

# **Oracle® Retail Demand Forecasting Cloud Service**

Starter Kit

Release 18.0

**F13775-15**

June 2021

Copyright © 2021, Oracle and/or its affiliates. All rights reserved.

Primary Author: Eric Bloemeke

Contributing Author: Melissa Artley

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

**Licensing Note:** This media pack includes a Restricted Use license for Oracle Retail Predictive Application Server (RPAS) - Enterprise Engine to support Oracle® Retail Demand Forecasting only.

#### **Value-Added Reseller (VAR) Language**

##### **Oracle Retail VAR Applications**

The following restrictions and provisions only apply to the programs referred to in this section and licensed to you. You acknowledge that the programs may contain third party software (VAR applications) licensed to Oracle. Depending upon your product and its version number, the VAR applications may include:

- (i) the **MicroStrategy** Components developed and licensed by MicroStrategy Services Corporation (MicroStrategy) of McLean, Virginia to Oracle and imbedded in the MicroStrategy for Oracle Retail Data Warehouse and MicroStrategy for Oracle Retail Planning & Optimization applications.
- (ii) the **Wavelink** component developed and licensed by Wavelink Corporation (Wavelink) of Kirkland, Washington, to Oracle and imbedded in Oracle Retail Mobile Store Inventory Management.
- (iii) the software component known as **Access Via**™ licensed by Access Via of Seattle, Washington, and imbedded in Oracle Retail Signs and Oracle Retail Labels and Tags.
- (iv) the software component known as **Adobe Flex**™ licensed by Adobe Systems Incorporated of San Jose, California, and imbedded in Oracle Retail Promotion Planning & Optimization application.

You acknowledge and confirm that Oracle grants you use of only the object code of the VAR Applications. Oracle will not deliver source code to the VAR Applications to you. Notwithstanding any other term or condition of the agreement and this ordering document, you shall not cause or permit alteration of any VAR Applications. For purposes of this section, "alteration" refers to all alterations, translations, upgrades, enhancements, customizations or modifications of all or any portion of the VAR Applications including all reconfigurations, reassembly or reverse assembly, re-engineering or reverse engineering and recompilations or reverse compilations of the VAR Applications or any derivatives of the VAR Applications. You acknowledge that it shall be a breach of the agreement to utilize the relationship, and/or confidential information of the VAR Applications for purposes of competitive discovery.

The VAR Applications contain trade secrets of Oracle and Oracle's licensors and Customer shall not attempt, cause, or permit the alteration, decompilation, reverse engineering, disassembly or other reduction of the VAR Applications to a human perceivable form. Oracle reserves the right to replace, with functional equivalent software, any of the VAR Applications in future releases of the applicable program.



---

---

# Contents

<b>Send Us Your Comments .....</b>	<b>xi</b>
<b>Preface .....</b>	<b>xiii</b>
Audience .....	xiii
Documentation Accessibility .....	xiii
Related Documents .....	xiii
Customer Support .....	xiii
Improved Process for Oracle Retail Documentation Corrections .....	xiv
Oracle Retail Documentation on the Oracle Technology Network .....	xiv
Conventions .....	xiv
<b>1 Introduction</b>	
<b>About This Document .....</b>	<b>1-1</b>
<b>Hardware and Software Requirements.....</b>	<b>1-1</b>
Cygwin Installation Requirement Notes .....	1-2
Starter Kit Components.....	1-3
Hardware and Software Requirement Notes.....	1-3
<b>Terms .....</b>	<b>1-3</b>
<b>2 Installing an RDF Starter Kit on a Windows Environment</b>	
<b>RDF Cloud Service Starter Kit Overview.....</b>	<b>2-1</b>
<b>Starter Kit Installation on Windows.....</b>	<b>2-1</b>
Starting the Cygwin Shell and Setting up the Environment .....	2-2
Update fstab.....	2-2
Run Cygwin as an Administrator.....	2-3
Switch to mksh Shell.....	2-3
Update the PATH and Verify the Environment.....	2-3
Download and Install Java JDK .....	2-3
Setup JAVA_HOME .....	2-3
Check the Version of Java .....	2-3
RPAS Package Location .....	2-4
Extracting the RPAS Package .....	2-4
Installing the RPAS Starter Kit.....	2-5
Installing the RPAS Application Standard Libraries Package.....	2-9
Launching RPAS Cloud Edition Configuration Tools .....	2-11

Configuring Required Function Libraries for Starter Kit.....	2-11
Install the RDF CS Starter Kit.....	2-13
<b>Installing the RDF CS Starter Kit Configuration.....</b>	<b>2-17</b>
Install the Sample Configurations .....	2-17
<b>Domain Creation for a non-GA Configuration .....</b>	<b>2-17</b>
SFTP Subdirectories .....	2-17
<b>Building the Domain using the BootStrap Process .....</b>	<b>2-19</b>
<b>Running Batch Mace and Rule Group using the BootStrap Process .....</b>	<b>2-19</b>
Starting LDIPS .....	2-19
Loading Data Files .....	2-21
Running Batch Mace and Rule Group .....	2-21
<b>Using Multiple Versions of RPAS on the Same Windows Machine.....</b>	<b>2-21</b>
rdf_bootstrap.ksh .....	2-21
Usage.....	2-21
rdf_patchdomain.ksh .....	2-22
Usage.....	2-22

## **A Troubleshooting**

---

---

# List of Tables

1-1	Starter Kit Hardware and Software Requirements .....	1-1
1-2	Software Requirements Notes.....	1-3





---

---

## List of Figures

2-1	Sample fstab Image.....	2-2
2-2	RPAS Cloud Edition Installer .....	2-5
2-3	Install Requirements.....	2-6
2-4	Install Mode .....	2-6
2-5	Base RPASCE Path.....	2-7
2-6	New Directory .....	2-7
2-7	Default RPASCE Installation Paths.....	2-7
2-8	Selected RPASCE Installation Paths.....	2-8
2-9	Installation Progress .....	2-8
2-10	Installation Complete .....	2-8
2-11	RPAS Application Standard Libraries .....	2-9
2-12	Choose Components to Install .....	2-10
2-13	Base Paths for Solution.....	2-10
2-14	Installation Finished .....	2-11
2-15	Function Library Manager.....	2-12
2-16	Library Name .....	2-12
2-17	Accepting the Libraries .....	2-13
2-18	Retail Demand Forecasting Cloud Services Installer.....	2-14
2-19	Choose Install Mode.....	2-14
2-20	Select Product to install.....	2-15
2-21	Install Domain .....	2-15
2-22	Enter RDF domain directory and retaillogin.ksh location .....	2-16
2-23	Installation Progress .....	2-16



---

---

## Send Us Your Comments

Oracle Retail Demand Forecasting Cloud Service Starter Kit, Release 18.0.

Oracle welcomes customers' comments and suggestions on the quality and usefulness of this document.

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).

---

---

**Note:** Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the Online Documentation available on the Oracle Technology Network Web site. It contains the most current Documentation Library plus all documents revised or released recently.

---

---

Send your comments to us using the electronic mail address:

[retail-doc\\_us@oracle.com](mailto:retail-doc_us@oracle.com).

Please give your name, address, electronic mail address, and telephone number (optional).

If you need assistance with Oracle software, then please contact your support representative or Oracle Support Services.

