Oracle® Retail Predictive Application Server

Installation Guide
Release 13.1.2

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Oracle® Predictive Application Server Installation Guide, Release 13.1.2

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Value-Added Reseller (VAR) Language

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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 document is intended for the users and administrators of Oracle Retail Predictive Application Server. This may include merchandisers, buyers, and business analysts.

This Installation Guide is written for the following audiences:

- Database administrators (DBA)
- System analysts and designers
- Integrators and implementation staff

Related Documents

For more information, see the following documents in the Oracle Retail Predictive Application Server Release 13.1.2 documentation set:

- *Oracle Retail Predictive Application Server Release Notes*
- *Oracle Retail Predictive Application Server Administration Guide*
- *Oracle Retail Predictive Application Server Licensing Information*
- *Oracle Retail Predictive Application Server User Guide*
- *Oracle Retail Predictive Application Server Online Help*
- *Oracle Retail Predictive Application Server Configuration Tools User Guide*
- *Oracle Retail Predictive Application Server Configuration Tools Online Help*

Customer Support

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https://support.oracle.com

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

Review Patch Documentation

When you install the application for the first time, you install either a base release (for example, 13.1) or a later patch release (for example, 13.1.2). If you are installing the base release and additional patch and bundled hot fix releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch and bundled hot fix releases can contain critical information related to the base release, as well as information about code changes since the base release.

Oracle Retail Documentation on the Oracle Technology Network

Documentation is packaged with each Oracle Retail product release. Oracle Retail product documentation is also available on the following Web site:

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

(Data Model documents are not available through Oracle Technology Network. These documents are packaged with released code, or you can obtain them through My Oracle Support.)

Documentation should be available on this Web site within a month after a product release.

Conventions

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

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

1

Getting Started

Overview

The Oracle Retail Predictive Application Server (RPAS) Installation Guide describes how to upgrade from your current RPAS installation to RPAS 13.1.2 for all operating system environments.

Terms

The following terms are used in this guide:

- 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 solutions.
- RPAS domain – The collection of server-side directories and files containing data and procedures that comprise the RPAS solution. Refer to the *RPAS Administration Guide* and the *RPAS Configuration Tools User Guide* for additional information.
- RPAS Client – The Windows-based client interface for end users and system administrators of an RPAS domain. An administrator may perform maintenance work in a domain using the RPAS Client, server-side RPAS utilities.
- RPAS Configuration Tools – The tools used to configure an RPAS solution. See the *RPAS Configuration Tools User Guide* for more information.

Requirements

The following hardware and software requirements are for the RPAS Server, Client, Configuration Tools, and ODBC/JDBC Clients.

General Hardware and Software Requirements

The following table provides hardware and software requirement information for the current release.

Requirements	Details
Supported OS: RPAS Server and Compilers	Sun Solaris 10: GCC 4.2.3 (32 bit) AIX 5.3 (TL5 or greater): GCC 4.1.1 (32 bit) AIX 6.1 (TL2, SP3): GCC 4.3.3 (32 bit) HP-UX 11.31 (Itanium): ACC 6.20 (64 bit) Oracle Enterprise Linux 5, Update 2 (OEL 5.2): GCC 4.1.1 (64 bit) Red Hat Enterprise Linux 5.2
Supported OS: RPAS Client	Windows XP and Vista
Required 3rd Party Software	Java Development Kit (JDK) 1.5 or higher (for the Configuration Tools and server machines as well as the JDBC Client) For AIX, the JDK version must be 1.5 SR1 or higher. **Note**: This version of RPAS is also certified with JDK 1.6, but it is not necessary to upgrade to JDK 1.6.
RPAS Client PC Requirements	800x600 or higher display resolution 1GHz or higher processor 512 MB or higher memory Intranet network connectivity with at least 10Mbps data rate
RPAS Client Browser Requirements	Microsoft Internet Explorer 6 or higher Java Plug-in 1.5 or higher to support the RPAS Web application, including the In-Context Launch feature.
Included Application Versions	RPAS Server 13.1.2 RDF Server 13.1.2 RPAS Client 13.1.2 RDF Plug-ins 13.1.2 Config Tools 13.1.2 ODBC Server 13.1.2 ODBC Client 13.1.2

- You will need to install Java Development Kit (JDK) version 1.5 or higher if you are installing the Configuration Tools. For AIX, you must use the 32-bit version of Java 1.5 SR1 or higher.

  Note: Users should avoid enabling AutoUpdate when installing Java because it may update the Java version without prompting.

- If you are installing the RPAS Server on Windows, you must install the MKS Toolkit in order to emulate UNIX commands (required for starting the RPAS Server on Windows). You can find more information about downloading this product at http://www.mks.com. If running Windows XP, you should use MKS version 8.7 since users running older versions of MKS encountered problems on Windows XP.
- Perl is an interpreted language that is included on all supported UNIX platforms (included with MKS Toolkit for Windows). Perl is used by the patch sets, which are used to install an RPAS patch.
- An application for unzipping (.zip) components on UNIX must be installed and used for extracting the RPAS Configuration Tools. Unzip is an open source software package that can be used for this process.

Supported Oracle Retail Products

For information on the version of the RPAS platform that an RPAS application uses, see that application's documentation.

2

RPAS Package Extraction

Overview

The first step in upgrading to the most recent installation is to download the 13.1.2 patch from the My Oracle Support Web site (https://support.oracle.com) to a staging folder (such as $PACKAGEDIR) that is accessible to all components of your current RPAS environment.

Example Package Extraction

The following example walks through a sample upgrade installation. These sample commands are provided to guide you through the file extraction process and to identify the files provided in this upgrade.

```
$ mkdir packagedir
$ cp RPAS.zip packagedir
$ cd packagedir
$ export PACKAGEDIR=`pwd`
$ unzip RPAS.zip
```

The following files may be extracted to the current directory:

- ARPOPlatform-13.1.2.aix53.tar.zip
- ARPOPlatform-13.1.2.aix61.tar.zip
- ARPOPlatform-13.1.2.sun10.tar.zip
- ARPOPlatform-13.1.2.linux.tar.zip
- ARPOPlatform-13.1.2.nt.zip
- ARPOPlatform-13.1.2.clients.zip

> **Note:** ARPOPlatform-13.1.2.clients.zip is an archive of the RPAS Client and ODBC Client for all platforms.

- Curve13.1.2.zip
- Grade13.1.2.zip
- README.html

At this point, you must choose which package you wish to extract, based on your current server platform and version. For the purpose of this example, we will choose AIX 6.1.

Next, run the following commands.

```
$ unzip ARPOPlatform-13.1.2.aix61.tar.zip
$ tar -xf ARPOPlatform-13.1.2.aix61.tar
```

Now the package directory should contain a subdirectory named ARPOPlatform. You have successfully completed extracting the upgrade.

3

RPAS Patch Installation Instructions

RPAS Upgrade Prerequisites

In order to upgrade RPAS, first verify the following criteria for the RPAS system:

- Verify that RPAS is currently installed.
- Verify that UNIX operating system is updated to the currently supported version, which can be found in the General Hardware and Software Requirements section.
- Verify that the environment variables are correctly set; if they are not, follow these instructions to set them:

  Change directories to the original RPAS installation directory (such as the one created by the most recent installer), and execute retaillogin.ksh to set all environment variables. For example:

  ```
  $ cd /retail
  $ . ./retaillogin.ksh
  ```

  Note: Once you have run the script, verify that the environment variables all point to the correct locations on your environment.

  Note: If you have updated Java since the last installation of RPAS, verify that the JAVA_HOME path is correct. If not, please update your retaillogin.ksh script and source it again as outlined above.

Java Environment

Ensure that Java Development Kit (JDK) has been installed on the machine where RPAS will run and that the JAVA_HOME environment variable is properly set. Version 1.5 or higher must be installed.

AIX, Solaris, and Windows (for the RPAS Configuration Tools) versions of RPAS are only compatible with a 32-bit version of Java.

Linux is only compatible with a 64-bit version of Java.

HP Itanium does not release separate 32-bit and 64-bit versions of Java. Therefore, you need to set the 64-bit Configuration Tools environment variable for Java as shown below:

```
export RIDE_OPTIONS=-d64
```

Note: Users should avoid enabling AutoUpdate when installing Java because it may update the Java version without prompting.

Ride Options

The RIDE_OPTIONS environmental variable has been defined to allow users to pass information into the rpasInstall process. Unlike the regular arguments passed on the command line to rpasInstall (such as -fullinstall and -updatestyles), arguments defined in RIDE_OPTIONS are passed to every rpasInstall instance that runs in the environment.

Described below are the three supported properties for use with RIDE_OPTIONS.

- **Xmx** – used for Java
- **HP 64-bit mode Java (-d64)** – used for HP Itanium
- **Drpas.maxProcesses** – used for RPAS

For Java

Xmx - 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 in patch installations than in builds since a patch installation requires two different versions of a configuration to 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`.

For HP Itanium

HP 64-bit mode Java (-d64) - The HP distribution of Java does not consist of separate executables for 32-bit and 64-bit operating systems. Instead, there is a single distribution of Java that can run in either 32-bit or 64-bit mode. By default, the HP Java runs in 32-bit mode. Because RPAS is built as a 64-bit executable on the Itanium OS, the RPAS libraries are unable to link with Java if it is running in 32-bit mode.

By adding the -d64 property to RIDE_OPTIONS, the HP Java distribution is 64-bit mode enabled and the RPAS libraries link successfully.

It is often the case that users may want to use or more different properties in conjunction with RIDE_OPTIONS. When this is the case, all desired properties should be included within the environmental variable definition separated by white space with the entire definition enclosed in double quotes. An example of this is shown below:

```
export RIDE_OPTIONS="-d64 -Xmx1024m -Drpas.maxProcesses=8"
```

For RPAS

Drpas.maxProcesses - Several RPAS server utilities are designed to take advantage of multi-processor hardware to improve their performance. These utilities attempt to perform operations in parallel, each process running on a distinct processor. The -Drpas.maxProcesses argument is used to instruct RPAS how many processors it should attempt to run in parallel when executing one of the server utilities that has multi-processor support when that utility is executed as a part of the rpasInstall process.

Note that the -Drpas.maxProcesses argument only affects those calls to server utilities made from within the rpasInstall process and does not affect calls to server utilities made from the command line or as part of a batch job. The syntax of the property is:

`-Drpas.maxProcesses=###`, where `###` is the number of sub-processes the RPAS server utility should attempt to run in parallel. The number of processes to use should be determined by the administrator of the hardware system based on the physical number of processors available and the amount of load that is acceptable for the rpasInstall process to place on the system.

RPAS Upgrade Process

The following process outlines how to upgrade the RPAS server environment to the current version.

