

Oracle® Retail Advanced Inventory Planning

Installation Guide

Release 15.0

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Oracle Retail Advanced Inventory Planning Installation Guide, Release 15.0.

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Preface

This *Oracle Retail Advanced Inventory Planning Installation Guide* describes the requirements and procedures to install this Oracle Retail Advanced Inventory Planning release.

Audience

This Installation Guide is for the following audiences:

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

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Related Documents

For more information, see the following documents in the Oracle Retail Advanced Inventory Planning Release 15.0 documentation set:

- *Oracle Retail Advanced Inventory Planning Administration Guide*
- *Oracle Retail Advanced Inventory Planning Data Management Online Help*
- *Oracle Retail Advanced Inventory Planning Data Management User Guide*
- *Oracle Retail Advanced Inventory Planning Data Model Volume 1—Oracle Database Data Model*
- *Oracle Retail Advanced Inventory Planning Data Model Volume 2—Measure Reference Guide*
- *Oracle Retail Advanced Inventory Planning Implementation Guide*

- *Oracle Retail Advanced Inventory Planning Installation Guide*
- *Oracle Retail Advanced Inventory Planning Operations Guide*
- *Oracle Retail Advanced Inventory Planning Order Management Online Help*
- *Oracle Retail Advanced Inventory Planning Order Management User Guide*
- *Oracle Retail Advanced Inventory Planning Release Notes*
- *Oracle Retail Advanced Inventory Planning Security Guide*
- *Oracle Retail Advanced Inventory Planning Store and Warehouse Replenishment Planning Online Help*
- *Oracle Retail Advanced Inventory Planning Store and Warehouse Replenishment Planning User Guide for the RPAS Fusion Client*

The following documentation may also be needed when implementing AIP:

- Oracle Retail Planning Batch Script Architecture (BSA) Implementation Guide
- Oracle Retail Integration Bus (RIB) documentation, based on type of deployment
- Oracle Retail Extract Transform and Load (RETL) documentation
- Oracle Retail Predictive Application Server (RPAS) documentation

My Oracle Support Documents

These Oracle Retail Advanced Inventory Planning Release 15.0 documents are available on My Oracle Support:

- *Oracle Advanced Inventory Planning Calculations for Store and Warehouse Replenishment Planning*
- *Oracle Retail Supply Chain Creation AIP White Paper*

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

<https://support.oracle.com>

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- 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, 15.0) or a later patch release (for example, 15.0.1). If you are installing the base release, 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.

Improved Process for Oracle Retail Documentation Corrections

To more quickly address critical corrections to Oracle Retail documentation content, Oracle Retail documentation may be republished whenever a critical correction is needed. For critical corrections, the republication of an Oracle Retail document may at times not be attached to a numbered software release; instead, the Oracle Retail document will simply be replaced on the Oracle Technology Network Web site, or, in the case of Data Models, to the applicable My Oracle Support Documentation container where they reside.

This process will prevent delays in making critical corrections available to customers. For the customer, it means that before you begin installation, you must verify that you have the most recent version of the Oracle Retail documentation set. Oracle Retail documentation is available on the Oracle Technology Network at the following URL:

<http://www.oracle.com/technetwork/documentation/oracle-retail-100266.html>

An updated version of the applicable Oracle Retail document is indicated by Oracle part number, as well as print date (month and year). An updated version uses the same part number, with a higher-numbered suffix. For example, part number E123456-02 is an updated version of a document with part number E123456-01.

If a more recent version of a document is available, that version supersedes all previous versions.

Oracle Retail Documentation on the Oracle Technology Network

Oracle Retail product documentation is available on the following web site:

<http://www.oracle.com/technetwork/documentation/oracle-retail-100266.html>

(Data Model documents are not available through Oracle Technology Network. You can obtain them through My Oracle Support.)

Conventions

The following text conventions are used in this document:

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

Introduction

This guide provides the full and patch installation instructions for Advanced Inventory Planning (AIP) version 15.0.

About the AIP Installation Process

If you are installing the application for the first time, you can install either a base release (for example, 15.0) or a later patch release (for example, 15.0.1). If you are installing a software version other than the base release, be sure to read the documentation for each patch release (since the base release) before you begin installation. Patch documentation can contain critical information related to the base release and code changes that have been made since the base release.

The process described in this document begins after the .zip files have been properly downloaded from <http://edelivery.oracle.com>. License keys for licensed products must be obtained before beginning the installation process.

About This Document

This document describes how to install AIP 15.0, or upgrade a 13.2.x.x or later installation to AIP 15.0. The AIP installation consists of the following components:

- The Oracle® Retail Predictive Applications Server (RPAS) version 14.1.0 domain using a configuration established by Oracle Retail developers.
- An online component based on Java and Oracle.

Detailed instructions for unpacking the software and installing both the RPAS and the online portion of the AIP 15.0 solution appear in this guide.

Before you begin installing AIP, you should read the *Oracle Retail Predictive Application Server Installation Guide*. Additional documentation may be required during the installation process and is referenced where applicable.

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

Note: AIP Java/Oracle, AIP on Oracle, and AIP Oracle are often used interchangeably to refer to those parts of AIP that access the Oracle relational database. This includes the Data Management and Order Management GUI components and a host of UNIX shell scripts and PL/SQL modules.

Preinstallation Tasks

This chapter provides information on the compatibility and hardware requirements for AIP.

Check for the Current Version of the Installation Guide

Corrected versions of Oracle Retail installation guides may be published whenever critical corrections are required. For critical corrections, the rerelease of an installation guide may not be attached to a release; the document is replaced on the Oracle Technology Network Web site.

Before you begin installation, check to be sure that you have the most recent version of this installation guide. Oracle Retail installation guides are available on the Oracle Technology Network at the following URL:

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

An updated version of an installation guide is indicated by part number, as well as print date (month and year). An updated version uses the same part number, with a higher-numbered suffix. For example, part number E123456-02 is an updated version of an installation guide with part number E123456-01.

If a more recent version of this installation guide is available, that version supersedes all previous versions. Only use the newest version for your installation.

Check Supported Database Server Requirements

This version of AIP is compatible with the database versions listed in [Table 2-1](#).

Table 2-1 Supported Database Server

Database Server	Supported Versions
Database Server 12c	<ul style="list-style-type: none"> ■ Oracle 12c Enterprise Edition Release 1 (version 12.1.0.2)

One-off Patches

The following table lists the one-off patches for the Oracle Database Management System (DBMS).

One-off Patch	Description
20846438	ORA-600 [KKPAPXFORMFKK2KEY_1] with list partition
19623450	Missing JAVA classes after upgrade to JDK 7

One-off Patch	Description
20406840	PRO*C 12.1.0.2 throws ORA-600 [17998] when precompiling by other user.
RAC only	
21260431	APPSST 12C: Getting ORA-4031 after 12C upgrade
21373473	Instance terminated as LMD0 and LMD2 hung for more than 70 seconds

Note: By default, JDK is at 1.6. after installing the 12.1.0.2 binary, apply patch 19623450. Follow the instructions on Oracle Database Java Developer's Guide 12c Release 1 to upgrade JDK to 1.7.

This guide is available at:

<https://docs.oracle.com/database/121/JJDEV/title.htm>

Follow-through to complete the post-patch operation.

Database Features

AIP database schema uses a partitioning feature of the DBMS.

Check Application Server Requirements

General requirements for an application server capable of running the AIP Oracle application include the versions listed in [Table 2-2](#).

Table 2-2 Supported Application Server

Application Server	Supported Versions
Application Server OS	<ul style="list-style-type: none"> ▪ Oracle WebLogic Server 12c Enterprise Edition (12.1.3) ▪ Oracle Application Development Runtime 12c (Release 12.1.3); apply ADF Patches 20716006, 20838345, and 21934304 (downloaded from My Oracle Support)

Check Server Operating Systems Requirements

This version of AIP is compatible with the server operating systems listed in [Table 2-3](#).

Table 2-3 Server Operating Systems

Server Operating Systems	Supported Version
Oracle Solaris	11.2
AIX	7.1
HP-UX	11.31 (Itanium)
Oracle Linux	6, 7
Red Hat Enterprise Linux	6, 7

Korn Shell

This version of AIP is compatible with the versions of Korn shell listed in [Table 2-4](#).

Table 2–4 Korn Shell Compatibility

Supported Version	Operating Systems
ksh88	<ul style="list-style-type: none"> ▪ Solaris ▪ AIX ▪ HP-UX
ksh93	Oracle Linux

Check Supported Server JRE Requirements

General requirements for the server JRE are listed in [Table 2–5](#).

Table 2–5 Supported Server JRE Requirements

Requirements	Supported Versions
Java Run Time Environment (JRE)	1.7

RPAS

This version of AIP is compatible with the RPAS versions, which includes RPAS Server and RPAS Configuration Tools in the following list. Refer to the Oracle Retail Predictive Application Server documentation for information on installing and administering RPAS.

- RPAS 15.0.0 (required)
- Java Development Kit (JDK) 1.7
- unzip utility (on UNIX)
- compress utility
- uncompress utility
- GNU stream editor (sed)
- GNU Diffutils
- GNU Tar (gtar): create a symbolic link to *tar* and ensure the link is before *tar* in the PATH

Software Requirements

Note: Oracle Retail assumes that the retailer has applied all required fixes for supported compatible technologies.

[Table 2–6](#) provides information on the software requirements for AIP.

Table 2–6 Software Requirements

Requirement	Details
Oracle Retail Predictive Applications Server (RPAS)	15.0
Oracle Retail RPAS Fusion Client	15.0
Oracle Retail Batch Script Architecture (BSA)	15.0

Note: Oracle Retail Batch Scripting Architecture (BSA) must be installed prior to installing AIP. For information about installing BSA, see the *Oracle Retail Batch Script Architecture Implementation Guide*.

Check Supported PC and Client Browser Requirements

This version of AIP is compatible with the PC and client browser requirements listed in [Table 2-7](#).

Table 2-7 PC and Client Browser Requirements

Requirements	Supported Version
Operating system	Windows 7 SP1 and Windows 7 Enterprise for any other language other than English
Display resolution	1024x768 or higher
Processor	1GHz or higher processor
Memory	256 MB or higher memory
Java Run Time Environment (JRE)	1.7, 1.8
Networking	Intranet network connectivity with at least 10Mbps data rate
Browsers	<ul style="list-style-type: none"> ■ Microsoft Internet Explorer 11.0 ■ Firefox 38 ESR

Check Oracle Retail Software Dependencies

This section lists Oracle Retail software dependencies for AIP.

Supported Oracle Retail Integration Technologies

This version of AIP is compatible with the Oracle Retail integration technologies listed in [Table 2-8](#).

Table 2-8 Supported Oracle Retail Products

Oracle Retail Integration Technologies	Supported Version
Oracle Retail Merchandising System (RMS)	15.0
Oracle Retail Integration Bus (RIB)	15.0
Oracle Retail Extract Transform and Load (RETL)	13.2.8.0.1

Supported Oracle Retail Products

This version of AIP is compatible with the Oracle Retail products listed in [Table 2-9](#).

Table 2-9 Supported Oracle Retail Products

Oracle Retail Product	Supported Version
Oracle Retail Advanced Science Engine (ORASE)	15.0
Oracle Retail Demand Forecasting (RDF)	15.0
Oracle Retail Replenishment Optimization (RO)	15.0

Preparing for Installation

This chapter provides information necessary to prepare for AIP installation.

Package Contents

A complete AIP 15.0 solution is delivered in the following files, which can be obtained from <http://edelivery.oracle.com>:

- AIP 15.0 Media Pack

Verify Contents

Follow these steps to verify the package contents.

1. Download the files and unpack the AIP package. The package contains the following files:
 - CDROM/AIP-rpas-installer.zip
 - CDROM/AIP-online-appserver-installer.zip
 - CDROM/AIP-online-dbserver-installer.zip
 - CDROM/AIP-dashboard-installer.zip
2. Verify that all files listed in Step 1 appear in the AIP package.

Installation Setup

The following sections describe preparations necessary for installation.

Preparing Your Windows Workstation

Unpack the AIP Media Pack to view the documentation. The AIP documentation is located in the DOCS folder.

Preparing Your UNIX Machine

1. Copy the following ZIP files to the UNIX machine that will house the server-side RPAS, Oracle, and Java files.
1. AIP-rpas-installer.zip - This file contains the AIP Installer which is an installation wizard that installs the following AIP components:
 - AIP RPAS batch components (binaries, libraries, XML files, shell scripts)
 - AIP RPAS Domain configuration and sample hierarchy data

- RMS-AIP Integration transformation files (shell scripts, schema files)

Note: It also provides the ability to define the AIP domain path and create the AIP domain.

2. AIP-online-appserver -installer.zip - This zip file contains the AIP 15.0 Online EAR file and binary license file for AIP Oracle. Inside this file is the AIP-online-integration.zip, which contains the AIP 15.0 Online integration files to exchange information between AIP Oracle, RPAS, and RMS (or an external system).
3. AIP-online-dbserver -installer.zip - This zip file contains the AIP 15.0 Online Oracle schema database files.
4. AIP-dashboard-installer.zip - This zip file contains the AIP 15.0 Dashboard installer files.

Installing the AIP Oracle Database Server Components

This chapter describes how to install the AIP Oracle database server components including:

- [Creating a UNIX User Account for Oracle and Retail](#)
- [Creating a Staging Directory for AIP Oracle Database Files](#)
- [Creating the Oracle 12c Database](#)
- [Creating the AIP Oracle Schema Owner](#)
- [Installing the AIP Oracle Database - Patch Mode](#)
- [Preparing Your Server for Installation](#)
- [Running the AIP Oracle Database Schema Installer](#)

Creating a UNIX User Account for Oracle and Retail

Perform the following procedure to create the necessary UNIX user accounts:

1. Create the following UNIX groups:
 - dba
 - dev

This account owns the Oracle RDBMS.
2. Create the following UNIX users, using ksh as the default shell:
 - oracle - dba group
 - retail - dev group

Note: The Oracle account is used to create the Oracle 12c Release 1 database. The Retail account is the owner of the AIP Oracle files that reside on the UNIX server.

Creating a Staging Directory for AIP Oracle Database Files

Perform the following procedure to create the staging directory for your AIP Oracle database server files:

1. Log on to the UNIX server as the newly created retail user and determine where the AIP Oracle database files will be extracted. There should be a minimum of 18 MB disk space available for the database installation files.
2. Copy the AIP-online-dserver-installer.zip file from the CDROM directory to the newly created staging directory.
3. Change directories (cd) to the staging directory and extract the zip file. This location is referred to as <DBINSTALL_DIR>.

Creating the Oracle 12c Database

If Oracle 12c is already installed then skip this section. Perform the following procedure to create the Oracle 12c database:

1. Install Oracle 12c Release 1 (version 12.1.0.2) with the Oracle UNIX account. Oracle 12c can be installed either in clustered topology or as standalone database.
2. Create a 12c database. Again this can be done either as Oracle Real Application Clusters (RAC) database or as single instance database.
 - When set up as clustered database, the tnsnames.ora should include all the database connection details.
 - Refer to [Appendix A, "Appendix: Database Parameter File"](#) in this document for sample init.ora files.
 - If these scripts are not used as a guide, a system tablespace of 500MB is required for each installation of the AIP Oracle schema.
3. Create the retail_data, retail_index, and lob_data tablespaces.

