Oracle® Retail Assortment Planning Cloud Service Starter Kit



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Oracle Retail Assortment Planning Cloud Service Starter Kit, Release 23.1.201.0

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Contents

Preface

v
v
v
v
vi
vi
vi

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<u>1</u> Introduction

Hardware and Software Requirements1-1Cygwin Installation Requirement Notes1-2Starter Kit Components1-2Hardware and Software Requirement Notes1-3		
Cygwin Installation Requirement Notes1-2Starter Kit Components1-2Hardware and Software Requirement Notes1-3	About This Document	1-1
Starter Kit Components1-2Hardware and Software Requirement Notes1-3	Hardware and Software Requirements	1-1
Hardware and Software Requirement Notes1-3	Cygwin Installation Requirement Notes	1-2
	Starter Kit Components	1-2
Terms 1-3	Hardware and Software Requirement Notes	1-3
	Terms	1-3

2 Installing on a Windows Environment

AP Cloud Service Starter Kit Overview	2-1
Starter Kit Installation on Windows	2-1
Starting the Cygwin Shell and Setting up the Environment	2-1
Download and Install Java JDK	2-1
Setup JAVA_HOME	2-2
RPAS Package Location	2-2
Installing the Starter Kit	2-2
Creating the Required Environment Variables	2-3
Steps to Access the Environment Variables Window	2-3
Create the RPAS_HOME Environment Variable	2-5



Create the RIDE_HOME Environment Variable	2-6
Update or Create the JAVA_HOME Environment Variable	2-6
Update the PATH Variable	2-7
Update the RPAS_JAVA_CLASSPATH Variable	2-7
The RIDE_OPTIONS Variable	2-8
Launching RPAS Cloud Edition Configuration Tools	2-8
Application Building	2-9
Object Store Locations	2-9
Updating the Starter Kit Installation	2-10

3 RPASCE Virtual Machine

VirtualBox Software	3-1
System Requirements	3-2
VM Image	3-2
VM Setup	3-3
Using the VM	3-11
Launching the RPASCE User Interface	3-11
Copying Files between the VM and the Host Desktop	3-13
Users in the VM	3-15
Using SQL Developer	
Troubleshooting	3-17



Preface

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

Audience

This Starter Kit is written for the following audiences:

Integrators and implementation staff

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Related Documents

For more information, see the following documents in the Oracle Retail Assortment Planning Cloud Service Release 23.1.201.0 documentation set:

- Oracle Retail Assortment Planning Cloud Service Administration Guide
- Oracle Retail Assortment Planning Cloud Service Implementation Guide
- Oracle Retail Assortment Planning Cloud Service User Guide
- Oracle Retail Assortment Planning Cloud Service Starter Kit Guide
- Oracle Retail Assortment Planning Cloud Service Release Notes
- Oracle Retail Predictive Application Server Cloud Edition documentation set

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- Exact error message received
- Screenshots of each step you take

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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.



Convention	Meaning
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.

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Oracle Retail Assortment Planning Cloud Service Starter Kit, Release 23.1.201.0.

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

Welcome to the *Oracle Retail Assortment Planning 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
- Launch ConfigTools and application plug-ins for modifying an existing or developing a new application configuration.
- Validate the configurations using scripts in Cygwin
- Download and launch Virtual Machines

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 describes the hardware and software requirements for the Starter Kit.



Table 1-1 Starter Kit Hardware and Software Requirements

Requirement	Details
Supported Operating Systems for RPAS Configuration Tools	Microsoft Windows 10 Note: 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 1.8 or later.
Required Software	 Java 8 JDK (required to support the RPAS Cloud Edition Configuration Tools.) Microsoft 2015 Runtime Libraries VirtualBox Cygwin



Requirement	Details
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:
	vc_redist.x64.exe
	vc_redist.x86.exe
	Download these libraries from this link:
	<pre>https://www.microsoft.com/en-us/download/details.aspx? id=48145</pre>
	Note: Use Microsoft Visual C++ 2015 or higher for use with RPAS Cloud Edition Configuration Tools and other RPAS utilities.
Cygwin	64-bit installation of Cygwin
	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).

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

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 the mksh, unzip, and zip packages to be installed.

Starter Kit Components

For information on installing the Starter Kit, refer to Installing on a Windows Environment.



For information on installing the VM related software refer to RPASCE Virtual Machine

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 Configuration Tools.
- You must install Cygwin to emulate UNIX commands (required for running some RPAS 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 Configuration Tools to create or modify solutions.
Typical User	Solution/ Product Administrator
Platforms	Windows 10
RPAS Server	Yes
RPAS Clients	No
Configuration Tools	Yes
Java	Yes

Terms

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

Term	Definition
RPASCE	The Oracle Retail Predictive Application Server Cloud Edition provides the foundation for Oracle Retail solutions such as Oracle Retail Assortment Planning (APCS), Merchandise Financial Planning (MFPCS), and Retail Demand Forecasting (RDFCS). 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.
PDS	Planning Data Store. Database containing the data and metadata for RPAS applications.
RPAS Configuration Tools	The tools used to configure an RPAS solution. For more information, refer to the Oracle Retail Predictive Application Server Configuration Tools User Guide



2 Installing on a Windows Environment

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

AP Cloud Service Starter Kit Overview

RPAS Cloud Service is comprised of many components. In addition, there are solutions that have been developed using the RPAS Cloud Service foundation. Examples of these solutions include Oracle Retail Merchandise Financial Planning (MFP) and Oracle Retail Demand Forecasting (RDF). Each application supported by the RPAS Cloud Service Platform has a dedicated Starter Kit.

