Oracle® Retail Merchandise Financial Planning Cloud Service
Starter Kit

ORACLE®

Oracle Retail Merchandise Financial Planning Cloud Service Starter Kit, Release 24.1.201.0

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Preface

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

Audience

This Starter Kit is written for the following audiences:

- Integrators and implementation staff

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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.
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 Merchandise Financial Planning Cloud Service Starter Kit, Release 24.1.201.0.

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

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1

Introduction

Welcome to the *Oracle Retail Merchandise Financial 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 RPASCE 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.

> **Note:**
>
> Java can be acquired for Microsoft Windows at: `www.java.com`.

Table 1-1   Starter Kit Hardware and Software Requirements

Requirement	Details
Supported Operating Systems for RPASCE 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.
	RPASCE Configuration Tools requires 64-bit Java 1.8 or later.
Required Software	- Java 8 JDK (required to support the RPASCE Cloud Edition Configuration Tools.) - Microsoft 2015 Runtime Libraries - VirtualBox - Cygwin

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

Requirement	Details
Microsoft 2015 Runtime Libraries	Ensure that these Microsoft 2015 Runtime Libraries are installed to enable RPASCE RPAS Cloud Edition Configuration Tools and other RPASCE utilities: • vc_redist.x64.exe • vc_redist.x86.exe Download these libraries from this link: https://www.microsoft.com/en-us/download/details.aspx?id=48145 **Note:** Use Microsoft Visual C++ 2015 or higher for use with RPAS Cloud Edition Configuration Tools and other RPASCE 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).

Cygwin Installation Requirement Notes

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

- An application for unzipping (`.zip`) components must be installed and used for extracting the RPASCE Configuration Tools.

- You must install Cygwin to emulate UNIX commands (required for running some RPASCE 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
RPASCE Server	Yes
RPASCE 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 Clud Edtion provides the foundation for Oracle Retail solutions such as Oracle Retail Inventory Planning Optimization Cloud Service-Demand Forecasting (IPOCS-Demand Forecasting), Merchandise Financial Planning (MFPCS), and Assortment Planning (APCS). RPASCE 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 RPASCE applications.
RPASCE Configuration Tools	The tools used to configure an RPASCE 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 MFP Cloud Service Starter Kit on a Windows environment.

MFP Cloud Service Starter Kit Overview

RPAS Cloud Edition 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 (MFPCS) and Oracle Retail Inventory Planning Optimization Cloud Service-Demand Forecasting (IPOCS-Demand Forecasting). Each application supported by the RPAS Cloud Edition Platform has a dedicated Starter Kit.

The components of the Starter Kit software include the following:

- RPASCE Configuration Tools
- RPASCE 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
- RPASCE 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.

RPASCE Package Location

The RPASCE 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 Merchandise Financial 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
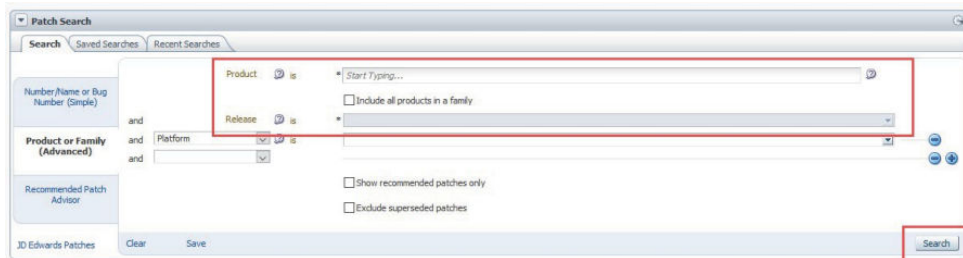
6. From the Patch Advanced Search Results, click the patch link located in the Patch Name column.

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 RPASCE Configuration Tools.

In this example, the path `C:\Oracle\MFP_Cloud_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 RPASCE will function correctly. Refer to "Creating the Required Environment Variables" for information on creating the necessary RPASCE variables.

Creating the Required Environment Variables

The following steps outline the process to follow and environment variables required to support the RPASCE 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**.

Figure 2-2   System Properties - Advanced Tab
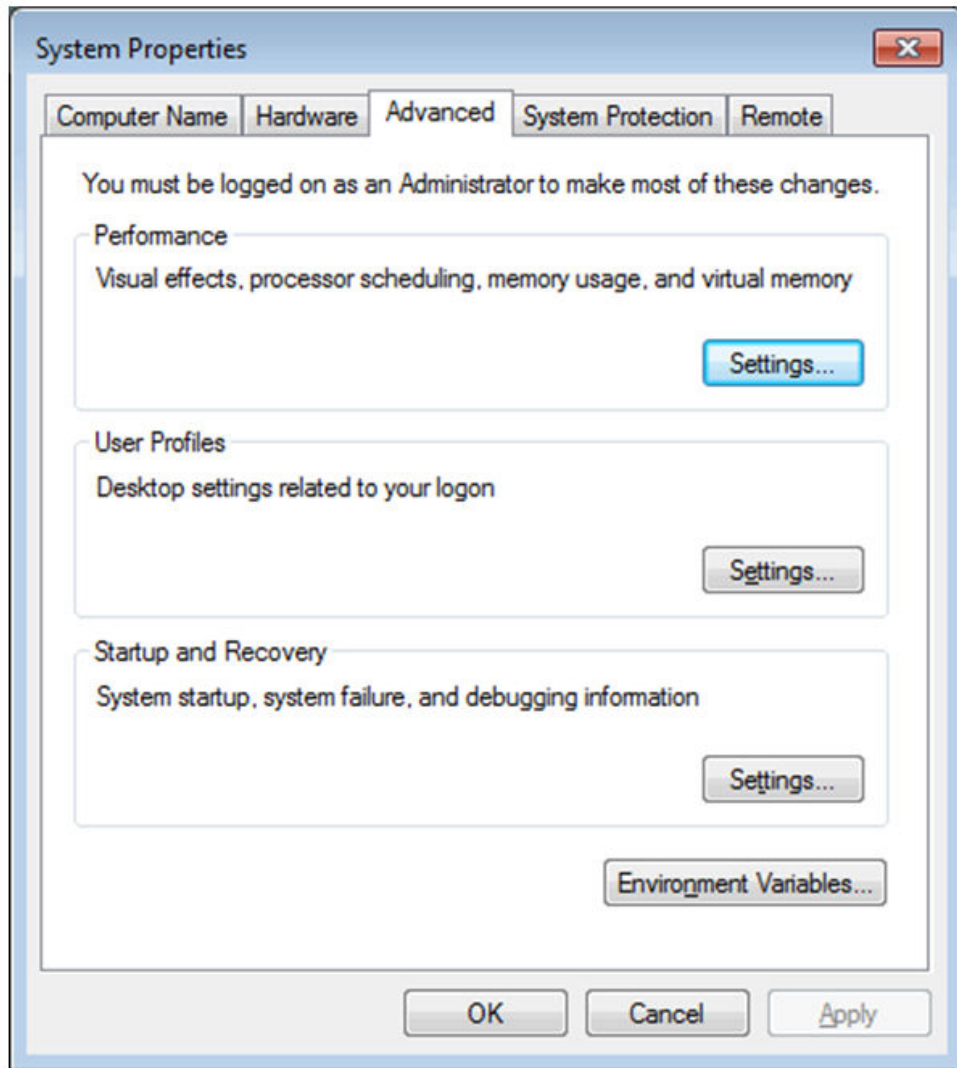
5.   The Figure 2-3 window opens.