1. In a command prompt, change to location of the base directory of this upgrade.

   ```
   $ cd $PACKAGEDIR/ARPOPlatform/13.1.2
   ```

2. Run RSP Manager to upgrade your environment:
   - If the platform is Linux, use the following command:

     ```
     $ ./rsp_manager.linux –install –sp linux –no_domain
     ```

   - For all other platforms, use the following command:

     ```
     $ ./rsp_manager –install –sp [PLATFORM] –no_domain
     ```

     Note: [PLATFORM] represents your current platform and should be replaced with the correct label, such as **aix53**.

     Note: -no_domain indicates that there no domain in need of upgrading. For instructions on upgrading domains, see the Domain Administration chapter of the *RPAS Administration Guide*.

3. Verify that none of the files failed during the upgrade; this can be determined based on the output of RSP Manager. For example, a successful output message would read:

   ```
   Validation complete...
   Files Checked: 106
   Files Passed: 106
   Files Failed: 0
   ```

The RPAS upgrade process is complete.

Domain Upgrade Process

For instructions on upgrading domains, please see the Domain Administration chapter of the *RPAS Administration Guide*.

ODBC/JDBC Upgrade Process

This section describes how to save and migrate your existing ODBC/JDBC configurations to the new 13.1.2 version. If you do not have any existing configurations to migrate, you can uninstall the old version and install the new one.

ODBC Server

Upgrading from 13.0.x to 13.1.2

On all platforms, the 13.0.x ODBC Server configurations are stored in openrda.ini and oadrd.ini.

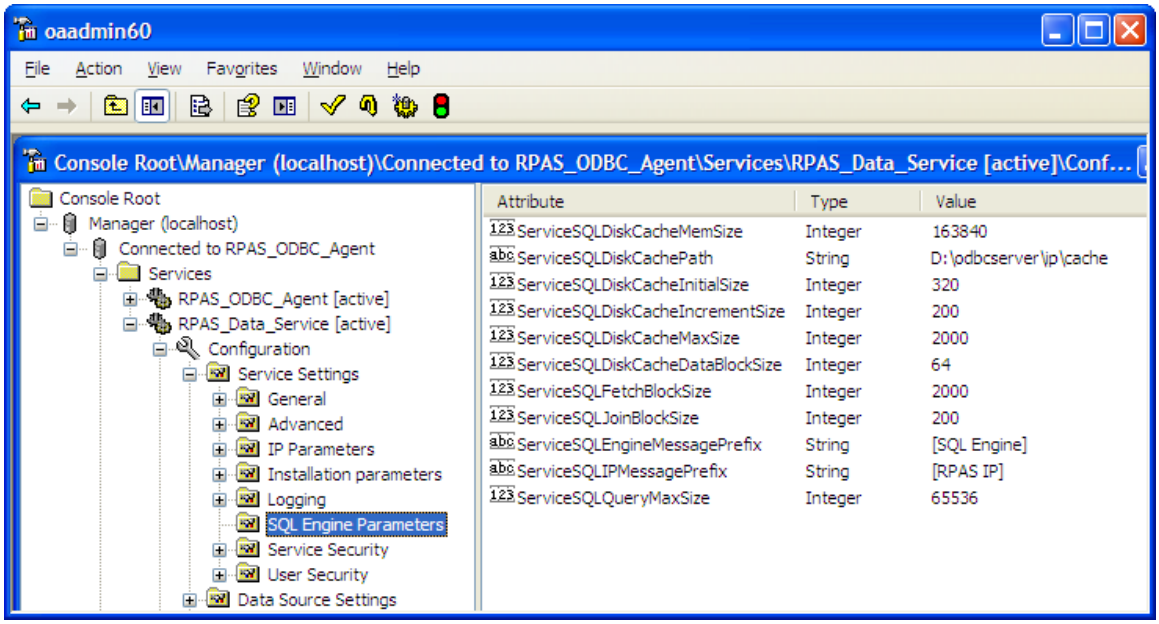
1. Before upgrading $RPAS_HOME, save a copy of openrda.ini and oadrd.ini to a temporary location.
2. Uninstall the 13.0.x version of the ODBC Server. To do this on Windows, run setup.exe and choose the **Remove** option. On UNIX platforms, the ODBC directory should be automatically overlaid when you upgrade your $RPAS_HOME.
3. Install the 13.1.2 version of the ODBC Server. Use the information below to migrate the 13.0.x configuration to the new ODBC Server.

Migrating Server Configuration

The table below shows the mapping of the configurations between 13.0.x and 13.1.2.

13.0.x Server Configurations	Corresponding 13.1.2 Server Configurations
INITIAL_SIZE	ServiceSQLDiskCacheInitialSize
INCREMENT_SIZE	ServiceSQLDiskCacheIncrementSize
MAX_SIZE	ServiceSQLDiskCacheMaxSize
DATABLOCK_SIZE	ServiceSQLDiskCacheDataBlockSize
CacheMemSize	ServiceSQLDiskCacheMemSize
FETCHBLOCK_SIZE	ServiceSQLFetchBlockSize
JOINBLOCK_SIZE	ServiceSQLJoinBlockSize
QueryMaxSize	ServiceSQLQueryMaxSize

The figure below shows the new ODBC Manager with the configuration attributes that are listed in the previous table.



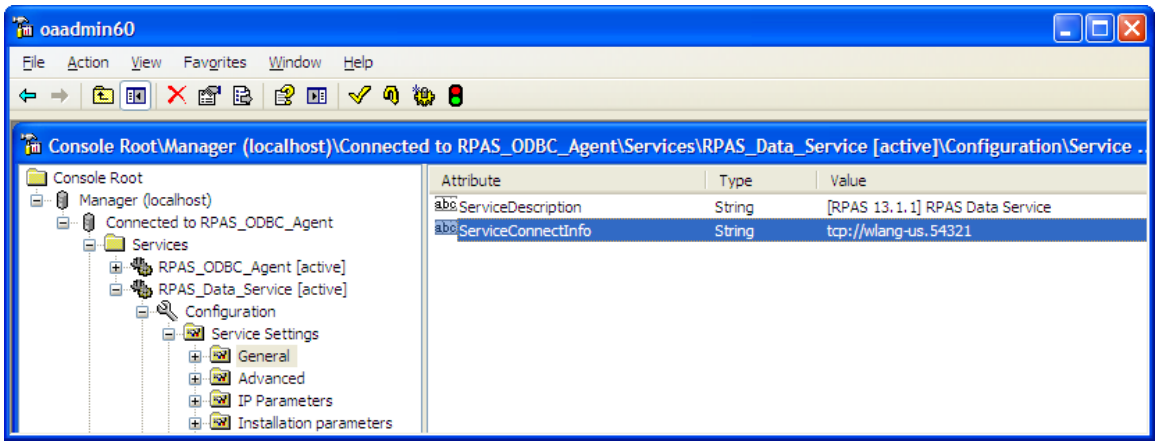
13.1.2 Server Configuration Attributes

Migrating Data Source Information

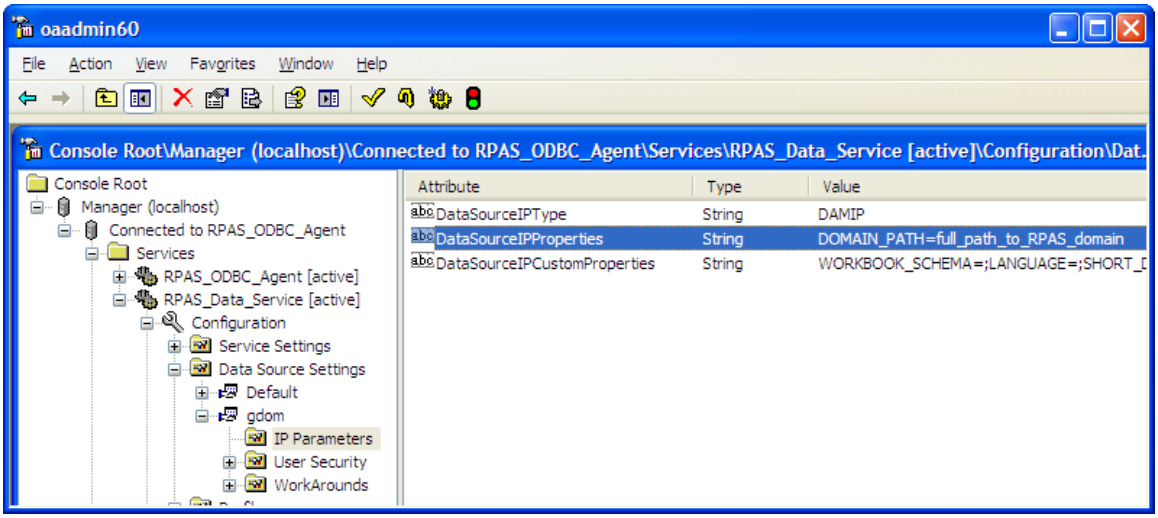
A data source in oadrd.ini looks like the sample below.

```
ADDRESS=mspdev41
PORT=1710
CONNECT_STRING=/vol.nas/u08/aip_triage/hany/Position_parent/croad_SR
TYPE=BTREE
SCHEMA_PATH=
REMARKS=
```

The attributes that you need to migrate are ADDRESS, PORT, and CONNECT_STRING. CONNECT_STRING in 13.0.x maps to DOMAIN_PATH in 13.1.2. The figures below show where they are in the 13.1.2 Server configuration.



Server Address and Port Number in 13.1.2



DOMAIN_PATH in 13.1.2

Upgrade from 13.1.1 to 13.1.2

1. Before uninstalling 13.1.1, take screenshots of the server configuration and server address as shown in three previous figures: **Server Configuration Attributes**, **Server Address and Port Number**, and **DOMAIN_PATH**. These show the server's connecting and configuration information as well as the data sources you have.
2. Uninstall 13.1.1 ODBC Server. To do this on Windows platform, run setup.exe in the server installation package and choose the **Remove** option. On UNIX platforms, delete the ODBC directory under $RPAS_HOME.
3. Install the 13.1.2 ODBC Server. Use the information saved in the screenshots created in Step 1 to complete the server and data source configuration.

ODBC Client

UNIX Platform

In 13.0.x, the client configuration information to be migrated is stored in oadrd.ini and odbc.ini. Note that odbc.ini is not required by the 13.0.x version of the RPAS ODBC Client, but it may be required by your ODBC application (such as OBIEE).

