Oracle® Retail Merchandise Financial Planning Cloud Service

Starter Kit

Release 16.0

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Oracle Retail Merchandise Financial Planning Cloud Service Starter Kit, Release 16.0

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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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Related Documents

For more information, see the following documents in the Oracle Retail Predictive Application Server Release 16.0 documentation set:

- *Oracle Retail Merchandise Financial Planning Cloud Service Administration Guide*
- *Oracle Retail Merchandise Financial Planning Cloud Service Implementation Guide*
- *Oracle Retail Merchandise Financial Planning Cloud Service Starter Kit Guide*
- *Oracle Retail Merchandise Financial Planning Cost Cloud Service User Guide*
- *Oracle Retail Merchandise Financial Planning Cloud Service Release Notes*
- *Oracle Retail Merchandise Financial Planning Retail Cloud Service User Guide*
- Oracle Retail Predictive Application Server documentation

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Conventions

The following text conventions are used in this document:

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

1

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.

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 RPAS Configuration Tools	Microsoft Windows 7 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 32-bit Java 1.8 or later.
Required Software	A Java 8 JRE is required to support the RPAS Configuration Tools. The specified Java versions or later patch releases are supported: ▪ Microsoft Windows 7 ▪ Microsoft Windows 10

Starter Kit Components

For information on installing the Starter Kit, refer to Chapter 3, "Installing 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 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 7 or 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
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 *Oracle Retail Predictive Application Server Administration Guide*.
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

Getting Started

This chapter provides overview of the MFP Cloud Service Starter Kit.

MFP Cloud Service Starter Kit Overview

RPAS 16.0 Cloud Service is comprised of many components. In addition, there are solutions that have been developed using the RPAS 16.0 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 16.0 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
- A base configuration of the application
- Application specific extensions of the RPAS Configuration Tools
- Documentation

> **Note:** The use of the RPAS Fusion Client and RPAS Classic Client simultaneously in the same environment is not supported in a production environment.

3

Installing on a Windows Environment

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

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.

Extracting the RPAS Package

Unzip the `MFP_Cloud_Starter_Kit-16_0_0_6.zip` to a newly created directory on the Windows machine. The `MFP_Cloud_Starter_Kit-16_0_0_6.zip` contains all the RPAS components.

Once extracted, the following directories appear:

Directory	Description
ConfigTools	This directory contains the components required to run the RPAS Configuration Tools.
configurations	This directory contains an example configuration for the MFP solution.

Java Environment

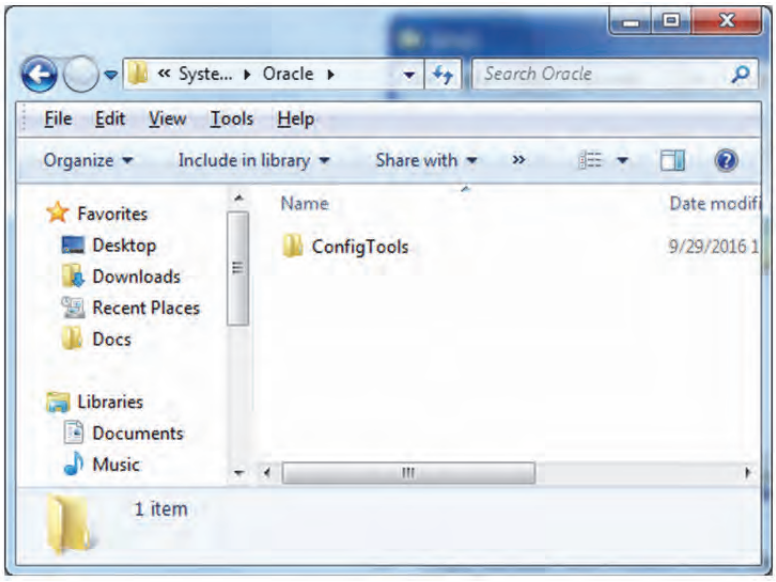
During the Java installation, a directory is created to store the Java software. This directory is referred to later in this document as **JAVA_HOME**. For information on setting **JAVA_HOME**., refer to "Creating the Required Environment Variables."