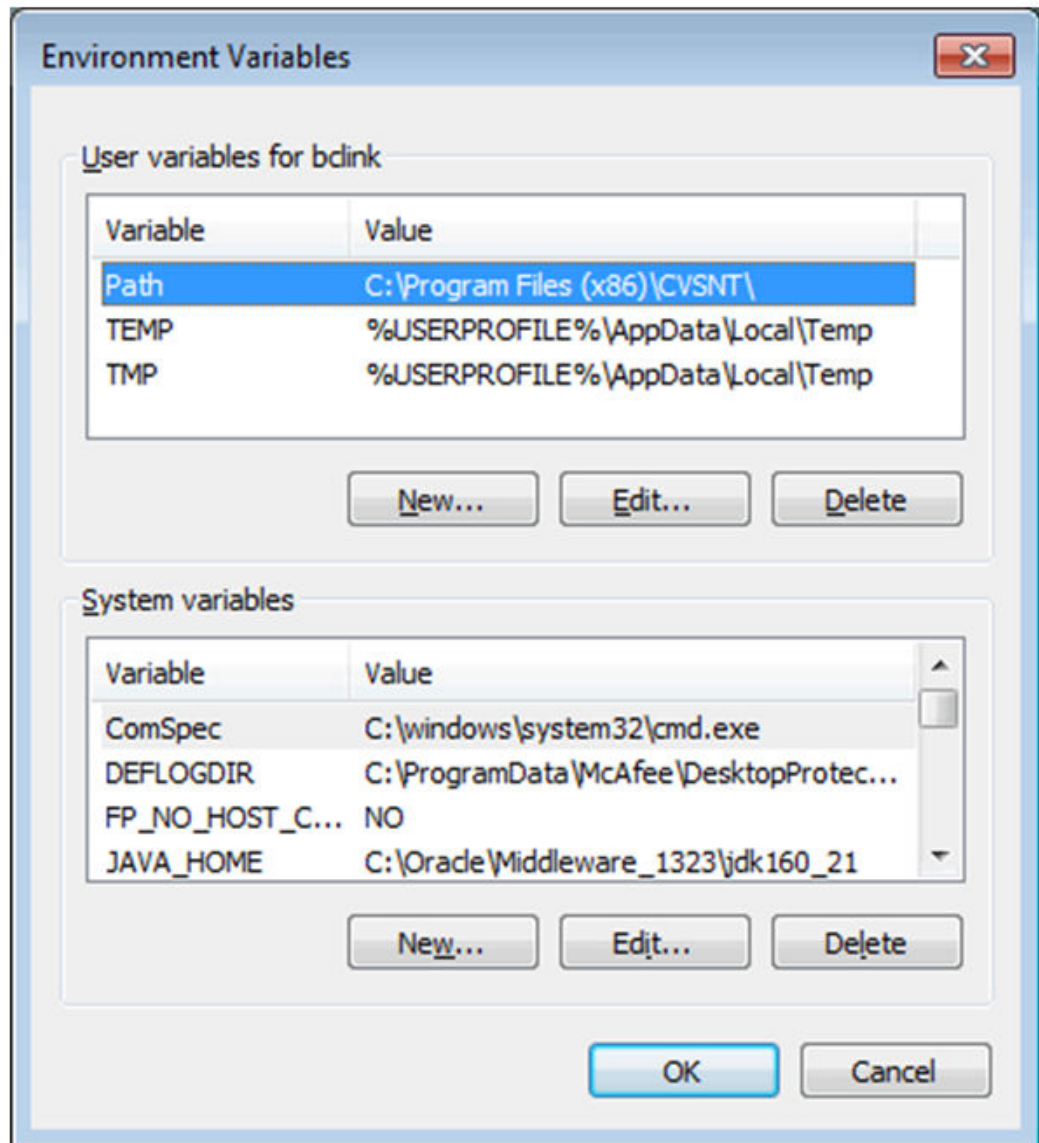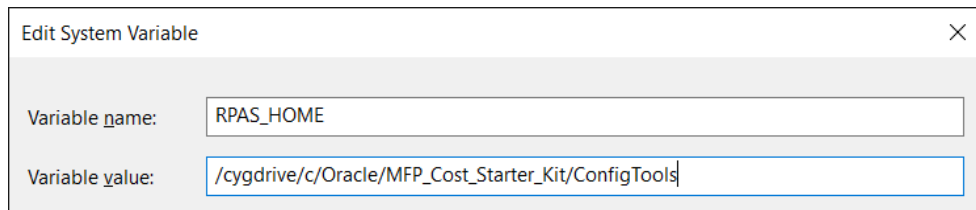**Figure 2-3   Environment Variables Window**

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/MFP_Cloud_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/MFP_Cloud_Starter_Kit/ ConfigTools**

4. Click **OK**.

Figure 2-5   Example of RIDE_HOME Variable
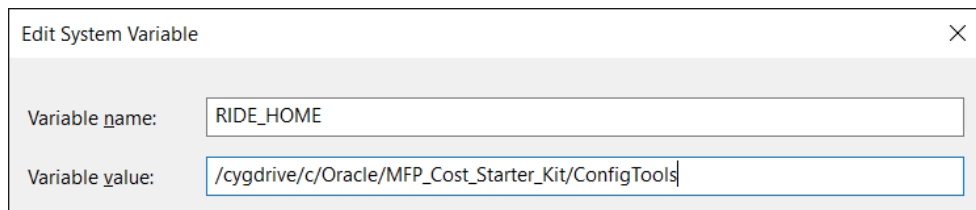
Update or Create the JAVA_HOME Environment Variable

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
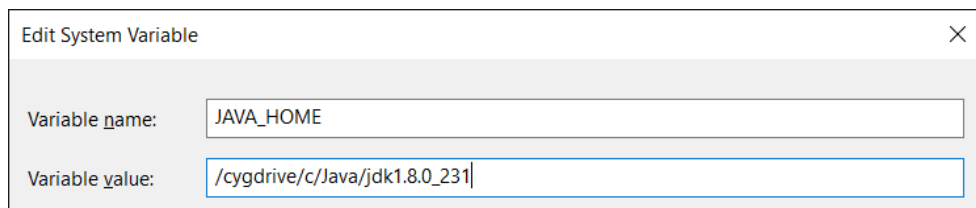
3. Create the ORACLE_HOME environment variable.

   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-windows-downloads.html

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

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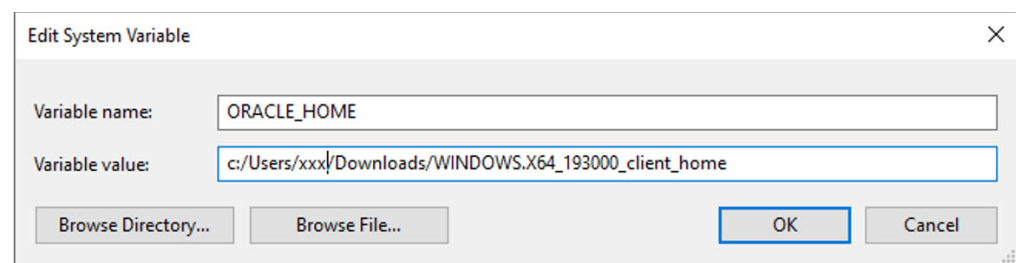
`c:/Users/xxx/Downloads/WINDOWS.X64_193000_client_home`