Refer to [Appendix A, "Appendix: Database Parameter File"](#) in this document for the sample tablespace creation script. The size of these tablespaces vary from client to client. For the initial installation, minimum tablespaces of 500MB are recommended.

Creating the AIP Oracle Schema Owner

Use script `create_aip_owner.sql` in <DBINSTALL_DIR>/AIPOnlineDBServer/aip/utility to create the schema owner. This script prompts you for schema owner name, password, and a temporary tablespace. This script should be run as `sys`.

Note: After the AIP database is successfully installed, create the AIP user schema prior to installing AIP Online. You can choose to use a second database user to run AIP processes.

Installing the AIP Oracle Database - Patch Mode

Note: Before starting the upgrade process, it is important to take a complete backup of the Database.

Perform the following procedure to install the AIP Oracle Database in patch mode:

1. Upgrade Oracle Database to version 12.1.0.2.

2. Check the Database character set. If it is not AL32UTF8, convert the character set to AL32UTF8. Refer to ["Physical Database Upgrade Requirements"](#) on page 1.
3. This step is needed only if you are upgrading from a release earlier than 14.0 to 14.1 or later.

Rename the tablespace RETEK_DATA to RETAIL_DATA and rename the tablespace RETEK_INDEX to RETAIL_INDEX.

Note: Releases 14.0 and later no longer use tablespaces RETEK_DATA and RETEK_INDEX and they should be renamed to RETAIL_DATA and RETAIL_INDEX. It is absolutely essential that a complete backup has been taken before performing this task.

- a. Connect to the database as *sys*.
- b. Run the command to rename the two tablespaces:

```
SQL> alter tablespace retek_data rename to retail_data; Tablespace altered.
```

```
SQL> alter tablespace retek_index rename to retail_index; Tablespace altered.
```

You can optionally rename the datafiles to correspond to the newly changed tablespace names but it is absolutely essential to take a full backup before the renaming data files.

Preparing Your Server for Installation

Note: If installing a patch, backup the existing database schema before continuing.

Beginning with Release 14.0, you can upgrade directly from 13.2.3 to 14.0 as described in [Chapter 7, "Installing AIP RPAS-Upgrade Version."](#)

If you are upgrading from an earlier version than AIP release 13.2.3, then the patch install is not cumulative. This means that you first need to apply the previous release patch (or patches one by one) until you are upgraded to AIP release 13.2.3.

The full install option should be chosen when there is no previous AIP release already installed.

Before you run the AIP Oracle Database Schema Installer, make sure you have performed the following:

- Set the ORACLE_HOME and ORACLE_SID environment variables with the values for your Oracle RDBMS installation. The oraenv script can be used for this.
- Set the NLS_LANG variable for your locale.
- Set the CLASSPATH variable to include Oracle 12c client JDBC driver (ojdbc7.jar).

Example:

```
NLS_LANG=AMERICAN_AMERICA.UTF8; export NLS_LANG
```

The `JAVA_HOME` variables are set by the installer based on the `ORACLE_HOME` that you have defined. In the event that it does not, ensure that your `JAVA_HOME` is set to 1.7 or later.

In order to override the `JAVA_HOME` set by the installer to an alternate `JAVA_HOME` - set the following environment variable prior to running the installer: `ORACLE_ALT_JAVA_HOME`.

If you are going to run the Installer in GUI mode using an X server, which is the recommended installation method, you need to have the X server extension enabled. This setting is not always enabled by default in your X server. Verify the extension is enabled.

For example, use following command to enable `DISPLAY` in your X server:

```
export DISPLAY=<ipaddress>:0
```

where `ipaddress` is machine rendering the graphics

Running the AIP Oracle Database Schema Installer

Perform the following procedures to use the AIP Oracle Database Schema Installer. Regardless of the RIB version being used, the AIP Oracle Database Schema installation process is identical. Depending on system resources, a typical installation takes anywhere from 2 minutes to 30 minutes.

Procedure to Use the AIP Oracle Database Schema Installer

1. Change directory (`cd`) to the `<DBINSTALL_DIR>/AIPOnline DBServerdirectory`.
2. Run the following `install.sh` script to start the Installer.

```
./install.sh
```

Note: The command must be executed with the preceding period and forward slash (`./`).

- If this process is being run on an X-Windows emulator (such as Exceed), a graphical user interface (GUI) to the Installer opens. If you are running in console mode through a terminal emulator, the text interface to the Installer opens.
- To run the Installer in the GUI mode, which is the recommended installation method, adjust the `DISPLAY` environment variable. For example use following command to adjust `DISPLAY` in your X server:

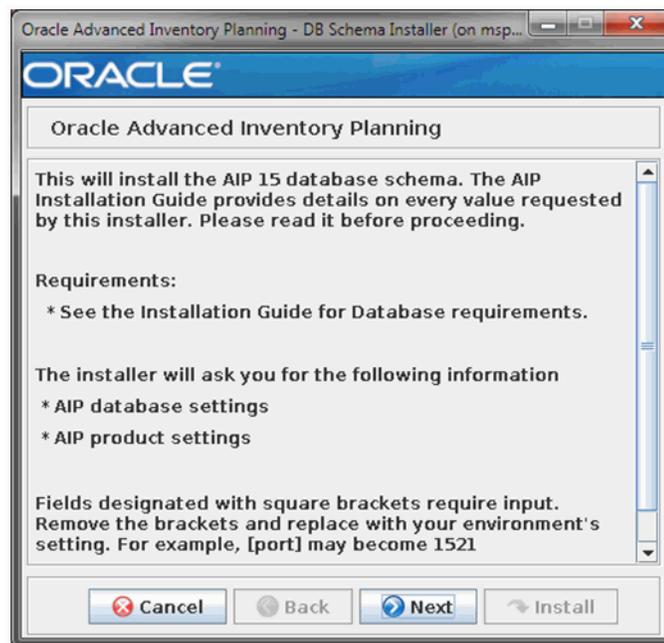
```
export DISPLAY=<ipaddress>:0
```
- In both cases, the requested information is identical. In the GUI, you may be shown a check box to signal whether you want a component installed; in text mode, you are prompted for a response of **true** or **false**.

Note: In text mode, the default value appears in square brackets []. To use the default value and continue, press **Enter**. If you wish to use a different value, enter the new value. When prompted to create a directory, respond with **yes** and press **Enter**.

Password fields appear masked, but the previous and default values appear in plain text when running in the text mode.

3. The [Oracle Advanced Inventory Planning - DB Schema Installer Window](#) opens and displays the components that are installed during installation process, as well as the required components. Click **Next** to continue.

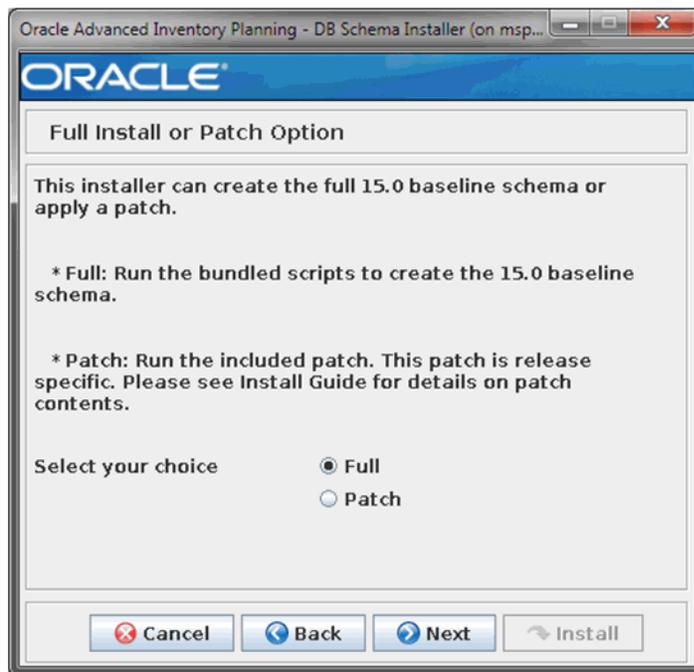
Figure 4–1 Oracle Advanced Inventory Planning - DB Schema Installer Window



4. The [Full Install or Patch Option Window](#) opens. Choose either the Full or Patch option. Click **Next** to continue.

Note: The patch install option should only be chosen when upgrading from AIP release 13.2.3 or later to a 15.0.x release. The full install option should be chosen when there is no previous AIP release already installed.

Figure 4–2 Full Install or Patch Option Window



5. The [Data Source Details Window](#) opens. Enter the information described in [Table 4–1](#) and click Next.

Table 4–1 Data Source Details Window Fields

Field	Description
AIP Schema Owner	Enter the AIP Schema owner's name.
AIP Schema Password	Enter the AIP Schema Owner's password.
AIP Oracle SID	Enter the name of the database where the AIP schema will be installed.

Figure 4–3 Data Source Details Window

6. If running the Full Install, the [Data Source Details URL Window](#) opens. Enter the AIP JDBC URL and click **Next**.

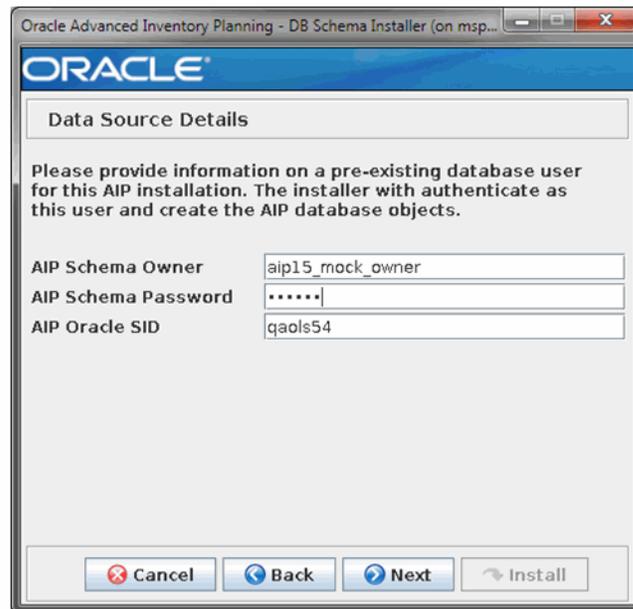
This is the URL that is used by AIP to access the database. The expected format for the field is shown.

Note: If you are using an HP 64-bit or a Sun 64-bit server, you must specify the AIP JDBC URL to use the thin driver.

Note: If the Oracle DB 12c is configured as pluggable database where the service name is used instead of the SID, then the connection string should be like this example:

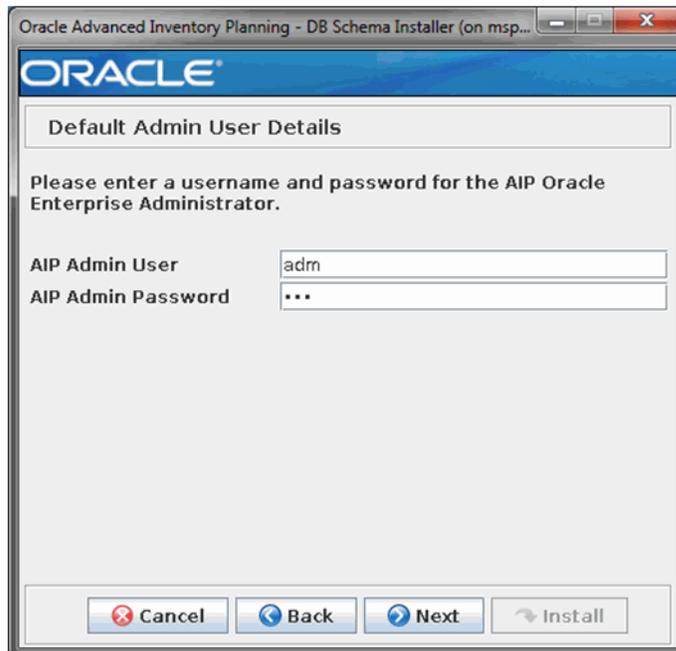
```
jdbc:oracle:thin:host:port/POLSP02APP
```

Figure 4–4 Data Source Details URL Window

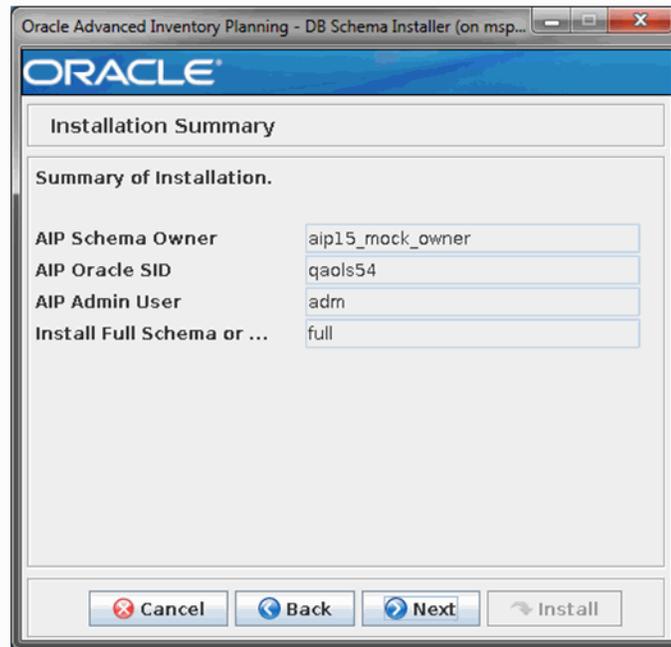


7. If running the Full Install, the [Default Admin User Details](#) opens. Enter the User ID and password for the AIP Oracle Enterprise Administrator and click **Next**.

Figure 4–5 Default Admin User Details



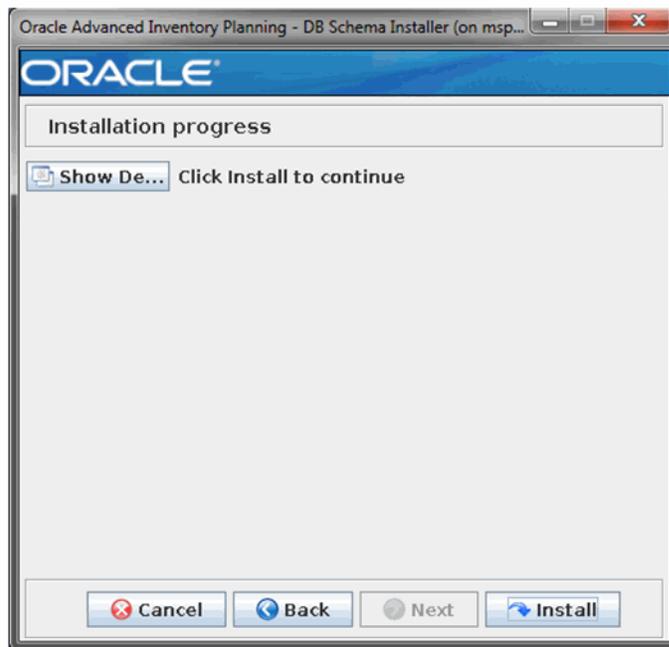
8. The [Installation Summary Window](#) opens. Click **Next** to continue.