Installing Configuration Tools

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

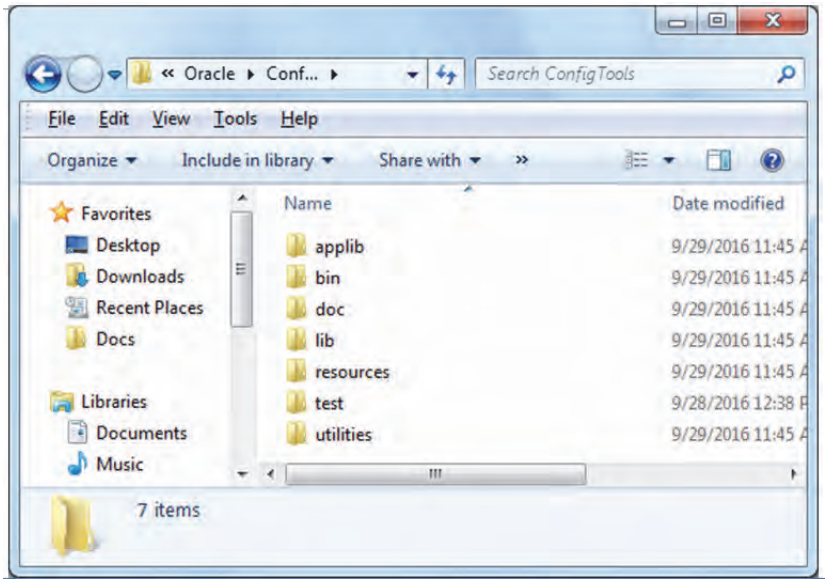
1. Using Windows Explorer, navigate to your C drive, create a folder named **Oracle**.
2. Open the **Oracle** folder and create a folder named **ConfigTools**.

Figure 3–1 Example of ConfigTools Folder Path



3. Copy all files and folders from the **ConfigTools** folder where you extracted the `MFP_Cloud_Starter_Kit-16_0_0_6.zip` to the **C:\Oracle\ConfigTools** folder.

Figure 3–2 ConfigTools Folder with All Starter Kit Components



This location is referred to as both **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.

Microsoft 2010 Runtime Libraries

Ensure that these Microsoft 2010 Runtime Libraries are installed to enable RPAS Configuration Tools and other RPAS utilities:

- MSVCR100.dll
- MSVCP100.dll

Download these libraries from this link:

`http://www.microsoft.com/en-us/download/details.aspx?id=5555`

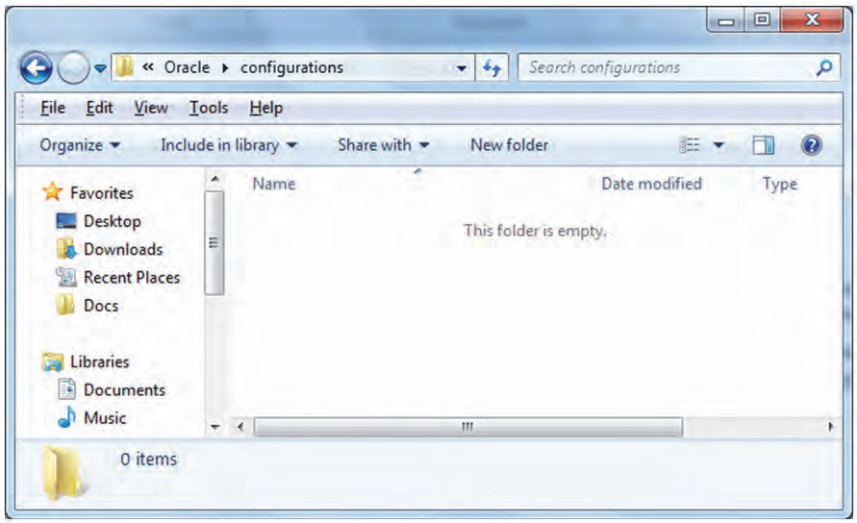
> **Note:** Use Microsoft Visual C++ 2010 or higher for use with RPAS Configuration Tools and other RPAS utilities.