Figure 2-7   Example of ORACLE_HOME Variable

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 MFP 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/MFP_Cloud_Starter_Kit/lib/oracleRpasUtils.jar;C:/
Oracle/ConfigTools/MFP_Cloud_Starter_Kit/applib/aaijni.jar
```

Figure 2-8   Example of RPAS_JAVA_CLASSPATH Variable
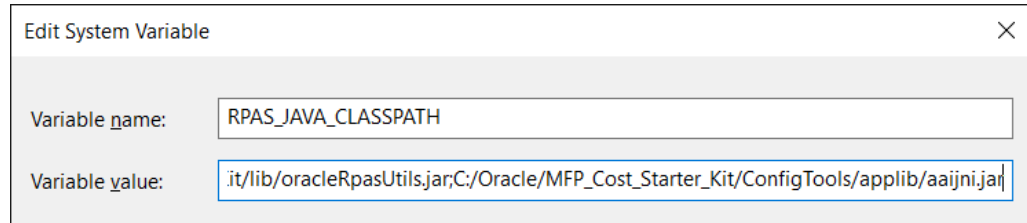
## The RIDE_OPTIONS Variable

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
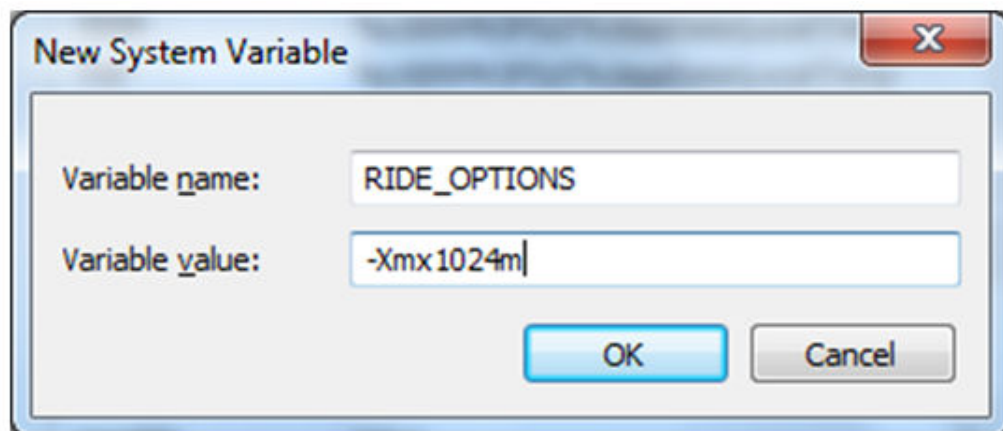
Launching RPAS Cloud Edition Configuration Tools

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`.

If using MFPCS template version then customer can use the plug-ins to generate different available configuration plug-in options. Refer to Appendix: Generating the Configuration for Plug-in Options

json

Dashboards uses `dashboardSettings.json` and this file is used by the RPASCE client for displaying the dashboard. It is also possible to use an empty file if you do not need to configure the dashboard. This file if present should be uploaded to the Object Store under `planning/incoming/json location`.

batch_control

The set of batch process control files 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 MFP Cloud Service Starter Kit.

2. Delete the contents of the `C:/Oracle/MFP_Starter_Kit` directory.

> **WARNING:**
>
> It is highly recommended to save custom configurations outside of the MFP_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 on the existing configuration to create a version of the configuration for the selection configuration options. Follow the instructions in the *Oracle Retail Merchandise Financial Planning Cloud Service Implementation Guide*.

5. Apply the changes in the newly generated configuration to the MFP Cloud Service application.

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

3
RPASCE Virtual Machine

RPAS Cloud Edition (RPASCE) 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.

> **Note:**
>