The components of the Starter Kit software include the following:

- RPAS Configuration Tools
- RPAS Server libraries used by the Configuration Tools
- Documentation

Note:

The Starter Kit distribution does not contain a full Retail Home instance. As a result, Retail Home and its features are not supported in Starter Kit environments.

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 contains the following topics:

- Starting the Cygwin Shell and Setting up the Environment
- RPAS Package Location
- Installing the 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.

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 as described in Creating the Required Environment Variables.

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 dashboard, click on the Patches & Updates tab.
- 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 Assortment Planning 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**.

Figure 2-1 Patch Search

		Product 🥥 is	 Start Typing 	Ø
Number/Name or Bug Number (Simple)			Include all products in a family	
	and	Release 😰 is		*
Product or Family (Advanced)	and Platform			<u> </u>
Recommended Patch Advisor	alu		Show recommended patches only	

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

Note:

Some customers may not be able to download the Starter Kit package, due to a limitation in My Oracle Support portal's structure. If you run into a problem trying to download, then log an SR through which Oracle will provide you a link to access the Starter Kit package.

Installing the Starter Kit

The following procedures provide information about creating the necessary folders on your Windows PC and copying the Configuration Tools components to them.

1. Using Windows Explorer, navigate to your C drive, create a folder named **Oracle**.



- 2. Open the **Oracle** folder.
- **3.** Unzip the downloaded file with a name similar to p33174696_19000_MSWIN-x86-64.zip into the newly created Oracle directory on the Windows machine. Once extracted, the following directories appear:

Directory	Description
ConfigTools	This directory contains the components required to run the RPAS Configuration Tools.

In this example, the path C:\Oracle\AP_Starter_Kit\ConfigTools is both the RPAS_HOME and RIDE_HOME. Environment variables are defined on your Windows PC to point to this location so that RPAS will function correctly. Refer to "Creating the Required Environment Variables" for information on creating the necessary RPAS variables.

Creating the Required Environment Variables

The following steps outline the process to follow and environment variables required to support the RPAS installation and application install.

Steps to Access the Environment Variables Window

Perform the following steps to access the Environment Variables window.

- 1. Press Windows key and **R**, the Run box opens.
- 2. Type sysdm.cpl and press Enter.
- 3. Select the Advanced tab.
- 4. At the bottom of the window, click Environment Variables.



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omputer Marine	naiuwaie	/ dranced	System Flotection	nemote
You must be lo	noned on as	an Administra	tor to make most of t	hese changes
	gged on do			and the changes
Performance				
Visual effects	, processor s	scheduling, m	emory usage, and vi	rtual memory
			1	Settings
User Profiles				
Desktop setti	nas related t	o vour logon		
Desitiop setti	nga related t	o your logon		
			Г	Cattingen
				Settings
Startup and F	acover			
1000 CT 1000				
System startu	p, system fai	lure, and deb	ugging information	
			-	
				Settings
			F errisson	ant Vestables
			Environm	ent Variables

Figure 2-2 System Properties - Advanced Tab

5. The Figure 2-3 window opens.

Path TEMP TMP	C:\Program Files (x86)\CVSNT\ %USERPROFILE%\AppData\Local\Temp %USERPROFILE%\AppData\Local\Temp
ſ	
untern unsichler	<u>N</u> ew <u>E</u> dit <u>D</u> elete
ystem variables Variable	Value
ComSpec DEFLOGDIR FP_NO_HOST_C	C:\windows\system32\cmd.exe C:\ProgramData\McAfee\DesktopProtec NO
JAVA_HOME	C:\Oracle\Middleware_1323\jdk160_21

Figure 2-3 Environment Variables Window

Create the RPAS_HOME Environment Variable

- 1. Under the System variables box, click **New**. The New System Variable dialog box opens.
- 2. Enter **RPAS_HOME** in the **Variable** name field.
- 3. Enter the path of the **RPAS Server** folder in the **Variable value** field. In our Figure 2-4 example, this is: /cygdrive/c/Oracle/AP_Starter_Kit/ConfigTools



Edit System Variable		×
Variable name:	RPAS_HOME	
Variable value:	/cygdrive/c/Oracle/AP_Starter_Kit/ConfigTools	

Figure 2-4 Example of RPAS_HOME Variable

4. Click OK. RPAS_HOME now appears in the Variable name box.

Create the RIDE_HOME Environment Variable

- 1. Under the System variables box, click **New**. The New System Variable dialog box opens.
- 2. Enter RIDE_HOME in the Variable name field.
- 3. Enter the path of the **ConfigTools** folder in the **Variable value** field. In our Figure 2-5 example, this is: /cygdrive/c/Oracle/AP_Starter_Kit/ConfigTools
- 4. Click OK.