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



---

---

# Preface

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

## Audience

This Installation Guide is written for the following audiences:

- Integrators and implementation staff

## Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

### Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit

<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 Predictive Application Server Release 18.0 documentation set:

- *Oracle Retail Demand Forecasting Cloud Service Administration Guide*
- *Oracle Retail Demand Forecasting Cloud Service Implementation Guide*
- *Oracle Retail Demand Forecasting Cloud Service Release Notes*
- *Oracle Retail Demand Forecasting Cloud Service User Guide*
- *Oracle Retail Demand Forecasting Cloud Service Starter Kit*

## 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

## 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
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
<b>monospace</b>	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

---

# Introduction

Welcome to the *Oracle Retail Demand Forecasting Cloud Service Starter Kit*. This chapter outlines the contents of this guide, discusses the updated components with respect to the previous version, lists hardware and software requirements, and defines commonly used notations and terms.

Using this document allows users to:

- Install RPAS Windows Starter kit using a installer for RPAS and related applications using Cygwin.
- Launch ConfigTools and RDF plug-ins for modifying an existing or developing a new RDF configuration.
- Validate the configurations by building a domain using the RDF BootStrap process for cloud deployment.
- Develop batch control files to execute Batch LoadMeasure/Mace calls.

## About This Document

This document contains information for installation of the Starter Kit components.

Read this entire guide before beginning the installation process to ensure you understand the installation process and have all the necessary documentation, hardware, and software available.

## Hardware and Software Requirements

[Table 1–1](#) describe the hardware and software requirements for the Starter Kit.

---

**Note:** Java can be acquired for Microsoft Windows at: [www.java.com](http://www.java.com).

---

**Table 1–1 Starter Kit Hardware and Software Requirements**

Requirement	Details
Supported Operating Systems for RPAS Configuration Tools	Microsoft Windows 10
	<b>Note:</b> Oracle Retail assumes that the retailer has ensured its Operating System has been patched with all applicable Windows updates.
	RPAS Configuration Tools requires 64-bit Java JDK 1.8 or later.

**Table 1–1 (Cont.) Starter Kit Hardware and Software Requirements**

Requirement	Details
Required Software	Java 8 JDK (required to support the RPAS Cloud Edition Configuration Tools.) Microsoft 2015 Runtime Libraries Cygwin
Microsoft 2015 Runtime Libraries	Ensure that these Microsoft 2015 Runtime Libraries are installed to enable RPAS RPAS Cloud Edition Configuration Tools and other RPAS utilities: <ul style="list-style-type: none"> <li>■ vc_redist.x64.exe</li> <li>■ vc_redist.x86.exe</li> </ul> Download these libraries from this link: <a href="https://www.microsoft.com/en-us/download/details.aspx?id=48145">https://www.microsoft.com/en-us/download/details.aspx?id=48145</a> <b>Note:</b> Use Microsoft Visual C++ 2015 or higher for use with RPAS Cloud Edition Configuration Tools and other RPAS utilities.
Cygwin	Use a 32 bit version of Cygwin. 64-bit version of Cygwin is not currently supported. Cygwin provides a Unix-like environment under Windows. You must install Cygwin to emulate UNIX commands (required for running some RPAS Cloud Edition Configuration Tools utilities on Windows).
CygUtils	Download and install CygUtils from: <a href="http://gnuwin32.sourceforge.net/packages/cygutills.htm">http://gnuwin32.sourceforge.net/packages/cygutills.htm</a> Select the option: <b>Complete package, except sources</b> <b>Note:</b> Cygutills is required for utilities like dos2unix, d2u. Install within C:\cygwin
ORACLE Database	RPAS Data Mart domain installation assumes customer has installed Oracle Enterprise Edition Database installed locally or on remote server
ORACLE Client	RPAS Data Mart Installation requires customer to install compatible Oracle Database Client for Microsoft Windows (x64)

## Cygwin Installation Requirement Notes

The following notes pertain to the RPAS hardware and software requirements.

### Installation Requirements for Cygwin

For some RPAS Cloud Edition Configuration Tools utilities on Windows, you must install Cygwin to emulate UNIX commands. You can find more information about downloading this product at: <http://www.cygwin.com>.

1. Cygwin should be installed under this directory:

**C:\cygwin\GnuWin32**

---

**Note:** Only use this folder and do not install under **C:\Program files** or any other folders with spaces to avoid file path conversion issues.

---



2. Select **Use System Proxy Settings** for install to display a list of mirror sites.

---

**WARNING:** In addition to the default packages that are installed, make sure to select **mksh** and **unzip** any packages to be installed.

---

3. Download and install **CygUtils** using the setup for *Complete package, except sources*.

Ensure that it is installed under this directory: **C:\cygwin\GnuWin32**

<http://gnuwin32.sourceforge.net/packages/cygutils.htm>

---

**Note:** CygUtils is required for utilities like dos2unix, d2u.

---

## Starter Kit Components

For information on installing the Starter Kit, refer to [Chapter 2, "Installing an RDF Starter Kit on a Windows Environment."](#)

## Hardware and Software Requirement Notes

The following notes pertain to the RPAS hardware and software requirements:

- An application for unzipping (.zip) components must be installed and used for extracting the RPAS Cloud Edition Configuration Tools.
- You must install Cygwin to emulate UNIX commands (required for running some RPAS Cloud Edition Configuration Tools utilities on Windows). You can find more information about downloading this product at: <http://www.cygwin.com>.

[Table 1–2](#) indicates which software components are needed for each task.

**Table 1–2 Software Requirements Notes**

Item	Details
Task	Use the Cloud Edition Configuration Tools to create or modify solutions.
Typical User	Solution/ Product Administrator
Platforms	Windows 10
RPAS Server	Yes
RPAS Clients	No
RPAS Cloud Edition Configuration Tools	Yes
Java	Yes

## Terms

The following table lists terms that are used in this guide:

Term	Definition
RPAS	The Oracle Retail Predictive Application Server provides the foundation for Oracle Retail solutions such as Oracle Retail Demand Forecasting (RDF), Merchandise Financial Planning (MFP), and Advanced Inventory Planning (AIP). RPAS does not include any business logic, but it enables the solutions to store, manipulate and retrieve data. It provides the solutions with a standard interface based on wizards, templates, workbooks, and batch processes.
RPAS solution	The software that uses RPAS. RPAS solutions are added on to RPAS domains as separate modules. All the business logic is encapsulated in the solution. An RPAS domain can support multiple solutions.
RPAS domain	The collection of server-side directories and files containing data and procedures that comprise the RPAS solution. For additional information, refer to either the Classic Client or Fusion Client version of the <i>Oracle Retail Predictive Application Server Administration Guide</i> .
RPAS Configuration Tools	The tools used to configure an RPAS solution. For more information, refer to the <i>Oracle Retail Predictive Application Server Configuration Tools User Guide</i> .

---

## Installing an RDF Starter Kit on a Windows Environment

This chapter describes how to install the RDF Cloud Service Starter Kit on a Windows environment.

---

**Note:** The Starter Kit does not currently support upgrades on an existing installation.

---

### RDF Cloud Service Starter Kit Overview

RPAS 18.0 Cloud Service is comprised of many components. In addition, there are solutions that have been developed using the RPAS 18.0 Cloud Edition (RPAS CE) foundation. Examples of these solutions include Oracle Retail Merchandise Financial Planning (MFP) and Oracle Retail Demand Forecasting (RDF). Each application supported by the RPAS 18.0 Cloud Edition platform has a dedicated Starter Kit. Three different zip files were need to complete the installation: edge-server package, RPAS Application Shared Libraries (rasl) package, and RDFCS package.