> The previously mentioned Operating System is the OS of the host machine where the VirtualBox software will be installed and not the OS of the VM image itself. For most installers this will be a Windows system as shown in Figure 3-1.

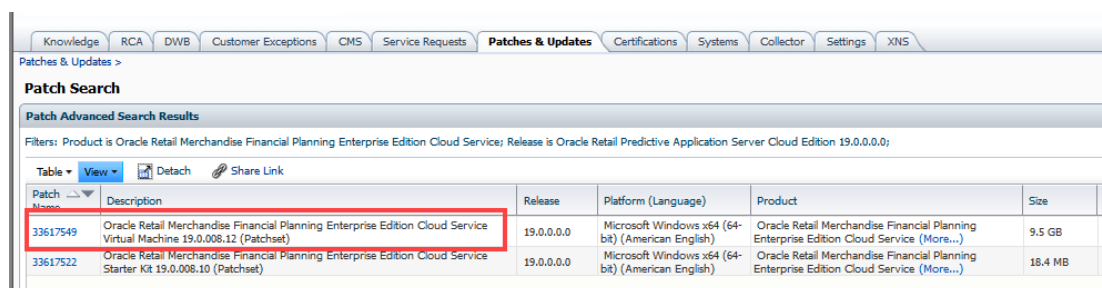**Figure 3-1   VirtualBox Platform Packages**
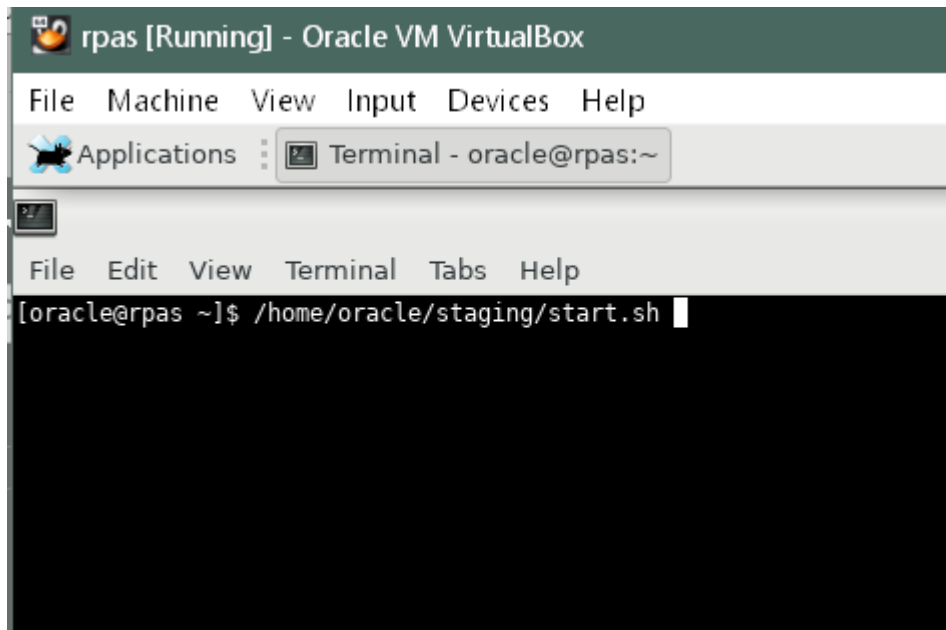
System Requirements

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.

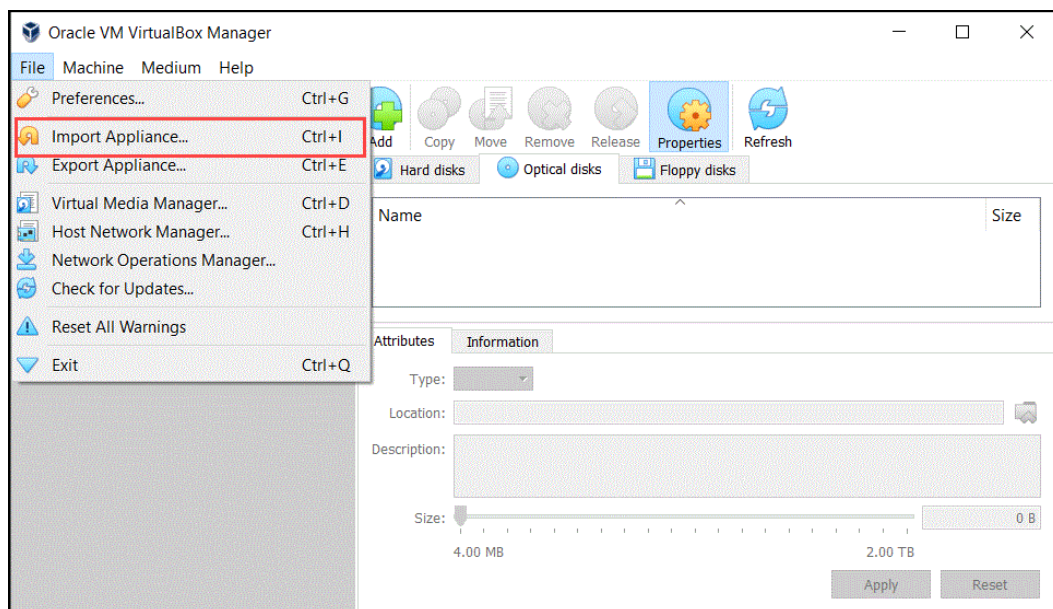**Figure 3-2　VM Download**

After downloading the VM, unzip the archive to obtain 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

2. From the main menu, click **File** and then select **Import Appliance…** as shown in Figure 3-3

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**.

Figure 3-4   Downloaded VM Base Image
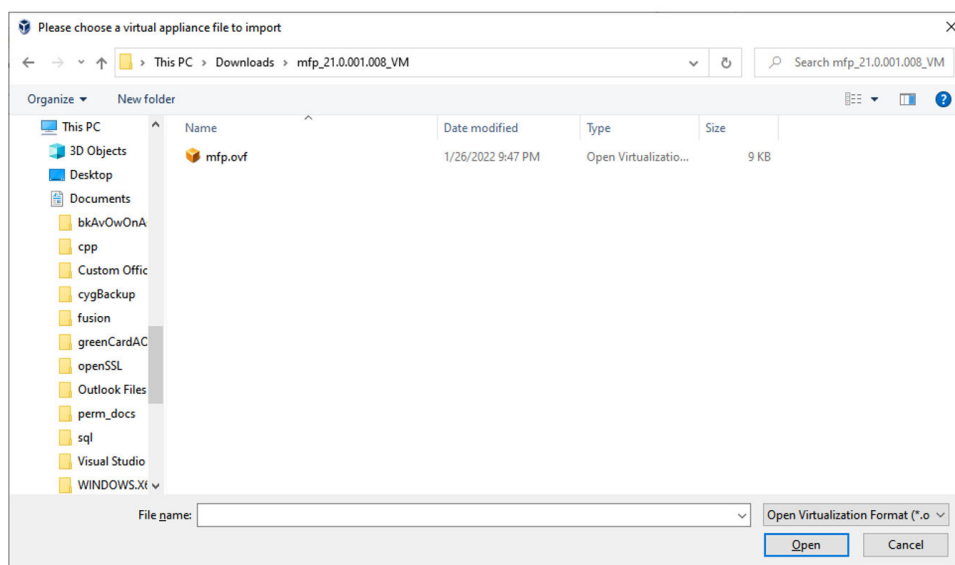
4. On the screen shown in Figure 3-5, change the name of the VM or increase the RAM used for a smoother VM experience, but choose the RAM setting carefully. The memory given to VM will not be available to your host OS while the VM is running, and this can significantly impact the performance of your 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
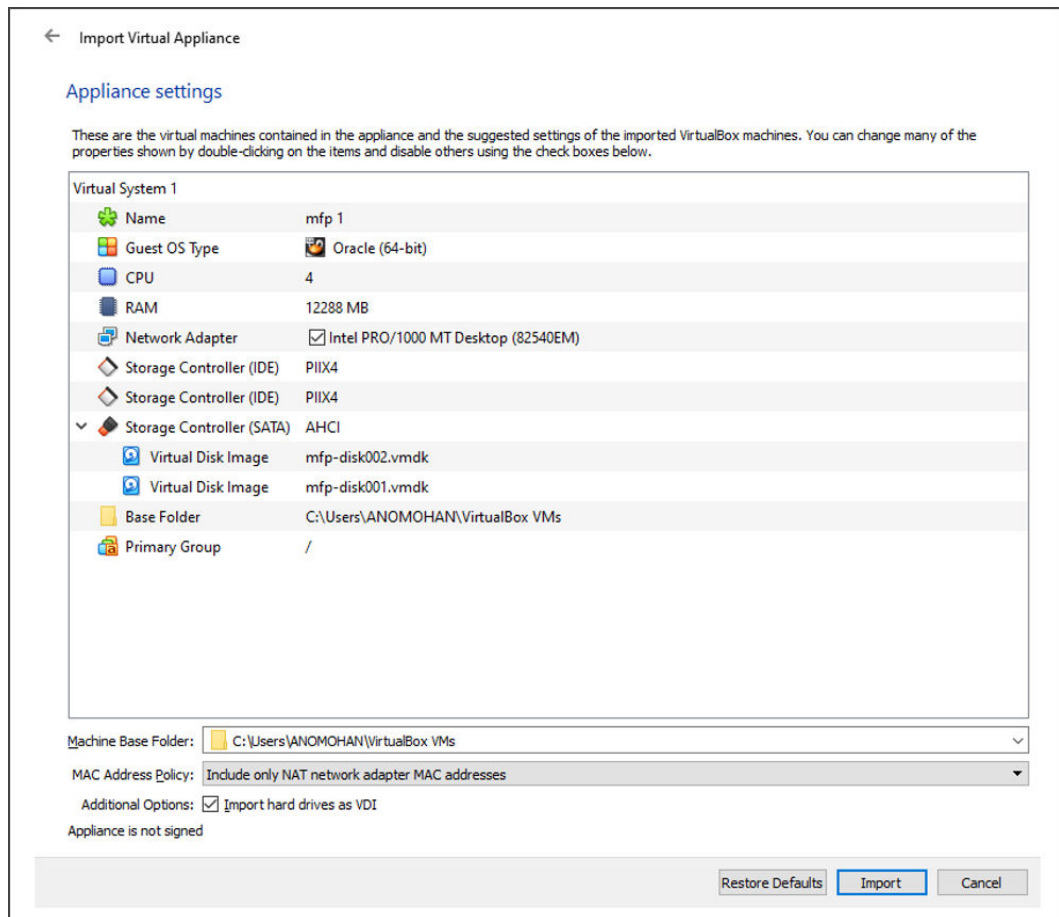
> **✎ Note:**
>
> This step creates a large file of around 40 GB on your local disk. The default location of these files is the location where VirtualBox is installed (usually the C drive for Windows). If the default location does not contain at least 50 GB of free space, then change the default location as described here:
>
> * Click **File** and then select **Preferences…**
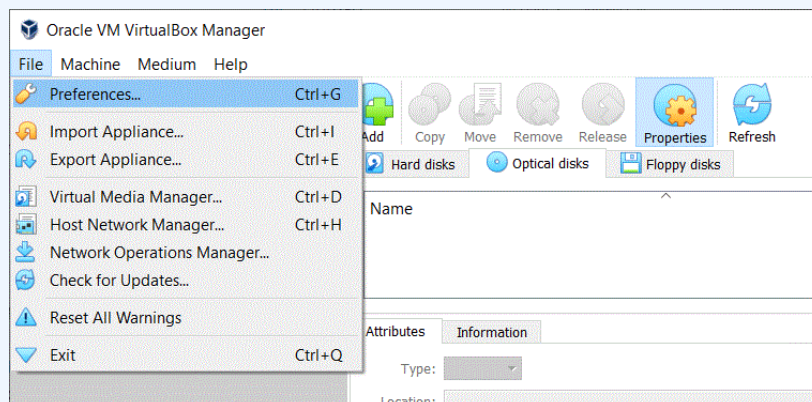
> * Change the location of the Default Machine Folder to a drive that has enough space.
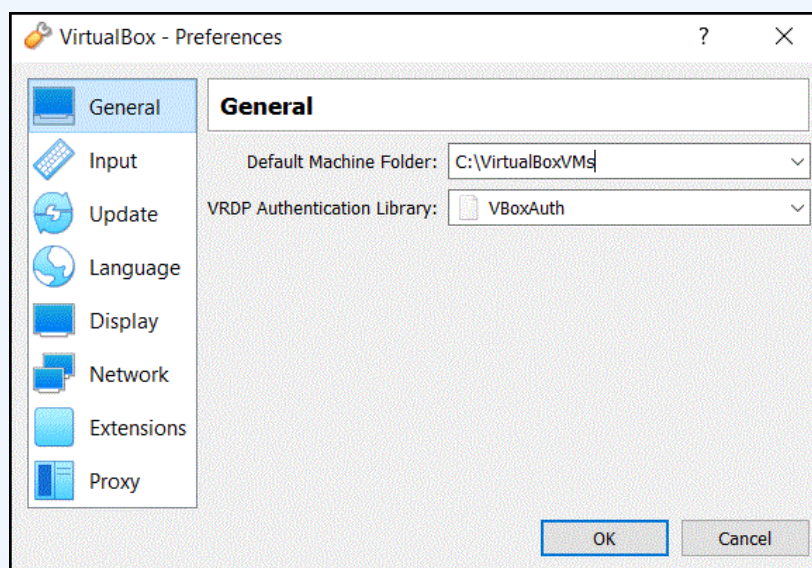

> Wait for the image to get imported. It might take a few minutes.

5. Prior to deployment, verify that the Basic settings are correct to avoid receiving an error message that indicates that the inappropriate kernel is being used for your CPU.

