation should be available on this Web site within a month after a product release. Note that documentation is always available with the packaged code on the release date.

Conventions

Navigate: This is a navigate statement. It tells you how to get to the start of the procedure and ends with a screen shot of the starting point and the statement “the Window Name window opens.”

Note: This is a note. It is used to call out information that is important, but not necessarily part of the procedure.

This is a code sample
It is used to display examples of code

A hyperlink appears like this.

Full Installation

Before You Begin

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

Supplemental installations guides are referenced in this document. The RPAS Installation Guide and RPAS Configuration Tools Guide must be obtained prior to beginning the installation process. Read these documents in their entirety before beginning the installation.

Read through this document completely before performing the installation steps.

Note: If you are upgrading to RDF 13.1.2 from a previous version rather than performing a full installation, refer to the following document for upgrade instructions:

Oracle Retail Upgrade Guide (Doc ID 837368.1)

This document is available through My Oracle Support (formerly MetaLink). Access My Oracle Support at the following URL:

<https://support.oracle.com>

Hardware and Software Requirements

The following table provides information about the current release.

Release Information	Details
Supported RPAS version	13.1.2
Supported OS, Server, and Compilers	Sun Solaris 10: GCC 4.2.3 (32 bit) AIX 5.3 (TL5 or greater): GCC 4.1.1 (32 bit) AIX 6.1 (TL2, SP3): GCC 4.3.3 (32 bit) HP-UX 11.31 (Itanium): ACC 6.20 (64 bit) Oracle Enterprise Linux 5.2, Update 2 (OEL 5.2): GCC 4.1.1 (64 bit) Red Hat Enterprise Linux 5.2
Supported OS, Client	Windows XP and Vista
Required 3rd Party Software	Java Runtime Environment (JRE) 1.5 or higher Note: JRE 1.6 is also certified, but it is not necessary to upgrade to JRE 1.6.

Supported Oracle Retail Products

The following Oracle Retail products are supported:

Requirement	Version
Oracle Retail Analytic Parameter Calculator for Replenishment Optimization (APC RO)	13.1.2
Oracle Retail Merchandising System (RMS)	13.1.2
Oracle Retail Promotion Planning and Optimization (PPO)	13.1.2
Oracle Retail Regular Price Optimization (RPO)	13.0.4

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 *RPAS 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 will set 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 below:

```
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 files:

- 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 *RDF Release Notes*.
- Installation Guide – This folder contains the *RDF Installation Guide*.

Installation Instructions

Perform the following procedure to install RDF.

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
```

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

```
./install.sh
```

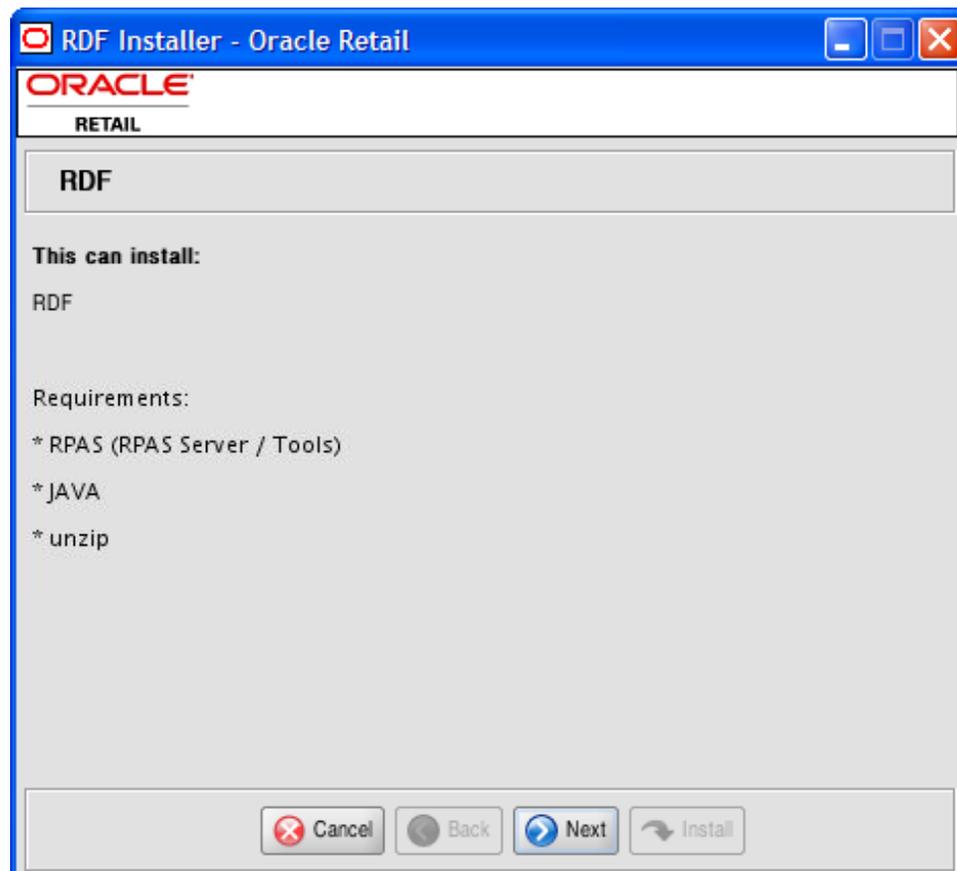
Note: The command must be executed with the preceding period and forward slash (. /).