The edge-server package contains the following:

- RPAS RPAS Cloud Edition Configuration Tools
- RPAS Server libraries, binaries and Scripts
- LDIP libraries and Scripts

The rasl package contains the all Application specific extension libraries of RPAS server. The RDFCS package contains the following:

- RDF GA configuration
- Application specific extensions of the RPAS Cloud Edition Configuration Tools
- Documentation
- RDF specific batch scripts
- Hierarchy, data and translation files

### Starter Kit Installation on Windows

For the purposes of this section, a slash “/” is used to delineate directories and files in paths. Users in a Windows Command Prompt environment need to either use a backslash “\” as the delineation character or use double quotes around paths. This section provides details for:

- Starting the Cygwin Shell and Setting up the Environment
- RPAS Package Location
- Extracting the RPAS Package
- Installing the RPAS Starter Kit
- Installing the RPAS Application Standard Libraries Package
- Launching RPAS Cloud Edition Configuration Tools
- Configuring Required Function Libraries for Starter Kit
- Install the RDF CS Starter Kit

## Starting the Cygwin Shell and Setting up the Environment

Perform the following procedures to start the Cygwin shell and set up the environment.

- Update fstab
- Run Cygwin as an Administrator
- Switch to mksh Shell
- Update the PATH and Verify the Environment
- Download and Install Java JDK
- Setup JAVA\_HOME
- Check the Version of Java

### Update fstab

---

---

**WARNING:** Before starting work with the Cygwin shell, you need to update the fstab file to prevent permission issues observed when files are modified on Windows Explorer versus Cygwin.

---

---

Open the Cygwin shell as an administrator and modify the fstab file and close the shell.

```
>cd /etc  
>cat fstab
```

---

---

**Note:** Add the text, **noacl,exec** to the fstab file.

---

---

*Figure 2–1 Sample fstab Image*



```
## /etc/fstab  
##  
## This file is read once by the first process in a Cygwin process tree.  
## To pick up changes, restart all Cygwin processes. For a description  
## see https://cygwin.com/cygwin-ug-net/using.html#mount-table  
## This is default anyway:  
none /cygdrive cygdrive binary,noacl,posix=0,user 0 0
```

**Example 2-1 Sample fstab File**

```
# /etc/fstab
#
#   This file is read once by the first process in a Cygwin process tree.
#   To pick up changes, restart all Cygwin processes. For a description
#   see https://cygwin.com/cygwin-ug-net/using.html#mount-table

# This is default anyway:
none /cygdrive cygdrive binary,noacl,posix=0,user,exec 0 0
```

**Run Cygwin as an Administrator**

To run Cygwin as an Administrator, either:

- Right-click the Cygwin shortcut and select **Run as Administrator**
- Change shortcut and select **Run the Program as Administrator**

**Switch to mksh Shell**

In Cygwin shell switch to the ksh shell by typing the command:

```
>mksh
```

---

**Note:** This shell selection can also be updated in the **.profile** setting so that the mksh shell is the default when you open the Cygwin shell.

---

**Update the PATH and Verify the Environment**

In the shell, add **cygutils\bin** to PATH and verify the environment.

```
export CYGUTIL_PATH=/cygdrive/c/cygwin/GnuWin32/
export PATH=$CYGUTIL_PATH/bin:$PATH
```

---

**Note:** This shell selection can also be updated in the **.profile** setting so that the mksh shell is the default when you open the Cygwin shell.

---

**Download and Install Java JDK**

This version of ConfigTools support 64 bit Java JDK version. Java needs to be installed under the directory which does not have spaces in it.

```
C:\Java
```

**Setup JAVA\_HOME**

After installing JDK inside Cygwin, setup the JAVA\_HOME.

```
export JAVA_HOME=/cygdrive/c/Java/JDK64
export PATH=$JAVA_HOME/bin:$PATH
```

**Check the Version of Java**

```
> java -version
```

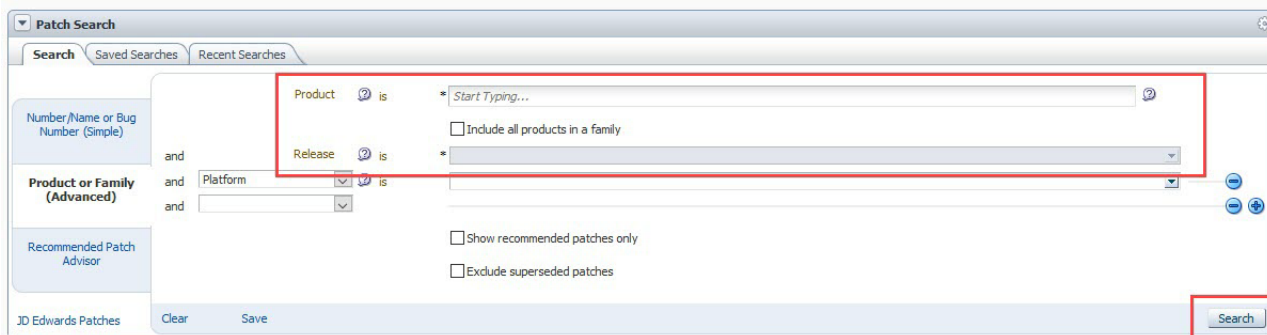
## RPAS Package Location

The RPAS package can be found on My Oracle Support.

1. Access My Oracle Support using this URL: <https://support.oracle.com>
2. From the My Oracle Support Portal, click **Download a Patch** within the **How Do I?...?** box. This link opens the **Patches & Updates** tab on the My Oracle Support page.



3. From the **Patches & Updates** tab, select the **Product or Family (Advanced Search)** that is located in the **Patch Search** panel.
4. In the **Product** search box, enter: *Oracle Retail Demand Forecasting Cloud Service*.
5. Click the arrow on the **Release** list to view all of the available releases for your product. Select the release that you wish to access and then click **Search**.



6. From the Patch Advanced Search Results, click the patch link located in the Patch Name column.
7. Verify that this your desired patch and then click **Download**.

## Extracting the RPAS Package

Unzip the **Edge\_Server-18.0.011.00.001\_NT.zip** to a newly created directory on the Windows machine.

For example:

`/cygdrive/d/oracle/Retail/installers`

The **Edge\_Server-18.0.011.00.001\_NT.zip** contains all the RPAS components.

The **ras1-18\_0\_011\_00\_001\_NT.zip** contains all the packages required for Apps.

```
>cd /cygdrive/d/oracle/Retail/installers
>unzip Edge_Server-18.0.011.00.001_NT.zip
>unzip ras1-18_0_011_00_001_NT.zip
>cd NT
>unzip ras1.zip
```

After unzipping, you will have an NT folder with all of the RPAS Starter Kit components.

## Installing the RPAS Starter Kit

---

**Note:** This installer can also be run in command line. Just skip setting of the DISPLAY property and go through the steps similar to GUI mode.

---

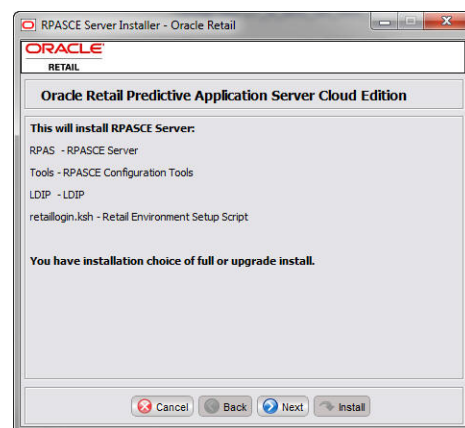
Perform the following steps to install the RPAS Starter Kit.