Installing the Sample Configurations

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

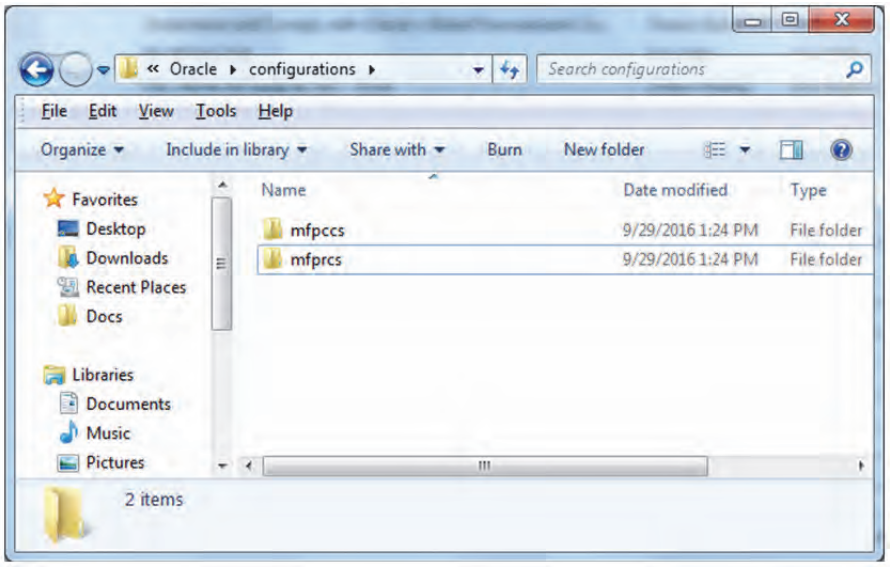
1. Using Windows Explorer, navigate to your C drive, create a folder named Oracle, which you created in the section, "Installing Configuration Tools.".
2. Create a folder named **configurations**.

Figure 3–3 Example of Configurations Folder Path



3. Copy all files and folders from the **configurations** folder where you extracted the `MFP_Cloud_Starter_Kit-16_0_0_6.zip` to the **C:\Oracle\configurations** folder.

Figure 3–4 Configurations Folder with Sample MFP Configuration



Generating the Configuration with Plug-in Options

MFP Cloud Service supports generating different configurations using plug-in automation for different configuration options.

For details on creating a configuration using plug-ins, refer to "Appendix C: Generating the Configuration for Plug-in Options" in the *Oracle Retail Merchandise Financial Planning Cloud Service Implementation Guide*.

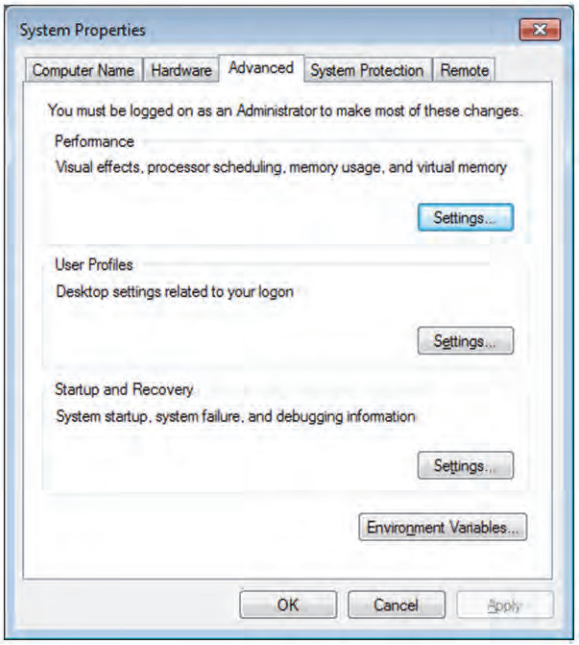
Creating the Required Environment Variables

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

1. From the Control Panel, open the System window.
    a. If your system is using Category view, from the Windows 7 Start menu, go to **Control Panel**, select **System and Security**, select **System**, and then select **Advanced System Settings**.