   a. Click the **Settings** icon to verify the settings for the selected VM.

Figure 3-6   Settings Icon

b.   From the left panel, click **General** and then select the **Basic** tab.

Figure 3-7   Basic Tab
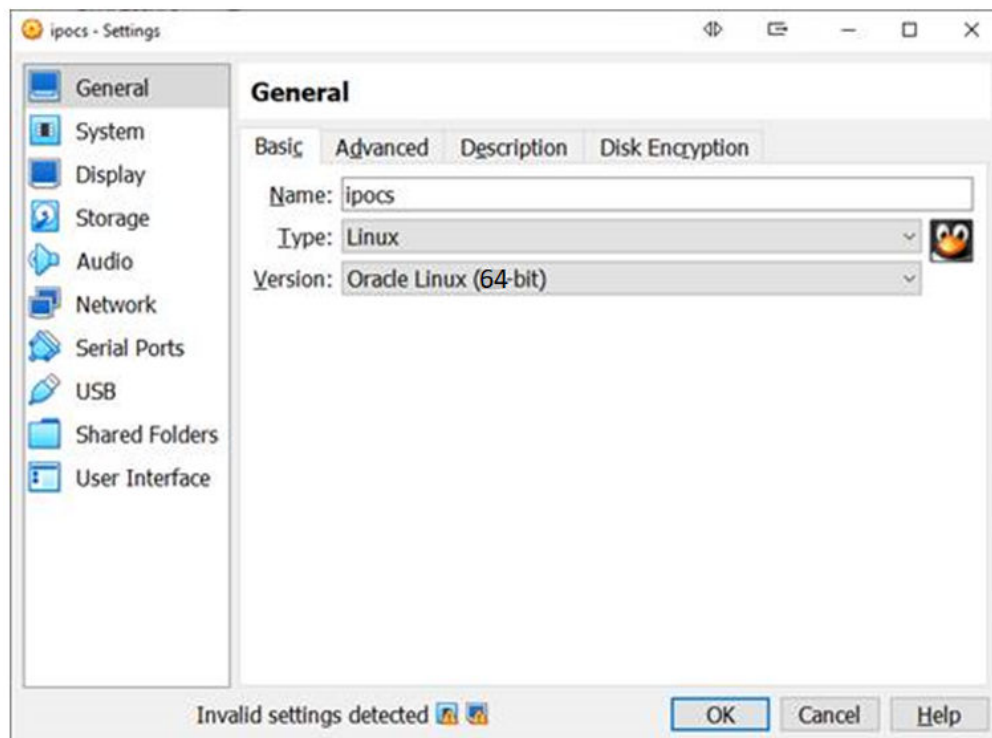
c.   Verify that the System Type and Version are appropriate and match your CPU.

Example:

Type: `Linux`

Version: `Oracle Linux (64-bit)`

6.   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.

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

> ✏ **Note:**
>
> Sometimes the settings screen shows an invalid settings warning. This warning can be ignored.

Figure 3-8   System Memory Slider
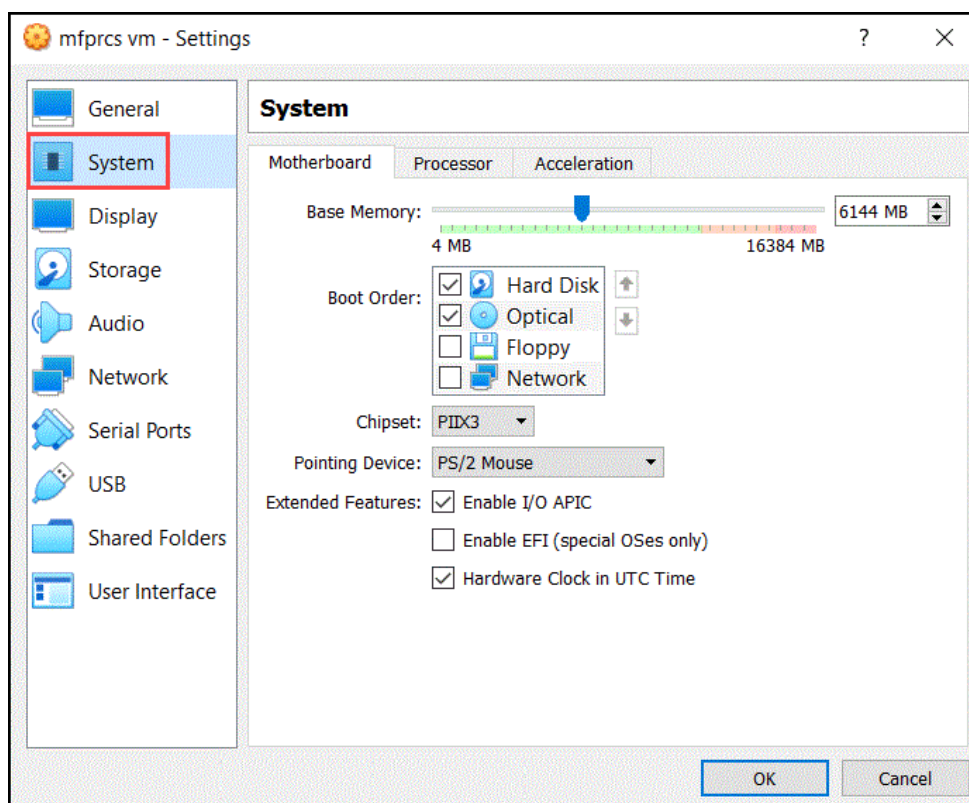
8. Select the **Processor** tab. If you run into any performance issues while using the VM and your host machine has multi-core processors, you may increase the available CPU for the VM by increasing the number of processors in the **Processor** tab (Figure 3-9).

**Figure 3-9   System Processor CPU Change**
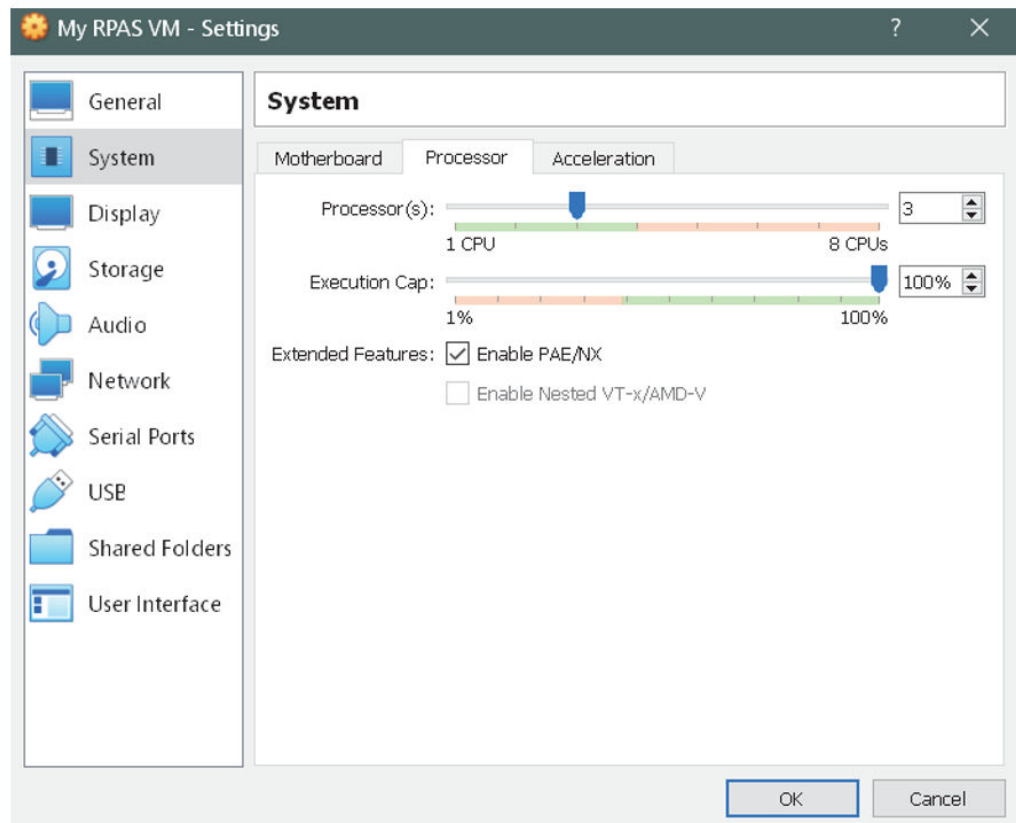
9. Optional step- Only perform this step if someone else will use an RPASCE VM on the same network.

   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.

Figure 3-10   New Random MAC Address for the Virtual Network Card
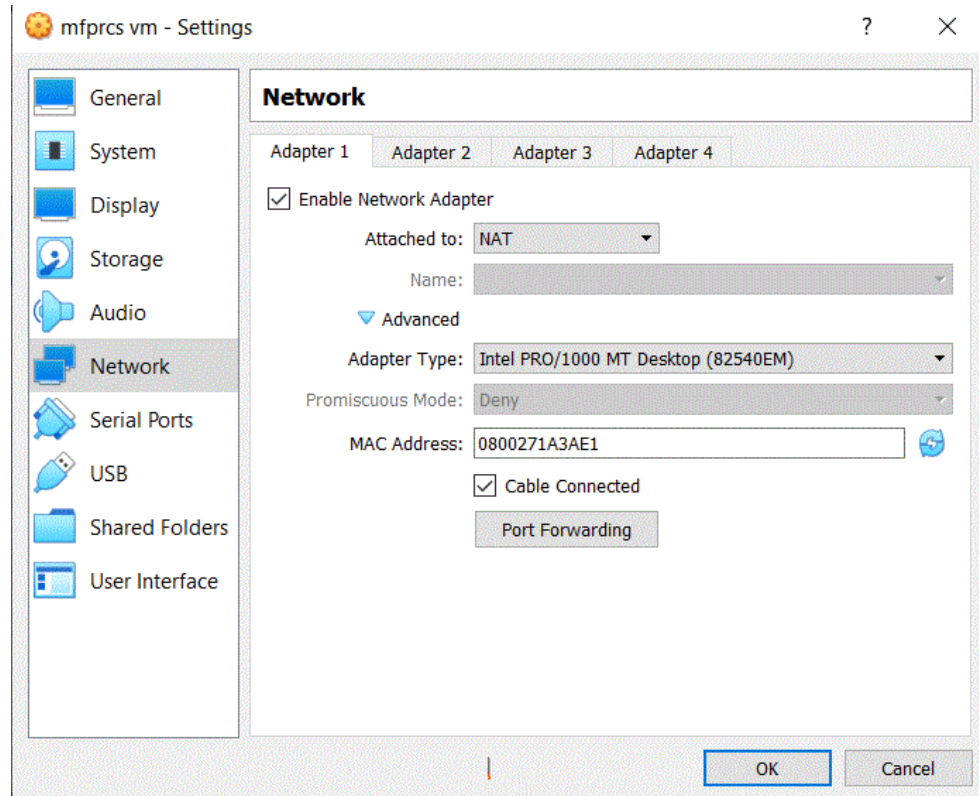
10. Click **Port Forwarding**.

    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.
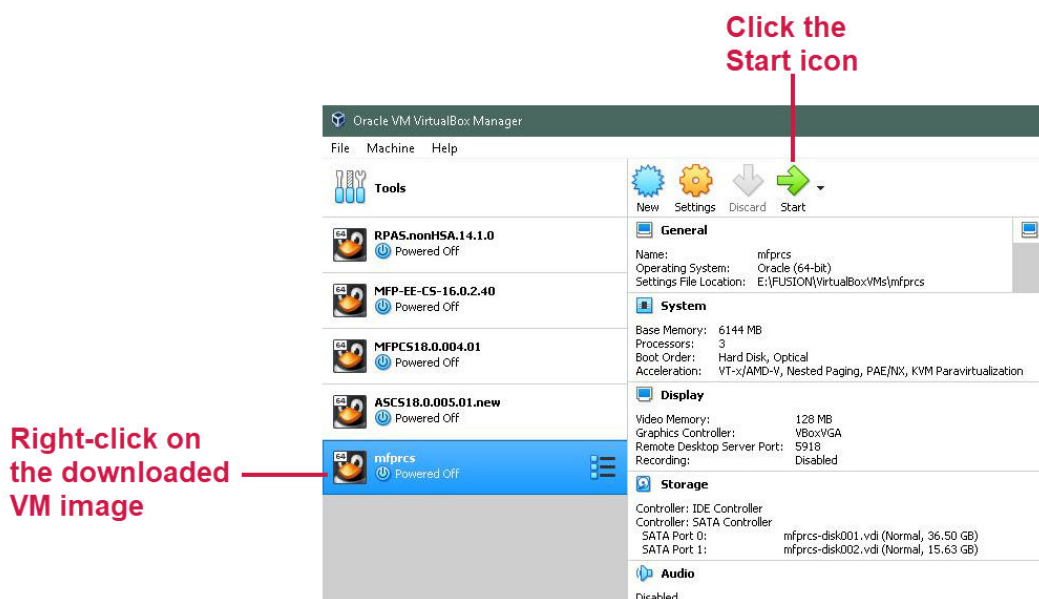
Figure 3-11   Port Forwarding Rules Window
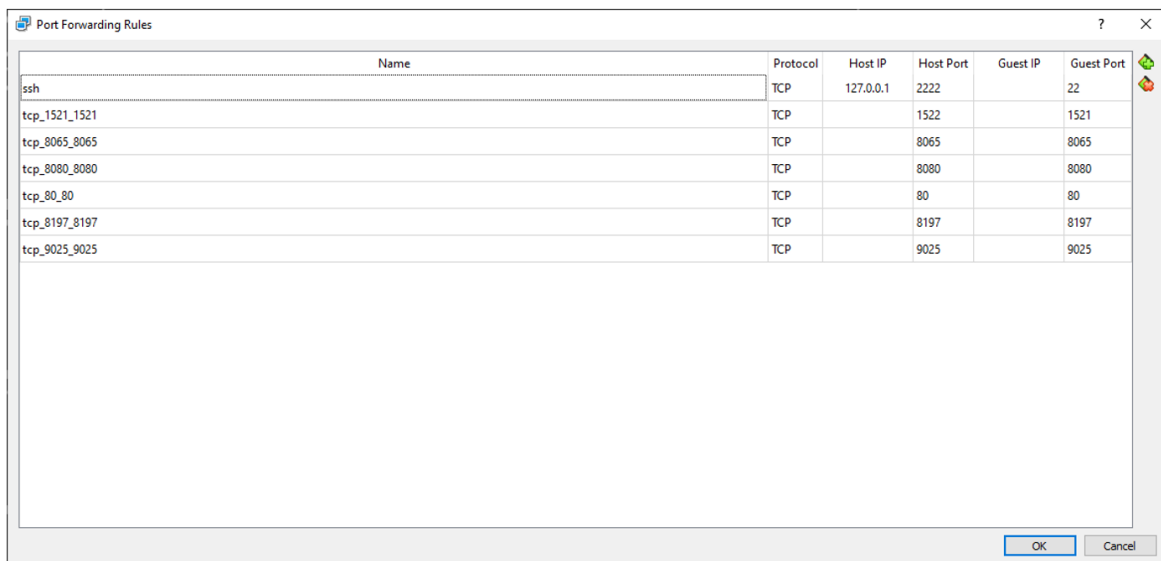
Click **OK**.

11. 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 3-12   Starting the VM Image

12. 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 3-13.

Figure 3-13   Load Messages

13. 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 3-14.

Figure 3-14   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.
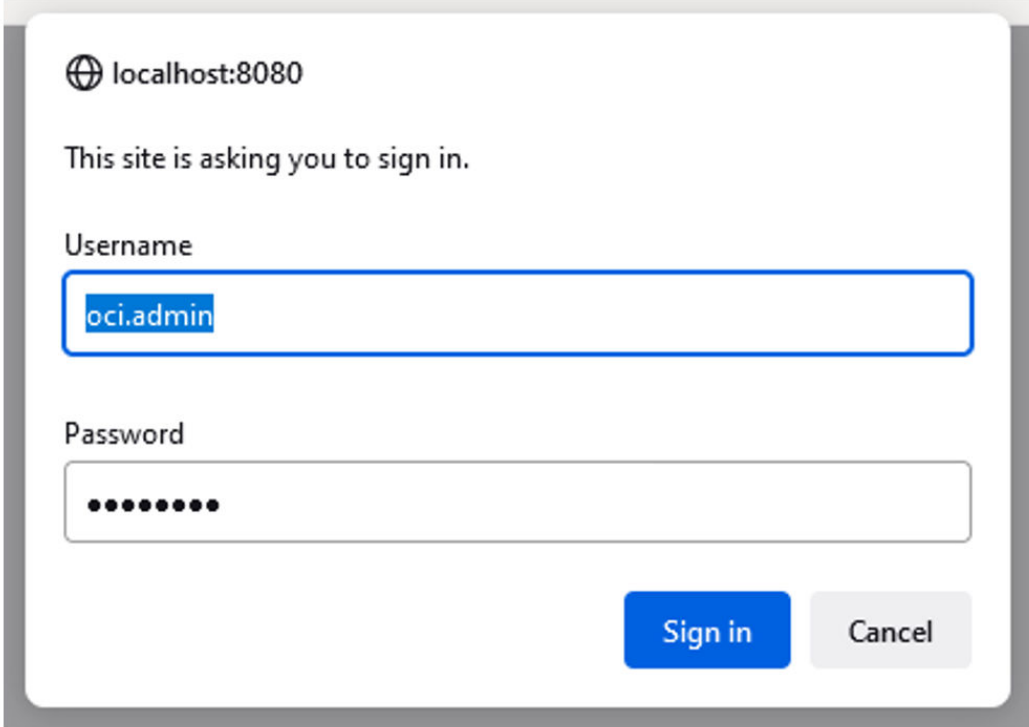
Launching the RPASCE User Interface

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 3-15 shows the RPASCE UI Sign In, enter the Username: *oci.admin* and the Password: *Orcl1234*.