1. Run the installer in GUI mode by setting the DISPLAY variable to the IP address of the machine with :0 appended to it. After setting the DISPLAY property, run the install.sh under the NT/rpas folder.

```
>export DISPLAY=127.0.0.1:0
>cd /cygdrive/d/oracle/Retail/installers/NT
>./install.sh
```

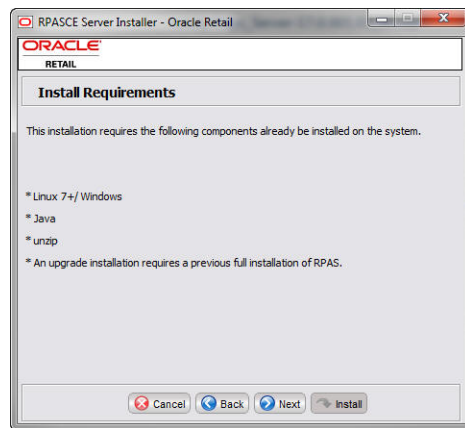
The RPAS Cloud Edition Installer opens.

**Figure 2–2 RPAS Cloud Edition Installer**



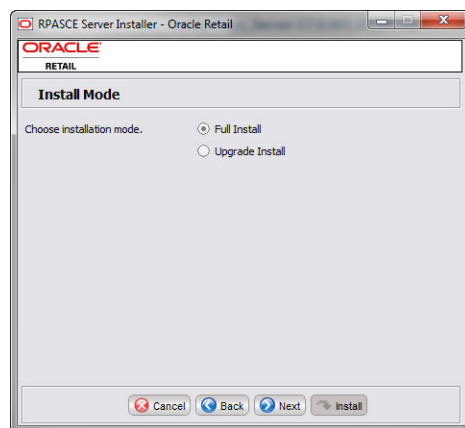
2. Click **Next** to proceed to the [Install Requirements](#) window.

**Figure 2–3 Install Requirements**



3. Click **Next** to proceed to the [Install Mode](#) window.

**Figure 2–4 Install Mode**



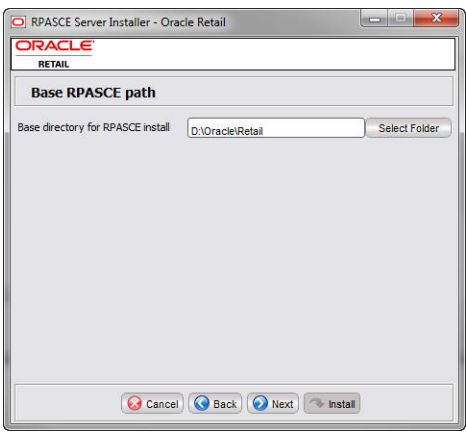
For a fresh install, select *Full Install*.

Click **Next** to proceed to the [Base RPASCE Path](#) window.

4. Click *Select Folder* to find the folder location of where you want to install the packages. Ensure that the path has no spaces in its name.

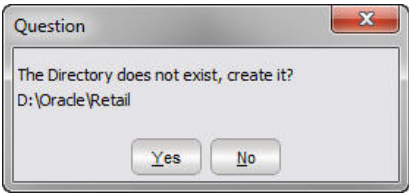


Figure 2–5 Base RPASCE Path



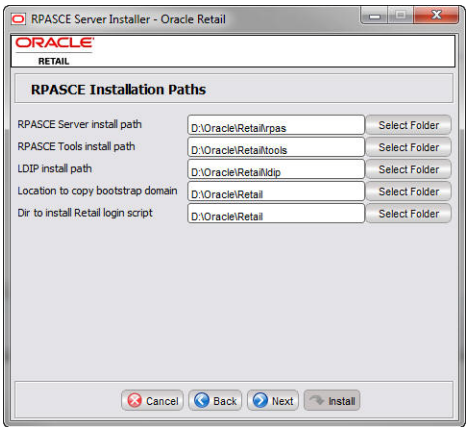
If directory does not exist click **Yes** to create it.

Figure 2–6 New Directory

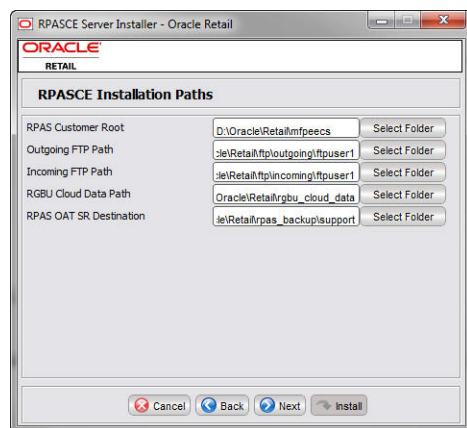


- 5. Click **Next** and then select all of the default locations relative to root install location.

Figure 2–7 Default RPASCE Installation Paths

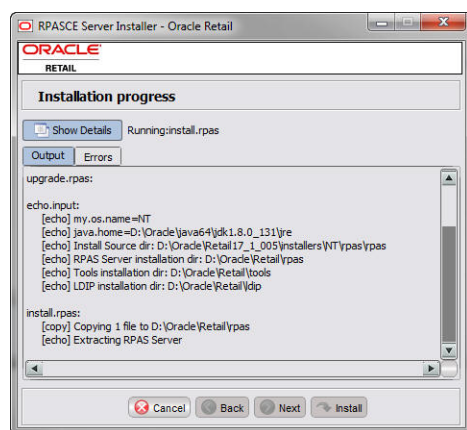


**Figure 2–8 Selected RPASCE Installation Paths**



6. Click **Next** to begin the installation.

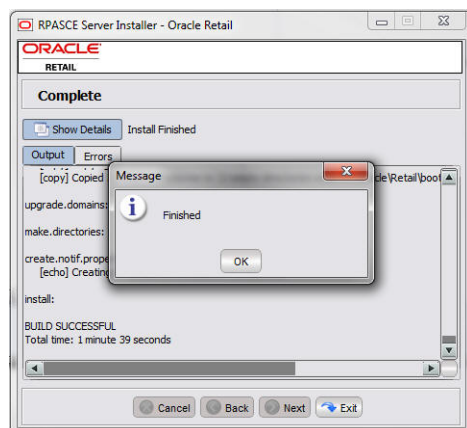
**Figure 2–9 Installation Progress**



Installation begins and you can view the progress under the Output tab.

7. Once the installation is complete a message box opens. Click **OK**.

**Figure 2–10 Installation Complete**



8. Under the installed location you should see these folders:

```
>ls /cygdrive/d/Oracle/Retail
bootstrap ldip retaillogin.ksh rpas tools
ftp rdfcs rgbu_cloud_data rpas_backup
```

9. Once the installation has finished, source the **retaillogin.ksh** again to set the new environment variables.:

```
>cd /cygdrive/d/Oracle/Retail
>. ./retaillogin.ksh
```

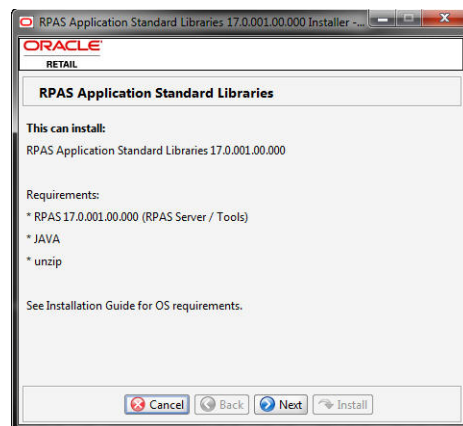
## Installing the RPAS Application Standard Libraries Package

Perform the following steps to install the RPAS Application Standard Libraries Package (rasl).