Below is a sample data source definition in oadrd.ini.

```
ADDRESS=mspdev41
PORT=54321
REMARKS=
```

To migrate SampleDataSource to the 13.1.2 version of the ODBC Client, create an entry for SampleDataSource in odbc.ini:

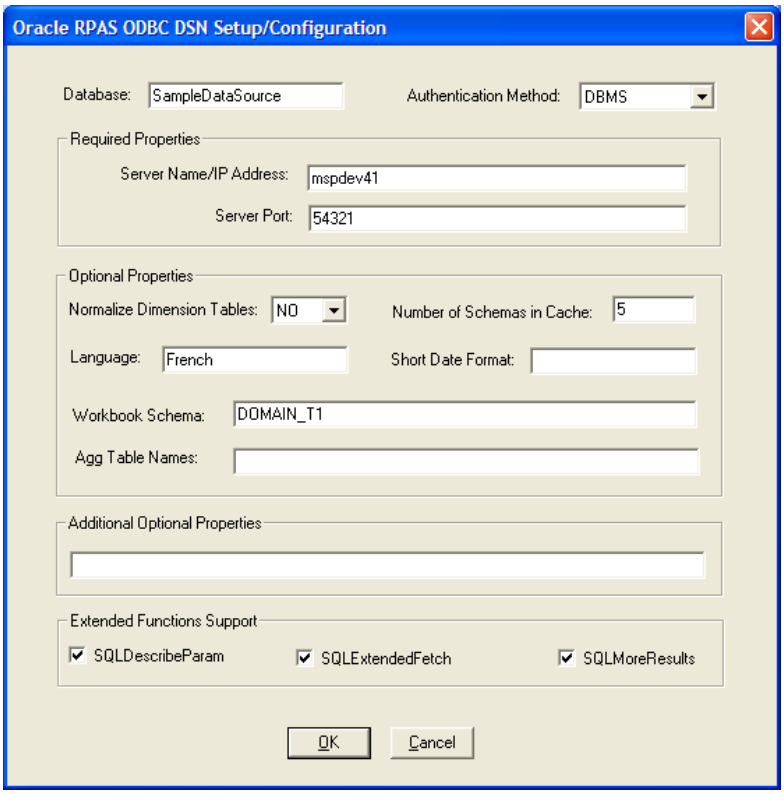
```
[ODBC Data Sources]
SampleDataSource=Oracle Retail RPAS ODBC Driver

[SampleDataSource]
Driver=PATH_TO_ODBC_CLIENT/odbcclient32/lib/ivoa22.so
Description=Oracle Retail RPAS ODBC Driver
Host=mspdev41
Port=54321
ServerDataSource=gdom
UseLDAP=0
DistinguishedName=
Encrypted=0
LoadBalancing=0
AlternateServers=
ConnectionRetryCount=0
ConnectionRetryDelay=3
CustomProperties=
```

The customProperties entry in odbc.ini can be copied to the same entry in the 13.1.2 version of odbc.ini.

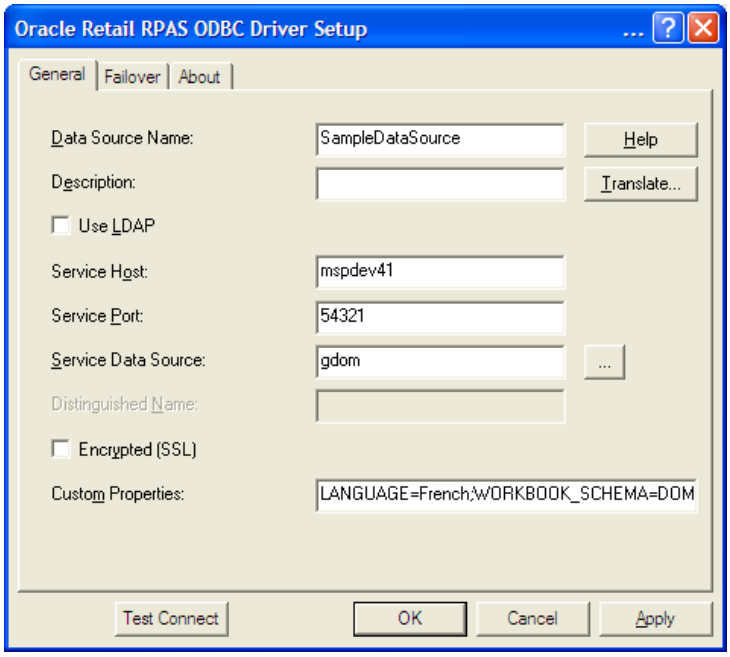
Windows Platform

The figure below shows a sample data source in the 13.0.x version of the ODBC Client.



RPAS ODBC DSN Setup/Configuration for 13.0.x

In 13.1.2, the Microsoft ODBC Administrator is used for creating and configuration the ODBC data source.



RPAS ODBC Driver Setup for 13.1.2

All properties in **Optional Properties** and **Additional Optional Properties** in 13.0.x map to the **Custom Properties** in 13.1.2. The properties are listed below.

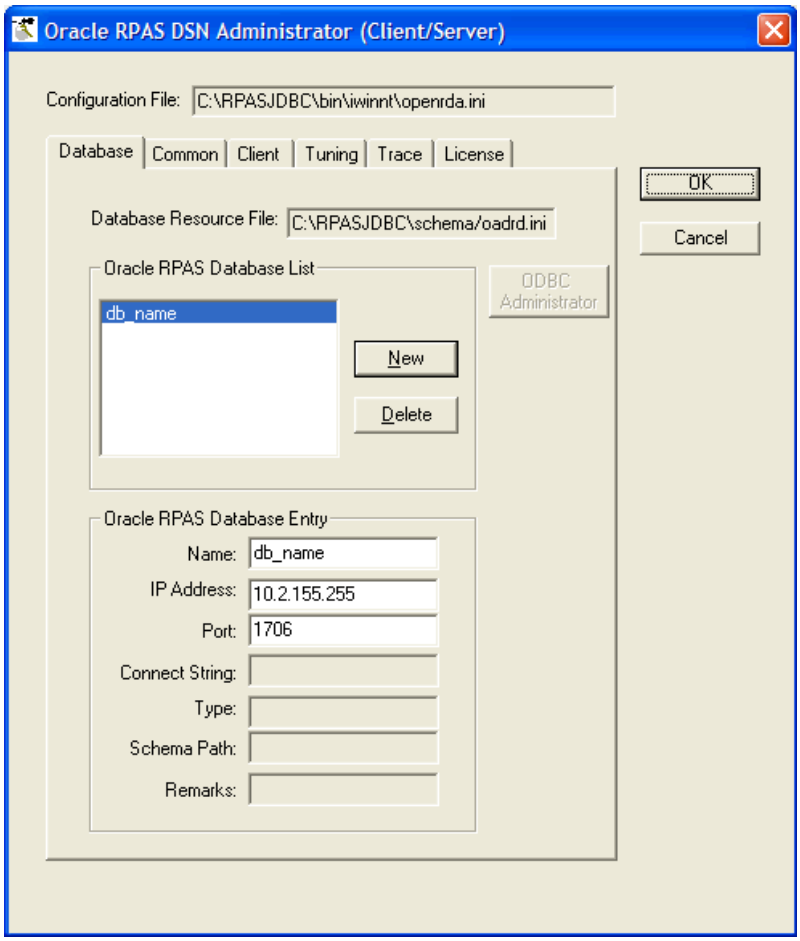
- NORMALIZE_DIM_TABLES
- SCHEMA_IN_CACH
- LANGUAGE
- WORKBOOK_SCHEMA
- AGG_TABLE_NAMES
- SHORT_DATE_FORMAT
- DEFAULT_SCHEMA
- LOG_FILE
- RPAS_LOG_LEVEL

JDBC Client

Upgrade 13.0.x to 13.1.2

1. Before uninstalling 13.0.x JDBC Client, record the data sources that you want to migrate to 13.1.2. To do this on Windows platforms, open the Admin Tool (shown in Step 3 on the next page), gather the name, IP address, and port (of the server). On UNIX platforms, use the command line Admin utility rpasjdbcclientadmin to gather the same information. You should also collect the optional custom connection properties that may exist in your JDBC URLs if you use URL in your JDBC applications.
2. Uninstall 13.0.x JDBC Client. To do this on Windows, run setup.exe and choose the **Remove** option. On UNIX, delete the jdbcclient directory.

3. Install the 13.1.2 JDBC Client (see the instructions in the *RPAS 13.1.1 Installation Guide* and *RPAS Administration Guide*). Then use the information gathered in Step 1 to construct the URLs for your JDBC applications.



RPAS DSN Administrator (Client/Server) Window

Upgrade from 13.1.1 to 13.1.2

1. Gather the information for the server's IP address, port number, data source name, and any custom connection properties in the 13.1.1 JDBC URLs.
2. Delete the 13.1.1 version of the JDBC Client.
3. Install the 13.1.2 JDBC Client.
4. Use the information gathered in Step 1 to construct the JDBC URLs for the 13.1.2 JDBC Client.

4

RPAS Client Installation

Overview

The RPAS Client can be installed through either of the following methods:

- Windows installer
- Web-based deployment

The following sections describe the installation processes for these two methods.

Windows Installer Method

This section describes the installation of the RPAS Client on Windows machines, and describes how to configure the client to connect to a domain.

Make RPAS Client Files Generally Accessible

Perform the following procedure to make the RPAS Client available.

1. Create a directory on the network from where users will install the RPAS Client.

   The location and the name of the directory are up to the system administrator's preferences. This directory is henceforth referred to as the [RPASCLIENT] directory.
2. Extract the client from the ARPOPlatform-13.1.2.clients.zip included in the main package to the [RPASCLIENT] directory.

Installing the RPAS Client

The RPAS Client installation procedure is the same for all of the RPAS applications. Perform the following procedures to install the application onto a PC.

1. Run the setup.exe file located in the [RPASCLIENT] directory on the network.
2. The welcome page is displayed. Follow the installation procedures as prompted.

   The setup program exits after the installation is complete.

Configuration

After creating an RPAS domain and starting the DomainDaemon (see the *RPAS Administration Guide*), you must configure the RPAS Client to connect to the domain on a server. This section provides instructions for configuring the RPAS Client on a local computer using a Microsoft Windows operating system.

The EConfigure Utility

EConfigure is a Windows application that configures the client-server communication for RPAS. EConfigure lets you specify communication parameters and produces a file that is used as input to the client. These files must be in FCF (Foundation Configuration File) format/extension. The files contain the necessary information for the client to start up the communication with the server. These files can be stored on the client machine or on the network.

When the client is executed, a file named Foundation.FCF is expected in the same directory. If the file has a different name or if it is stored somewhere on the network, the path to this file must be passed in as an argument to the client.

EConfigure consists of a menu bar, a main view, and the advanced settings dialog box. Passwords saved in the FCF file are encrypted. To launch EConfigure, double-click the EConfigure.exe file, which is by default located in the root directory of the RPAS Client.

The Menu Bar

The files produced by EConfigure may contain multiple connections. Each connection will be specific for a server with certain communication settings. Connections need to have unique descriptions, and they can be added and deleted using the menu bar.