If this process is being run on an X-Windows emulator (such as Exceed), a graphical user interface 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 will be identical but displayed differently. In the GUI, a checkbox may appear to signal whether you want a component installed. In text mode, a response of yes or no may be required.

Note: In text mode, the default value will appear in square brackets. To use the default value and continue, press the **Enter** key. If you want to use a different value, enter the new value. When prompted to create a directory, respond with y or yes and press the **Enter** key.

6. The RDF Installer screen displays the software required to complete this installation. You should already have installed this software on your system. If you have not installed these items, please perform the necessary installations before continuing. Click **Next** to continue.



RDF Installer Screen

7. The Base Paths for Solution screen appears. 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.

RDF Installer - Oracle Retail

ORACLE
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Base Paths for Solution

Dir to store configurations	<input type="text" value="/u00/rpas/mlke/mock/configurations/rdl"/>	Select Folder
Dir to store created domains	<input type="text" value="/u00/rpas/mlke/mock/domains"/>	Select Folder
Path and filename to retaillogin.ksh sc...	<input type="text" value="/u00/rpas/mlke/mock/retaillogin.ksh"/>	Select File

Cancel Back Next Install

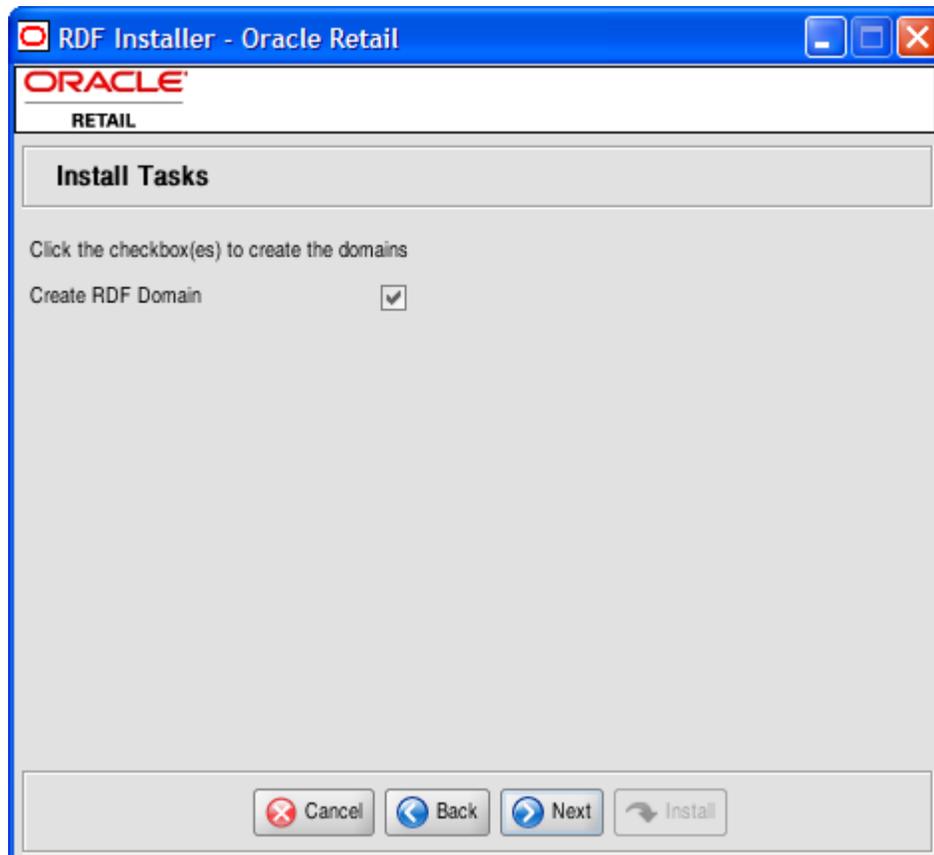
Base Paths for Solution Screen

8. The Domain Installation Path screen appears. Enter the path where the RDF domain will be created, and click **Next**.



Domain Installation Paths Screen

9. The Install Tasks screen appears. Select the **Create RDF Domain** check box to create the RDF domain. Deselect the check box to install all the components required to support an RDF domain but not create the actual RDF domain. Click **Next** to continue.