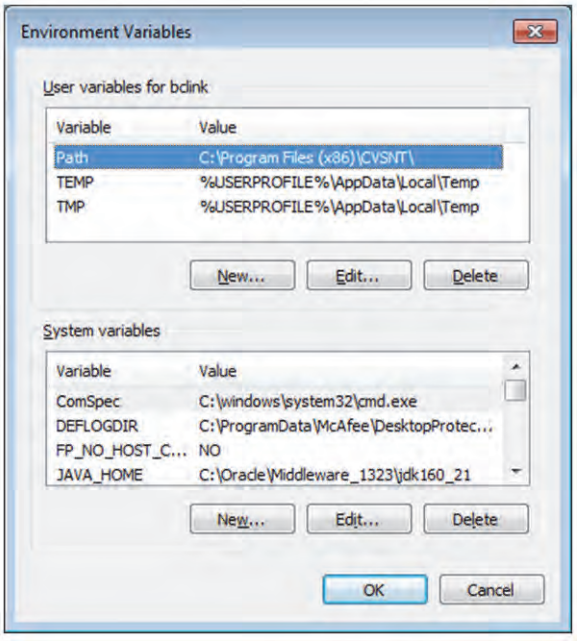
       The System Properties window opens on the Advanced tab.
    b. Select the **Advanced** tab.
    c. At the bottom of the window, click **Environment Variables**.

Figure 3–5 System Properties - Advanced Tab



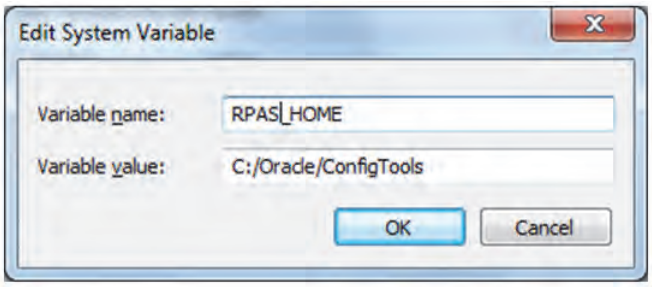
d. The Environment Variables window opens.

Figure 3–6 Environment Variables



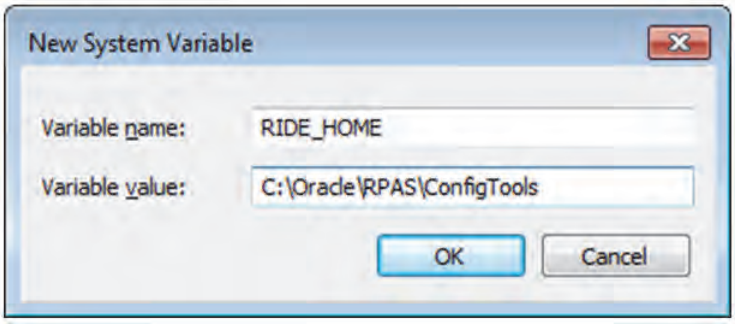
2. Create the **RPAS_HOME** environment variable.
   a. Under the System variables box, click **New**. The New System Variable dialog box opens.
   b. Enter **RPAS_HOME** in the **Variable** name field.
   c. Enter the path the **RPAS Server** folder in the **Variable value** field.