Figure 2-5 Example of RIDE_HOME Variable

Edit System Variable		×
Variable name:	RIDE_HOME	
Variable value:	/cygdrive/c/Oracle/AP_Starter_Kit/ConfigTools	

Update or Create the JAVA_HOME Environment Variable

- 1. Under the System variables box, select the JAVA_HOME environment variable and update it
- 2. Enter the path of the java folder in the Variable value field. In Figure 2-6, this is: / cygdrive/c/Java/jdk1.8.0_231

Figure 2-6 JAVA_HOME Variable

Edit System Variable				
Variable <u>n</u> ame:	JAVA_HOME			
Variable <u>v</u> alue:	/cygdrive/c/Java/jdk1.8.0_231			

- 3. Create the ORACLE_HOME environment variable.
 - a. Ensure that the Oracle Database 19c Client is installed locally on your Windows machine. If not installed, you can download a copy from: https:// www.oracle.com/database/technologies/oracle19c-windowsdownloads.html



For example, download the WINDOWS.X64_193000_client_home.zip file and then unzip it into your Download directory.

- Beneath the System variables box, click New. The New System Variable dialog box opens.
- c. In the Variable name field, enter ORACLE_HOME
- d. In the Variable value field, enter the path of the Oracle database 19c client folder. In Figure 2-7, this is:

c:/Users/xxx/Downloads/WINDOWS.X64_193000_client_home

Figure 2-7 Example of ORACLE_HOME Variable

Edit System Variable		×
Variable name:	ORACLE_HOME	
Variable value:	c:/Users/xxx/Downloads/WINDOWS.X6	i4_193000_client_home
Browse Directory	Browse File	OK Cancel

Update the PATH Variable

- 1. Under the System variables section, select the PATH environment variable and click Edit.
- 2. Insert the complete paths for RPAS_HOME, RIDE_HOME, and JAVA_HOME as shown: %RPAS HOME%\bin;%RPAS HOME%\applib;%RPAS HOME%\lib;

%JAVA HOME%\bin;%JAVA HOME%\lib;

%JAVA HOME%\jre\bin\server;

%ORACLE HOME%\bin;%ORACLE HOME%\lib;

Note:

Remember to separate all path statements with semicolons (;).

3. Select **OK** to save your changes.

Update the RPAS_JAVA_CLASSPATH Variable

The RPAS_JAVA_CLASSPATH is used to enable the AP solution to execute extensions to RPAS written within the AAI framework. In order for the Configuration Tools to support these extensions, it is necessary to set the RPAS_JAVA_CLASSPATH environment variable so that the Configuration Tools can locate the libraries.

The value of the RPAS_JAVA_CLASSPATH variable should be the locations of the aaijni.jar located in the applib subdirectory of the Starter Kit installation and the oracleRpasUtils.jar located in the lib subdirectory of the Starter Kit installation. Assuming the default location for Starter Kit installation, RPAS_JAVA_CLASSPATH should be set to:



C:/Oracle/ConfigTools/AP_Cloud_Starter_Kit/lib/oracleRpasUtils.jar;C:/ Oracle/ConfigTools/AP_Starter_Kit/applib/aaijni.jar

Figure 2-8 Example of RPAS_JAVA_CLASSPATH Variable

Edit System Variable	>
Variable name:	RPAS_JAVA_CLASSPATH
Variable value:	C:\Oracle\AP_Starter_Kit\ConfigTools\lib\oracleRpasUtils.jar;C:\Oracle\AP_Retail_Starter_Kit\Co

The RIDE_OPTIONS Variable

The RIDE_OPTIONS environmental variable can be used to pass information into the ConfigTools.

By default, the Java Virtual Machine requests on the order of 268 MB of RAM from the OS to allocate for its heap. This is even more of an issue when multiple configurations are open in the Configuration Tools and must be held in memory simultaneously.

By using the -Xmx option, you can instruct the Java Virtual Machine to request more memory from the OS to prevent situations when all allocated memory is exhausted. The syntax of the property is:

-Xmx###m, where ### is the amount, in megabytes, of memory the JVM is to request. Common values for this argument are -Xmx512m or -Xmx1024m.

Figure 2-9 Example of RIDE_OPTIONS Variable

ole 🔀
RIDE_OPTIONS
-Xmx 1024m
OK Cancel

Launching RPAS Cloud Edition Configuration Tools

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

1. Start Cygwin terminal and run the following commands:



>cd \$RIDE_HOME/bin

then

>ConfigTools

Application Building

This section describes building applications on Oracle cloud using the configuration from the Starter Kit.