Figure 4–6 *Installation Summary Window*

9. The [Installation Progress Window](#) opens. Once you are ready to begin the installation, click **Install**. This window displays the progress of the installation routine.

Note: The installation log may include PL/SQL compilation warnings where dependencies have not yet been installed. These warnings are expected and all PL/SQL is automatically recompiled at the end of the installation process.

Click **Show Details** to view the log output as the installation is performed. If you do not choose to view the details, a graphical representation of the installation steps appears. You can toggle between detailed mode at any time during or after the installation.

Figure 4–7 Installation Progress Window

10. When the installation has finished, the [Complete Window](#) opens.

To view the installation details, select Show Details. The window displays two tabs, *Output* and *Errors*.

It is recommended that you review these tabs for any issues that may have occurred during the installation process.

When performing a full install and the Installer is complete, a log file and a `.dbhistory` file appear in the installation directory. The log file is named `aip-install-dbschema.<timestamp>.log`, where `<timestamp>` is the date and time you ran the Installer. A `.dbhistory` file is also created, which contains a list of all the SQL scripts that were run by the installer. A `.dberrors` file is created if any errors were encountered during full install.

The Installer also generates an `ant.install.properties` file for future reference and repeat installations. This file contains all inputs you provided in the Installer windows, including passwords. As a security precaution, make sure that the file has restrictive permissions as shown in this example:

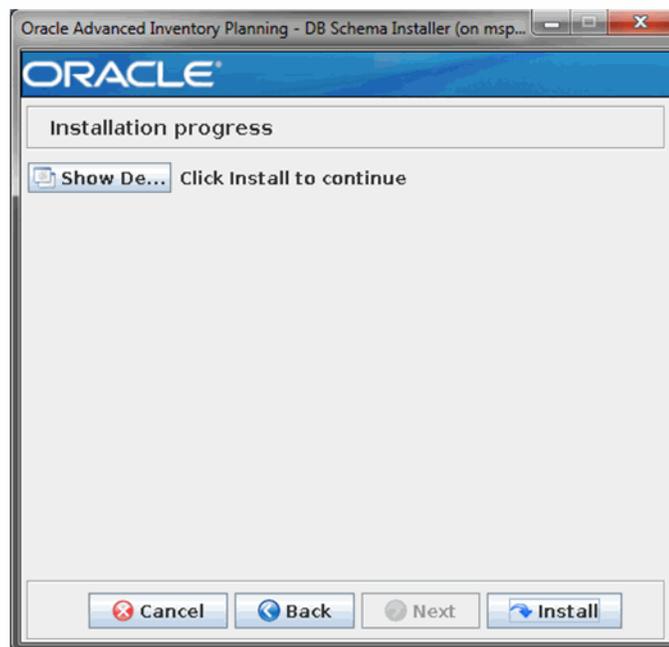
Example: `chmod 600 ant.install.properties`

Note: The installer compares the actual database object count with expected object count for several different object types and displays a warning when there is a mismatch.

You should review the logs and compare the logs from the actual and expected folders to see if there are schema differences listed in the `install.log` located under `<Db install >AIPOnlineDBServer/aip/db_verification/`.

It is okay if the actual count is greater than the expected count. This could happen due to temporary internal objects being created by database during installation or if there were non-AIP objects present in the schema.

Figure 4–8 Complete Window



11. Open the installation log file and record the database settings displayed at the end of the Installer log file, `aip-install-dbschema.<timestamp>.log`. You will need this information when performing the AIP Application Installation.
12. Click **Exit** to close the Installer.

Resolving Errors Encountered During Database Schema Full Installation

If the database schema installer encounters any errors, it prints to the window which SQL script it was running when the error occurred. It also writes the path to this script to the `.dberrors` file. When this happens, you must run that particular script using `sqlplus`. After you are able to complete execution of the script, delete the `.dberrors` file and run the Installer again. You can run the installer in silent mode so that you don't have to retype the settings for your environment. Refer to ["Reinstalling in Silent Mode"](#) on page 10-1 of this guide for instructions on silent mode.

Refer to ["Troubleshooting"](#) on page 10-2 for a list of common installation errors.

Subsequent executions of the Installer skips the SQL scripts that have already been executed in previous Installer runs. This is possible because the Installer maintains a .dbhistory file with a listing of the SQL scripts that have been run. If you have dropped the AIPOnline schema and want to start with a clean install, you can delete the .dbhistory file so that the Installer runs through all of the scripts again. It is recommended that you allow the Installer to skip the files that it has already run.

Resolving Errors Encountered During Database Schema Upgrade to 15.0

When running the installer to upgrade existing database schema to a 15.0 level, perform the following steps to fix errors and restart the installer:

1. Locate the last reported error in log file: upgrade.log

This log file is generated in:

<DBINSTALL_DIR>/AIPOnlineDBServer/aip directory.

2. Once the error is located, you should examine the source of error in your schema and fix that individual error.
3. Restart the installer as described in ["Running the AIP Oracle Database Schema Installer"](#).

The installer maintains a record of all successfully applied DBC (database change) scripts in upgrade.log file. When installer is restarted after failure, it identifies the already applied scripts from looking at upgrade.log and therefore skips those.

Note: You always have the other option of restoring your schema to pre-upgrade state from the database backup (assuming that proper database backup was taken before the upgrade), fixing the individual error and restarting installer.

4. After successfully installing the AIP database, create the AIP user schema using the script `create_aip_user.sql` as described in [Creating an Additional AIP Oracle User](#).

Creating an Additional AIP Oracle User

After a successful full installation into AIP database schema owner, it is recommended to create a second database user besides the schema owner to run AIP processes. This user requires access to all tables, views, sequences, packages, functions and procedures belonging to the schema owner through the use of public or private synonyms.

Use script `create_aip_user.sql` in <DBINSTALL_DIR>/AIPOnlineDBServer/aip/utility to create the additional database user. This script prompts you for the additional user's schema name, password, temporary tablespace, and the AIP owner schema name. This script should be run as sys.

This script only needs to be run after full installation if a separate database user is created. This script does not need to be run after a patch or upgrade installation.

Installing AIPOnlineApp on WebLogic

This chapter contains the typical steps for installing the AIP Oracle application to your Oracle WebLogic Server.

Before proceeding, you must install Oracle WebLogic Server 12c Enterprise Edition 12.1.3, plus any patches listed in [Chapter 3, "Preparing for Installation"](#) of this guide.

Also make sure to first install the AIP Oracle database components as outlined in [Chapter 4, "Installing the AIP Oracle Database Server Components"](#).

AIP Oracle is deployed to WLS managed server instance or cluster within the Oracle WebLogic Server 12c Enterprise Edition installation. It is assumed that Oracle RDBMS 12c has already been configured and loaded with the appropriate AIP Oracle schema for your installation.

Note: AIP uses Oracle WebLogic Server 12c Enterprise Edition, but also supports Oracle WebLogic Suite 12c.

Setting up WebLogic for AIP Oracle

Ensure that the WebLogic admin server and node manager are running for your AIP Oracle installation. Refer to the *Oracle Retail Application Server Administrator's Guide* for details on how to start the admin server and node manager.

Perform the following procedure to create a new managed server instance for the AIP Oracle installation. If the application is being installed to a clustered WLS, then create an instance for each node of the server. All such instances should be under the same cluster.

Note: If you are deploying to an existing managed server instance, you can skip this step since your environment is already prepared for installing AIP Oracle.

1. Log in to the administration console which is running your WLS 12c installation.
Example: `http://localhost:7001/console`
2. Choose a name for the new managed server instance.
Example: `aip_MS`
3. Create this managed server instance as documented in the *Oracle Retail Application Server Administrator's Guide*.

Note: If you do not have SOA installed, make sure the DMS/Oracle JRF deployments/libraries are not targeted to the AIP managed server.

4. Configure the managed server to assign it to a machine, listen address, listen port, and so on. Also, ensure that the machine using the managed server has the node manager installed and is running.
5. Log in the WebLogic admin console and navigate to the server start options for the AIP managed server that was created.
 - a. In the Arguments text box enter:
-XX:MaxPermSize=512m
 - b. Save and activate the changes. Refer to the *Oracle Retail Application Server Administrator's Guide* for details.
6. Start the managed server instance. You can do this through the administration console, or on the command line. See the *Oracle Retail Application Server Administrator's Guide* for more information.
7. Verify that the managed server instance was fully started. In the admin console, the instance should have a green check mark indicating that it is running. You can also verify that aip_MS java process is running on the command line.

Sample Syntax:

```
ps -ef | grep aip_MS
```

Preparing Your Server for Installation

Before you run the AIP Application Server Installer, make sure you have performed the following:

1. Log in to the UNIX server as the user who owns the WLS 12c installation. Create a new staging directory for the AIP Oracle application distribution (AIP-online-appserver- installer.zip).

Example: \$ORACLE_HOME/aiporacle_staging

This location will be referred to as <INSTALL_DIR> for the remainder of this chapter.

2. Make sure there is a minimum of 500 MB disk space available for the application installation files.
3. Copy AIP-online-appserver- installer.zip to <INSTALL_DIR> and extract its contents.

Note: If you are going to run the Installer in GUI mode using an X server, which is the recommended installation method, you need to have the X Server extension enabled. This setting is not always enabled by default in your X server. Verify the extension is enabled.

4. Set the ORACLE_HOME and WEBLOGIC_DOMAIN_HOME and JAVA_HOME environment variables. ORACLE_HOME should point to your Oracle WebLogic Server 12c Enterprise Edition installation. WEBLOGIC_DOMAIN_HOME should

point to the directory where your WebLogic domain was installed. JAVA_HOME must point to a valid Java 1.7 or later JDK.

Running the AIP Oracle Application Installer

Once you have an managed server instance that is started, you can run the AIP Oracle application installer. This installer will configure and deploy the AIP Oracle application and AIP Oracle Integration files.

1. Extract AIP-online-appserver- installer.zip to <INSTALL_DIR> directory.
2. Change directory (cd) to the <INSTALL_DIR>/AIPOnlineAppServer directory.
3. Run the following install.sh script to start the Installer.

```
./install.sh
```

Note: The command must be executed with the preceding period and forward slash (/).

When the installation is complete, a detailed installation log file is created. This file is named aip15.0install--app.<timestamp>.log where <timestamp> represents the date and time the installation was performed. This file is located in the <INSTALL_DIR>/AIPOnlineAppServer directory.

If this process is being run on an X-Windows emulator (such as Exceed), a graphical user interface (GUI) to the Installer opens. If you are running in console mode through a terminal emulator, the text interface to the Installer opens.

To run the Installer in the GUI mode, which is the recommended installation method, adjust the DISPLAY environment variable. For example use following command to adjust DISPLAY in Exceed:

```
export DISPLAY=<ipaddress>:0
```

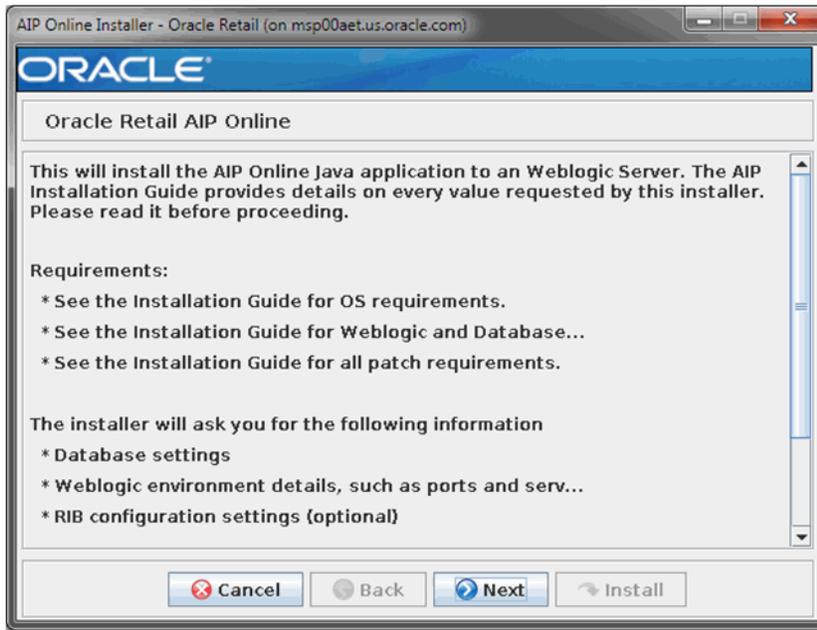
In both cases, the requested information is identical. In the GUI, you may be shown a check box to signal whether you want a component installed; in text mode, you are prompted for a response of **true** or **false**.

Note: In text mode, the default value will appear in square brackets []. To use the default value and continue, press **Enter**. If you wish to use a different value, enter the new value. When prompted to create a directory, respond with **yes** and press **Enter**.

Password fields will appear masked, but the previous and default values will appear in plain text when running in the text mode.

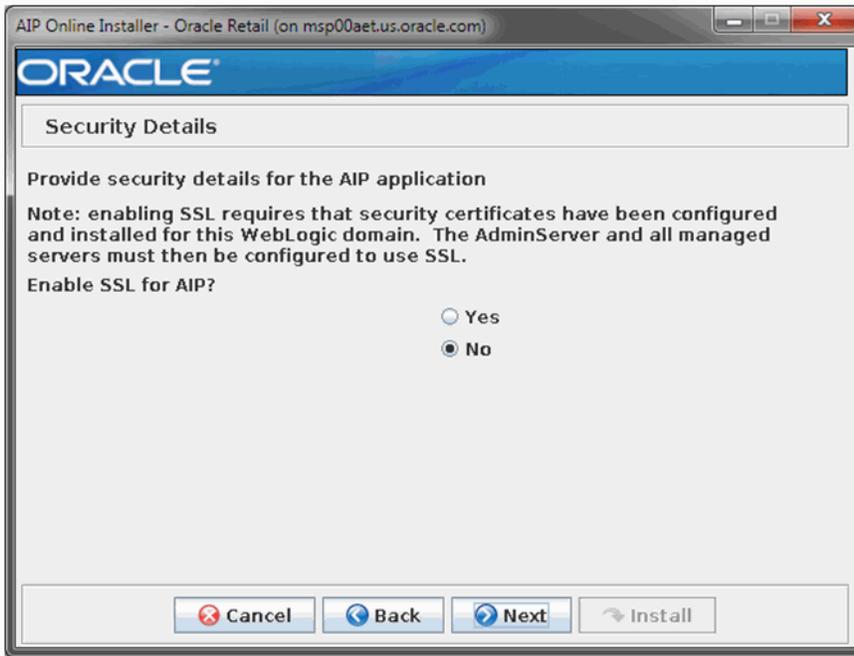
4. The [AIP Oracle Installer Window](#) opens and displays the components that will be installed during installation process, as well as the required components. Click **Next** to continue to the [Security Details Window](#).