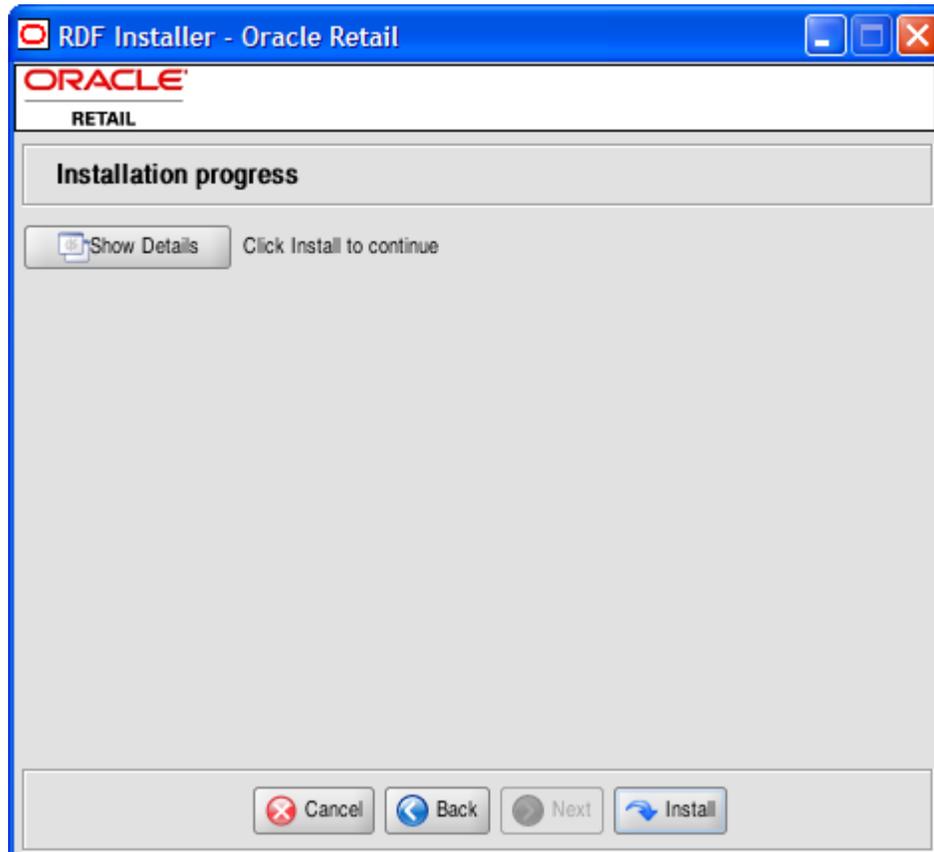


Install Tasks Screen

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

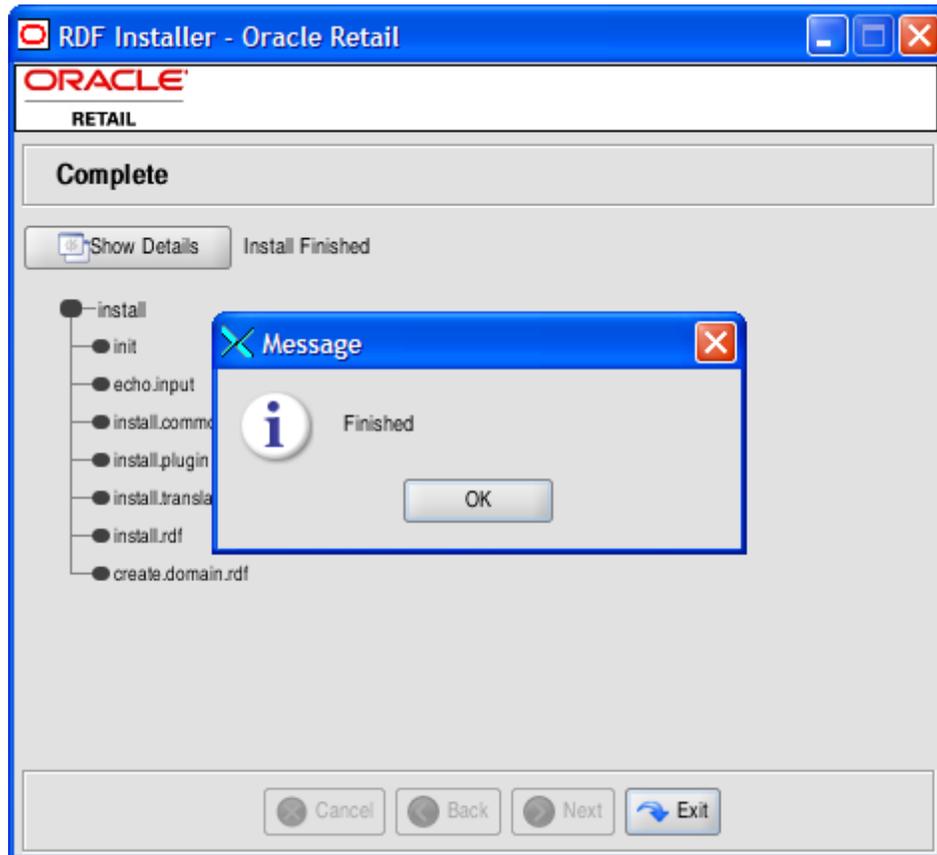
You can view the detailed mode at any time during or after the installation.