Object Store Locations

For the purposes of building the application, following subpaths in the object store are used:

Note:

If you are using the VM it still uses the incoming FTP location; which is a folder shared with the host machine instead of the object store.

config

For uploading the application configuration into the cloud environment, create an archive containing the config directory and all of its contents. This archive file must be named as <config_name>_config.zip. This archive file must be uploaded to the in Object Store under planning/incoming/config_location.

json

Dashboards uses dashboardSettings.json and this file is used by the RPASCE client for displaying the dashboard. This file is optional. If present it should be uploaded to the Object Store under planning/incoming/json location.

batch_control

The set of batch process control files is optional. If present they must be uploaded to the Object Store under planning/incoming/batch_control location.

integration

The batch process also needs interface.cfg file which is a configuration file to get data from RAP Integration. Refer to the *Oracle Retail Predictive Application Server Cloud Edition Implementation Guide* for more details about configuring the interface.cfg file. This file is needed only if some interfaces are configured to get the data. This file if present should be uploaded to the Object Store under planning/incoming/config location.

input

The hierarchy data files and measure input files must be uploaded to the object store under planning/incoming/input as individual files or as an archive in the .zip format. If uploading data files as an archive, the name of the archive file should be same as the one used in batch control files for the compressed files. Remember not to include any directory structure in the archive file. In addition to the application build and patch processes, batch framework tasks



like measload, hierload, unpack, and waittrigger will check for incoming files in this same object store input location.

Updating the Starter Kit Installation

Each release of Cloud Service will have a version-specific Starter Kit. As the product is enhanced in future versions, it will be necessary to update the Starter Kit to incorporate these enhancements. The following steps outline the process of updating the Starter Kit installation:

- 1. Download the new version of the AP Cloud Service Starter Kit.
- 2. Delete the contents of the C:/Oracle/AP_Starter_Kit directory.

WARNING:

It is highly recommended to save custom configurations outside of the AP_Starter_Kit directory so that they are not accidentally deleted when updating the Starter Kit.

- 3. Follow the installation instructions for the new version of the Starter Kit.
- 4. Run plug-in automation (if available) on the existing configuration to create a version of the configuration for the selection configuration options. Follow the instructions in the *Oracle Retail Demand Forecasting Cloud Service Implementation Guide*.
- **5.** Apply the changes in the newly generated configuration to the AP Cloud Service application.

Note:

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



3 RPASCE Virtual Machine

RPAS Cloud Edition (CE) Virtual Machines (VMs) provide a way for anyone to be up and running using the RPASCE software as quickly as possible without having to deal with all the steps around setting up the RPASCE server, UI and its applications. The VMs are created for Oracle consultants and partners who want to get a quick feel of the application without having to set up the hardware and software resources necessary for trying out RPASCE solutions.

RPASCE VMs are not a replacement or substitution for pre-production Cloud Environments (STAGE, Dev, and so on). Note that the VMs are only provided to give a quick feel of the application and are not intended to be used as full-blown implementation tool.

This chapter lists the steps necessary to deploy an RPAS Cloud Edition VM, launch the UI and connect to the application included in the VM. All the components - RPASCE server, UI, PDS (Planning Data Store) are all local to the VM. Disregard the version numbers shown in the images in this chapter as the steps are the same across different versions.

Contrary to previous versions of the RPASCE VMs where the RPASCE server and UI software were directly installed in the VM they are now deployed using Docker inside the VirtualBox VM. Therefore, the RPASCE server, UI and database processes are running inside their silos known as containers inside the VM. For more information on Docker, refer to the URL:

https://docs.docker.com/

Note:

The VMs do not include Retail Home, Science, or RI components. It only contains the base planning application. Also, the VMs do not use IDCS or Object Storage. Notifications are currently not supported in the VM.

VirtualBox Software

Download the Oracle VirtualBox software that is available for Windows, Mac, Linux and Solaris from the following link. For Windows, select the download link for Windows Hosts:

https://www.virtualbox.org/wiki/Downloads

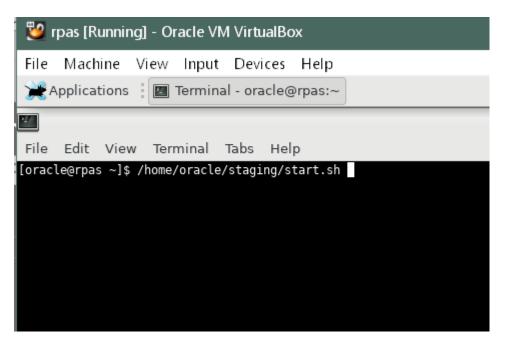
Note:

For a straight forward installation, use the VirtualBox version 6.1 from the older downloads section. Version 7 and later versions require Python and certain Python bindings, refer to VirtualBox software documentation for more information.





Figure 3-1 VirtualBox Platform Packages



System Requirements

The Oracle VirtualBox software has the following system requirements:

- 16 GB RAM
- Quad-core CPU
- 50 GB free disk space

VM Image

Download the VM the same way as you download the Starter Kit using the **Patches & Updates** tab from the My Oracle Support dashboard. Refer to "RPAS Package Location" for instructions on My Oracle Support downloads.