Figure 5–1 AIP Oracle Installer Window



5. The [Security Details Window](#) opens. Indicate whether or not you would like to enable SSL for AIP and then click **Next** to continue to the [JDBC Security Details Window](#).

Figure 5–2 Security Details Window



6. The [JDBC Security Details Window](#) opens. Indicate whether or not you would like to enable a secure JDBC connection for AIP and then click **Next** to continue to the [Data Source Details Window](#).

Figure 5–3 JDBC Security Details Window

7. The [Data Source Details Window](#) opens. Enter the information as shown in the following table and then click **Next**.

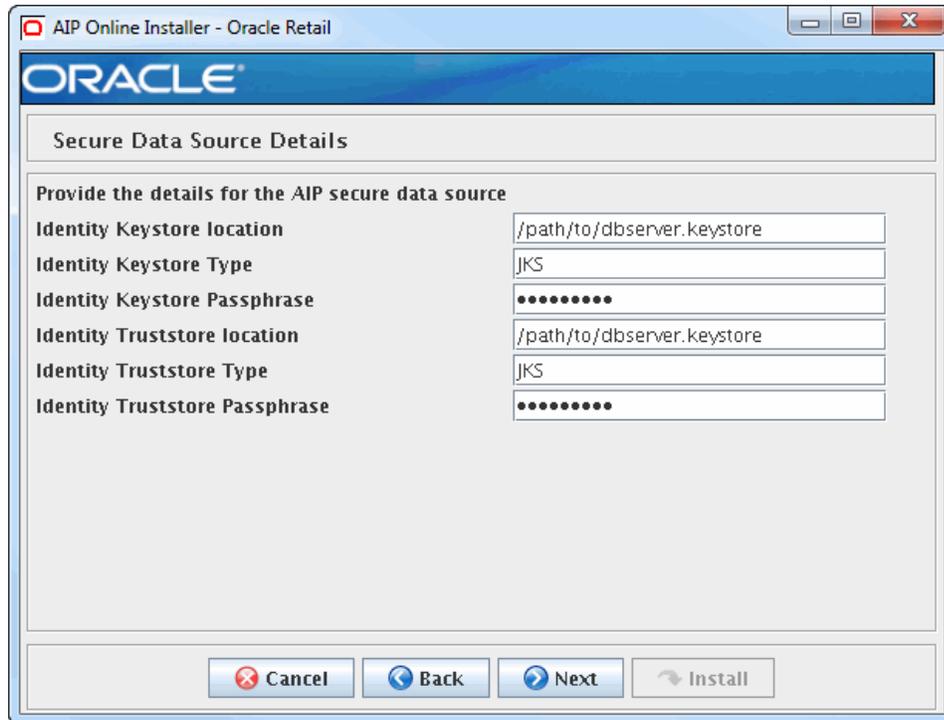
If you selected Yes in the [JDBC Security Details Window](#), continue to the [Secure Data Source Details Window](#). If you selected No, continue to the [WebLogic Administration Window](#).

Figure 5–4 Data Source Details Window

Field	Description
AIP JDBC URL	Enter the path for the JDBC connection,
AIP DB schema user	Enter the AIP database schema user name.
AIP DB schema password	Enter the AIP database schema password.
Enter the AIP schema owner	Enter the AIP database schema owner which is typically the same as the AIP DB schema user.
Enter the AIP schema alias	Enter the AIP database schema alias. This is used to securely store the username/password in a wallet file.

- The [Secure Data Source Details Window](#) opens. Enter the information as shown in the following table and then click **Next** to continue to the [WebLogic Administration Window](#).

Figure 5–5 Secure Data Source Details Window



Field	Description
Identity Keystore location	Location or path where identity keystore file is stored.
Identity Keystore type	The type of the keystore used. For example, JKS
Identity Keystore Passphrase	The password for the Identity Keystore.
Identity Truststore location	The path of the keystore which contains the SSL root and optionally intermediate certificates as obtained from the certificate authority
Identity Truststore type	The type of the truststore used. For example, JKS
Identity Truststore Passphrase	The password for the Identity Truststore.

9. The [WebLogic Administration Window](#) opens. Enter the information as described in [Table 5–1](#) and click **Next** to continue to the [Application Deployment Details Window](#).

Figure 5–6 *WebLogic Administration Window*

Table 5–1 *WebLogic Administration Fields*

Field	Description
Hostname	Hostname of the server where the AIP weblogic admin server is running.
WebLogic admin port	Enter the WebLogic admin port found in \$WEBLOGIC_DOMAIN_HOME/config/config.xml file. Example of Port Definitions in config.xml File: <pre><server> <name>AdminServer</name> <listen-port>7001</listen-port> <listen-address></listen-address> </server></pre>
WebLogic admin user	Enter the WebLogic admin user name.
WebLogic admin password	Enter the WebLogic admin user password.
WebLogic admin alias	This is the alias for the WebLogic username/password to store in the wallet file during installation.

10. The [Application Deployment Details Window](#) opens.

Enter the information as described in [Table 5–2](#) and click **Next** to continue to the [AIP Oracle Installation Directory Window](#).

Figure 5–7 Application Deployment Details Window

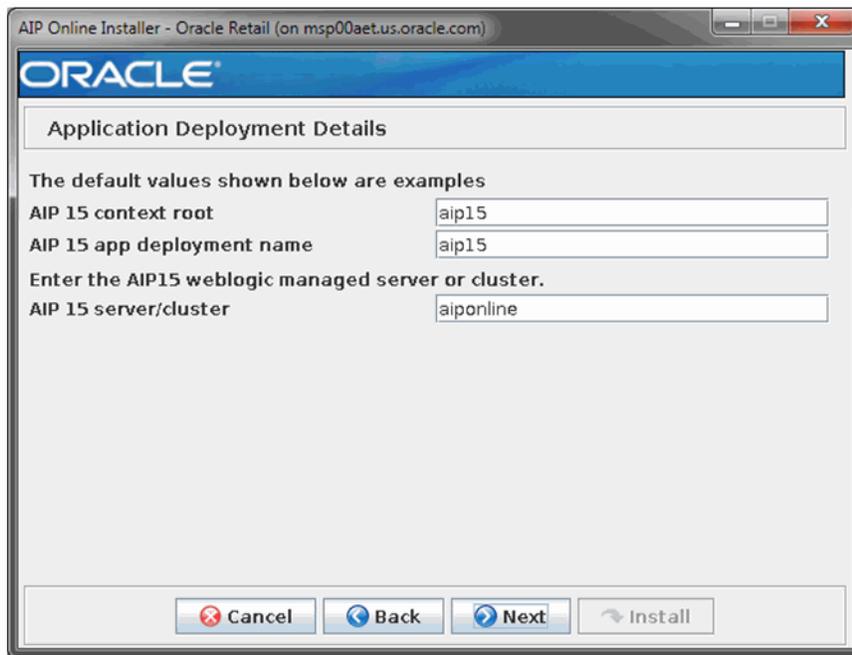
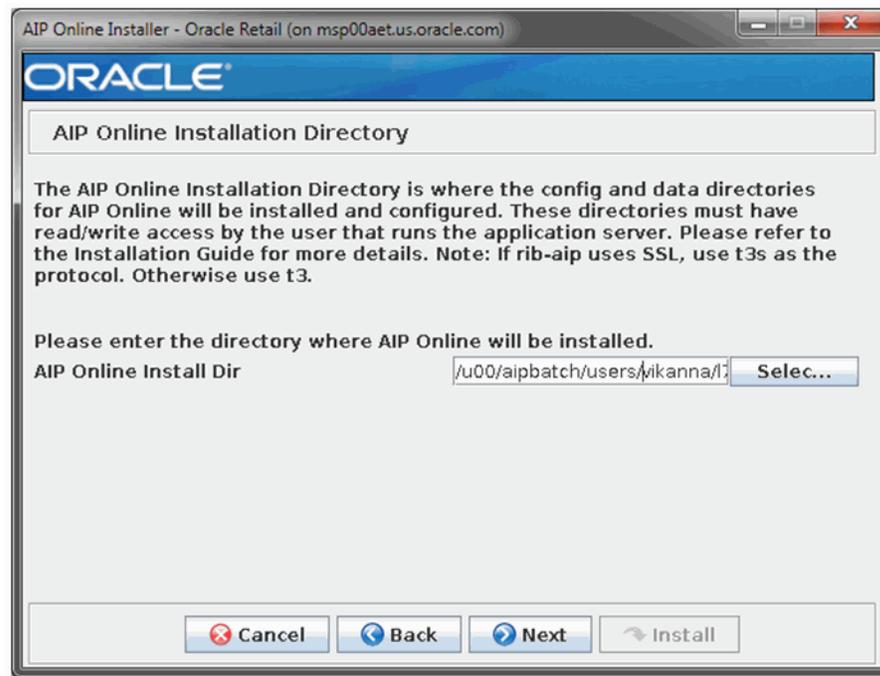


Table 5–2 Application Deployment Details Window Fields

Field	Description
AIP 15 context Root	Enter the context root that the application will use. Example: http://appserver.example:7501/aip15 where aip15 represents the context root required for this field.
AIP 15 app deployment name	Enter the name to be used by the application server to identify the AIP Oracle application.
AIP 15 server/cluster	The managed server or cluster to which AIP deploys.

11. The [AIP Oracle Installation Directory Window](#) opens.

Enter the directory where AIP Oracle will be installed and click **Next** to continue to the [AIP Oracle Integration Window](#).

Figure 5–8 AIP Oracle Installation Directory Window

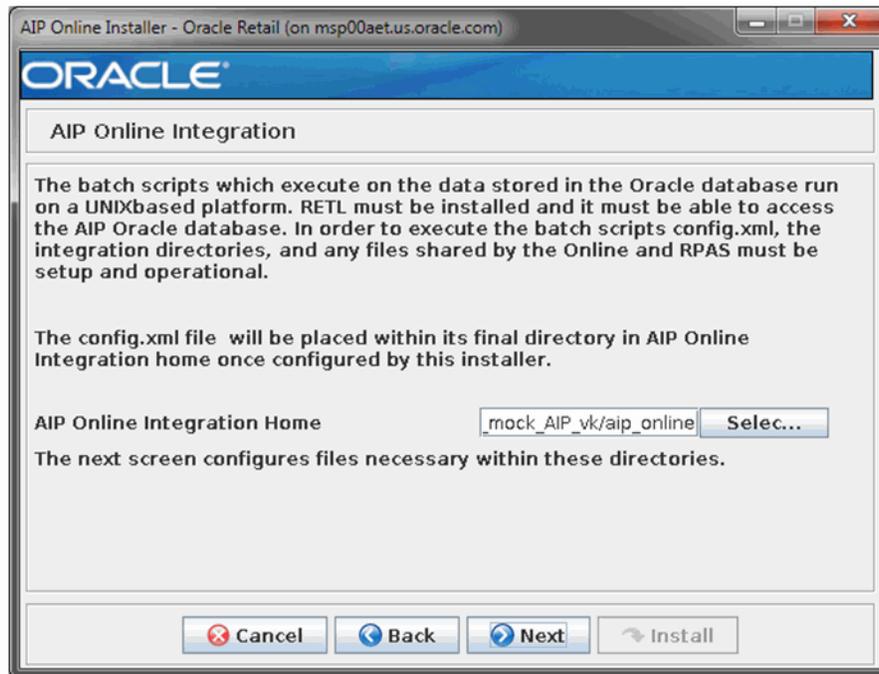
12. The [AIP Oracle Integration Window](#) opens.

Enter the directory where AIP Oracle Integration components are to be installed and click **Next** to continue to the [AIP Online Integration Install Window](#).

The AIP Oracle Integration Home field defaults to the value of the AIP Online Install Dir field from the [AIP Oracle Installation Directory Window](#).

You may choose to install the integration components to another location on the same server at this point, or you may choose to move the installed files once the installation process is complete.

Figure 5–9 AIP Oracle Integration Window



13. The [AIP Online Integration Install Window](#) opens. Complete all the AIP Integration Install fields and click **Next** to continue to [AIP Online RIB Enable Window](#).

Note: Refer to the *Oracle Retail Advanced Inventory Planning Online Implementation Guide* as well as the *Oracle Retail Extract, Transform, and Load (RETL) Installation Guide* for further details on the AIP Integration Install fields.

Figure 5–10 AIP Online Integration Install Window

AIP Online Installer - Oracle Retail (on msp00aet.us.oracle.com)

ORACLE

AIP Online Integration Install

The following properties set up the files needed for integration between RETL and Online. Please refer to RETL documentation and the AIP Online Install Guide for references on values should the default values need to be adjusted. The oraread section defines the properties required for all export operations on the database and the orawrite section defines these for all import operations. Though both contain similar attributes, it is imperative that each section is defined as needed for the specific Oracle database installation.

**** Please refer to the AIP Online Install Guide for an important note regarding TNS_ADMIN and Online DB Alias**

AIP DB Hostname	msp00aen
AIP DB Port	1521
Array size	2000
RETL Read DB SID	qaols54

Buttons: Cancel, Back, Next, Install

AIP Online Installer - Oracle Retail (on msp00aet.us.oracle.com)

ORACLE

AIP Online Integration Install

AIP DB Hostname	msp00aen
AIP DB Port	1521
Array size	2000
RETL Read DB SID	qaols54
RETL Read DB User Alias	AIP15_mock_user_alias
RETL Read DB Password	*****
RETL Write DB SID	qaols54
RETL Write DB User Alias	AIP15_mock_user_alias
RETL Write DB Password	*****
RETL Write Method	conventional
Online Schema Owner	aip15_mock_owner
Online DB Alias	aip15_mock_owner_alias

Buttons: Cancel, Back, Next, Install

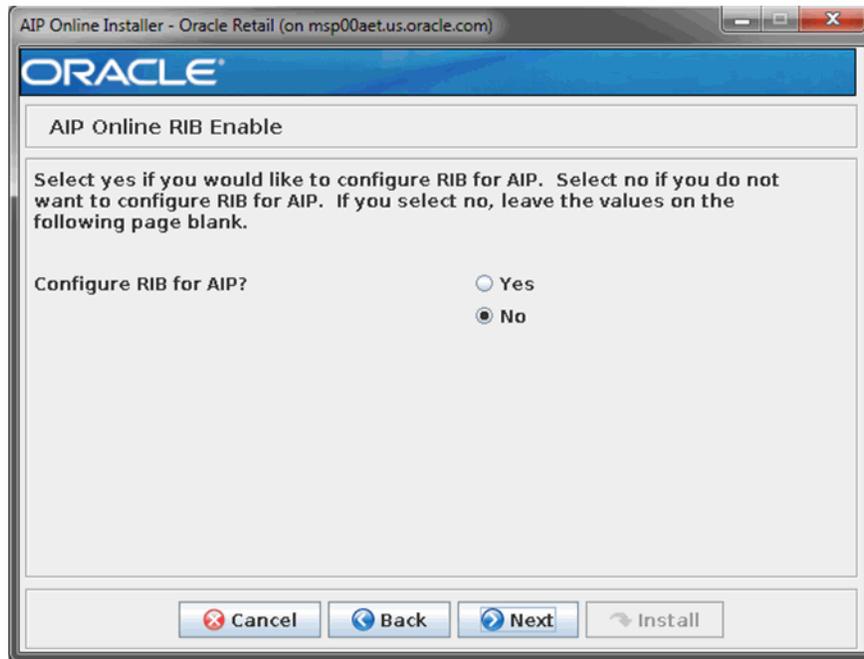
14. The [AIP Online RIB Enable Window](#) opens.