1. Before proceeding to install the Apps package: **rasl-18\_0\_011\_00\_001\_NT.zip**. You need to source the **retaillogin.ksh** and run **install.sh**.

```
>cd /cygdrive/d/Oracle/Retail
>. ./retaillogin.ksh
>cd /cygdrive/d/oracle/Retail/installers/NT/rasl
>./install.sh
```

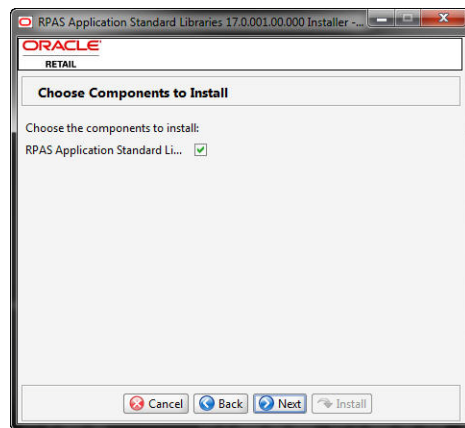
**Figure 2–11 RPAS Application Standard Libraries**



Click **Next**.

2. Select the RPAS Application Standard Libraries check box and click **Next**.

**Figure 2–12 Choose Components to Install**

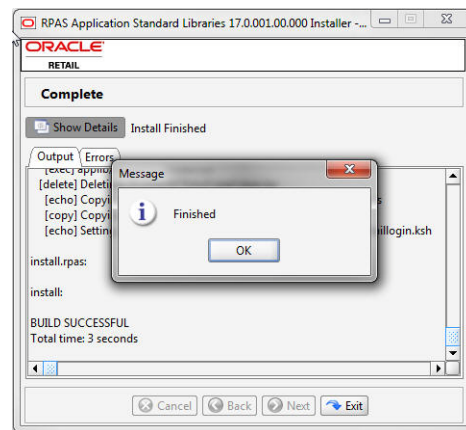


3. Click **Select File** to navigate to the path location of the **retaillogin.ksh** and then click **Next**.

**Figure 2–13 Base Paths for Solution**



4. Click **Install** to start the installation. Once the Installation is complete, you receive a *Finished* message. Click **OK** to close the message.

**Figure 2–14 Installation Finished**

5. Once the installation has finished, source the **retaillogin.ksh** again to enable the new Apps specific environment variables.

```
>cd /cygdrive/d/Oracle/Retail
>. ./retaillogin.ksh
```

## Launching RPAS Cloud Edition Configuration Tools

Perform the following steps to launch RPAS Cloud Edition Configuration Tools from Cygwin.

1. Run Cygwin as an Administrator.
2. Switch to the mksh shell.

In the Cygwin shell, switch to the **.ksh** shell by typing the command:

```
>mksh
```

3. In the shell, add **cygutils\bin** to the PATH and verify the environment.

```
export CYGUTIL_PATH=/cygdrive/c/cygwin/GnuWin32/
export PATH=$CYGUTIL_PATH/bin:$PATH
```

---

**Note:** This shell selection can also be updated in the **.profile** setting so that the mksh shell is the default when you open the Cygwin shell.

---

4. Change directories to the installed RPAS directory source **retaillogin.ksh**

```
>cd /cygdrive/d/Oracle/Retail
>. ./retaillogin.ksh
>configtools
```

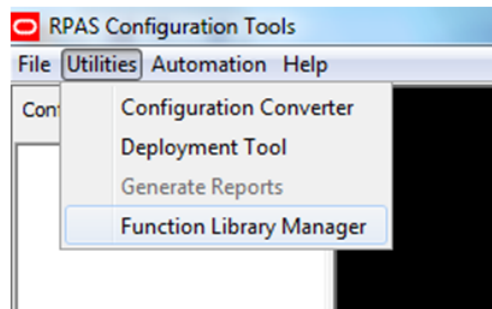
## Configuring Required Function Libraries for Starter Kit

The RPAS Cloud Edition Configuration Tools provide validation of the content of a configuration. In order to provide validation for the rule content of a configuration, the set of function libraries used in the rules of a configuration must be set within the RPAS Cloud Edition Configuration Tools.

Follow these steps to register the function libraries used by the Demand Forecasting solution in the RPAS Cloud Edition Configuration Tools:

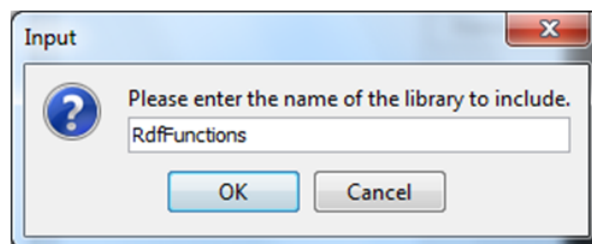
1. Launch the RPAS Cloud Edition Configuration Tools.
2. From the Utilities Menu, select **Function Library Manager**.

**Figure 2–15 Function Library Manager**



3. To add a new entry, click **Add**.
4. Enter the name of the function library to be registered.

**Figure 2–16 Library Name**

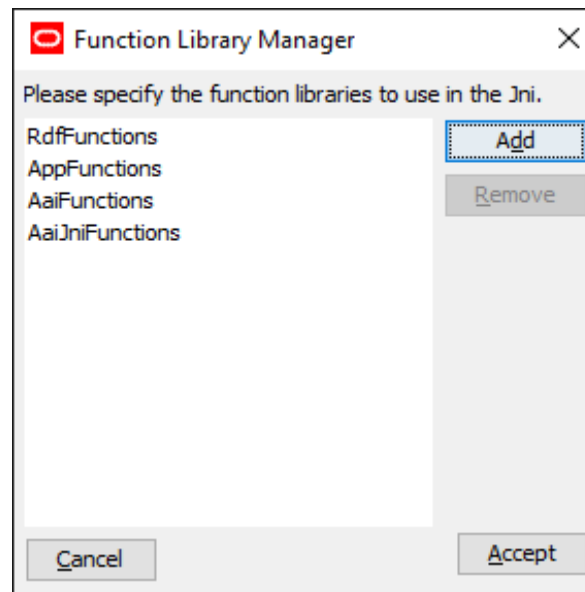


5. Click **OK** to add the entry.

The set of libraries required by the RDF solution are:

- RdfFunctions
- AppFunctions
- AaiFunctions
- AaiJniFunctions

6. Once all libraries have been entered, click **Accept** to close the window.

**Figure 2–17 Accepting the Libraries**

7. Close and re-open the RPAS Cloud Edition Configuration Tools for the changes to take effect.

## Install the RDF CS Starter Kit

Perform the following steps to install the RDF CS Starter Kit:

1. Unzip the package named **rdfcs-18\_0\_011\_00\_001.zip** for RDF Cloud Services. Once unzipped, you can view all of the RDFCS related components.