Figure 3-2 VM Download

Patch Sear	ch					
Patch Advanced Search Results						
ilters: Product	is Oracle Retail Demand Forecasting Cloud Service; Release is Oracle Retail Demand Forec	asting Cloud !	Service 19.0.0.0.0;			
Table 🗸 Vie	w 🗸 🛃 Detach 🥜 Share Link					
Patch ▲▽ Name	Description	Release	Platform (Language)	Product	Size	
34091432	Oracle Retail Demand Forecasting Cloud Service Starter Kit 19.0.010.01 (Patchset)	19.0.0.0.0	Microsoft Windows x64 (64-bit) (American English)	Oracle Retail Demand Forecasting Cloud Service (More)	43.4 MB	
34091453	Oracle Retail Demand Forecasting Cloud Service Virtual Machine 19.0.010.01 (Patchset)	19.0.0.0.0	Microsoft Windows x64 (64-bit) (American English)	Oracle Retail Demand Forecasting Cloud Service (More)	9.8 GB	

After downloading the VM, unzip the archive to get the file with the .ovf extension.

VM Setup

Perform the following steps to import the downloaded RPASCE VM image file using VirtualBox software and then start it.

- 1. Start the VirtualBox software
- From the main menu, click File and then select Import Appliance... as shown in Figure 3-3

👽 Oracle VM VirtualBox Manager		- 🗆 X
File Machine Medium Help Import Appliance Import Appliance Import Appliance Import Appliance Import Appliance	Ctrl+G Ctrl+I Ctrl+E Ctrl+D Ctrl+H	Add Copy Move Remove Release Properties Refresh Hard disks © Optical disks Propy disks Name Size
Reset All Warnings		Attributes Information
V Exit	Ctrl+Q	Type: Location: Description: Size: 4.00 MB 2.00 TB Apply Reset

Figure 3-3 Main Menu: Import Appliance...

3. Browse to the downloaded VM base image (.ovf file). Select the VM file with the.ovf extension and click **Open**.



Arganize Vew folder This PC This PC This PC Desktop Desktop Desktop Decuments bkAvOwOnA Cpp Custom Offic CygBackup fusion		e modified 6/2022 9:47 PM	Type Open Virtualizatio	Size	9 KB	₩ •	
3D Objects besktop besktop bekAvOwOnA cpp Custom Offic cygBackup fusion	Dat		1. 54		9 KB		
Desktop Documents bkAvOwOnA cpp Custom Offic cygBackup fusion	1/2	6/2022 9:47 PM	Open Virtualizatio		9 KB		
greenCardAC openSSL Outlook Files perm_docs sql Visual Studio							
WINDOWS.XE V							

Figure 3-4 Downloaded VM Base Image

4. On the screen shown in Figure 3-5, change the name of the VM or increase the RAM used for a smoother VM experience, but choose the RAM setting carefully. The memory given to VM will not be available to your host OS while the VM is running, and this can significantly impact the performance of your host OS if tit is already running low on memory due to other applications.

Click Import.



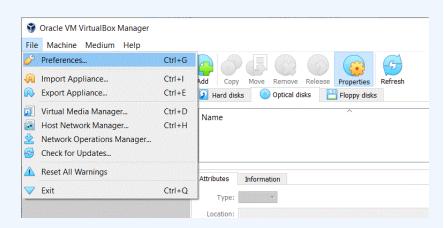
Figure 3-5	Change the Name and RAM of the VM file

	rties shown by double-clicking o al System 1	n the items and disable others using the check boxes below.
	Name	mfp 1
8	Guest OS Type	2 Oracle (64-bit)
C	СРИ	4
	RAM	12288 MB
6	Network Adapter	Intel PRO/1000 MT Desktop (82540EM)
<	Storage Controller (IDE)	PIIX4
<	Storage Controller (IDE)	PIIX4
~ 4	Storage Controller (SATA)	AHCI
	🧕 Virtual Disk Image	mfp-disk002.vmdk
	🙆 Virtual Disk Image	mfp-disk001.vmdk
	Base Folder	C:\Users\ANOMOHAN\VirtualBox VMs
4	월 Primary Group	
T 0		NOMOHAN\VirtualBox VMs AT network adapter MAC addresses

Note:

This step creates a large file of around 40 GB on your local disk. The default location of these files is the location where VirtualBox is installed (usually the C drive for Windows). If the default location does not contain at least 50 GB of free space, then change the default location as described here:

Click File and then select Preferences...



• Change the location of the Default Machine Folder to a drive that has enough space.

	General	General		
Ø	Input	Default Machine Folder:	C:\VirtualBoxVMs	<u>93</u>
G	Update	VRDP Authentication Library:	VBoxAuth	100
9	Language			
	Display			
5	Network			
	Extensions			
	Proxy			

5. Wait for the image to get imported. It might take a few minutes.

If your machine has more than 16 GB of memory, increase the memory used by the VM. Note that the post-build batch for the initial application build will not work without at least 12 GB of memory allocated.

Click the Settings icon to change the settings for the selected VM.



Figure 3-6 Settings Icon



6. From the left panel, click **System** and then move the slider to desired memory.



Sometimes the settings screen shows an invalid settings warning. This warning can be ignored.