Indicate whether or not you would like to configure RIB for AIP at this point in time. If you do not, refer to the *Oracle Retail Advanced Inventory Planning Operations Guide* in manually configuring RIB for AIP.

If you select Yes, click **Next** to continue to the [AIP Online RIB Enable Details Window](#). If you select No, click **Next** to continue to the [Installation Summary Window](#).

Note: Disregard the screen directions to leave the values blank on the following page if you select No. If you select No and click **Next**, you continue to the [Installation Summary Window](#).

Figure 5–11 AIP Online RIB Enable Window



15. The [AIP Online RIB Enable Details Window](#) opens. If you selected **No** on the previous [AIP Online RIB Enable Window](#), leave these values blank. If you selected **Yes**, then enter the RIB application details and then click **Next** to continue to the [Installation Summary Window](#).

Figure 5–12 AIP Online RIB Enable Details Window

AIP Online RIB Enable

Please enter the RIB application details. If you chose no on the previous page, you can leave these blank.

RIB Server Name	ribserver.example.com
RIB Admin Port	19117
RIB Target Server Name	rib-aip-server
RIB username	ribadmin
RIB password
RIB alias	rib-alias

Use SSL (t3s) for RIB?

Yes
 No

Cancel Back Next Install

16. The [Installation Summary Window](#) opens. Verify the values and then click **Next** to continue to [Installation Progress Window](#).

Figure 5–13 Installation Summary Window

Installation Summary

Summary of Installation

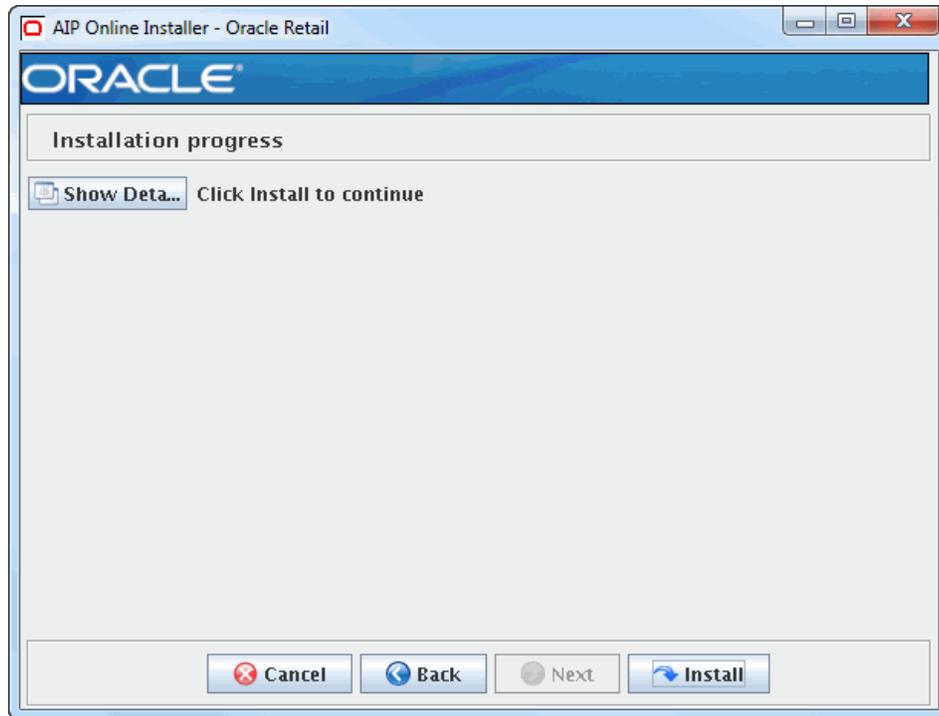
Enable SSL for AIP	false
Enable secure JDBC	false
Enable SSL for RIB	false
AIP DB Host	msp00aen
AIP DB Port	1521
AIP DB Schema User	AIP15_mock_user
AIP DB Schema Alias	aip15_mock_user_alias
AIP DB URL	oracle:thin:@msp00aen:1521/qaols54
Identity Keystore location	
Identity Keystore type	
Identity Truststore location	

Cancel Back Next Install

17. The [Installation Progress Window](#) opens.

Once you are ready to begin installation, click **Install** to continue to the [Installation Progress Details Window](#).

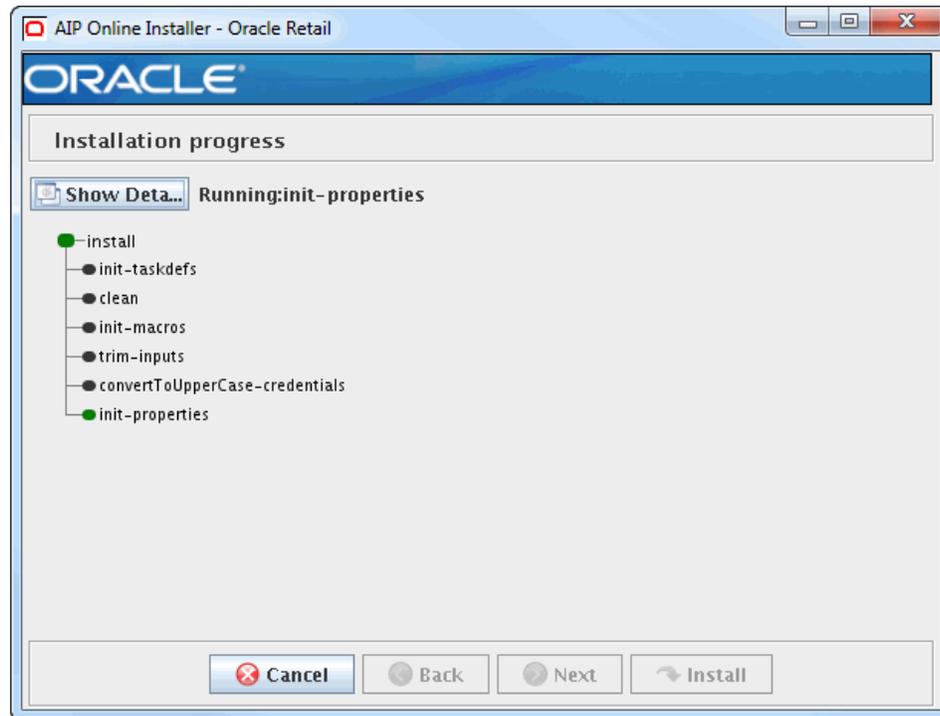
Figure 5–14 *Installation Progress Window*



18. The [Installation Progress Details Window](#) opens.

This window displays the progress of the installation routine. Click **Show Details** to view the log output as the installation is performed. If you do not select to view the details, a graphical representation of the installation steps appears.

You can toggle between detailed mode at any time during or after the installation.

Figure 5–15 Installation Progress Details Window

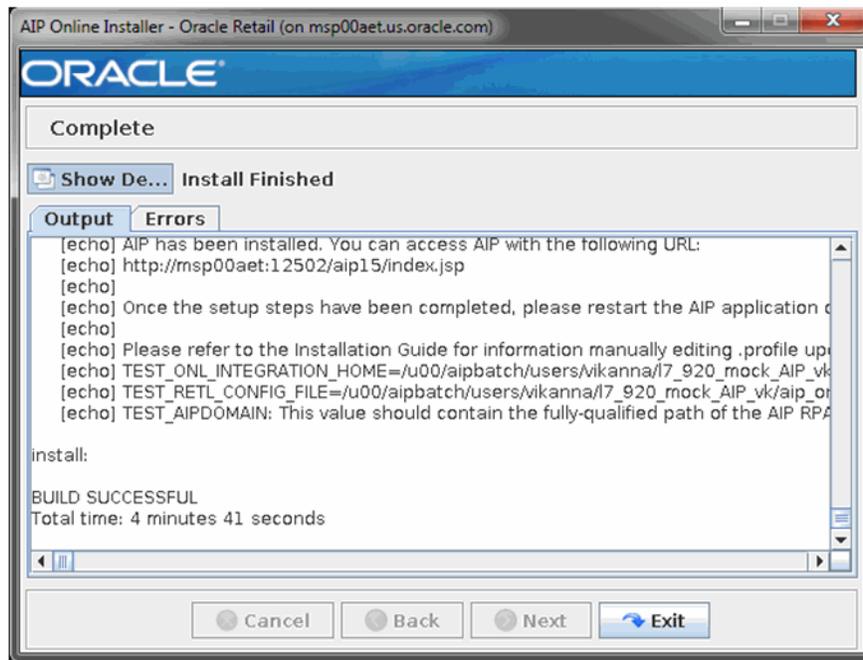
19. When the installation has finished, the [Finished Pop-up Window](#) opens. Click **OK** to close the pop-up and open the [Complete Window](#).

Figure 5–16 Finished Pop-up Window

20. The [Complete Window](#) opens. To view the installation details, click **Show Details**. The window displays two tabs:
- Output
 - Errors

It is recommended that you review these tabs for any issues that may have occurred during the installation process.

When the installation is complete, a detailed installation log file is created. This file is named `aip15.0install-app.<timestamp>.log` where `<timestamp>` represents the date and time the installation was performed. This file is located in the `<INSTALL_DIR>/AIPOnlineAppServerdirectory`.

Figure 5–17 Complete Window

Resolving Errors Encountered During Application Installation

If the application installer encounters any errors, it will halt execution immediately. You can run the installer in silent mode so that you don't have to retype the settings for your environment. Refer to ["Reinstalling in Silent Mode"](#) on page 10-1 of this guide for instructions on silent mode.

Refer to the ["Troubleshooting"](#) on page 10-2 section of this guide for a list of common installation errors.

Since the application installation is a full reinstall every time, any previous partial installs will be overwritten by the successful installation.

AIP Oracle Integration Directory (Optional)

The AIP Oracle Installer places the AIP Oracle Integration directory, AIPONLINE_DIR, with the rest of the AIP Oracle application files.

The integration directory can be located in a different location if you cannot run them from under the AIPONLINE_DIR. To install the integration files in a different location, copy the entire \$AIPONLINE_DIR/AIPOnlineIntegration directory to the appropriate destination. Refer to [Chapter 6, "Installing the AIP Integration Components"](#) of this guide for more information.

Manual Deployment Tasks

Note: Skip this section if you chose the default option of allowing the installer to complete the installation to the application server. Refer to [Chapter 6, "Installing the AIP Integration Components"](#) of this document for more information.

The Installer includes the option to configure the application locally and skip deployment to the application server. If this option is chosen, the installer will make the configured application files available under
<INSTALL_DIR>/AIPOnlineAppServer/aip/configured-output/.

If you chose this installer option, you can complete the installation by following these steps:

1. Inspect and then overlay files from
<INSTALL_DIR>/AIPOnlineAppServer/aip/configured-output/ into your application server installation.
2. Deploy the AIPOnlineApp EAR file using the WLS Admin Console Web interface.

The configured EAR file is located at:

```
<INSTALL_
DIR>/AIPOnlineAppServer/aip/configured-output/AIPOnlineApp.ear.
```

When deploying the EAR file, you should provide the same application name you entered in the Installer. This value is stored in the <INSTALL_AIP>/AIPOnlineAppServer/ant.install.properties file by the Installer for later reference.

3. Deploy the AIPOnlineApp-help EAR file using the WLS Admin Console Web interface.

The configured EAR file is located at:

```
<INSTALL_
DIR>/AIPOnlineAppServer/aip/configured-output/AIPOnlineApp-help.ear.
```

Configuring the Java Security Policy File

The weblogic.policy file requires editing if RIB was configured for AIP. The file is located at WL_HOME\server\lib\weblogic.policy. Entries should be created to grant full permissions to the location of the deployed application as well as the EJB Compiler Cache location.

Example

An example of these entries:

```
grant codeBase "file:/u00/webadmin/product/12.1.3/WLS/user_projects/domains/soa_
domain/servers/AIP_SERVER/tmp/_WL_user/aip/-" {
    permission java.security.AllPermission;
    permission oracle.security.jps.service.credstore.CredentialAccessPermission "credstoressp.credstore",
    "read,write,update,delete";
    permission oracle.security.jps.service.credstore.CredentialAccessPermission "credstoressp.credstore.*",
    "read,write,update,delete";};
```

```
grant codeBase "file:/u00/webadmin/product/12.1.3/WLS/user_projects/domains/soa_
domain/servers/AIP_SERVER/cache/EJBCompilerCache/-" {
    permission java.security.AllPermission;
    permission oracle.security.jps.service.credstore.CredentialAccessPermission "credstoressp.credstore",
    "read,write,update,delete";};
```

```
permission oracle.security.jps.service.credstore.CredentialAccessPermission "credstoessp.credstore.*",  
"read,write,update,delete";};
```

Configuring Web Security

Oracle Retail Advanced Inventory Planning can be accessed through a secure HTTP connection. Using a secure message transport such as SSL/TLS will provide confidentiality for messages as they traverse the network. This is the recommended configuration for Advanced Inventory Planning.

For more information on using SSL/TLS see the section "Configuring SSL" found in the WebLogic guide *Securing Oracle WebLogic Server*.

Testing the AIP Oracle Application

When you have successfully finished the postinstallation steps in the following sections, you should have a working AIP Oracle application installation. To launch the application client, open a Web browser and go to the client URL. You can find the URL in the log file that was created by the Installer.

Example: `http://myhost:7501/aip15/`

Configuring Languages

Clients using certain languages are required to edit the Java Font Configuration file on the client machine. Follow the instructions in this section if you are using these languages:

- French
- German
- Greek
- Russian
- Turkish

Adding the Cyrillic Character Set

Follow these instructions to add the Cyrillic character set:

1. Verify the Java installation path.
Open Task Manager and while `java.exe` is running, right-click on `java.exe` to view which path is used (either **C:\Program Files (x86)\Java\jre7\bin** or **C:\Program Files\Java\jre7\lib**)
2. Go to your Java path\lib (either: **C:\Program Files (x86)\Java\jre7\bin** or **C:\Program Files\Java\jre7\lib**)
3. Make a copy of `fontconfig.properties.src` and rename this to `fontconfig.properties`
4. On `fontconfig.properties`, modify the line:

```
sequence.allfonts=alphabetic/default,dingbats,symbol
```

to

```
sequence.allfonts=cyrillic,alphabetic/default,dingbats,symbol
```

Creating the AIP Oracle Enterprise

This section provides the procedures to create an AIP Oracle enterprise and the initial administrator for the newly created enterprise.

1. Select the link displayed in the AIP Oracle Setup to load the AIP Oracle application System Administration.

In the event that the page has timed out or been closed, enter the application URL in the Web browser as shown in the following example.

Example: `http://<server>:<port>/<context root>/phantasm`

2. For the User Name field and Password field, enter the user name and password that were set for the "[Default Admin User Details](#)" on page 4-8. The System Administration page opens.