The Main View

The main view has the basic connection parameters. On this view, three groups of controls are available:

- The connection group
- The domains group
- The Advanced Settings dialog

The Connection Group

Database Server: The hostname or the IP address of the server, for example, atldev03 or 10.2.1.23. This value should be **localhost** when running the RPAS Server on a Windows machine.

Daemon Port: The port number on which the domain daemon is listening. This must be an integer between 1025 and 65535 (for example, 55278).

The Domains Group

Domain: The name of the domain that is displayed to the user when logging in. Select a domain from the list or type the name of a new domain and click **Add Domain**. You can delete a domain from the list by selecting it and then clicking **Delete Domain**.

Domain Path: The full path to the directory containing the domain, for example, /root/testenv/domain/Sample_Project

User: Provide the user ID if you do not want to force the user to provide it when logging in. The user ID must be defined in the associated domain.

Password: provide the password for the above user if you do not want to force the user to provide it when logging in. This password must match the password defined in the domain for the associated user.

The Advanced Settings Dialog

Default Database Login

User: The database user that is used by the client if a domain specific user has not been entered, for example, adm.

Password: Like the default database user, default database password is used if a domain specific password has not been entered, for example, adm.

Database Port Range: Port range is used to specify the range of ports on which the RPAS Server processes is started by the DomainDaemon (the rpasDbServer processes). The port **Start** and port **End** fields are the lower and upper limits of this range respectively.

These fields must be integers between 1025 and 65535, which are also the default values if values are not specified, for example, Start: 40000, End: 45000.

Compression Threshold: The number of bytes above which client and server are using compression. Only advanced users should manipulate this number.

Web Tunneling: The configuration of Web tunneling.

Proxy Settings: The configuration of the RPAS Client to support a proxy server is not completed in this utility.

Web-Based Deployment Method

This section describes the installation of the RPAS Client Web deployment installation process.

Web-based deployment allows you to perform the following:

- Use a Web browser to install the RPAS Client application to the user's computer.
- Launch the RPAS Client when it has already been installed.
- Reinstall the RPAS Client when an updated version is available.
- Use the RPAS Web Launch applet to facilitate In-Context Launch integration.

Web deployment has been tested and is supported for the following components:

- Oracle Application Server (OAS) version 10.1.3.3, which includes JDK 1.5. If Oracle Single Sign-On (SSO) is used, the OAS server must be registered with an OID provider.
- Apache Tomcat version 6.0 with JDK 1.5.0_10 or higher.
- Microsoft Internet Explorer version 6.0/7.0 with Sun JVM plug-in of Java version 1.5. These instructions assume that the software specified above has been properly installed and configured. Consult the documentation of each component for installation and configuration information, as well as hardware and software requirements.

For the RPAS Web deployment to function properly, users must have sufficient access to their PCs (typically administrator rights) which allow them to install software, unless the administrator configures the applet to launch only preinstalled RPAS Client. Specifically, they need permission to write into the Windows Registry.

Installation and Configuration Process Overview

The following is an overview of the process that must be followed to install RPAS for Web deployment.

- Install the RPAS Web Application. This installation is completed onto the Web server and involves two components that are included with the RPAS archive (RPAS.war or RPAS_osso.war, and RPASWebData.tar).
- Install multiple versions of RPAS Client files on Web server (as needed).
- Configure the RPAS Servlet by using the deployment descriptor web.xml to specify servlet properties.
- Configure Oracle Single Sign-On for RPAS Web application (if Oracle SSO is used).
- Start the RPAS Web Configuration Utility. Using the URL of the RPAS Web Launch application, administrators and users follow this process to log in to the system.
- Configure Web Launch and Web Tunneling: using the Enterprise Configuration component of the Administration Console, the administrator indicates whether Web tunneling is to be used.
- Perform other Web client administration activities. Once the Web deployment environment is prepared, additional configuration and administration activities, such as domain configuration and managing administrative users, may need to be performed.

Installing the RPAS Web Application

Installing the RPAS Web Application consists of the following procedures:

- Preparing your environment
- Installing the necessary files and configuring the environment based on your type of installation. Three different processes may be used for RPAS Web deployment:

  Installing on an Oracle Application Server (OAS) with Single Sign-On (SSO) Support

  Installing on an Oracle Application Server (OAS) without Single Sign-On (SSO) Support

  Installing on an Apache Tomcat Server, which is a standalone server that is not part of the Single Sign-On (SSO) infrastructure
- Configuring the RPAS Servlet
- Configure and Administer the Web application

Preparing Your Environment

1. Log in to the UNIX server and determine where the RPAS Web files will be installed. A minimum of 50 MB disk space available is required for the application installation files. More space may be needed if multiple versions of RPAS Client are supported on the Web server.
2. Copy the RPAS Web files (RPAS.war, RPAS_osso.war and RPASWebData.tar), located in [RPAS Installation]/Web/ directory, to a newly created staging directory on the UNIX server. This directory will be referred to as STAGING_DIR.

3. Extract the RPASWebData.tar to the appropriate location. This location is referred to as [RPAS_WEB_DATA_DIR] in this document. If the Web server is running in a load balance environment with multiple servers, the RPASWebData files must be deployed to a network drive accessible to all Web server instances. A new directory RPASWebData/ and three subdirectories (client/, db/, and logs/) are created. Verify that the client directory has read permissions and that the db and logs directories have read and write permissions.
4. For each release of RPAS Client, there are two files: buildNumber.txt and client.zip. These files are not part of RPAS Web files. They generally come with RPAS release package. The default installation location for the files is [RPAS_WEB_DATA_DIR]/RPASWebData/client. If multiple client versions are to be supported, both files of each version must be placed under [RPAS_WEB_DATA_DIR]/RPASWebData/client/[VERSION] where [VERSION] is the version number of that release (for example, 13.1.2 or 12.0.10).
5. Perform the necessary procedures based on your type of implementation.

Installing on Oracle Application Server with SSO Support

Perform the following procedure if you are implementing RPAS Web on an Oracle Application Server with Single Sign-On (SSO) Support. This process consists of several steps:

- Step 1: Ensure prerequisites are met
- Step 2: Deploying the WAR file
- Step 3: Configuring RPAS Web Launch
- Step 4: Protect RPAS root
- Step 5: Setting RPAS role for Oracle Single Sign-On logins

Step 1: Ensure Prerequisites Are Met

Make sure the following procedures have been performed before installing RPAS Web using Oracle Single Sign-On:

1. Install the Oracle Identity Management Infrastructure server, including the Oracle Internet Directory (OID) LDAP and Oracle Single Sign-On (OSSO) servers.
2. Register the RPAS HTTP server with the OSSO server via the ssoreg.sh script. The output of this command will be a binary file, denoted here as the osso.conf file. Copy osso.conf to the RPAS HTTP server ($ORACLE_HOME/Apache/Apache/conf/osso/osso.conf) and configure the RPAS HTTP Server to enable the mod_osso module. See the Oracle Single Sign-On documentation for further details.
3. Obtain the OID information (TCP/IP address and port, whether SSL is used as a transport mechanism and the realm name) from Oracle SSO server administrator. You will also need an administrative login and password, such as that used by the orcladmin user.

4. Set the instance security provider for the RPAS OC4J to Oracle Identity Management (the OID server). You will need to use the information gathered in step 3. Verify this by checking the file, $ORACLE_HOME/j2ee/<RPAS_OC4J_INSTANCE>/config/jazn.xml.

   An example file is shown below.

```
<?xml version = '1.0' encoding = 'UTF-8'?>
<jazn xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="http://xmlns.oracle.com/oracleas/schema/jazn-
10_0.xsd" schema-major-version="10" schema-minor-version="0" provider="LDAP"
location="ldap://myhost.mycompany.com:636" default-realm="us">
    <property name="ldap.cache.purge.initial.delay" value="1200000"/>
    <property name="ldap.password"
value="{903}lDjczxpuY0o2BQg2MqM0YReAax9p+Po0wuU0oKU67as="/>
    <property name="ldap.cache.initial.capacity" value="20"/>
    <property name="ldap.user"
value="orclApplicationCommonName=jaznadmin2,cn=JAZNContext,cn=products,cn=Orac
leContext"/>
    <property name="ldap.cache.policy.enable" value="true"/>
    <property name="ldap.cache.purge.timeout" value="1200000"/>
    <property name="ldap.cache.realm.enable" value="true"/>
    <property name="ldap.cache.session.enable" value="true"/>
</jazn>
```

   Note: Only LDAP specific properties are listed above. Your values of these may also differ. See the Oracle Application Server administration documentation for further details.

5. Restart the RPAS OC4J to incorporate your changes.

Step 2: Deploying the WAR File

Perform the following procedure to deploy the WAR file to the Oracle Application Server.

1. Log on Oracle Enterprise Manager/Application Server Control as oc4jadmin.
2. Select the intended application group for your deployment.
3. Click **Deploy**.
4. Select **Archive is already present on the server where Application Server Control is running** (second option) and type the following in **Location on Server** field:

   [STAGING_DIR]/RPAS_osso.war
5. Click **Next**.
6. Type **RPAS Web Launch** in the **Application Name** field.
7. Type **RPAS** (or anything you choose) in **Context Root** field.

   This name is referred to as [CONTEXT_ROOT] in this document.
8. Click **Next**.
9. Click the pen icon for **Select Security Provider**, and select **Oracle Identity Management** from the list.
10. Select **Enable SSO Authentication** check box.
11. Click **OK**.
12. Click **Deploy**.

Step 3: Configuring RPAS Web Launch

To configure RPAS Web Launch, you need to modify one property file (propfile). This file is located in the following path:

[OAS_INSTALL_DIR]/j2ee/home/applications/RPAS Web Launch/[CONTEXT_ROOT] /WEB-INF/config

where [OAS_INSTALL_DIR] is the installation location of the OAS server.

1. Locate the following information in propfile and replace `[RPAS_WEB_DATA_DIR]` with the actual location and `[HOSTNAME]` with the host name of the server)

   ```
   dbPath=[RPAS_WEB_DATA_DIR]/RPASWebData/db
   clientSourceDir=[RPAS_WEB_DATA_DIR]/RPASWebData/client
   tunnelLogFile=[RPAS_WEB_DATA_DIR]/RPASWebData/logs/tunnel.[HOSTNAME].log
   webLogFile=[RPAS_WEB_DATA_DIR]/RPASWebData/logs/rpasPortal.[HOSTNAME].log
   isOSSO=true
   debug=false
   classicMode=false
   defaultInstallDir=C:\\RPAS Client
   ```

   Please note that `isOSSO` flag must be set to `true` to enable OSSO. `defaultInstallDir` is the default location where the RPAS Client will be installed on the Windows workstation. Set `classicMode` to `true` to support RPAS Client release 9.4.
2. Restart RPAS Web Launch Application from the Oracle Enterprise Manager/Application Server Control screen.