Figure 3-15   RPASCE UI Sign In

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 EE application.

2. To build the GA app using the input files present in the VM select the GA checkboxes as shown in Figure 3-16.

   Refer to either the *Oracle Retail Merchandise Financial Planning Cloud Service Administration Guide* or *Oracle Retail Merchandise Financial Planning Enterprise Edition Cloud Service Administration Guide* for more details about building the application.

Figure 3-16   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).

3. If your build is not using GA, run the OAT task Template Status and then deactivate the template status.

Figure 3-17   Select Options for non-GA App Build
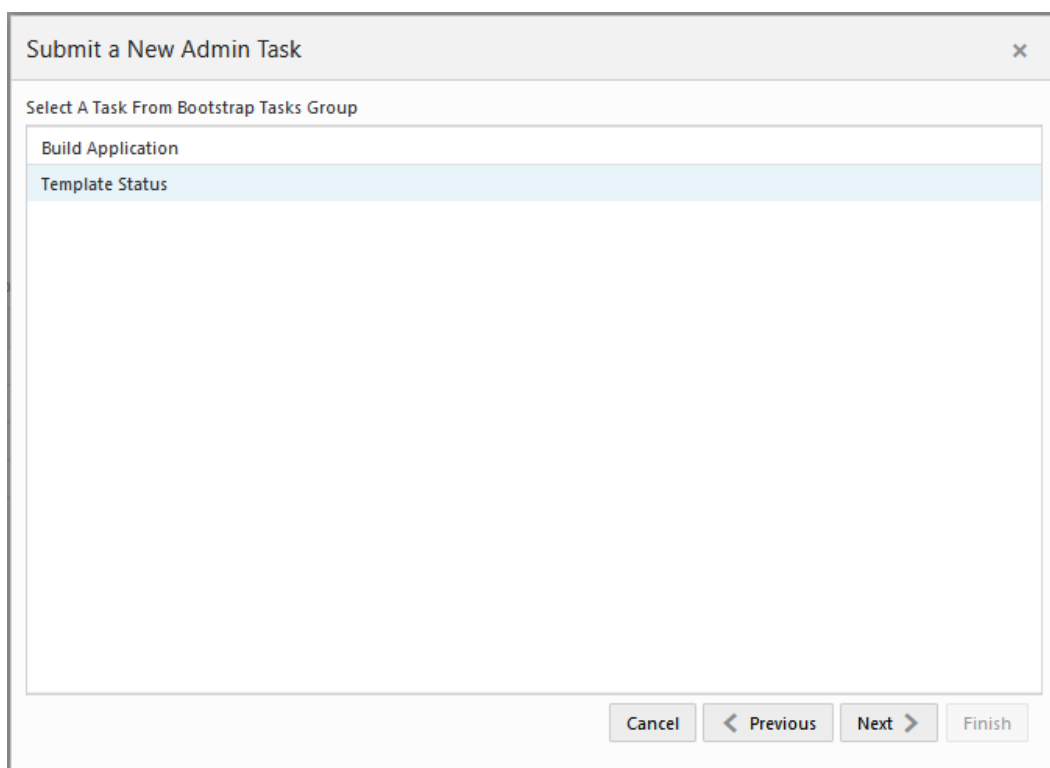
a.   From the Change template status drop-down list, select **Deactivate**. Click **Next** and
     then click **Finish** to run the task.

Figure 3-18   Change Template Status List

> **Note:**
>
> Hierarchy data is now loaded after the application is built as a post-build step. If the template status is active, just run the post-build batch that is available as part of GA. If the template is deactivated, then a post-build batch can be setup using the control files uploaded during application build to load the hierarchy data.
>
> 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.

Copying Files between the VM and the Host Desktop

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

1. 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*.

Figure 3-19   Sharing Files
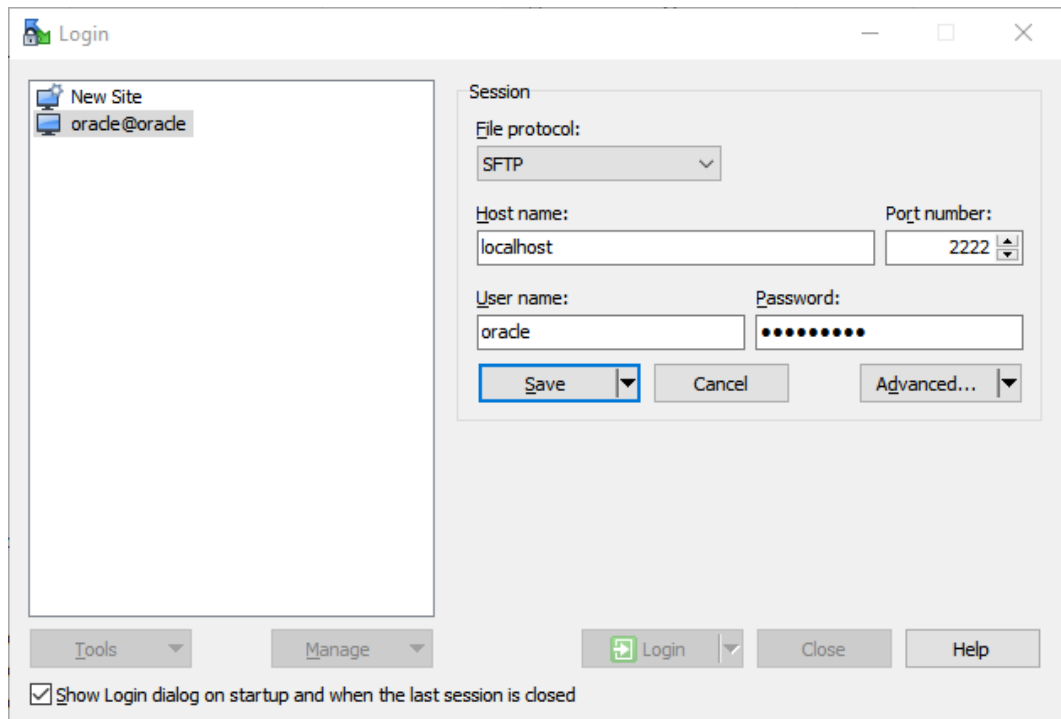
2. The incoming FTP location inside the VM is:

    `/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 Merchandise Financial Planning Cloud
    > Service* documentation set.

Figure 3-20   FTP Locations
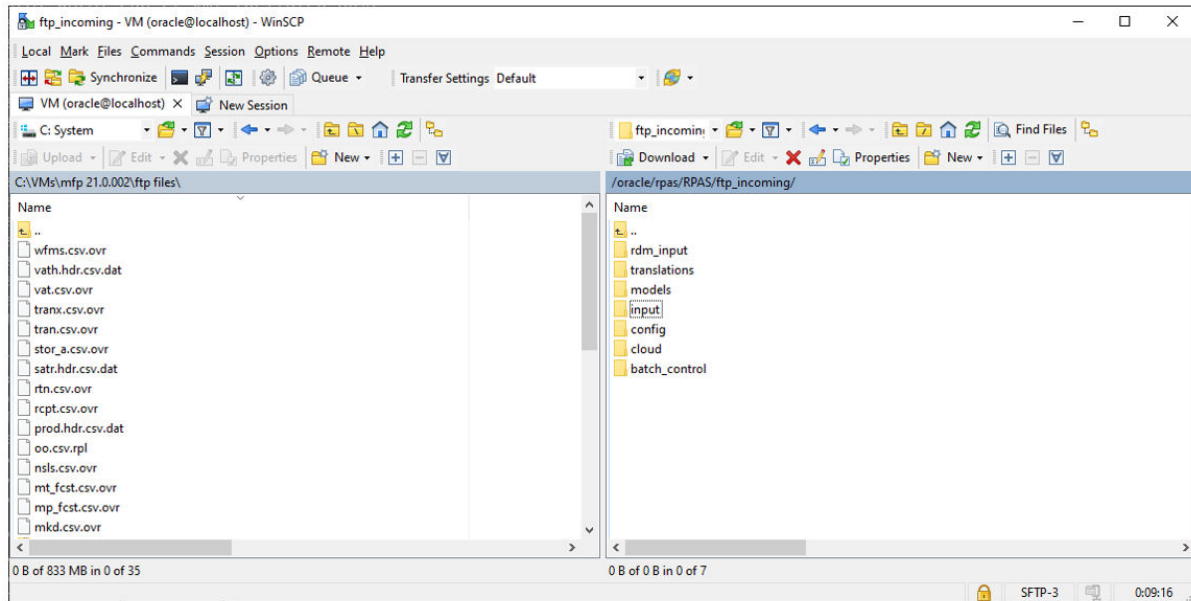
Users in the VM

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
Oracle Internal User	oracleintuser	Yes

User Label	User Name	Administrator