Note: A Warning - Security window may appear asking if the signed applet that is to run the Enterprise Administration window can be trusted. If this window opens, click **Yes**.

3. Click **Enterprises** in the Enterprise Data section. The Enterprise Administration window opens.
4. Click **New**.
5. On the Company Info tab, enter the following information.

Field	Description	Example
Company name	Enter your company name	My Company
Enterprise code	aiponline	aiponline
Contact Email	Enter the AIP Administrator's e-mail address	admin@server.com

Note: The Industry and Company type fields are not required.

6. On the initial Admin tab, enter the following information.

Field	Description	Example
First Name	Enter the AIP Administrator's first name.	John
Last Name	Enter the AIP Administrator's last name.	Doe
Username	Enter the AIP Administrator's user name to be used when logging into AIP Oracle.	doejohn

Field	Description	Example
New Password	<p>Enter the AIP Administrator's AIP Oracle password.</p> <p>When selecting a password, make sure it meets the following requirements:</p> <ul style="list-style-type: none"> ■ Minimum 6 characters; maximum 128 characters ■ At least 5 different characters ■ Must not be simple pattern of characters (such as, ABCDEF or ABCXYZ) ■ Must not be easily derivable from user name or full name ■ Must not be easily derivable from previous password ■ Must not be derivable from a dictionary entry ■ Case sensitive 	aip150
Retype New Password	Retype your password. Remember, the password is case sensitive, so you must type it exactly as it was entered in the Password field.	aip150

7. Navigate to the Services tab. Two services are displayed, Core Administration and AIP Oracle. Perform the following steps:

Step	Direction
a.	Click the Enabled cell of Core Administration.
b.	Double-click the User Limit cell of Core Administration and enter an integer value in the cell. This integer value represents the number of users that can be created per application. If the exact number of users is not known, enter a large number such as 100. This number can be changed later by the system admin user.
c.	Press Enter to accept your input.
d.	Click the Enabled cell of AIP Oracle.
e.	Double-click the User Limit cell of AIP Oracle and enter an integer value in the cell. This integer value represents the number of users that can be created per application. If an exact number of users is not known, enter a large number such as 100. This number can be changed at a later time by the system admin user.
f.	Press Enter to accept your input.

8. On the Enterprise Administration window, click **Save**. Close the Enterprise Administration window when the save is complete.
9. On the System Administrator page, click the **LOG OUT** link located at the top right of the page.

Creating AIP Oracle Users

This section provides the procedures to create AIP Oracle users. New users should be created using the administrator account created in the previous step.

1. Load the application URL in a browser to access the AIP Oracle application login page.

Example: `http://<server>:<port>/<context root>`

2. Input the administrator username and password, and click **LOG IN**. The Application page opens.
3. Click the Core Administration link. The Administration page opens.
4. Click **Users** in the Application Setup section. The Core Administration: User Administration window opens.
5. Select the Users tab and click **New**. A user information form is displayed.
6. In the Details tab, enter all relevant user information in the form.

Field	Example
First Name	John
Last Name	Doe
Email	jdoe@company.com
Username	doejohn
New Password	aip150
Retype New Password	aip150
Password Status	Normal

7. Click the Permissions tab. A user permissions form opens.
8. Select the Enabled cell of the AIP Oracle service. Available Types selection box is populated with data.
9. Select **All AIP Permissions** from the **Available Types** selection box. Click > to move this permission type to the Selected Types box, and then click **Save**.
10. Repeat steps 5 through 9 until you have added the necessary user accounts.
11. When you have added all the necessary user accounts, close the Core Administration: User Administration window.
12. To exit, click **LOG OUT**.

Installing the AIP Integration Components

In order to exchange information between AIP Online, RPAS, and RMS (or an external system), the interface portion of the AIP Online suite must be installed, which consists of the following steps:

1. Installing Retail Extract Transform and Load (RETL)
2. Extracting the AIP integration/database files
3. Configuring the environment

Installing RETL

Refer to the *Oracle Retail Extract Transform and Load (RETL) Programmer's Guide* for detailed installation instructions on this product. Following the successful installation of RETL, test the application to verify the environment was set up properly and the RETL binary was installed correctly.

1. Log in to the UNIX server as the *rfx* user.
2. At the UNIX prompt, enter *rfx*. A command-line error appears if all environment variables are setup properly, as shown in the following example.

Example:

```
/u00/retl> rfx
Error: Flow file argument ('-f') required!
```

3. Verify that the RETL binary is installed properly and the database environment variables are correct by executing the *verify_ret1* script. This script runs a series of validation steps and displays a confirmation message if the environment is set up correctly. Upon confirmation, the RETL environment is now ready to be configured.

Example:

```
/u00/retl> verify_ret1 -doracle
Checking RETL Environment...found ORACLE environment...passed!
Checking RETL binary...passed!
Running samples...passed!
```

```
Congratulations! Your RETL environment and installation passed all tests.
See the programmer's guide for more information about how to further test your
database installation (if applicable).
```

```
Exiting...saving output in /tmp/verifyret1-1843208.log
```

Note: The database parameter passed with the `verify_retl` script varies depending on the type of database to which RETL is configured. Refer to the *Oracle Retail Extract Transform and Load (RETL) Programmer's Guide* for the specific parameters permitted in this script.

Extracting AIP Integration Files

The integration files contain the necessary RETL flow and schema files that describe the integration process. In addition to the integration files, several batch shell scripts are required to transfer data between AIP Online, RPAS, and RMS (or an external system). The integration files must be extracted to the same server where RETL is installed. It is recommended that RETL and the integration files reside on the database server.

Both online integration files and batch scripts are configured and installed through the AIP Online Application Server Installer during the Integration steps.

If these files need to be moved to another server after completing the installation process, you need to perform the following:

1. Zip the contents of the AIP Online Integration directory specified during the Application Server Installer.
2. Move the zip file to the desired server.
3. Proceed to ["Editing the .profile to Run cron_export.sh and cron_import.sh Scripts"](#) and perform the necessary tasks.
4. Once the integration files have been installed, you can use the `rfx` or `retail` UNIX user account to run the integration/database scripts.

Configuring Your Environment

The AIP Online Application Server Installer configures the following configuration files, which are discussed in the following sections:

File	Description	Section
<code>config.xml</code>	RETL configuration file	"Configuring the config.xml File"
<code>aip_env_online.sh</code>	AIP configuration file	"Editing the aip_env_online.sh to Run cron_export.sh and cron_import.sh Scripts"

Configuring the config.xml File

This configuration file contains the database connection information for RETL for both import and export. Refer to the Oracle Retail Extract, Transform, and Load (RETL) documentation for detailed descriptions of element definitions. Essentially, the *Oraread* section describes the database for the export and *Orawrite* for the import; both would normally be the same. Databases can be local or remote, but if they are remote they must be reachable by normal means (that is, should be an entry in `tnsnames.ora` and reachable by SQLPlus). The database can be clustered or standalone. `config.xml` file is created by AIP installer during installation.

The Oracle export *arraysize* needs to be set dynamically in the `config.xml` file depending on the server's capabilities. The recommended default *arraysize* value is

2000. Setting the value too high can cause an out of memory error. The value can be set up to 10,000 to maximize performance based on server capability.

The *dbuseralias* property should be set to the alias used for AIP database credentials in the RETL wallet. See [Appendix B, "Appendix: Setting Up Password Stores with Oracle Wallet"](#) for details on creating RETL database credentials

When installing to a RAC database, the property *jdbcconnectionstring* should be set using the description field of *tnsnames.ora* file.

The resulting saved value of this field in *config.xml* should look like [Example 6-1](#):

Example 6-1 Saved Value from the Description Field of *tnsnames.ora* file

```
jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS_LIST=(ADDRESS=(PROTOCOL=TCP)(HOST=mspvip92)(PORT=1521))(ADDRESS=(PROTOCOL=TCP)(HOST=mspvip93)(PORT=1521))(LOAD_BALANCE=yes))(CONNECT_DATA=(SERVICE_NAME=qaolr13)))
```

Note: The *jdbcconnectionstring* property is only required for RAC database and is not needed for non-RAC database.

Editing the *aip_env_online.sh* to Run *cron_export.sh* and *cron_import.sh* Scripts

In order for the *cron_export.sh* and *cron_import.sh* to function correctly, the AIP Online Application Server Installer configures the *aip_env_online.sh* file with the following environment variable

Environment Variable	Description
DB_ALIAS	This variable must be set to the Oracle Wallet alias used by AIP shell scripts to access the Oracle database.

The following environment variables are also set in *aip_env_online.sh*:

Environment Variable	Description
INTEGRATION_HOME	This is the path to the integration directory extracted earlier (where the <i>cron_export.sh</i> and <i>cron_import.sh</i> shell scripts reside). Refer to the <i>Oracle Retail Advanced Inventory Planning Implementation Guide</i> for information on the parameters to be set.
RETL_MAX_HEAP_SIZE	This parameter is used by the virtual machine. It is set to a default value of 700M. However, it can be changed dynamically to xxxM or yG to limit the memory usage by the virtual machine.
RETL_INIT_HEAP_SIZE	This parameter is used by the virtual machine. It is set to a default value of 200M. However, it can be changed dynamically to xxxM or yG to set the initial memory assigned to RETL.

Note: A batch scheduler should be set up to run *cron_export.sh* and/or *cron_import.sh*.

Editing the *.profile* to Run *cron_export.sh* and *cron_import.sh* Scripts

In order for *cron_export.sh* and *cron_import.sh* scripts to run correctly, the following variables must be modified in the UNIX user *.profile* file. Refer to the *Oracle Retail*

Advanced Inventory Planning Implementation Guide for further details on how these values are used.

Table 6–1 Variables for the `cron_export.sh` and `cron_import.sh` Scripts

Variable	Description
RFX_HOME	This variable points to the RETL installation home.
RFX_TMP	This variable points to the tmp directory under RFX_HOME.
ORACLE_HOME	This variable points to the Oracle client.
JAVA_HOME	This variable points to required JRE version for use by RETL.
TEST_ONL_INTEGRATION_HOME	This value should be the directory where <code>cron_import.sh</code> and <code>cron_export.sh</code> reside. The <code>INTEGRATION_HOME</code> variable in <code>aip_env_online.sh</code> references this externally-defined variable by default. Using this externally-defined variable allows multiple testers to use the same <code>aip_env_online.sh</code> while working in different test directories. If the <code>INTEGRATION_HOME</code> variable in <code>aip_env_online.sh</code> is changed to reference a hardcoded directory, this variable is not needed.
TEST_RETL_CONFIG_FILE	This value should contain the fully-qualified path and filename of a RETL configuration file containing database connection information. The <code>RETL_CONFIG_FILE</code> variable in <code>aip_env_online.sh</code> references this externally-defined variable by default. Using this externally-defined variable allows multiple testers to use the same <code>aip_env_online.sh</code> while referencing different RETL configuration files. If the <code>RETL_CONFIG_FILE</code> variable in <code>aip_env_online.sh</code> is changed to contain a hardcoded value, this variable is not needed.
TEST_AIPDOMAIN	This value should contain the fully-qualified path of the AIP RPAS global domain. The <code>AIPDOMAIN</code> variable in <code>aip_env_online.sh</code> references this externally-defined variable by default. Using this externally-defined variable allows multiple testers to use the same <code>aip_env_online.sh</code> while working with different test domains. If the <code>AIPDOMAIN</code> variable in <code>aip_env_online.sh</code> is changed to reference a hardcoded domain, this variable is not needed.

The source call to load the profile is to setup environment variables to enable programs to function correctly (for instance; setting `ORACLE_HOME` and paths so that `sqlldr` functions correctly).

Example:

The following sample code can be defined in user `.profile` file:

```
export RFX_HOME=<path from root>/rfx/rfx-13.1
export ORACLE_HOME=<path from root>/oracle/product/12.1.0.1
export JAVA_HOME=<path of required JRE version compatible with RETL version>
export TEST_ONL_INTEGRATION_HOME=<path to integration directory>
export TEST_RETL_CONFIG_FILE=<path and filename of RETL config file>
export TEST_AIPDOMAIN=<path of the AIP RPAS global domain>
export RFX_TMP=$RFX_HOME/tmp

export PATH=$RFX_TMP:$RFX_HOME/bin:$ORACLE_HOME/bin:$JAVA_HOME/bin:$JAVA_
HOME/jre/bin:$PATH
export
PATH=$TEST_ONL_INTEGRATION_HOME:<full PATH to BSA folder>:$TEST_ONL_INTEGRATION_
HOME/scripts:$PATH
```

Installing AIP RPAS-Upgrade Version

This chapter details the steps needed to do a patch installation of AIP. For information about a full installation, see [Chapter 8, "Installing AIP RPAS - Full Version"](#).

Note: Beginning with Release 14.0, you can upgrade directly from 13.2.3 to 14.0 as described in this chapter.

If you are upgrading from an earlier version than AIP release 13.2.3, then the patch install is not cumulative. This means that you first need to apply the previous release patch (or patches one by one) until you are upgraded to AIP release 13.2.3.

The AIP RPAS Installer

The AIP RPAS Installer is an installation wizard that installs the following AIP RPAS components:

- AIP RPAS batch components (binaries, libraries, XML files, shell scripts)
- AIP RPAS Domain configuration and sample hierarchy data
- RMS-AIP Integration transformation files (shell scripts, schema files)
- AIP RPAS environment variables, including the AIP RPAS domain path

Before You Begin

Before starting the AIP Installer, the following software must be installed on your system:

- RPAS 15.0, which includes RPAS Server and RPAS Configuration Tools. Refer to the Oracle Retail Predictive Application Server documentation for information on installing and administering RPAS.
- Java Development Kit (JDK) 1.7
- unzip utility (on UNIX)

Note: Solaris and HP Itanium do not release separate 32-bit and 64-bit versions of Java. Therefore, you must set the 64-bit Configuration Tools environment variable for Java as shown:

```
export RIDE_OPTIONS=-d64
```

Pre-Installation Tasks

Prior to running the AIP Installer, ensure that all of the following tasks have been completed.

Remove Hot-fix Backup Files

AIP hot-fix instructions directed customer to backup certain files before applying the hot-fix. Ensure these backup files are not located inside the AIP domain directory structure. Extra files in the \$AIPDOMAIN/repos or \$AIPDOMAIN/installs directory trees may cause patch failure.

Backup Environment

Perform a backup of the current domain and RPAS environment (\$RPAS_HOME) before attempting to install the patch. If any problems arise during the patch install, restore your backup data, fix the issue, and re-install the patch.

Extracting the Installer

Locate and extract AIP-rpas-installer.zip into a newly created staging directory, which is referred to as [AIP_Installer].

Merge the AIP-RPAS Definition Customizations

If you have customized the AIP RPAS domain (hierarchies, measures) configuration, then these customizations must be merged into the new configuration delivered with this patch. To merge your current AIP RPAS definitions customizations into the AIP 15.0 RPAS configuration, perform the following procedure.

Note: Prior to using the layered configurations tool to merge your changes on the RPAS-side for patching, you need to make adjustments to your old configuration because of internal name changes. Refer to [Appendix C, "Appendix: Configuration Name Changes"](#) for instructions and the name changes. Refer to the Oracle Retail Predictive Application Server documentation for additional information.