Figure 3–7 Example of RPAS_HOME Variable



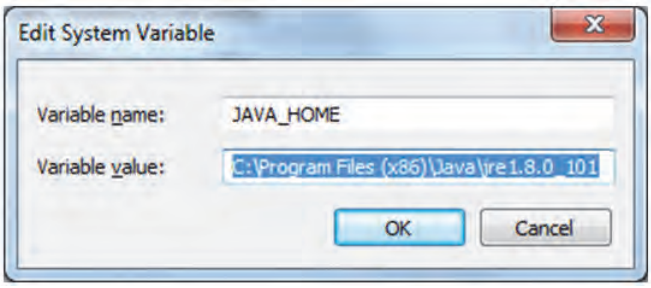
   d. Click **OK**. **RPAS_HOME** now appears in the Variable name box.
3. Create the **RIDE_HOME** environment variable.
   a. Under the System variables box, click **New**. The New System Variable dialog box opens.
   b. Enter **RIDE_HOME** in the **Variable name** field.
   c. Enter the path the **ConfigTools** folder in the **Variable value** field.

Figure 3–8 Example of RIDE_HOME Variable



   d. Click **OK**. **RIDE_HOME** now appears in the Variable name box.
4. Create the **JAVA_HOME** environment variable.
   a. Under the System variables box, click **New**. The New System Variable dialog box opens.
   b. Enter **JAVA_HOME** in the **Variable name** field.
   c. Enter the path the **Java** folder under Program Files in the **Variable value** field.

Figure 3–9 Example of JAVA_HOME Variable



d. Click **OK**. **JAVA_HOME** now appears in the Variable name box.

5. Update the Path variable.

   a. Under the System variables section, select the **Path** environment variable and click **Edit**.