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 3-21   Database Connection
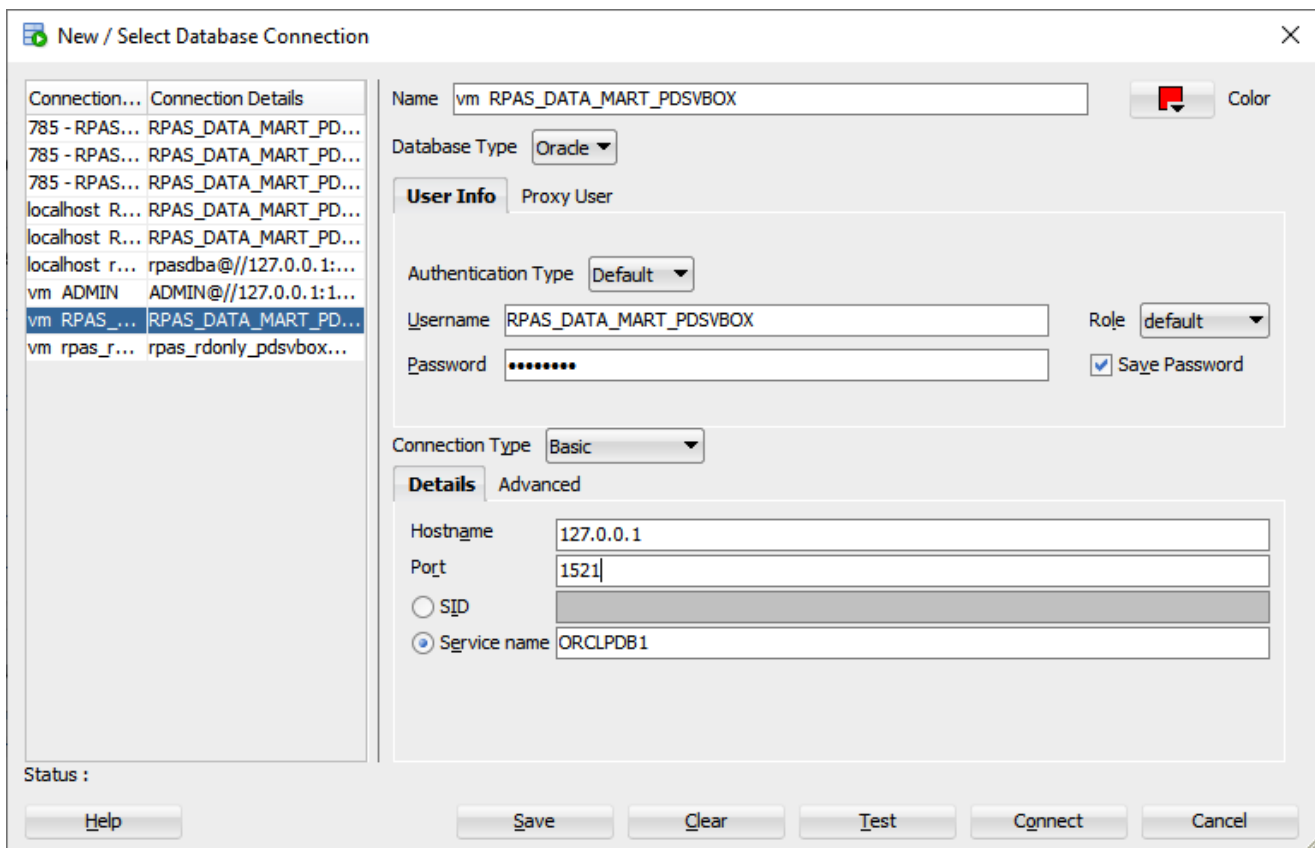
Table 3-1 lists the schema users

Table 3-1   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

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 3-22 while starting the image, you might have an unsupported version of VirtualBox. Install the latest VirtualBox software.

Figure 3-22   VirtualBox Error
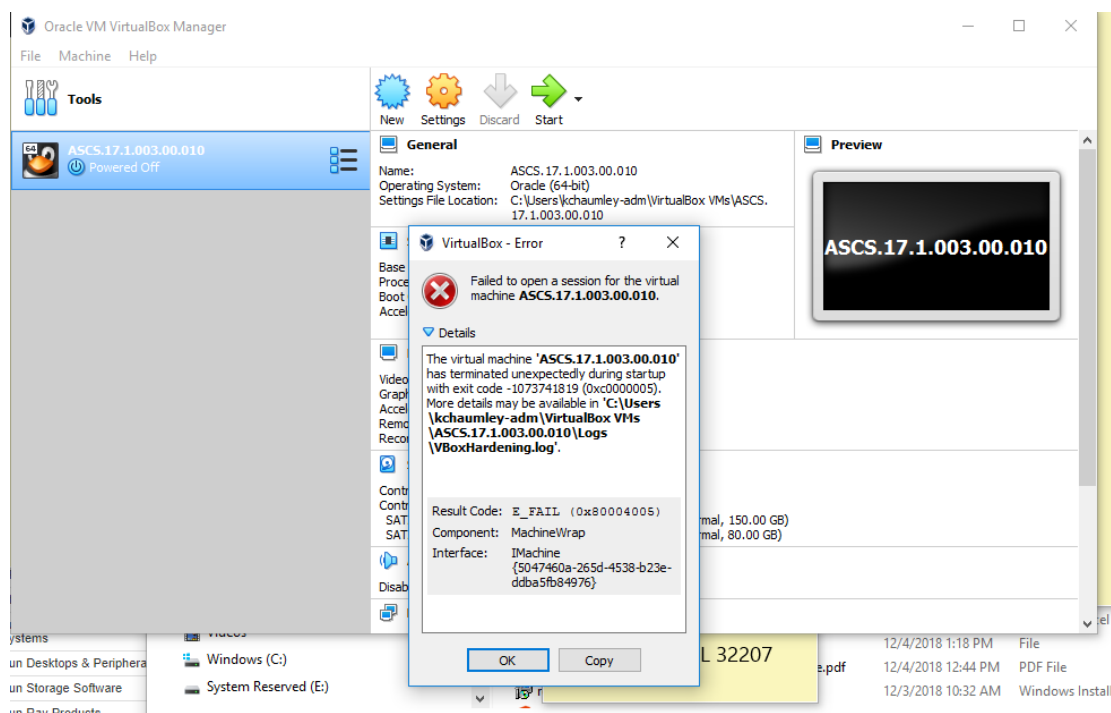
UI Login Issues

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.

A

Appendix: Generating the Configuration for Plug-in Options

Merchandise Financial Planning Cloud Service supports generating different configurations using plug-in automation for different configuration options.

Steps to Generate MFP Cost Configuration

By default, without any selections if MFP GA is deployed it will only deploy the MFP Retail configuration. In order to deploy MFP Cost configuration, MFP Cost configuration needs to be generated from MFP Starter Kit.

1. Download the MFP_Starter_Kit.zip and unzip the content.

2. Open the RPAS Cloud Edition Configuration Tools from the Starter Kit and open the configuration `mfpcs` within the starter kit. Notice that configuration is MFP Retail with the solution name used in it is shown as **MFPRCS**.

3. From Automation, select **MFP Cloud Service** and then **Specify Parameters**.

Figure A-1   Specify Parameters
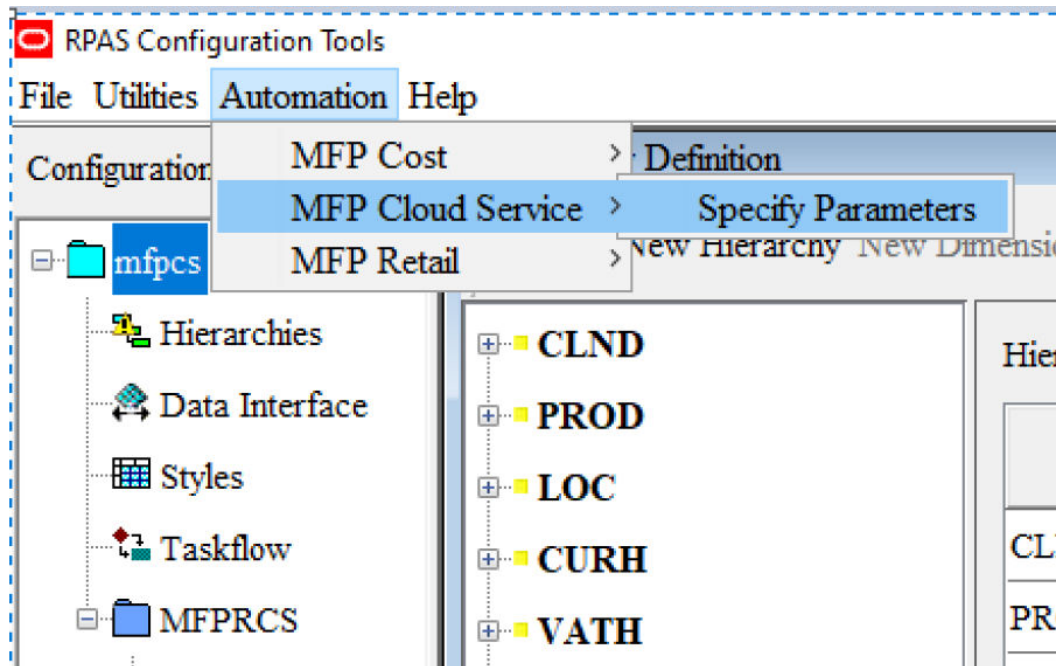
4. From the Service Parameters dialog box, select **MFP Cost** and clear the **MFP Retail Solution**.

Select or clear any Configuration Options.

Click **OK**.

Figure A-2   Service Parameters
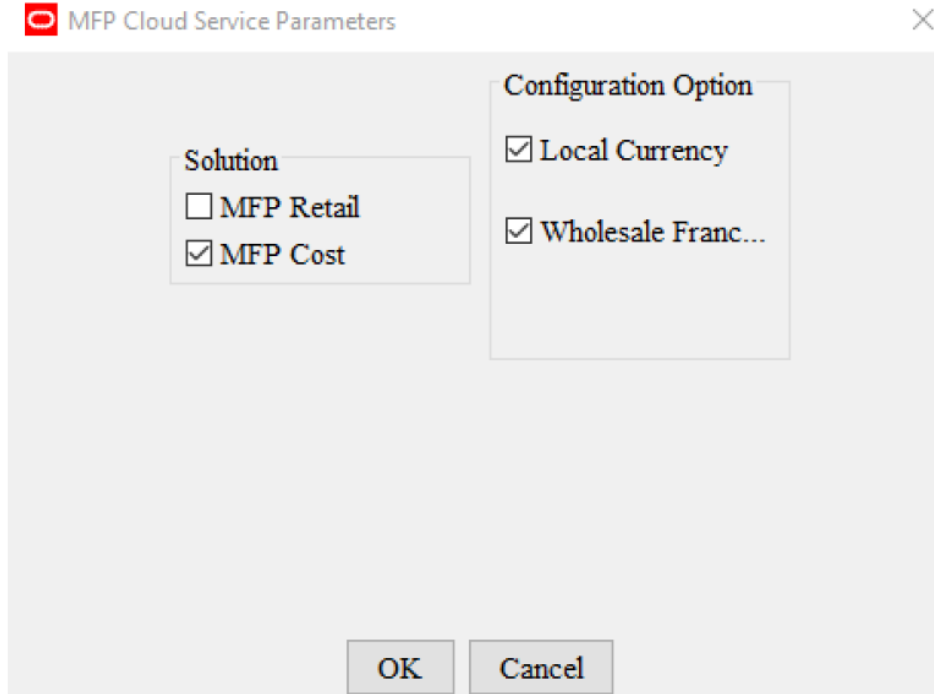
5. Save the configuration and exit the RPAS Cloud Edition Configuration Tools.

6. Open the Cygwin from where config tools was launched and then go to the bin directory.

   ```
   cd $RIDE_HOME/bin;
   ```

7. Ensure that BSA_LOG_HOME and BSA_TEMP_DIR are set to valid directories. For example:

   ```
   mkdir -p "${ORACLE_HOME}/logs"