1. Change the directory to:
[AIP_Installer]/aip/[platform]/env/AIP_INSTALL/
Where [platform] is one of the following:
 - AIX 7.1
 - Linux
 - HP-UX
 - SunOS
2. To extract the AIP 15.0 RPAS definitions configuration, execute the following command from \$AIP_INSTALL:

```
$ tar -xf configuration.tar
```
3. Refer to the *Oracle Retail Predictive Application Server Configuration Tools User Guide* to perform the following RPAS definitions customizations as needed on \$AIP_INSTALL/configuration:

- Add new measures
- Add new rule groups
- Add new workbooks
- Change the hierarchy

Note: Do not modify any existing measures, rules groups, or attempt any other customization without consulting with an Oracle Retail Support Representative.

4. Repackage the \$AIP_INSTALL/configuration.tar:

```
$ tar -cf configuration.tar configuration
```

RPAS convertDomain

When patching a domain older than AIP Release 13.3, it must first be patched to AIP Release 13.2.3, then the convertDomain utility must be run before running install.sh.

The convertDomain utility creates a new domain that has all the dimensions and measure arrays converted to integer-indexed arrays.

The conversion process creates a new domain based on the source domain provided. Since a new domain is created from the domain and does not replace the source domain, the source domain remains unaffected.

Note: Because you are creating a second domain, you must have enough space for the original source domain and the new converted domain. Since workbooks are not converted, you only need the amount of space the source domain uses, minus the space that the workbooks in the source domain use.

For additional information, refer to the section, “convertDomain” in either the *Oracle Retail Predictive Application Server Administration Guide for the Classic Client* or the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*.

Perform the following procedure to run the convertDomain utility:

1. Perform the procedure described in the previous section, “[Extracting the Installer](#)”.
2. Run configTools and then generate the Hierarchy.xml report. For additional information, refer to the section, “Report Generator” in the *Oracle Retail Predictive Application Server Configuration Tools User Guide*.
3. Run config tool on AIP.xml which is available when you extract the installer.
4. FTP the Hierarchy.xml to the server that is running convertDomain.
5. Run the convertDomain utility.
6. Copy the interface directory from the old master domain to the new master domain.

Custom Environment Variables

The script aip_env_rpas.sh contains variables which can be customized by the client. When the AIP RPAS Executables and Definitions are upgraded, a new aip_env_rpas.sh

from the installer will be copied into the \$RPAS_HOME/bin directory, overwriting the previous copy.

Perform the following procedure to merge your customizations:

1. Change the directory to:

[AIP_Installer]/aip/[platform]/rpas/bin

Where [platform] is one of the following:

- AIX 7.1
 - Linux
 - HP-UX
 - SunOS
2. Merge your customizations into the:
[AIP_Installer]/aip/[platform]/rpas/bin/aip_env_rpas.sh and save.

Note: When upgrading to 13.2 or later:

One of the changes in AIP 13.2 is the removal of prefixes for measure data containing a string value that is a position of a hierarchy dimension. The script, aip_env_rpas.sh contains several values affected by this. When reintroducing custom values from the backup of aip_env_rpas.sh into AIP 13.2 aip_env_rpas.sh, make note of the SPECIAL_ORDER_CYCLE and CSC_AND_STORE_DIRECT_STRING variables, whose values no longer contain the PFOC and SFMT prefix.

Refer to the Oracle Retail Predictive Application Server documentation for information on installing and administering RPAS.

Running the AIP RPAS Installer

Note: Beginning with Release 14.0, you can upgrade directly from 13.2.3 to 14.0, but you must run the convertDomain utility before upgrading AIP to Release 14.0.

Ensure that all of the [Pre-Installation Tasks](#) have been completed including [RPAS convertDomain](#) and then upgrade AIP as a patch install to 14.0.

If you are upgrading from an earlier version than AIP release 13.2.3, then the patch install is not cumulative. This means that you first need to apply the previous release patch (or patches one by one) until you are upgraded to AIP release 13.2.3.

Perform the following procedure to run the AIP Installer.

Note: This product's installer includes Ant. If Ant is already installed on your system and is version 1.6.5 or earlier, then you must run unset ANT_HOME on the command line to ensure that the installer uses the included version. The unset ANT_HOME command must be run before ./install.sh.

1. Make sure you have run the `retaillogin.ksh` script or set up `RPAS_HOME` and `RIDE_HOME` properly. The package contents will be installed to those locations during the installation process.
2. Change to the root of the `[AIP_Installer]/aip` directory and run the installer by entering the following commands:

```
cd [AIP_Installer]/aip
./install.sh
```

Note: The command must be executed with the preceding period and forward slash (`./`).

If this process is being run on an X-Windows emulator (such as Exceed) you will be presented with a graphical user interface to the Installer. If you are running in console mode through a terminal emulator, you will be presented with the text interface to the installer.

To run the Installer in the GUI mode, which is the recommended installation method, adjust the `DISPLAY` environment variable. For example use following command to adjust `DISPLAY` in Exceed:

```
export DISPLAY=<ipaddress>:0
```

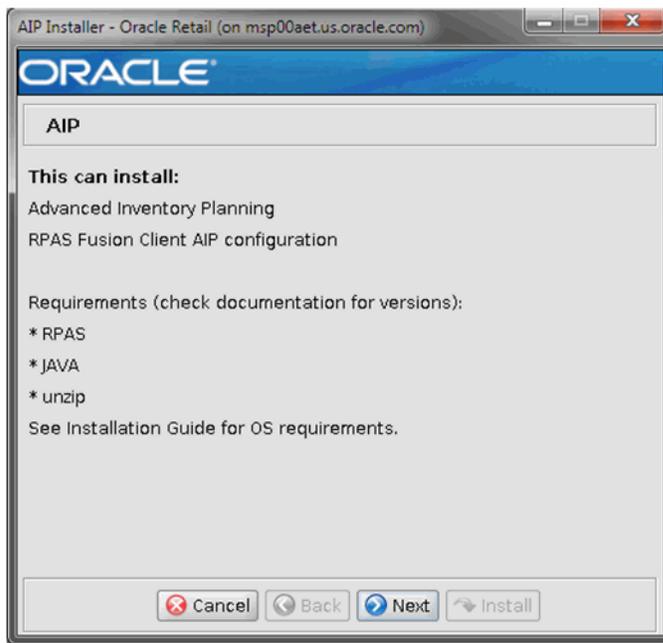
In both cases, the requested information will be identical, but displayed differently. In the GUI, you may be shown a check box to signal whether you want a component installed. In text mode, you will be prompted for a response of **yes** or **no**.

Note: In text mode, the default value will appear in square brackets. To use the default value and continue, press **Enter**. If you want to use a different value, enter the new value. When prompted to create a directory, respond with **yes** and press **Enter**.

3. The [AIP Installer Window](#) opens and displays the AIP requirements, which you should already have installed. If you have not installed these items, perform the necessary installations before continuing.

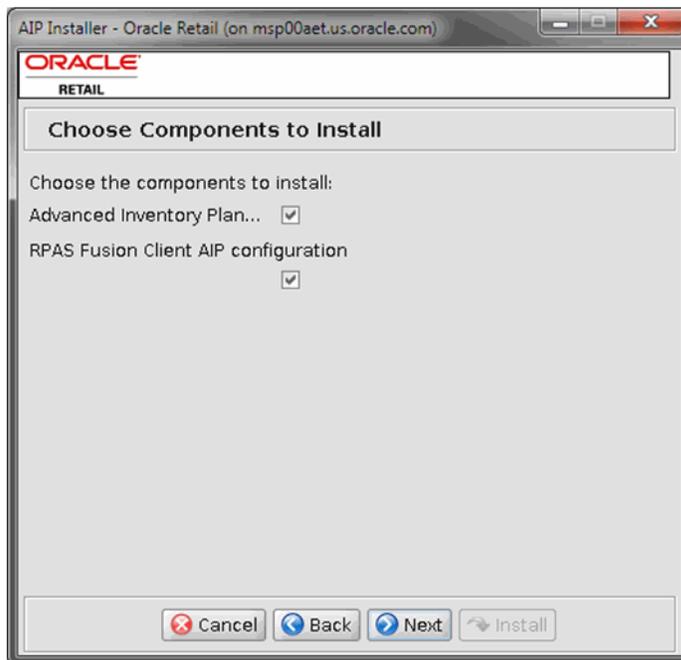
Click **Next** to continue.

Figure 7-1 AIP Installer Window



4. The [Choose Components to Install Window](#) opens.

Figure 7-2 Choose Components to Install Window



Select one or both of the following options:

- **Advanced Inventory Planning**– Select this option to install the Advanced Inventory Planning solution with the domain.

- **RPAS Fusion Client AIP configuration** – Select this option to install the RPAS Fusion Client AIP configuration.

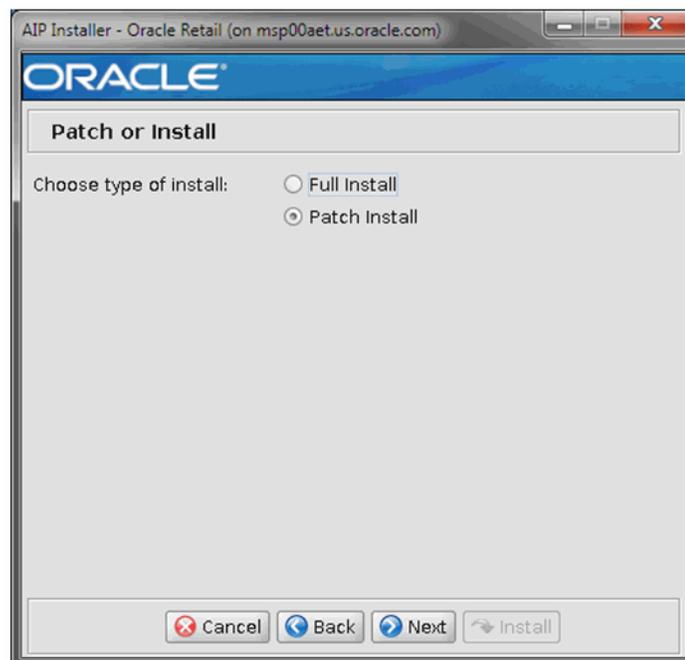
If You Are...	Then...
Not installing the RPAS Fusion Client AIP configuration.	Clear the RPAS Fusion Client AIP configuration check box and skip Steps 8 and 9.
Not installing the AIP solution, but are installing the RPAS Fusion Client AIP configuration.	<ol style="list-style-type: none"> 1. Clear the Advance Inventory Planning check box and select the RPAS Fusion Client AIP configuration check box. 2. After installation, you must update the domain-path entry in the ProfileList.xml on the RPAS Fusion Client server. 3. In the ProfileList.xml, change <code>\${input.aip.dir}</code> to your AIP domain path.

Click **Next** to continue.

5. The **Patch or Install Window** opens.

Select **Patch Install** to install AIP when you have a pre-existing environment. Click **Next** to continue to the **Patching Details Window**.

Figure 7–3 Patch or Install Window



6. The **Patching Details Window** opens and allows you to set the path to your domains and select installation options which performs a patch installation over an existing AIP installation and any existing AIP domains.

Enter the path in the **Select File** box, select any options as shown in [Table 7–1](#) and click **Next** to continue to the **Installation Progress Window**.

Figure 7–4 Patching Details Window

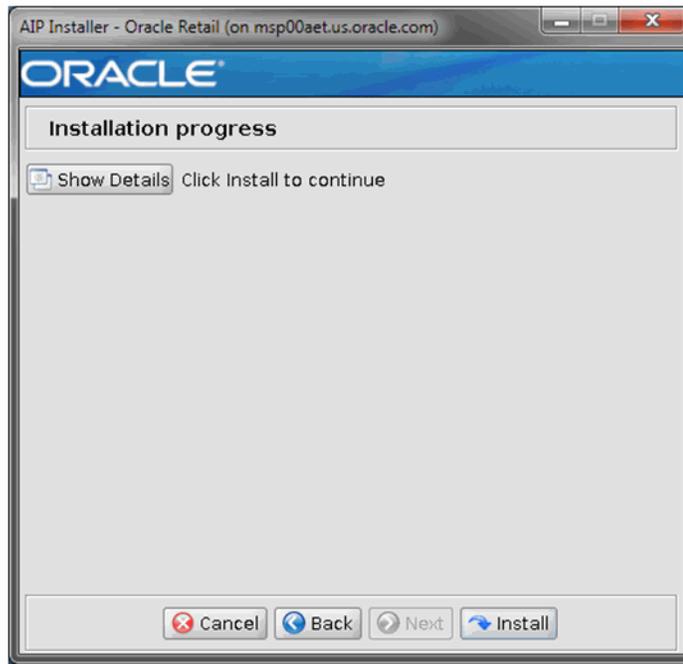


Table 7–1 Patching Details Fields

Patching Details Fields	Description
Select File box	Enter the absolute path to a master domain or an absolute path to a file that contains a domain list.
Skip RPAS Overlay	When checked, patching skips the RPAS_HOME overlay application.
Skip ConfigTools Overlay	When checked, patching skips the RIDE_HOME overlay application.
Force Patch Reapplication	Select this check box when you are reapplying this patch.

7. The [Installation Progress Window](#) opens.

To display the progress of the components and tasks being performed by the AIP Installer, click **Show Details**. Click **Install** to start the installation process.

Figure 7-5 Installation Progress Window

8. The [Fusion Location Information Window](#) opens.

Note: The Fusion Location Information screens open when you select the RPAS Fusion Client configuration check box on the [Choose Components to Install Window](#).

If you are not installing the RPAS Fusion Client configuration, proceed to step 10.

Figure 7–6 Fusion Location Information Window

AIP Installer - Oracle Retail (on msp00aet.us.oracle.com)

ORACLE
RETAIL

Fusion Location Information

Enter the number of RPAS Fusion Client servers to install these configurations on:
(1-4)

Enter the RPAS server hostname:

Enter the RPAS server port:

AIP domain path

- Enter the number of servers running the RPAS Fusion Client where you want to install the RPAS Fusion Client AIP configuration. If the RPAS Fusion Client is running on a single server, enter 1. If you have a clustered installation, you can enter up to four servers.
 - Enter the host name and port number of the RPAS server.
- Click **Next** to continue.
9. Based on the number of servers you entered, the [Fusion Location Information \(Details\) Window](#) opens.

Figure 7-7 Fusion Location Information (Details) Window



Enter the server details in the following set of fields for each configuration:

Note: The authentication provided needs to be either:

Path to SSH identity file and SSH identity passphrase

or

Login username, Login password, and Login username alias

Field	Description
Hostname or IP	Enter the host name or IP address of the server where the RPAS Fusion Client is installed.
Configuration Directory	Enter the location of the config directory available at the location where the RPAS Fusion Client is installed.
Path to SSH identity file	Enter the location of the SSH identity file to be used for authentication to the server where the RPAS Fusion Client is installed.
SSH identity passphrase	If your SSH identity is secured with a passphrase, then enter the passphrase. If not, then leave this field empty.
Login username	Enter the user name to log on to the server where the RPAS Fusion Client is installed.
Login password	Enter the password associated with the user name.
Login username alias	Specify an alias name for the administrative user. Specifying an alias name for the administrative user enhances the security for the application. When left blank, the alias name defaults to the administrative user name.