Step 4: Protect RPAS Root

Perform the following to protect the RPAS root location in the Oracle HTTP Server configuration.

1. In the file $ORACLE_HOME/Apache/Apache/conf/mod_osso.conf, add the following protected resource to `<IfModule mod_osso.c>` section.

   ```
   <Location /[CONTEXT_ROOT]/web>
   require valid-user
   AuthType Basic
   </Location>
   ```
2. Restart the Oracle HTTP Server to ensure the modification is applied.

> **Note:** Protect `/[CONTEXT_ROOT]/web` instead of `/[CONTEXT_ROOT]` to let through `/[CONTEXT_ROOT]/tunnel` for Web tunneling.

Step 5: Setting RPAS Role for Oracle Single Sign-On Logins

There are two types of roles for RPAS Web Launch users: RPAS_ADMIN_ROLE and RPAS_USER_ROLE.

Both roles can launch the RPAS Client and connect to a domain. Only RPAS_ADMIN_ROLE has the privilege to access the ADMIN interface.

It is recommended that RPAS_USER_ROLE be assigned to most Oracle Single Sign-On (OSSO) users (such as planner) and RPAS_ADMIN_ROLE be assigned for a few power users (such as executive). This needs to be performed on the LDAP server storing the OSSO user information.

The roles can be created manually by using the OID DAS application. The oidadmin application or LDIF scripts may also be used to create users and roles. See the OID documentation for more details.

Creating a Group Using the DAS Application

Use the following procedure to use the DAS application to create the RPAS_USER_ROLE and RPAS_ADMIN_ROLE accounts.

1. Access the DAS application.

   The DAS application is found in the following location:

   http://<host>:<port>/oiddas

   where <host> and <port> are the infrastructure or Oracle Identity Management OAS.

   Example: http://rpas.us.oracle.com:7778/oiddas
2. Click the **login** link and log in as **orcladmin** or another privileged user.
3. On the right-side of the page, select the **Directory** tab, and on the left side, select the **Groups** link.
4. Click **Create**.
5. Enter the name of the group to create (for example, RPAS_ADMIN_ROLE), the display name, and a description.
6. Make sure the **Group Visibility** option is set to **Public**.
7. If you would like, add additional users. Scroll to the **Members** section and select the **Add User** button to add users to this group. You can also nest other groups as well. Members can be added at a later time as needed.
8. When all members have been added, click the **Submit** button.

Creating Groups from an LDIF Script

Alternatively, you can create the groups using an LDIF script. A template is given below. Note that the following token `@BASE_REALM_DN@` needs to be replaced with installation specific value of the Realm Distinguished Name. Also, this script creates the group with a single member, orcladmin, as part of the group. Additional members may be added via more `uniquemember` attributes. You can execute the script via the `ldapadd` command supplied with the Oracle Identity Management infrastructure OAS server.

Example:

```
# The LDIF template for creating RPAS_ADMIN_ROLE and RPAS_USER_ROLE groups in OID.
# RPAS_USER_ROLE
dn: cn=RPAS_USER_ROLE,cn=groups,@BASE_REALM_DN@
objectclass: top
objectclass: groupOfUniqueNames
objectclass: orclGroup
cn: RPAS_USER_ROLE
displayname: RPAS user role
description: RPAS user role
orclisvisible: true
owner: cn=orcladmin,cn=users,@BASE_REALM_DN@
uniquemember: cn=orcladmin,cn=users,@BASE_REALM_DN@

# RPAS_ADMIN_ROLE
dn: cn=RPAS_ADMIN_ROLE,cn=groups,@BASE_REALM_DN@
objectclass: top
objectclass: groupOfUniqueNames
objectclass: orclGroup
cn: RPAS_ADMIN_ROLE
displayname: RPAS Administrator role
description: RPAS Administrator role
orclisvisible: true
owner: cn=orcladmin,cn=users,@BASE_REALM_DN@
uniquemember: cn=orcladmin,cn=users,@BASE_REALM_DN@
```

Once the RPAS groups have been created via the LDIF script, you could use the OID DAS application to add more members to them.

Installing on Oracle Application Server without SSO Support

Perform the following procedure if you are implementing RPAS Web on an Oracle Application Server with Single Sign-On (SSO) Support. This process consists of several steps:

- Step 1: Deploying the WAR File
- Step 2: Configuring RPAS Web Launch

Step 1: Deploying the WAR File

Perform the following procedure to deploy the WAR file to the Oracle Application Server without SSO.

1. Log on Oracle Enterprise Manager/Application Server Control as oc4jadmin.
2. Select the intended application group for your deployment.
3. Click **Deploy**.
4. Select **Archive is already present on the server where Application Server Control is running** (second option) and type the following in **Location on Server** field:

   [STAGING_DIR]/RPAS.war
5. Click **Next**.
6. Type **RPAS Web Launch** in the **Application Name** field.
7. Type **RPAS** (or anything you choose) in **Context Root** field.

   This name is referred to as [CONTEXT_ROOT] in this document.
8. Click **Next**.
9. Click **Deploy**.

Step 2: Configuring RPAS Web Launch

To configure RPAS Web Launch, you need to modify one property file (propfile). This file is located in the following path:

[OAS_INSTALL_DIR]/j2ee/home/applications/RPAS Web Launch/[CONTEXT_ROOT] /WEB-INF/config

where [OAS_INSTALL_DIR] is the installation location of the OAS server.

1. Locate the following information in propfile and replace `[RPAS_WEB_DATA_DIR]` with the actual location and `[HOSTNAME]` with the host name of the server)

   ```
   dbPath=[RPAS_WEB_DATA_DIR]/RPASWebData/db
   clientSourceDir=[RPAS_WEB_DATA_DIR]/RPASWebData/client
   tunnelLogFile=[RPAS_WEB_DATA_DIR]/RPASWebData/logs/tunnel.[HOSTNAME].log
   webLogFile=[RPAS_WEB_DATA_DIR]/RPASWebData/logs/rpasPortal.[HOSTNAME].log
   isOSSO=false
   debug=false
   classicMode=false
   defaultInstallDir=C:\\RPAS Client
   ```

   Please note that `isOSSO` flag must be set to `false`. `defaultInstallDir` is the default location where the RPAS Client will be installed on the Windows workstation. Set `classicMode` to `true` to support RPAS Client release 9.4.
2. Restart RPAS Web Launch Application from the Oracle Enterprise Manager/Application Server Control screen.

Installing on Apache Tomcat

Perform the following procedure if you are deploying RPAS Web launch on a standalone Apache Tomcat server, which implies a non-SSO environment.

Installing RPAS Web Launch on Apache Tomcat consists of two steps:

- Step 1: Deploying the RPAS WAR File
- Step 2: Configuring RPAS Web Launch on Apache Tomcat

Step 1: Deploying the RPAS WAR File

Please refer to your Apache Tomcat documentation for more details of how to deploy a Web archive.

1. Log on to the Tomcat Web server URL: http://server:port/manager/html.
2. Scroll down to **Deploy directory or WAR file located on server** section.
3. Type **/RPAS** (or anything else you choose) in the **Context Path** field.

   This location is referred to (without the "/") as [CONTEXT_ROOT] in this document.
4. Type [STAGING_DIR]/RPAS.war in the **WAR or Directory URL** field.
5. Click **Deploy**.

The display name should show **RPAS Web Launch** for a successful deployment. In the event you need to a re-deploy RPAS Web Launch, it is recommended that the following be performed:

- Undeploy the Web application.
- Restart the Web server to clear any caching.
- Re-deploy the Web application.

Step 2: Configuring RPAS Web Launch on Apache Tomcat

To configure RPAS Web Launch, you need to modify one property file (propfile). This file is located in the following path:

[TOMCAT_INSTALL_DIR]/webapps/[CONTEXT_ROOT]/WEB-INF/config

where [TOMCAT_INSTALL_DIR] is the installation location of the Tomcat Web server. If the Web server is running in a load balance environment with multiple servers, this file must be modified for all Web server instances.

1. Locate the following information in propfile and replace `[RPAS_WEB_DATA_DIR]` with the actual location and `[HOSTNAME]` with the host name of the server.

   ```
   dbPath=[RPAS_WEB_DATA_DIR]/RPASWebData/db
   clientSourceDir=[RPAS_WEB_DATA_DIR]/RPASWebData/client
   tunnelLogFile=[RPAS_WEB_DATA_DIR]/RPASWebData/logs/tunnel.[HOSTNAME].log
   webLogFile=[RPAS_WEB_DATA_DIR]/RPASWebData/logs/rpasPortal.[HOSTNAME].log
   isOSSO=false
   debug=false
   classicMode=false
   defaultInstallDir=C:\\RPAS Client
   ```

   Please note that `isOSSO` flag must be set to `false`. `defaultInstallDir` is the default location where the RPAS Client will be installed on the Windows workstation. Set `classicMode` to `true` to support RPAS Client release 9.4.
2. Restart the RPAS Web Launch application.

Configuring the RPAS Servlet

The class for the RPAS servlet is com.retek.mdap.servlet.ServletManager. The servlet properties have been configured in the deployment descriptor web.xml that is originally archived in RPAS.war.

This deployment descriptor provides two sets of initialization parameters to the RPAS servlet.

> **Note:** The deployment descriptor should not be modified. All of the servlet initialization parameters should not be modified, except the timeout and sleep parameters (which specify the time in seconds) for Web tunneling.

After the servlet is configured, load it into your Web server. You might be required to reload your Web server to activate the new servlet.

Configuring and Administering the Web Application

The following topics provide information on accessing the RPAS Web Administration console to perform administrative tasks such as defining the RPAS enterprise configuration, and adding, modifying and deleting domain configurations.

Start the RPAS Web Configuration Utility – Administration Console

1. To access the RPAS Web configuration utility, start a Web browser (Internet Explorer 6 recommended) and go to the following location:

   `http://[WEB_SERVER_ADDRESS]/[CONTEXT-NAME]/web`

   where

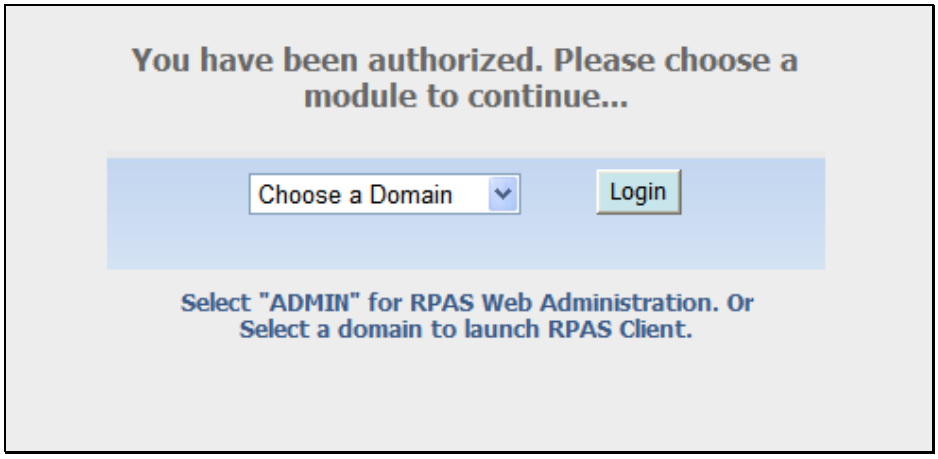
   `WEB_SERVER_ADDRESS` is the address you use to access your Web server.