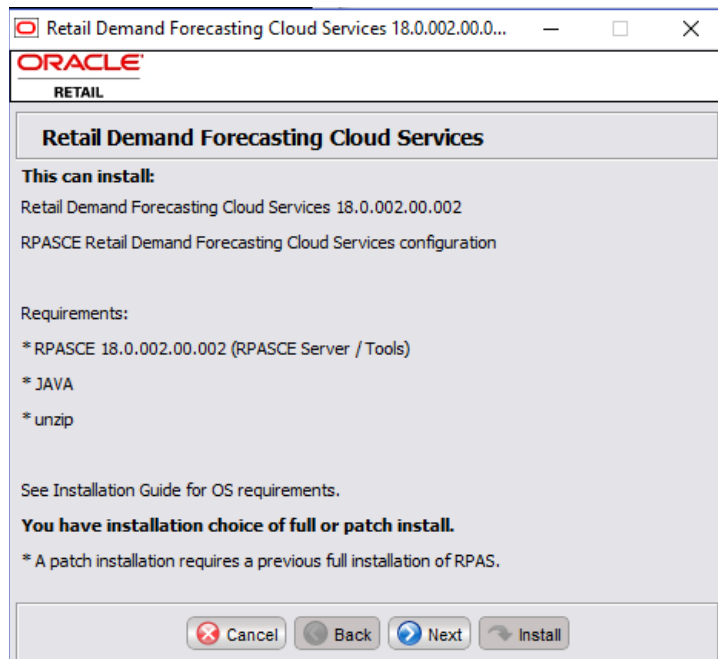
```
>cd/cygdrive/d/Oracle/Installer/
>unzip rdfcs-18_0_011_00_001.zip
>cd CDROM
>unzip rdfcs.zip
>cd rdfcs
batch_control bin config input json plugins translations
```

2. Run the installer in GUI mode by setting the DISPLAY variable to the IP address of the machine with :0 appended to it. After setting the DISPLAY property, run the **install.sh** under the **NT/rpas** folder.

```
>export DISPLAY=127.0.0.1:0
>cd/cygdrive/d/oracle/Retail/installers/NT/rdm
>./install.sh
```

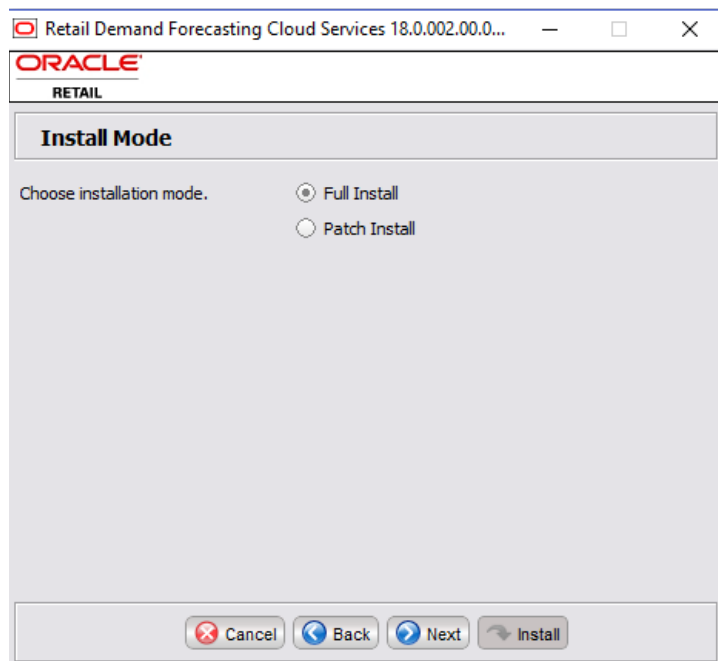
The RDF CS Installer opens.

**Figure 2–18 Retail Demand Forecasting Cloud Services Installer**



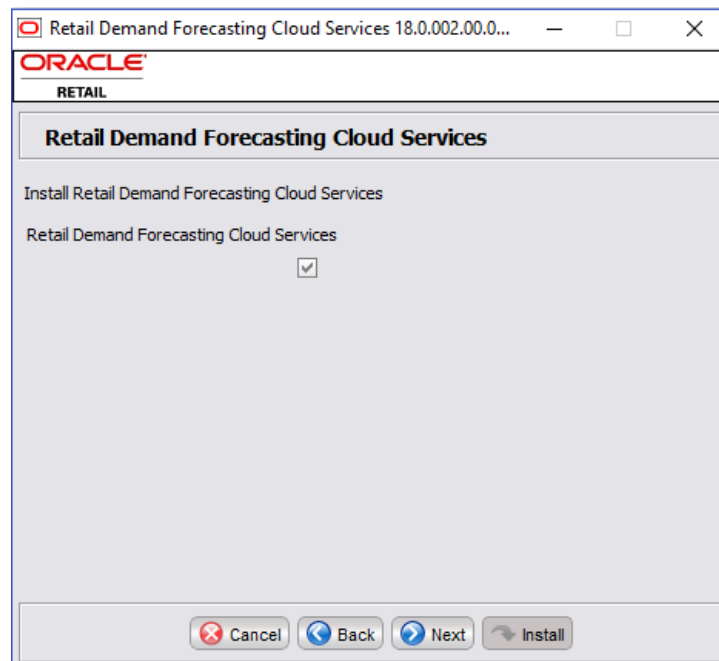
3. The Installer shows the installation mode. Select **Full Install** and click **Next**.