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



Installation Progress Screen

11. When the installation process is complete, the Complete screen appears with Message dialog box. Click **OK** to close the dialog box.



Complete Screen

12. To view the installation details, select the **Show Details** button. The screen 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.

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

Appendix: 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 *RPAS Installation Guide* for instructions on the above components.

Manually Installing RDF

Perform the following procedure to manually install RDF.

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`.

Note: See the *RPAS Configuration Tools User Guide* for information on `rpasInstall`.

Example:

```
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.

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

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/lom0`) and type the following command:

```
mace -d . -run -group common_batch
```

b. Repeat this step for each of the remaining local domains (`/RDF/lom1` and `/RDF/lom2`).

Appendix: 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 RPAS 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 (e.g. `-rf AppFunctions -rf RdfFunctions -rf LostSaleFunctions -rf ClusterEngine`)

Perform the subsequent procedure to patch your RDF domain.

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, autogenerate 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 autogeneration 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 *RPAS Installation Guide* 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.

Note: See the *RPAS Configuration Tools User Guide* for information on `rpasInstall`.

Example:

```
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
```

Appendix: 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+# is the default name given by RPAS to local domains. For the RDF configuration, post-install scripts are pre-configured to install and load data to the domains named **ldom0**, **ldom1**, 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 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 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.

Appendix: Run rpaInstall to Install RDF Domain(s)

The `rpaInstall` utility is used to install domains that support RDF. See the *RPAS Configuration Tools User Guide* for more information on using `rpaInstall`.

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

- AppFunctions
- RdfFunctions

Example 1: Installing a Simple domain environment by using a simple domain configuration:

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

Example 2: Installing a Global Domain environment by using a global domain configuration and the `-p` option to specify the partition dimension:

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

Example 3: Installing a Global Domain environment by using a global domain configuration and the `-configdir` option to specify the path to the `globaldomainconfig.xml`:

```
rpaInstall -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.

Note: See the *RPAS Configuration Tools User Guide* for information on using `rpaInstall`.

Appendix: Installation Order

This section provides a guideline as to the order in which the Oracle Retail applications should be installed. If a retailer has chosen to use some, but not all, 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)
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 `jndi_provider.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 `jndi_providers_ribclient.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 (IPCOE)
24. Oracle Retail Advanced Inventory Planning (AIP)
25. Oracle Retail Integration Bus (RIB)
26. Oracle Retail Point-of-Service (ORPOS)
27. Oracle Retail Analytics Applications
28. Oracle Retail Data Warehouse (RDW)
29. Oracle Retail Workspace (ORW)

Appendix: Upgrade Process

This section is 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's 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.

Note: Failure to follow these upgrade instructions could result in data loss.

Upgrade 1 Process

Use this process when:

- upgrading from RDF versions prior to 13.0.4.18 and
 - use standard integration between RMS and RDF
 - have stored data at class or subclass levels

Note: Upgrading from a version prior to 13.0.4.18 to 13.0.4.18 or later need to apply this process. In future, if you are already on 13.0.4.18 or later, this process need not be followed again.

Upgrade 1 Execution Steps

Follow the steps below 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

Use this process when:

- upgrading to 13.0.4.18 or later (from any version) and
 - you want to preserve your existing displayed class and subclass information

Note: For customers with version 13.0.4.18 and above, this process needs to be performed for every hot fix application.

Upgrade 2 Components

The table below shows the environment variables needed for the Upgrade 2 Process.

Environment Variables table

Environment Variables	Description
UPGRADE_HOME	This variable should point to the path of Upgrade scripts where configuration files such as: <ul style="list-style-type: none"> ▪ environment.ksh ▪ updateschemafiles.ksh ▪ updatetoolsconfiguration.ksh are present.
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.

The table below shows the scripts needed for the Upgrade 2 Process.

Script table

Script	Function
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 the steps below to complete the Upgrade 2 process.

1. Export the environment variables listed in the Environment Variables table.
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`