   mkdir -p "${ORACLE_HOME}/temp"

   export BSA_LOG_HOME="${ORACLE_HOME}/logs"

   export BSA_TEMP_DIR="${ORACLE_HOME}/temp"
   ```

8. Run the following plug-in script to generate the MFP Cost configuration. In the following example -c should be followed with full cygwin path where you have unzipped the starter kit.

   The example uses the directory: /cygdrive/c/Oracle/MFP_Starter_Kit.

9. Run this script:

   ```
   ra_auto_gen_config.ksh -c /cygdrive/c/Oracle/MFP_Starter_Kit -n mfpcs
   -genAllFiles
   ```

   The script should run and complete with non-zero return code as shown in Figure A-3.

   You can run the script with the -clean option to remove any customization from GA solutions.

If you are switching from MFP Cost to MFP Retail or vice versa, you must run the script with the `-clean` option.

```
ra_auto_gen_config.ksh -c /cygdrive/c/Oracle/MFP_Starter_Kit -n mfpcs -clean
-genAllFiles
```

Figure A-3   Run the Script

10. Open the configuration using RPAS Cloud Edition Configuration Tools and verify that solution now shows as **MFPCCS**.

Figure A-4   Verify the Solution
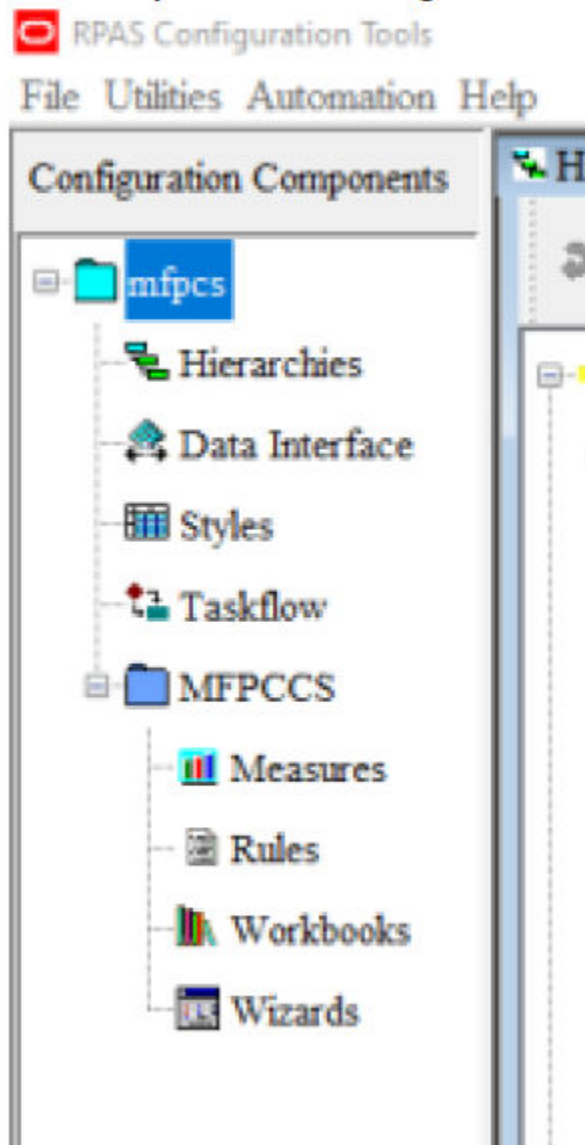
11. After the solution is generated, zip the **config mfpcs** folder and name it as `mfpcs_config.zip`. It can be used during application build or patching of the configuration.

> **Note:**
>
> You can implement on MFP Retail and then generate MFP Cost configuration and then patch it, but that patching option is allowed only if there are no extensibility changes. If you plan to use extensibility to customize template version of configuration, then you should decide on Retail or Cost type solution before making any of those extensibility specific changes.