**Figure 2–19 Choose Install Mode**

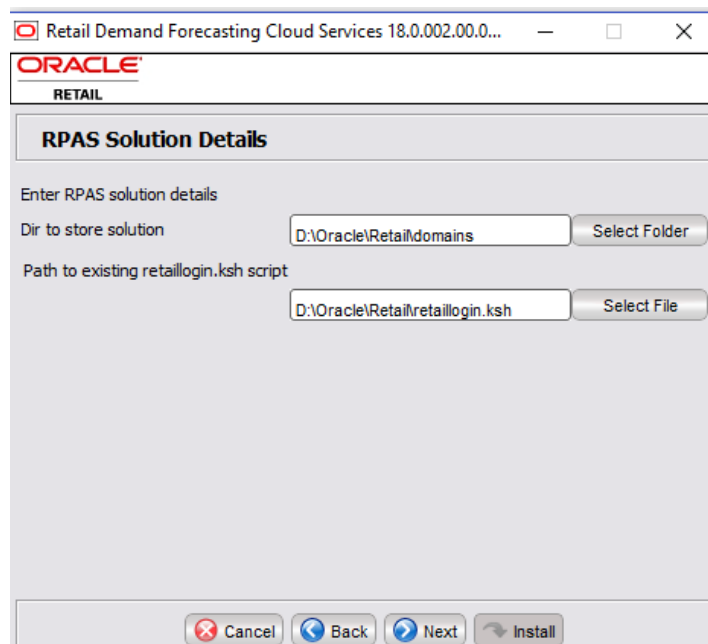


4. Select **Retail Demand Forecasting Cloud Services** and click **Next**.

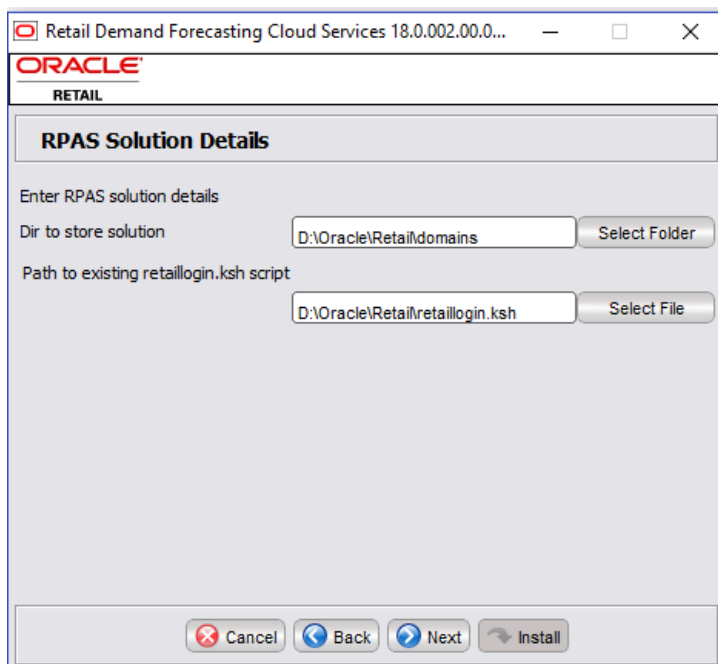


**Figure 2–20 Select Product to install**

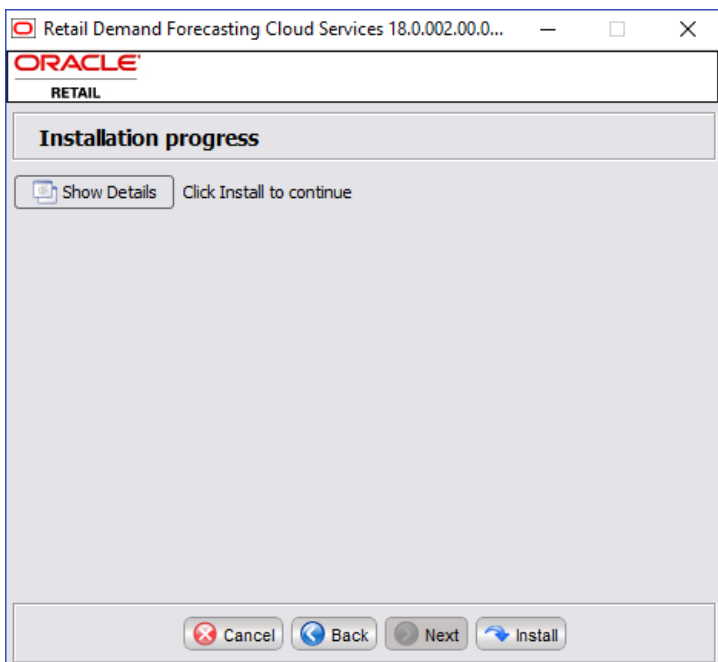
5. Select Retail Demand Forecasting Cloud Services Domain and specify if that you want to delete existing domain. Click **Next** to continue the installation.

**Figure 2–21 Install Domain**

6. Enter the domain path and the **retaillogin.ksh** path. Click **Next**.

**Figure 2–22 Enter RDF domain directory and retaillogin.ksh location**

7. Click **Install**.

**Figure 2–23 Installation Progress**

Once the Installation is complete, you will receive a *Finished* message. Click **OK** to close the message. Once the installation has finished, source the retaillogin.ksh again to enable the new RDF specific environment variables.

## Installing the RDF CS Starter Kit Configuration

This section details how to [Install the Sample Configurations](#).

### Install the Sample Configurations

Perform the following steps to install the sample configurations:

1. Unzip the package named **rdfcs-18\_0\_011\_00\_001.zip** for RDF Cloud Services. Once unzipped you can view all of the RDF CS related components.

```
>cd /cygdrive/d/Oracle/Installer/

>unzip rdfcs-18_0_011_00_001.zip
>cd CDROM
>unzip rdfcs.zip
>cd rdfcs
batch_control bin config input json plugins translations
```

2. Batch control files are present in batch\_control directory. JSON files for dashboard is in the json directory.

Configuration is present in the config directory with the name RDF

Input directory contains all GA data files and hierarchy files.

Plug-ins directory contains RDF extension of Config Tools

```
>./install.sh
```

3. The RDF CS sample configurations are installed.

## Domain Creation for a non-GA Configuration

This section describes domain creation using the Starter Kit. This process helps in validating configuration files for SFTP upload to the cloud servers to be built and deployed for the Application.

To mimic the SFTP location under the installed directory, upload the configuration to a location: **\$INCOMING\_FTP\_PATH** in the installed directory of RPAS using Cygwin.

Placeholders are under the following directory:

- ls \$INCOMING\_FTP\_PATH
- batch\_control input COMMAND

### SFTP Subdirectories

---

**Note:** For additional information, refer to the *Oracle Retail Demand Forecasting Cloud Service Implementation Guide*

---

For the purposes of building the domain, three subdirectories in the SFTP site are used:

#### config

For uploading the domain configuration into the cloud environment, create an archive (either .zip or .tar.gz) containing the config directory and all of its contents. This

archive file must be named as **rdf\_config.zip**, **RDF\_config.zip**, **rdf\_config.tar.gz** or **RDF\_config.tar.gz**. This archive file must be placed in the config subdirectory on the SFTP server. It may be updated as often as necessary in support of domain build or patch activities.

### **batch\_control**

The set of batch process control files, as detailed in the previous section, must be uploaded to the batch\_control subdirectory within the incoming SFTP location as an archive file, **batch\_control\_cust.tar.gz**. These files are placed into the domain environment when the domain is built and can be updated later by running the domain patch task.

### **input**

The initial domain creation process requires at least the **.dat** files for all hierarchies specified in the domain configuration. These hierarchy files may be placed into the input directory of the SFTP server as an archive called **rdf\_hiers.tar.gz** or **RDF\_hiers.tar.gz**.

Also include users.xml for all the users to be registered in the domain. If this file does not exist all users in the bootstrap domain will be imported into application domain.

You can register a default user to the boot strap domain using the following commands:

```
usermgr -d $RPAS_BOOTSTRAP_DOMAIN -addGroup USER_DEFINED_GROUP -label  
USER_DEFINED_GROUP_LABEL
```

```
usermgr -d $RPAS_BOOTSTRAP_DOMAIN -add USER_DEFINED_USER -label USER_  
DEFINED_LABEL -group USER_DEFINED_GROUP -admin
```

You can also create a **users.xml** file in the following format:

#### **Example 2-2 Sample users.xml**

```
<?xml version="1.0" encoding="UTF-8"?>  
<user_list version="2.0">  
  <groups>  
    <group name="user_defined_group">  
      <label>USER_DEFINED_GROUP_LABEL</label>  
    </group>  
  </groups>  
  <users>  
    <user name="USER_DEFINED_ADMIN_USER">  
      <label>USER_DEFINED_ADMIN_LABEL</label>  
      <dflt_grp>user_defined_group</dflt_grp>  
      <other_grps></other_grps>  
      <admin>T</admin>  
    </user>  
    <user name="USER_DEFINED_NORMAL_USER">  
      <label>USER_DEFINED_NORMAL_LABEL</label>  
      <dflt_grp>user_defined_group</dflt_grp>  
      <other_grps></other_grps>  
    </user>  
  </users>  
</user_list>
```

Remember not to include any directory structure in the archive file, but only simple file names. In addition to the domain build and patch processes, batch framework

tasks including measload, hierload, unpack, and waittrigger will also check for incoming files in this same input directory.

---

**Note:** Remember to send a COMPLETE file into the top-level COMMAND directory once all files for the domain build process have been uploaded.

A sample RDF configuration should include the previously mentioned files for upload.

---

### jse

The custom java special expression libraries, must be uploaded to the simulated `$INCOMING_FTP_PATH/jse` subdirectory. These files are placed into the domain environment when the domain is built.