   b. 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%\bin\client;%JAVA_HOME%\lib;
   %JAVA_HOME%\jre\bin\client
   ```

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

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

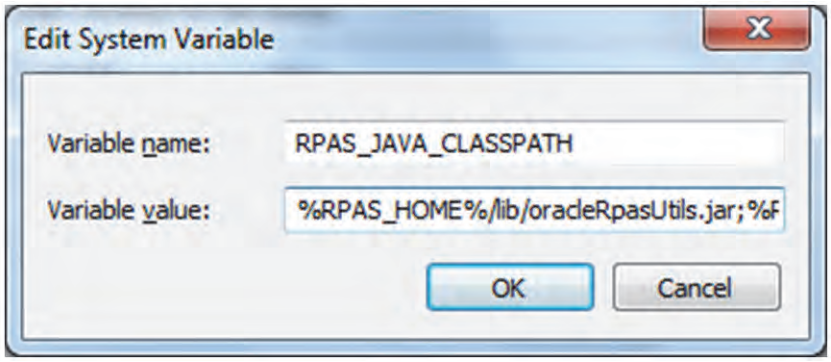
RPAS_JAVA_CLASSPATH

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

Figure 3–10 Example of RPAS_JAVA_CLASSPATH Variable



Ride Options

The RIDE_OPTIONS environmental variable has been defined to allow users to pass information into the ConfigTools process.

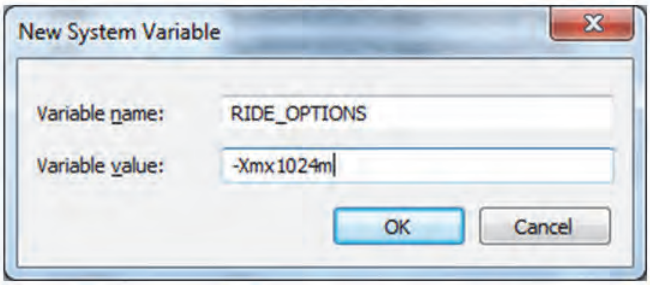
For Java -Xmx Option

By default, the Java Virtual Machine requests on the order of 268 MB of RAM from the OS to allocate for its heap. Large domains that are built from complex configurations can potentially exhaust this limited amount of memory. 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 3–11 Example of RIDE_OPTIONS Variable



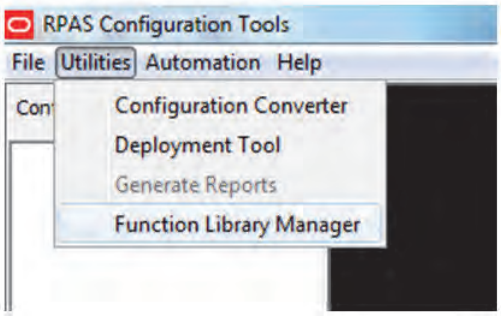
Configuring Required Function Libraries for Starter Kit

The RPAS 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 Configuration Tools.

Follow these steps to register the function libraries used by the MFP solution in the RPAS Configuration Tools:

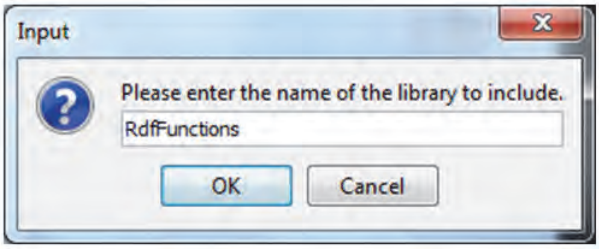
1. Launch the Configuration Tools.
2. From the Utilities Menu, select **Function Library Manager**.

Figure 3–12 Function Library Manager



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

Figure 3–13 Library Name



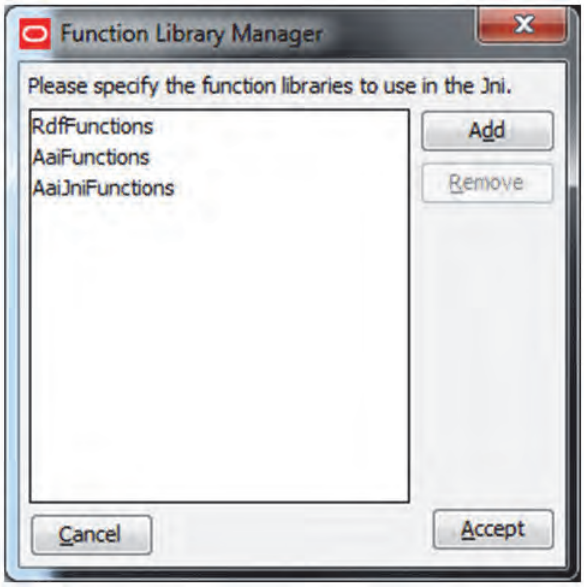
5. Click **OK** to add the entry.

   The set of libraries required by the MFP solution are:

   - RdfFunctions
   - AaiFunctions
   - AaiJniFunctions

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

Figure 3–14 Accepting the Libraries



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

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 16.0 after the installation process is complete.

To switch to a different version of RPAS that is installed on your machine, you will need to manually update the environment variables each time you want to switch.

Updating the Starter Kit Installation

Each release of MFP 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. Using the RPAS Configuration Manager, generate the set of customization present in the old customized version of the MFP configuration using the `-diff` command of the `rpasConfigMgr.sh` utility.
2. Download the new version of the MFP Cloud Service Starter Kit.
3. Delete the contents of the `C:/Oracle/ConfigTools` directory.
4. Delete the contents of the `C:/Oracle/configurations` directory.

WARNING: If you store the configuration generated in the older version of the MFP Cloud Service Starter Kit in the **`C:/Oracle/configurations`** directory, do not delete the configuration listed in this Step **4**, so that it may be used with the new version of the MFP Cloud Service Starter Kit.

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5. Follow the installation instructions for the new version of the MFP Cloud Service Starter Kit.
6. Run MFP Cloud Service 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*.
7. Using the RPAS Configuration Manager, customizations made to the older version of the MFP base configuration may be applied to the new version of the generated configuration using the `-merge` command of the `rpasConfigMgr.sh` utility.
8. Apply the changes in the newly generated configuration to the MFP Cloud Service domain.

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