   `CONTEXT_NAME` is the value you defined for the **Context Root** field in the Installing the RPAS Web Application procedure.

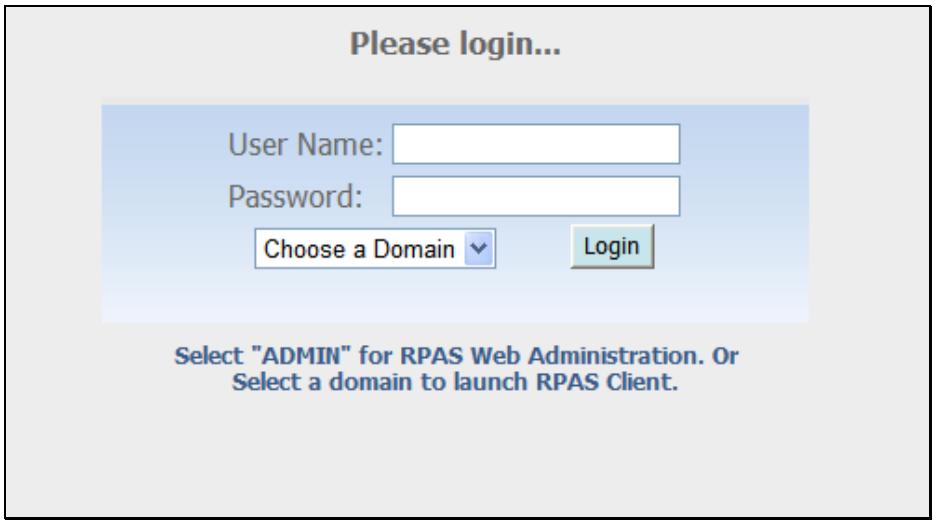
   > **Note:** The Web application support internationalization. It uses the locale from the browser to determine the appropriate language to display in the Web interface. The default language is English.

   Example: `http://rpasweb.oracle.com:13085/RPAS/web`

Depending the type of RPAS deployment being implemented (with SSO or without SSO), one of the following screens appears.



Login Screen after OSSO Authentication



Login Screen for Non-OSSO Configuration

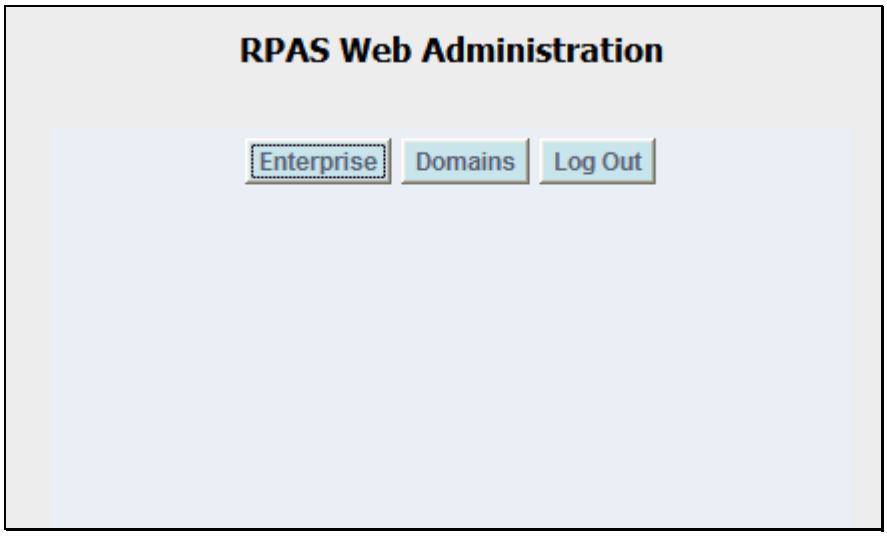
Note: If there is a very long list of domains, use URL `http://[WEB_SERVER_ADDRESS]/[CONTEXT-NAME]/web?app=[AppID]` to filter domains on the login page. Only domains with an application ID field matching `AppID` will be displayed in the list.

2. Perform one of the following:
   - If you are using an SSO environment, select **ADMIN** as the domain and click **Login** to access the Administration Console.
   - If you are not using an SSO environment, enter an Administrator user name and password (the initial administration user name is **adm** and the password is **adm**). Select **ADMIN** as the domain and click **Login** to access the Administration Console.

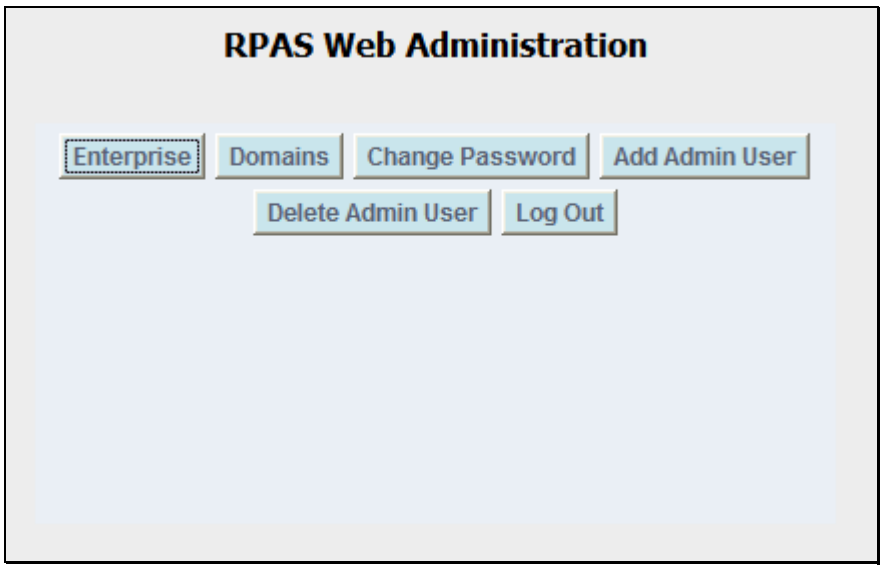
   A security warning dialog box appears.

Security Warning on Internet Explorer

3. Click **Run**. To avoid seeing this message in the future, make sure **Always trust content from this publisher** option is selected. The RPAS Web Administration console appears.



RPAS Web Administration Console in SSO Environment



RPAS Web Administration Console without SSO

4. Refer to the topics below to configure RPAS Web Launch or perform other administration activities.

Configure Web Launch and Web Tunneling – Enterprise Configuration

The following section describes how to configure the use of the Web launch or the Web tunneling architecture. Both the Web launch and Web tunneling architectures allow domain location setup, client application installation, and application launch processes to be initiated from a Web browser. The difference between the two architectures is in how data is communicated between the RPAS Client application that runs on a user's PC and the RPAS domain that runs on the database server.

The Web tunneling architecture sends all data through the Web server as it travels from a user's PC to the database server. This method allows PCs that are located outside a company's network to communicate through the Internet to a database server that is located inside a company's network.

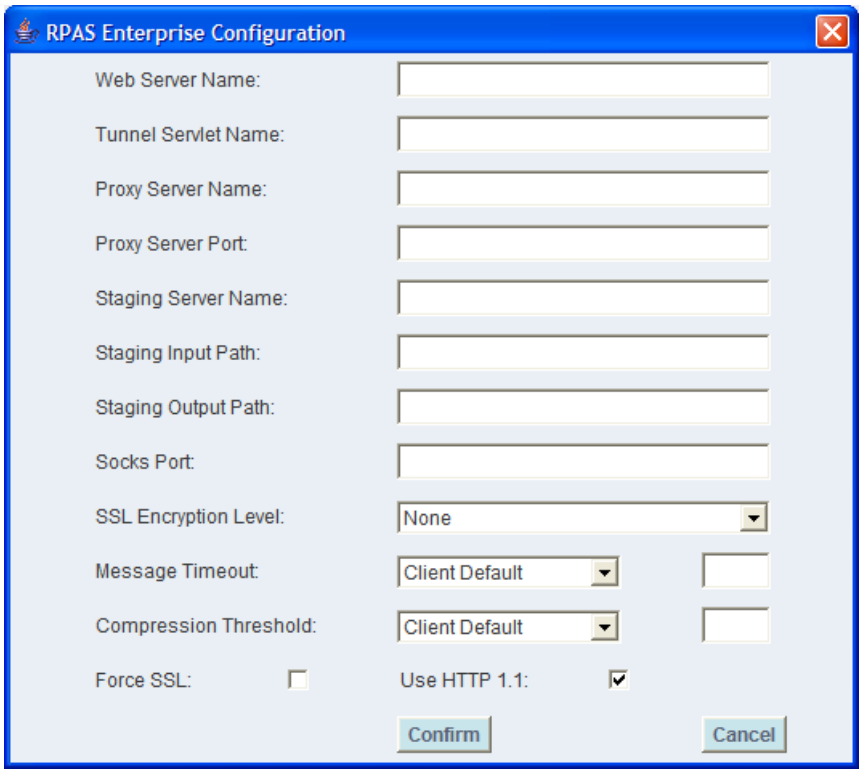
The Web launch architecture sends all data directly from a user's PC to the database server. This architecture assumes that the database server is on a network directly accessible by each user's PC (that is, the company's LAN).

1. Click **Enterprise** to open the RPAS Enterprise Configuration window.

   This dialog allows you to define the communications architecture that connects client PCs to the database server.

   From a configuration perspective the key differentiator, between the two options is in the value of the Web Server Name field (described below). To use the Web tunneling architecture, this field must be populated; if it is empty, the Web launch architecture is used.

2. To configure the Web launch architecture, make sure the **Web Server Name** field in the RPAS Enterprise Configuration dialog is empty, and click the **Confirm** button. All other fields in this window are ignored.