🥹 mfprcs vm - Setting	S	?	×
General	System		
System	Motherboard Processor Acceleration		
Display	Base Memory:	6144 MB	•
😥 Storage	4 MB 16384 MB		
Audio	Boot Order:		
Network			
Serial Ports	Chipset: PIIX3 🔻		
🌶 USB	Pointing Device: PS/2 Mouse Extended Features: Enable I/O APIC		
Shared Folders	Enable EFI (special OSes only)		
User Interface	Hardware Clock in UTC Time		
	ОК	Can	cel

Figure 3-7 System Memory Slider

 Select the Processor tab. If you run into any performance issues while using the VM and your host machine has multi-core processors, you may increase the available CPU for the VM by increasing the number of processors in the Processor tab (Figure 3-8).



General	System		
System	Motherboard Processor Acceleration		
Display	Processor(s):	1 I I	3
Storage	1 CPU Execution Cap:	8 CPUs	100%
Audio	1%	100%	
Network	Extended Features: Enable PAE/NX		
Serial Ports			
USE			
Shared Folders			
User Interface			

Figure 3-8 System Processor CPU Change

8. Optional step- Only perform this step if someone else will use an RPASCE VM on the same network.

From the left panel, click **Network** and then click the Circle icon next to the MAC Address text box. This gives the virtual network card in the VM a new random MAC address. If the MAC Address setting is not visible, then click the Advanced icon.

mfprcs vm - Setting		?	>
General	Network		
System	Adapter 1 Adapter 2 Adapter 3 Adapter 4		
Display	Enable Network Adapter		
Storage	Attached to: NAT Name:		*
🔎 Audio	V Advanced		
Network	Adapter Type: Intel PRO/1000 MT Desktop (82540	EM)	•
Serial Ports	Promiscuous Mode: Deny MAC Address: 0800271A3AE1		-
Shared Folders	Cable Connected		
User Interface	(or containing		
	C	ОК С	ancel

Figure 3-9 New Random MAC Address for the Virtual Network Card

9. Click Port Forwarding.

You should see the rule that forwards port 8080 inside the VM to port 8080 on the host machine. If you have some other application running on port 8080 of the host machine change the host port to an unused port number.

Figure 3-10 Port Forwarding Rules Window

Protocol	Host IP	Host Port	Guest IP	Guest Port]•
ТСР	127.0.0.1	2222		22	<
ТСР		1522		1521	
ТСР		8065		8065	
ТСР		8080		8080	-
ТСР		80		80	
ТСР		8197		8197	
TCP		9025		9025	
	тср тср	TCP 127.0.0.1 TCP TCP TCP TCP TCP TCP TCP TCP TCP TCP	TCP 127.0.0.1 2222 TCP 1522 TCP 8065 TCP 8080 TCP 8080 TCP 80 TCP 80 TCP 80 TCP 8197	TCP 127.0.0.1 2222 TCP 1522 TCP 8065 TCP 8080 TCP 8080 TCP 80 TCP 80 TCP 80 TCP 80	TCP 127.0.0.1 2222 22 TCP 1522 1521 TCP 8065 8065 TCP 8080 8080 TCP 80 80 TCP 80 80 TCP 80 80 TCP 80 80

Click OK.

10. Start the imported image.

From the left panel of the VirtualBox, right-click on the VM image you downloaded and select **Start**. Alternately you can select the image and click the Start arrow icon from the top menu.

Figure 3-11 Starting the VM Image



11. In the grub boot-loader screen there is no action required. Let the VM automatically boot the default kernel.

Wait for OS to finish loading and it displays similar messages as shown in Figure 3-12.



Figure 3-12 Load Messages

	[83.5122151	IPVS: Registered protocols (TCP, UDP, SCTP, AH, ESP)
I	[83.5126641	IPVS: Connection hash table configured (size=4096, memory=64Kbytes)
I	[85.145210]	IPVS: ipvs loaded.
I	[85.2794981	IPVS: [rr] scheduler registered.

12. In a browser on the host machine launch the following URL:

http://localhost/logs/startup.log

When the VM is ready to be used, an *Environment is ready for use!* message displays as shown in Figure 3-13.

Figure 3-13 VM is Ready Message

start.ksh
[start.ksh] Executing commands as user: oracle
[start.ksh]: Fri Jan 28 13:39:02 -05 2022 Waiting for RPAS stack services to come up
Fri Jan 28 13:39:13 -05 2022 Waiting for service RPAS http to reach 3/3 replicated running tasks
Fri Jan 28 13:39:13 -05 2022 Waiting for service RPAS rpasserver to reach 1/1 replicated running tasks
Fri Jan 28 13:39:13 -05 2022 Waiting for service RPAS launcher to reach 3/3 replicated running tasks
Fri Jan 28 13:39:13 -05 2022 Waiting for service RPAS taskdaemon to reach 1/1 replicated running tasks
Fri Jan 28 13:39:13 -05 2022 Waiting for service RPAS client to reach 1/1 replicated running tasks
Fri Jan 28 13:40:30 -05 2022 Service RPAS client has started successfully!
Fri Jan 28 13:41:25 -05 2022 Service RPAS launcher has started successfully!
Fri Jan 28 13:41:25 -05 2022 Service RPAS http has started successfully!
Fri Jan 28 13:41:25 -05 2022 Service RPAS rpasserver has started successfully!
Fri Jan 28 13:41:25 -05 2022 Service RPAS taskdaemon has started successfully!
[start.ksh]: Fri Jan 28 13:41:25 -05 2022 Creating RPAS service logs under /var/www/html/logs
[start.ksh]: Fri Jan 28 13:41:26 -05 2022 PDS Property subgroup max parallel set to 4
[start.ksh]: Fri Jan 28 13:41:26 -05 2022 Environment is ready for use! You may log into the RPAS Client at
http://localhost:8080/rpasceui
It is safe to close this window.