## Building the Domain using the BootStrap Process

Once all of the configuration files are uploaded into: `$INCOMING_FTP_PATH`. You can now build it using the `rdf_bootstrap.ksh` script.

```
>cd $RPAS_HOME/bin
```

```
rdf_bootstrap.ksh -d $RPAS_BOOTSTRAP_DOMAIN -u
```

If built successfully, the domain is placed under this directory:

```
$RPAS_CUST_ROOT/domains/ CONFIGURATION_NAME
```

If the domain failed during the build, then the log files are placed inside:

```
$OUTGOING_FTP_PATH
```

---

**Note:** The `-o` option deletes any existing domain. The CONFIGURATION\_NAME is RDF.

---

## Running Batch Mace and Rule Group using the BootStrap Process

Perform the following steps to run the Batch Mace and Rule Group using the BootStrap process

### Starting LDIPS

In order to test some of the rule groups and weekly batch we need to setup the middle tier.

The configuration file it uses is created under `$LDIP_HOME/jtdconfig` folder. The file name is called `TaskDaemonDeployment.xml`. Verify the file once for the name of the domain and domain path. This file is created by the [Building the Domain using the BootStrap Process](#).

```
> vi TaskDaemonDeployment.xml
```

```
<?xml version="1.0" encoding="UTF-8" ?>
```

```
<solutions>
```

```
  <!-- solutions are listed in order connections will be attempted -->
```

```
<!-- paths listed here should be to master domains -->
```

```
<solution>
  <name> DOMAIN_CONFIGURATION_NAME </name>
  <description>This is a solution called DOMAIN_CONFIGURATION_NAME
</description>
  <ldip-primary-controller>*</ldip-primary-controller>
  <ldip-backup-controller>*</ldip-backup-controller>
  <ldip-pool-size>50</ldip-pool-size>
  <ldip-timeout>5000000000</ldip-timeout>
  <domain-path>
WINDOWS_DOMAIN_PATH\DOMAIN_CONFIGURATION_NAME
</domain-path>
  <queue-size>10</queue-size>
  <log-level>error</log-level>
</solution>
</solutions>
```

Name of the domain<name></name> will be the name of the configuration built using the bootstrap process. Domain <domain-path></domain-path> path will be location of the domain in windows path.

Now start the ldips.

```
> cd $LDIP_HOME
> ldip_basic
```

---

---

**Note:** This step starts the middle tier frame work for interacting with the domain.

---

---

Once started, LDIP uses the sourced in retaillogin.ksh to execute batch commands on the domain. This means you cannot start two different shells and start ldips from different versions as they may interfere with each other. Make sure to shutdown or close the ldips in such cases.

Also you can stop the ldips using the command:

```
> ldip_end
```

Log files for the ldips are located under \$LDIP\_HOME/logs directory. You can also check the log \$LDIP\_HOME/nohup.out in case you have trouble starting them.

## Loading Data Files

Use the following commands to load uploaded data files.

```
> ./eebatch_loadmeas.ksh -d $RPAS_CUST_ROOT/domains/DOMAIN_CONFIGURATON_
NAME
-p <batch rule set name from batch control file batch_loadmeas_list.txt>
```

## Running Batch Mace and Rule Group

You can now start batch commands to investigate the rules and batch control files.

```
>./eebatch_calc.ksh -d $RPAS_CUST_ROOT/domains/DOMAIN_CONFIGURATON_NAME
-p <batch rule set name from batch control file batch_calc_list.txt>

> rpsce_run mace -d $RPAS_CUST_ROOT/domains/DOMAIN_CONFIGURATON_NAME -run
-group <rule group name>
```

## Using Multiple Versions of RPAS on the Same Windows Machine

If you have multiple versions of the Starter Kit installed on your PC, it is important to note that the environment variables will reference RPAS 18.0 after the installation process is complete.

To switch to a different version of RPAS that is installed on your machine, you will need to restart Cygwin and point to diff installed location of RPAS and related App.

### rdf\_bootstrap.ksh

This script is used to build a domain based on a RPAS bootstrap domain. The following steps were performed in the scripts.

1. Extract the following files from `$INCOMING_FTP_PATH` to `$RPAS_CUST_ROOT`:

```
$INCOMING_FTP_PATH/config/${PARAM_CONFIG_NAME}_config.tar.gz -> $RPAS_CUST_ROOT/config
```

```
$INCOMING_FTP_PATH/batch_control/batch_control_cust.tar.gz-> $RPAS_CUST_ROOT/batch_control_cust
```

```
$INCOMING_FTP_PATH/input/ rdf_hiers.tar.gz-> $RPAS_CUST_ROOT/input
```

```
$INCOMING_FTP_PATH/jason.tar.gz-> $RPAS_CUST_ROOT/jason
```

```
$INCOMING_FTP_PATH/input/*.csv.dat-> $RPAS_CUST_ROOT/input
```

2. Automatically regenerate RDF configuration at `$RPAS_CUST_ROOT/config`
3. Validate the generated Configuration.
4. Building the RDF domain
5. Set `domainProperties` and users
6. Copy the batch control files. Scripts, and `admintask` `xmls` into the domain
7. Update JETUI settings

### Usage

```
-e : //debug version domain
-d $PARAM_BOOTSTRAP_DOM.// bootstrap domain path
-g //using GA data
-o // overwrite existing domain
-p partitiondim
-u //Copy users from bootstrap to live domain
;;
-b // Running post-processing batch tasks: post_build
```

```
-j $PARAM_JSE_JARS // comma separated list of java expression jar files
```

### **rdf\_patchdomain.ksh**

This script is used to patch an existing RDF domain. The following steps were performed in the scripts.

1. Extract the following files from `$INCOMING_FTP_PATH` to `$RPAS_CUST_ROOT`:  

```
$INCOMING_FTP_PATH/config/${PARAM_CONFIG_NAME}_config.tar.gz -> $RPAS_CUST_ROOT/config
```

```
$INCOMING_FTP_PATH/batch_control/batch_control_cust.tar.gz-> $RPAS_CUST_ROOT/batch_control_cust
```

```
$INCOMING_FTP_PATH/input/ rdf_hiers.tar.gz-> $RPAS_CUST_ROOT/input
```

```
$INCOMING_FTP_PATH/jason.tar.gz-> $RPAS_CUST_ROOT/jason
```

```
$INCOMING_FTP_PATH/input/*.csv.dat-> $RPAS_CUST_ROOT/input
```
2. Automatically regenerate RDF configuration at `$RPAS_CUST_ROOT/config`
3. Validate the generated Configuration
4. Patch RDF domain
5. Copy the batch control files. Scripts, and `admintask.xmls` into the domain
6. Update JETUI settings

### **Usage**

```
-b : //debug version domain
```

```
-d $PARAM_BOOTSTRAP_DOM .// domain path to patch
```

```
-j $PARAM_JSE_JARS // comma separated list of java expression jar files
```



---

## Troubleshooting

This appendix provides details that you can use to identify and resolve problems.

### **Accessing Multiple RPASCE Applications**

A user may need to access multiple RPASCE applications, such as MFP, A&IP, and RDF, at the same time. In this case it is necessary to launch each application URL in a separate browser window, in the following way.

Launch one application in a browser window, then launch every other application in an incognito window (Chrome) or in a private window (Firefox). Launching multiple applications using regular browser windows of the same type (for example, Chrome/Firefox) can lead to unexpected UI errors, such as logging out of one application causing a logout across all applications.