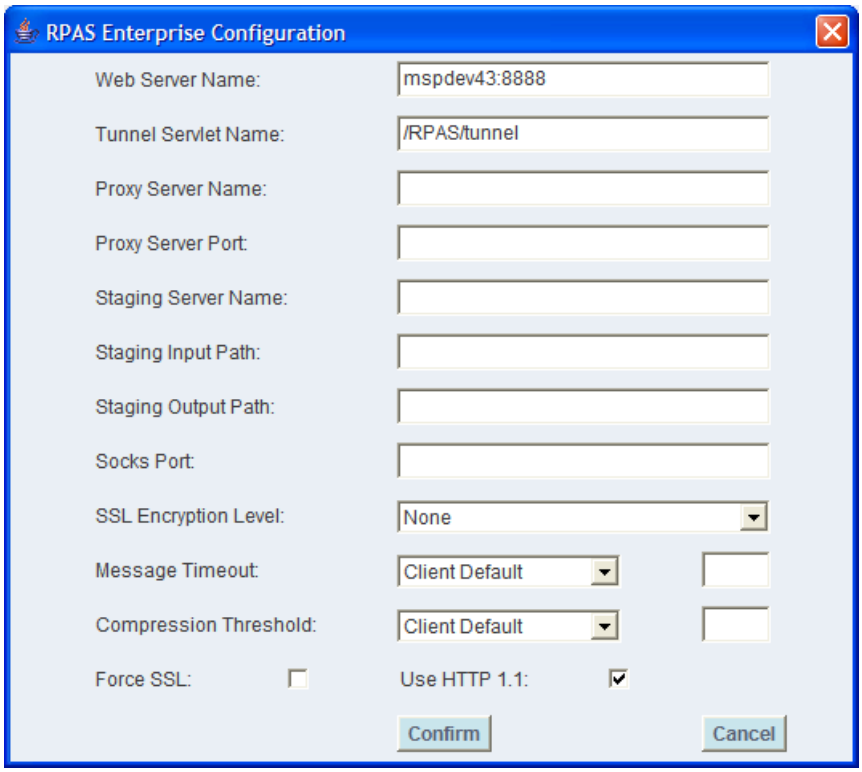


RPAS Enterprise Configuration Window

3. To configure the Web tunneling architecture, the RPAS Enterprise Configuration window must be filled with appropriate values following the table below.

Filed Name	Value Description
Web Server Name	The hostname or the IP address of the Web server and the port number of the Web server. They must be entered sequentially with a colon in between. If the **Force SSL** checkbox is checked, replace the port with the SSL port number. Required.
Tunnel Servlet Name	The path to the servlet that tunnels the information between the client and server. Formatting: /[*CONTEXT_NAME*]/tunnel. Required.
Proxy Server Name	The hostname or the IP address of the proxy server.
Proxy Server Port	The port number on which the proxy server is active. Must be an integer between 1 and 65535.
Staging Server Name	Leave blank. Not used right now.
Staging Input Path	Leave blank. Not used right now.
Staging Output Path	Leave blank. Not used right now.
Socks Port	If HTTP 1.1 is being used along with a proxy server, then the proxy server must enable SOCKS protocol. Must be an integer between 1 and 65535.

Filed Name	Value Description
SSL Encryption Level	If SSL is to be used, this value should be 128 Bit US, or 64 Bit International encryption level. 128 bit encryption should be preferred.
Message Timeout	Used in HTTP 1.1 to specify the number of milliseconds of inactive communication after which the client will timeout and reconnect. Must be an integer between 1 and 65535.
Compression Threshold	The number of bytes above which client and server will be using compression.
Force SSL	This is a check box that specifies whether SSL is used for transferring data between client and server.
Use HTTP 1.1	This is a check box that specifies whether HTTP 1.1 should be used. If not selected, HTTP 1.0 will be used.

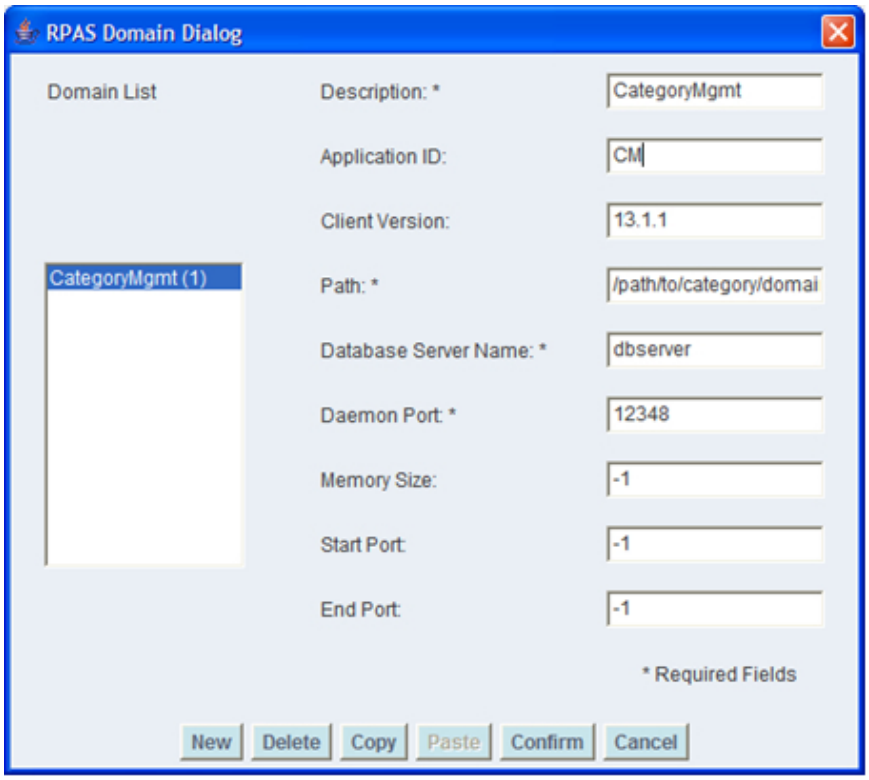


Sample Web Tunneling Configuration

Other Web Client Administration Activities

Adding, Modifying and Deleting Domain Configuration

1. Click **Domains** in the RPAS Web Administration Console. The RPAS Domain Dialog appears. This dialog is used to specify the location of RPAS domains. Each domain that can be accessed by a user must be specified with the dialog.



RPAS Domain Dialog

2. To add a new domain, click **New**, enter the following information, and click **Confirm**.

Field Name	Value Description
Description	This is displayed to users when they are selecting a domain to log in to. Required.
Application ID	Used in domain filtering. Can be any string without spaces. Leave blank if preferred.
Client Version	The version number of the RPAS Client to launch. It must exactly match the version number in the path of the client files on the Web server. Leave blank if multiple version support is not enabled.
Path	The full path to the directory containing the domain on the database server. Required.
Database Server Name	The hostname of the database server containing the domain. Required.

Field Name	Value Description
Daemon Port	The port number of the DomainDaemon process running on the database server. The port must be between 1025 and 65535 (inclusive). Required.
Memory Size	Leave blank. Not used right now.
Start Port	Start of the range of ports used by a client PC (Web launch architecture) or the Web server (Web tunneling architecture) to connect to the database server. This value must be great than (>) 1025. If it not specified, the RPAS database server attempt to find a free port whenever a client connects.
End Port	End of the range of ports used by a client PC (Web launch architecture) or the Web server (Web tunneling architecture) to connect to the database server. This value cannot be greater than 65535.

3. To change an existing domain configuration, select the domain from the **Domains List**, modify the fields as necessary, and click the **Confirm** button. Select the **Cancel** button to discard any changes that have been made.
4. To remove a domain, select a domain from the **Domains List** and click **Delete**. The selected domain configuration is removed.
5. To copy all of the domain settings of a domain, perform the following:
   a. Select the domain from the **Domains List** and click **Copy**.
   b. Selecting another domain from the **Domains List** and click **Paste**. The domain is updated the domains settings you have copied.
   c. Click **Confirm** to save the updated information.

Changing Administrator Password

Perform the following procedure from the RPAS Web Administration Console.

1. Click **Change Password**. The RPAS Change Password window appears. This allows the currently logged in administrator to change his/her password that allows access to the administrative console.
2. Enter the current password in the **Old Password** field. Passwords should not exceed 30 characters in length.
3. Enter the new password in the **New Password** and **Confirm New Password** fields.
4. Click **Confirm** to save the new password.

Adding a New Administrator Account

Perform the following procedure from the RPAS Web Administration Console.

1. Click **Add Admin User** to open the RPAS Add Admin User window. This window is used to add another RPAS administrative user.
2. Enter the administrative user's name in the **User Name** field. The user name must not be used by other people.

   If the user name has been used, an error dialog appears. Click **OK** on this error dialog if this occurs, and enter another name for this new administrative user.
3. Enter the initial password in the **Password** and **Confirm Password** fields.
4. Click **Confirm** to create the new administrator account.

Deleting an Administrator Account

Perform the following procedure from the RPAS Web Administration Console.

1. Click **Delete Admin User** to open the RPAS Delete Admin User window. This allows you to delete an RPAS administrative user.
2. Select the administrative user's name from the list in the window, and click **Confirm** to delete the user account.

Logging Out

From the RPAS Web Administration Console, click **Logout** to exit the administrative console. This returns you to the Login screen.

Install and Launch the RPAS Client Application

Perform the following procedure the install the RPAS Client and log in to a domain using RPAS Web Launch:

1. Start a Web browser and go to the following location/URL:
   `http://[WEB_SERVER_ADDRESS]/[CONTEXT_NAME]/web`

   Example: http://rpasweb.oracle.com:13085/RPAS/web

   This address is established during the initial installation and configuration. Administrators must provide this location/URL to end users. The `[WEB_SERVER_ADDRESS]` portion of the URL is the host address where the Java application service is running. This address may also include an alternate TCP/IP port number to communicate on (for instance, for port 8080, webss:8080). The login screen appears.
2. Perform one of the following based on your environment:
   - If your environment is not using Oracle Single Sign-On (SSO), enter a user name and password, select a domain from the list, and then click **Login**.
   - If you are using SSO, you will enter your SSO credentials for authentication. A login screen appears. Select a domain from the list and click **Login**. The user name must have been added to the domain to allow access.

     Note: When using SSO, you can by-pass the login page by specifying the domain in the URL: `http://[WEB_SERVER_ADDRESS]/[CONTEXT_NAME]/web?domain=[Desc]`. The domain with a description field matching `Desc` will be launched automatically after the authentication. No spaces are allowed in the description field if this direct triggering mechanism feature is used.

   When the **Login** button is selected, the **DomainDaemon** on the database server is contacted to verify that the specified user is allowed to access the selected domain. Ensure that the **DomainDaemon** process is running on the database server before clicking on **Login**.

   If access to the domain is allowed, a security dialog window may appear.
3. If the security window appears, click **Run.**

   After you click **Run** in the security window, a check is made to see if the RPAS Client application needs to be installed on the user's PC.

4. If necessary, select a directory that has at least 50 MB of free storage for installing RPAS Client, and click **OK**. A status dialog box appears as files are copied from the server to the user's PC. After the files have been copied, a RPAS installation program runs, and the RPAS Client starts. If everything is successful, the user sees a **Login Successful** message in the bottom left corner of the RPAS Client window.