Note:

This page may show older logs too, it is critical to check that the date and time matches the current time. The time shown is GMT-5 hours. Also, while waiting for the VM to be ready, refresh the page manually as it does not auto refresh.

Using the VM

All the necessary processes needed for using the RPASCE application in the VM automatically start when the VM boots up. The system just needs a few minutes after the login screen appears to bring up all of the necessary processes. However depending on the resources available to the VM, the time required for startup will differ.

Launching the RPASCE User Interface

Perform the following steps to launch the RPASCE User Interface (UI).

1. Open a browser on the host machine where you started the VirtualBox software and paste the URL into the address bar and press **Enter**

http://localhost:8080/rpasceui/



Figure 3-14 shows the RPASCE UI Sign In, enter the Username: *oci.admin* and the Password: *Orcl1234*.

Figure 3-14 RPASCE UI Sign In

Ocalhost:8080		
This site is asking you to sign in.		
Username		
oci.admin		
Password		
•••••		
	Sign in	Cancel

The VM does not come with any applications prebuilt. Therefore on the initial login, a user only has bootstrap access and no task flows. Users can use the Online Admin Tools to build a GA or extended application.

2. To build the GA app using the input files present in the VM select the GA check boxes as shown in Figure 3-15.

Refer to either the Oracle Retail Demand Forecasting Cloud Service Administration Guide for more details about building the application.



Specify the arguments for task:	
Task Label	
Build Application	
Partition Dimension	
dept	
Use GA Configuration with no extensibility?	
✔ Use GA data?	
Overwrite Existing Application?	
Set RPAS_TODAY in application	
20230101	
Batch Task Group to run after Application Build	
postbuild	
	Cancel < Previous Next > Finis

Figure 3-15 Select Options for GA App Build

Note:

Hierarchy data is now loaded after the application is built as a post-build step. Run the postbuild batch that is available as part of GA.

Alternately the load Dimension Data task is available in the online Admin Tools and can be used to load the hierarchy data.

For providing input files for building the application, refer to the section, Copying Files between the VM and the Host Desktop.

If Use GA data? is selected, it is recommended to set RPAS_TODAY in the application to 20230101 (January 1, 2023).

Copying Files between the VM and the Host Desktop

Perform the following steps to share files and folders between the desktop and the VM.

 Use an application like WinSCP to connect to the SSH port of the VM on 2222. Enter the Username as: *oracle* and the Password as: *oraclev21*.



🊰 Login	X
Vew Site	Session File protocol: SFTP Host name: Port number: localhost User name: Password: oracle Save Cancel Advanced
<u>Tools</u> ▼ <u>Manage</u> ▼ Show Login dialog on startup and when the last	session is closed

Figure 3-16 Sharing Files

2. The incoming FTP location inside the VM is:

/oracle/rpas/RPAS/ftp_incoming

The outgoing FTP location inside the VM is:

/oracle/rpas/RPAS/ftp_outgoing

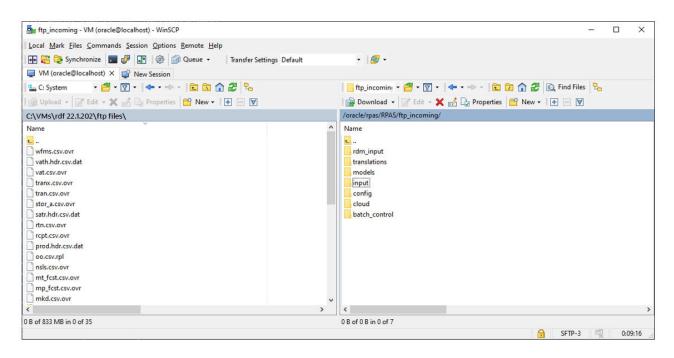
The VM still uses the incoming and outgoing FTP locations although now in the Oracle Cloud RPAS applications use object storage for incoming and outgoing locations.

Note:

For more details about placing files in incoming location for application build, batch or other OAT tasks, refer to the *Oracle Retail Demand Forecasting Cloud Service* documentation set.



Figure 3-17 FTP Locations



Users in the VM

The following users are present in the VM.

The password for all users is set to: Orcl1234.

Note:

It is not possible to add new users to the VM.

User Label	User Name	Administrator
OCI Administrator	oci.admin	Yes
Admin User 2	user2	Yes
Admin User 3	user3	Yes
Admin User 4	user4	Yes
Admin User 5	user5	Yes
Admin User 6	user6	Yes
Admin User 7	user7	Yes
Admin User 8	user8	Yes
Admin User 9	user9	Yes
Admin User 10	user10	Yes
Non-Admin User 1	nonadm1	No



User Label	User Name	Administrator
Oracle Internal User	oracleintuser	Yes
Non-Admin User 2	nonadm2	No
Administrator	adm	Yes
Administrator1	adm1	Yes
Administrator2	adm2	Yes
Administrator4	adm4	Yes
Administrator7	adm7	Yes
Administrator10	adm10	Yes
Admin User 1	user1	Yes

Using SQL Developer

It is possible to connect a SQL developer running on the host machine to the database running in the VM.

Set the password for all the schema users as: Orcl1234

Enter the Service name as: ORCLPDB1

Figure 3-10 Database connection	Figure 3-18	Database Connection
---------------------------------	-------------	---------------------

New / Select Database Connection	, ,	×
Connection Connection Details 785 - RPAS RPAS_DATA_MART_PD 785 - RPAS RPAS_DATA_MART_PD 785 - RPAS RPAS_DATA_MART_PD localhost R RPAS_DATA_MART_PD localhost R RPAS_DATA_MART_PD	Name vm RPAS_DATA_MART_PDSVBOX Color Database Type Oracle Oracle User Info Proxy User	
localhost r rpasdba@//127.0.0.1: vm ADMIN ADMIN@//127.0.0.1:1 vm RPAS RPAS_DATA_MART_PD vm rpas_r rpas_rdonly_pdsvbox	Authentication Type Default Username RPAS_DATA_MART_PDSVBOX Password Image: Save Password Connection Type Basic	
	Details Advanced Hostname 127.0.0.1 Port 1521 SID	
Status :		
Help	Save Clear Test Connect Cancel	

Table 3-1 lists the schema users



Schema User	Username
rpas_data_mart	RPAS_DATA_MART_PDSVBOX
rpas_patch_user	RPAS_PATCH_PDSVBOX
rpas_batch_user	RPAS_BATCH_PDSVBOX
rpas_dimload_user	RPAS_DIMLOAD_PDSVBOX
rpas_factload_user	RPAS_FACTLOAD_PDSVBOX
rpas_hiermgr_user	RPAS_HIERMGR_PDSVBOX
rpas_wkbk_user	RPAS_WKBK_PDSVBOX
rpas_etl_user	RPAS_ETL_PDSVBOX
rpas_rdonly_user	RPAS_RDONLY_PDSVBOX
rpas_report_user	RPAS_REPORT_PDSVBOX

Table 3-1 Schema Users

Troubleshooting

If you have any of the following issues, follow the steps for troubleshooting:

- Network Issues
- VirtualBox Error
- UI Login Issues
- SQL Developer Login Issues

Network Issues

If you have many network interfaces you might have to make changes to Network Settings screen before starting the VM. The VM image has been tested only with Ethernet and Wi-Fi. If you use power line Ethernet or a network dongle or you have multiple network interface cards in your system you might need to make changes in the VM network settings screen.

Depending on your system configuration, you might need to enable additional adapters.

VirtualBox Error

If you receive the following error shown in Figure 3-19 while starting the image, you might have an unsupported version of VirtualBox. Install the latest VirtualBox software.



🧿 Oracle VM VirtualBox	x Manager		- 🗆 X
File Machine Help			
Tools		New Settings Discard Start	
ASCS.17.1.003.1	00010	General Name: ASCS.17.1.003.00.010 Operating System: Oracle (64-bit) Settings File Location: C:/Lipeers/kchaumley-adm/WrtualBox VMs/ASC 17.1.003.00.010 Imachine AscCs.17.1.003.00.010 Imachine AscCs.17.1.003.00.010 Imachine AscCs.17.1.003.00.010 Imachine AscCs.17.1.003.00.010 Imachine AscCs.17.1.003.00.010 Acceed Imachine AscCs.17.1.003.00.010 Imachine AscCs.17.1.003.00.010 Imachine AscCs.17.1.003.00.010 Videe Imachine AscCs.17.1.003.00.010 Imachine AscCs.17.1.003.00.010 Imachine AscCs.17.1.003.00.010 Acceed Potatis Imachine AscCs.17.1.003.00.010 Imachine AscCs.17.1.003.00.010 Imachine AscCs.17.1.003.00.010 Imachine AscCs.17.1.003.00.010 Acceed Fealule Code: 1073741315 Imachine AscCs.17.1.003.00.010 Imachine AscCs.17.1.003.00.010 Imachine AscCs.17.1.003.00.010 Imachine AscCsCs	ASCS.17.1.003.00.010
		e	
ystems			12/4/2018 1:18 PM File
un Desktops & Periphera	🏪 Windows (C:)	ОК Сору L 3220	e.pdf 12/4/2018 12:44 PM PDF File
un Storage Software	🕳 System Reserved (E:)	v 13'1	12/3/2018 10:32 AM Windows Ins
in Ray Products			

Figure 3-19 VirtualBox Error

UI Login Issues

If you have trouble logging into the UI, check if port 8080 is being used by some other application on your host machine. Change the port mapping in the VM Network Setup screen and use the new port.

For any application related issues check the logs at this URL:

http://localhost/logs/

SQL Developer Login Issues

If you have trouble connecting to the database using SQL developer, check if port 1521 is being used. Change the port mapping in the VM Network Setup screen and use the new port.