   Note: If the RPAS Client does not need to be installed on the user's PC after you click **Login**, the RPAS Client immediately starts and connects the user to the selected domain.

RPAS Web Launch and Oracle Retail Workspace

If you plan to implement RPAS Web Launch in conjunction with Oracle Retail Workspace, refer to the *RPAS Administration Guide* as well as the Oracle Retail Workspace documentation for more information.

A

Appendix: Installation Order

This section provides a guideline as to the order in which the Oracle Retail applications should be installed. If a retailer has chosen to use some, but not all, of the applications, the order is still valid less the applications not being installed.

> **Note:** The installation order is not meant to imply integration between products.

Enterprise Installation Order

1. Oracle Retail Merchandising System (RMS), Oracle Retail Trade Management (RTM), Oracle Retail Sales Audit (ReSA)
2. Oracle Retail Service Layer (RSL)
3. Oracle Retail Extract, Transform, Load (RETL)
4. Oracle Retail Active Retail Intelligence (ARI)
5. Oracle Retail Warehouse Management System (RWMS)
6. Oracle Retail Allocation
7. Oracle Retail Invoice Matching (ReIM)
8. Oracle Retail Price Management (RPM)

> **Note:** During installation of RPM, you are asked for the RIBforRPM provider URL. Since RIB is installed after RPM, make a note of the URL you enter. If you need to change the RIBforRPM provider URL after you install RIB, you can do so by editing the jndi_provider.xml file.

9. Oracle Retail Central Office (ORCO)
10. Oracle Retail Returns Management (ORRM)
11. Oracle Retail Back Office (ORBO) or Back Office with Labels and Tags (ORLAT)
12. Oracle Retail Store Inventory Management (SIM)

> **Note:** During installation of SIM, you are asked for the RIB provider URL. Since RIB is installed after SIM, make a note of the URL you enter. If you need to change the RIB provider URL after you install RIB, you can do so by editing the jndi_providers_ribclient.xml file.

13. Oracle Retail Predictive Application Server (RPAS)
14. Oracle Retail Demand Forecasting (RDF)
15. Oracle Retail Category Management (CM)
16. Oracle Retail Replenishment Optimization (RO)
17. Oracle Retail Analytic Parameter Calculator Replenishment Optimization (APC RO)
18. Oracle Retail Regular Price Optimization (RPO)
19. Oracle Retail Merchandise Financial Planning (MFP)
20. Oracle Retail Size Profile Optimization (SPO)

21. Oracle Retail Assortment Planning (AP)
22. Oracle Retail Item Planning (IP)
23. Oracle Retail Item Planning configured for COE (IPCOE)
24. Oracle Retail Advanced Inventory Planning (AIP)
25. Oracle Retail Integration Bus (RIB)
26. Oracle Retail Point-of-Service (ORPOS)
27. Oracle Retail Analytics Applications
28. Oracle Retail Data Warehouse (RDW)
29. Oracle Retail Workspace (ORW)

B

Appendix: rsp_manager Usage

Overview

The rsp_manager (Retail Service Pack Manager) is a Perl script system that is capable of currently patching the following:

- RPAS
- Tools
- Domains
- Solution Environments (AIP_HOME, SCI_HOME, etc)

This system will automatically run any creates, scripts or procedures that need to be run when a patch is applied.

Prerequisites

You must have Perl 5.005 or later installed on your system. Most Unix variants will have this installed by default. On Windows, an installation of MKS is required.

Applying a Service Pack

The following instructions describe how to install a service pack.

1. Copy component-ver.os.tar.zip

   Note: This component will be named "-ver.os.zip" for Windows.

   The service pack is shipped as a compressed .tar or .zip, depending on the platform. The file will be named based on the release level of the code contained within. Copy the service pack .tar.zip or .zip file to a standard service pack directory that you have previously set up.

   Example

   Create a service pack directory at:

   `/files1/service_packs`

   Then, copy the service pack file to:

   `cp ./ARPOplatform-13.1.2.sun.tar.zip /service_packs`

   …where `/service_packs` is a user-created directory for archived service packs. In Windows, this directory would resemble the directory `C:\service_packs`.

2. Unpack the service pack from the .tar.zip or .zip file from step 1.

   Example

   The following are example Unix commands to unpack the service pack.

   ```
   cd /service_packs
   unzip ARPOplatform-13.1.2.sun.tar.zip
   tar –xvf
   ```

   This will create a subdirectory in your service pack directory named the same as the service patch/pack version, which contains a directory for the platform. In this directory, you will see subdirectories for each of the modules this service pack is updating. For example, if this service pack has updates to RPAS, domains, and tools, the following module directories could be created:

   ```
   /service_packs/ARPOplatform/13.1.2/sun/rpas
   /service_packs/ARPOplatform/13.1.2/sun/domain
   /service_packs/ARPOplatform/13.1.2/sun/tools
   ```

   Additionally, this document, Release Notes, and a copy of any service pack installation scripts/libraries will be copied to a location such as:

   ```
   /service_packs/ARPOplatform/13.1.2
   ```

   Note: In Windows, you may use WinZip or a similar unzipping tool for this step.

3. Apply the service pack on a staging or production server. After extracting the service pack, you will have to apply the service pack to the installed components and any domains that have been built. Note that the service pack installation should be carried out on the same operating system as that on which the product resides.

   The syntax of applying a service pack with *rsp_manager* is:

   ```
   rsp_manager –install –sp <sp path> -domain <domain path>
   ```

   Example 1

   To apply service pack 13.1.2 for ARPOplatform and domain /domain1, use the following commands:

   ```
   cd /service_packs/ARPOplatform/13.1.2/
   ./rsp_manager –install –sp sun –domain /domain1
   ```

   Example 1

   To turn on file logging of the output and store the results of the application in domain1.log, use the following commands:

   ```
   cd /service_packs/ARPOplatform/13.1.2/
   ./rsp_manager –install –sp sun –domain /domain1 –log domain1.log
   ```

   Following installation, a validation process will be run against your patched install.

Applying Service Packs on Multiple Domains

If you have more that one domain running off the same ARPOplatform, it is possible to create a domain list file and supply that file path, instead of the domain path, as an argument. This will be a text file with a full path to a domain on each line.

The additional syntax of *rsp_manager* is:

```
rsp_manager –install –sp <sp path> -domain <domain_list_file>
```

Example

To install service pack 13.1.2 for ARPOplatform and all domains listed in /files/domain_list.txt, use the following commands:

```
cd /service_packs/ARPOplatform/13.1.2/
./rsp_manager –install –sp sun –domain /files/domain_list.txt
```

…where /files/domain_list.txt looks similar to this:

```
cat /files/domain_list.txt
/domains/domain1
/domains/domain2
/domains/domain3
```

> **Note:** Logging will work with multiple domains, but only one file will be created and written to. This single log will contain the output from all updated modules and domains.

Optional Arguments or Commands for rsp_manager

rsp_manager has optional arguments that will allow you to perform tasks such as an installation version report, install or patch validation, and patch application forcing. The following sections provide details on these arguments.

-no_rpas

This flag stops your RPAS_HOME from being patched. This can be used in conjunction with –no_tools, but still passing domains, in order to upgrade a domain to your RPAS_HOME code level without performing an RPAS upgrade.

-no_tools

This flag stops your RIDE_HOME from being patched. This can be used in conjunction with –no_rpas, but still passing domains, in order to upgrade a domain to your RPAS_HOME code level without performing a tools upgrade.

-no_domain

This flag stops the patch from being applied to any domains.

-log <logfile>

Although logging is done by default, the log will be saved to the current working directory as a date-stamped filename. This flag allows you to change the name of the log file created to the argument you pass.

-force

This flag enforces the application of the patch/pack regardless of the versions that the components report. This allows you to reapply a patch that has already been applied, while also running any update scripts that might have already been run.

Example

To force reinstallation of the 13.1.2 service patch onto your installation and a single domain, with logging:

```
cd /service_packs/ARPOplatform/13.1.2/
./rsp_manager –install –sp sun –domain /domain1 –log domain1.log -force
```

-validate

This flag is run by default at the end of all –install processes. The purpose of this flag is to validate components of the service patch/pack against your installation. Currently, this will only check your core binaries and libraries in both RPAS_HOME and RIDE_HOME. Tests include permissions comparisons and file checksum validation, which are represented in the output as “P” or “C” respectively upon errors.

Example

To validate the 13.1.2 Sun service patch against your installation any time after patching:

```
cd /service_packs/ARPOplatform/13.1.2/
./rsp_manager –validate –sp sun
Validating your updated install against the service pack/patch -
.....................................................................
....
.....................
Validation complete...
Files Checked: 106
Files Passed: 106
Files Failed: 0
```

Note that the number of files checked might not match the above number, as it changes quantity based on platform and patch version. If any files fail, a listing of those failed files will be presented, each being preceded by flags (“C” or “P”) to indicate which check(s) failed.

-report

This flag checks each component of your installation, including domain(s) that you pass in, and reports the current service pack/patch level of each. If you believe that a patch has been applied, yet you are still having an issue that is reported to be resolved, the output of this flag will confirm whether the patch has actually been applied.

Example

To check versions of installed components and domains listed in the /files/domain_list.txt text file:

```
./rsp_manager -report -domain /files/domain_list.txt
rpas level: 13.1.2
tools level: 13.1.2
/domains/domain1: 13.1.2
/domains/domain2: 13.1.2
/domains/domain3: 13.1.2
```

This output shows that RPAS_HOME, RIDE_HOME, and the domains listed have all been patched up to 13.1.2.

This report output, along with the output of a `-validate` execution, can be of great use to support when trying to debug an issue.

Optional Environment Variables

> **Note:** The following process is not a suggested installation process, but Oracle Retail acknowledges that it may be more efficient in some limited cases.

Since rsp_manager relies on the Retek.pm library, this file must normally be in the same directory as that from which you run rsp_manager. You may use an environment variable to point to the path that contains the library so that they can be split from each other. A useful instance would be setting up a directory in your path and placing rsp_manager inside, while using the RSP_HOME environment variable to point to the directory that contains the Retek.pm file. This would allow you to run rsp_manager from anywhere on the system.

Example

To be able to run rsp_manager from anywhere:

```
> cd /service_packs/ARPOplatform/13.1.2/
> ls
rsp_manager       Retek.pm
> mkdir ~/bin
> cp ./rsp_manager ~/bin/
> export PATH=~/bin:$PATH
> export RSP_HOME=/service_packs/ARPOplatform/13.1.2
```

At this point, you can cd to anywhere on the disk and run rsp_manager.

Please keep in mind that if you do choose to split these files, when you obtain new copies of the script and library, you will need to place them into the locations you reference in $PATH and $RSP_HOME.