Note: Information such as user credentials for the RPAS Fusion Client is encrypted and stored in a secure location in the application installation directory. This location is called the Oracle Wallet.

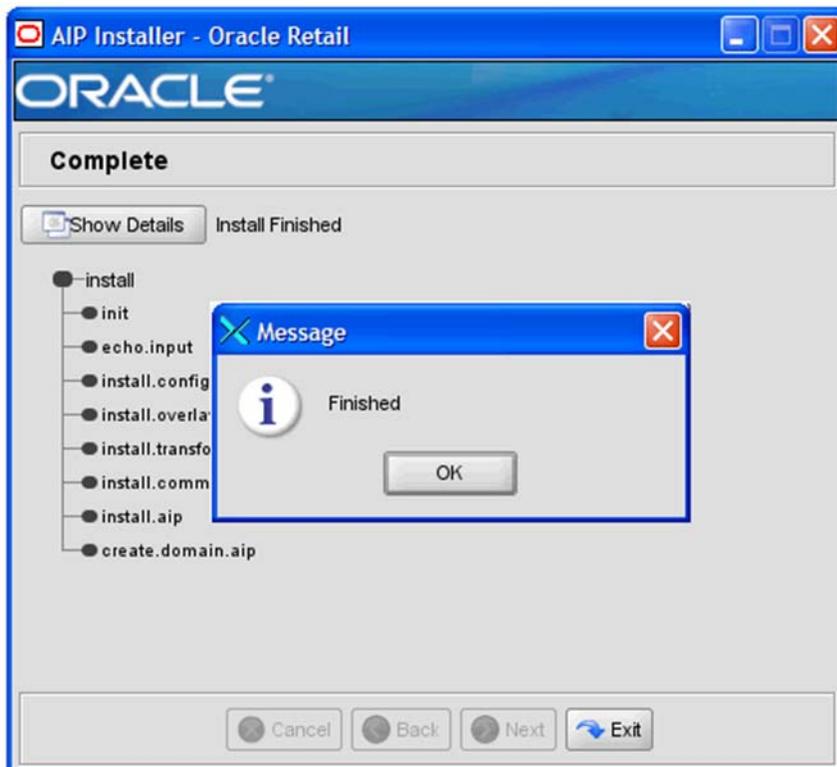
When the installation starts, the administrative user credentials are retrieved from the Oracle Wallet based on the alias name specified in this window.

Click **Next** to continue.

10. When the installation process is complete, the **Complete Window** opens with a Message dialog box.

Note: The installation process can vary depending on your environment. Installation time might take 30 to 60 or more minutes, depending on your server.

Figure 7–8 Complete Window



11. Click **OK** to close the dialog box.

12. Review the installation details.

To view the installation details, select **Show Details**. The window displays two tabs:

- Output
- Error

It is recommended that you review these tabs for any issues that may have occurred during the installation process.

If you wish to view the log again at a later date, a text copy was saved in the directory[AIP_Installer]. The log file will be named based on the product, aip, and a timestamp, followed by the .log extension.

- 13.** Click **Exit** to close the AIP Installer window.

Installing AIP RPAS - Full Version

This chapter details the steps needed to do a full installation of AIP. For information about a patch installation, see [Chapter 7, "Installing AIP RPAS-Upgrade Version"](#).

Note: A full installation of AIP should only be performed when there is no previous AIP release already installed.

The AIP RPAS Installer

The AIP RPAS Installer is an installation wizard that installs the following AIP RPAS components:

- AIP RPAS batch components (binaries, libraries, XML files, shell scripts)
- AIP RPAS Domain configuration and sample hierarchy data
- RMS-AIP Integration transformation files (shell scripts, schema files)
- AIP RPAS environment variables, including the AIP RPAS domain path

Before You Begin

Before starting the AIP Installer, the following software must be installed on your system:

- RPAS 15.0, which includes RPAS Server and RPAS Configuration Tools. Refer to the Oracle Retail Predictive Application Server documentation for information on installing and administering RPAS.
- Java Development Kit (JDK) 1.7
- unzip utility (on UNIX)

The AIP RPAS Installer includes an option for building an AIP RPAS domain. By default, this domain will be created on the sample hierarchy included in the AIP Installation. The *Oracle Retail Advanced Inventory Planning Implementation Guide* contains instructions for creating a domain that is built on top of non-sample, in-house customer hierarchy data.

Note: Solaris and HP Itanium do not release separate 32-bit and 64-bit versions of Java. Therefore, you must set the 64-bit Configuration Tools environment variable for Java as shown:

```
export RIDE_OPTIONS=-d64
```

Before running this installer, consider whether you are ready to build your production domain. If you are, refer to the “Building a Production AIP RPAS Domain” chapter of the *Oracle Retail Advanced Inventory Planning Implementation Guide* for alternate AIP RPAS domain build instructions.

Running the AIP RPAS Installer

Perform the following procedure to run the AIP Installer:

1. Locate and extract AIP-rpas-installer.zip into a newly created staging directory, which is referred to as [AIP_Installer].
2. Make sure you have run the retaillogin.ksh script or set up RPAS_HOME and RIDE_HOME properly. The package contents will be installed to those locations during the installation process.
3. Begin the Installer by changing to the root of the <AIP_Installer/aip> directory and by running the following command: `./install.sh`

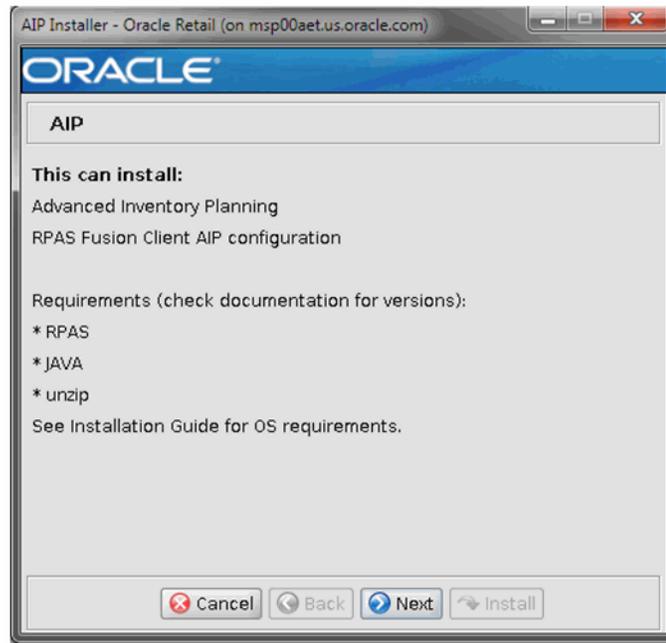
Note: The command must be executed with the preceding period and forward slash (./).

If this process is being run on an X-Windows emulator (such as Exceed) you are presented with a graphical user interface to the Installer. If you are running in console mode through a terminal emulator, you are presented with the text interface to the installer.

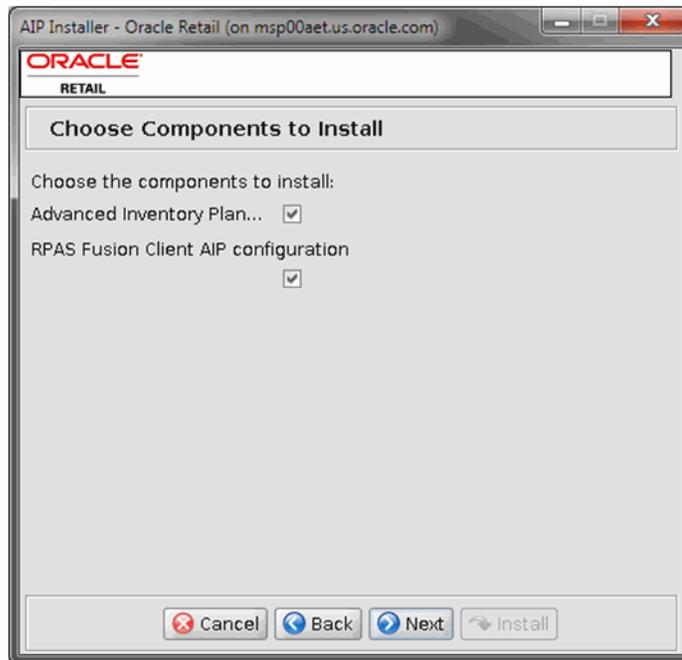
To run the Installer in the GUI mode, which is the recommended installation method, adjust the DISPLAY environment variable. For example use following command to adjust DISPLAY in Exceed: `export DISPLAY=<ipaddress>:0`

In both cases, the requested information will be identical, but displayed differently. In the GUI, you may be shown a check box to signal whether you want a component installed. In text mode, you are prompted for a response of *yes* or *no*.

4. The [AIP Installer Window](#) opens and displays the AIP requirements, which you should already have installed. If you have not installed these items, perform the necessary installations before continuing. Click **Next** to continue to the [Choose Components to Install Window](#).

Figure 8–1 AIP Installer Window

5. The [Choose Components to Install Window](#) opens.

Figure 8–2 Choose Components to Install Window

Select one or both of the following options:

- **Advanced Inventory Planning**– Select this option to install the Advanced Inventory Planning solution with the domain.

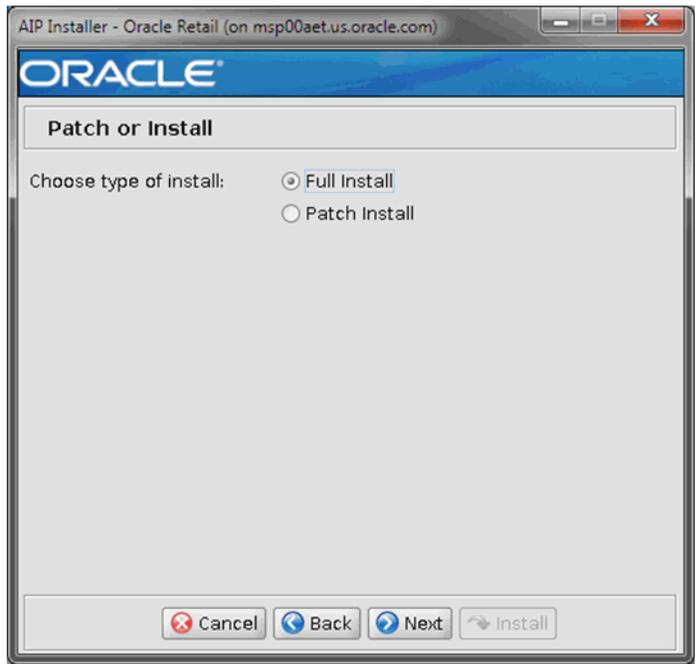
- **RPAS Fusion Client AIP configuration** – Select this option to install the RPAS Fusion Client AIP configuration.

If You Are...	Then...
Not installing the RPAS Fusion Client AIP configuration.	Clear the RPAS Fusion Client AIP configuration check box and skip steps 10 and 11.
Not installing the AIP solution, but are installing the RPAS Fusion Client AIP configuration.	Clear the Advance Inventory Planning check box and select the RPAS Fusion Client AIP configuration check box.

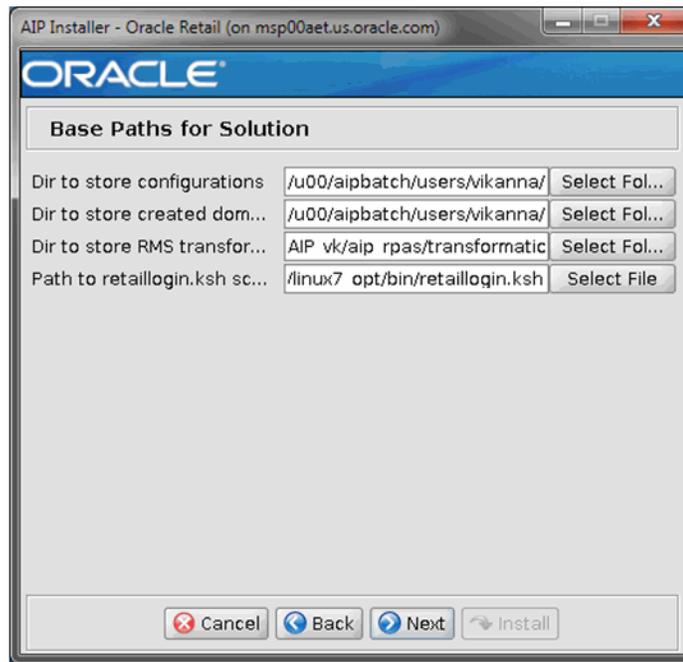
Click **Next** to continue.

- The **Patch or Install Window** opens.
Select **Full Install** to install AIP without a pre-existing environment. Click **Next** to continue to the **Patch or Install Window**.

Figure 8–3 Patch or Install Window



- The **Base Paths for Solution Window** opens.
Enter the path information as listed in **Table 8–1** and then click **Next** to continue to the **Domain Installation Paths Window**.

Figure 8–4 Base Paths for Solution Window

Note: Ensure that the installation paths are located outside of the installer directory [AIP_Installer].

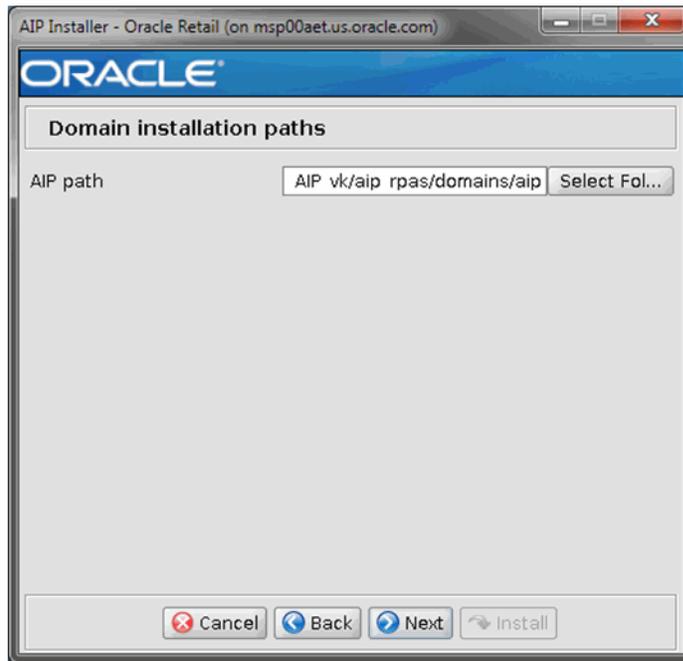
Table 8–1 Path Information for the Base Paths for Solution Window

Path Information	Description
Dir to store configurations	Enter the target directory for your configurations, or click Select Folder to navigate to the appropriate location. This is the path that will be assigned to the environment variable \$AIP_INSTALL.
Dir to store created domains	Enter the target directory for the domains that will be created by the AIP Installer, or click Select Folder to navigate to the appropriate location.
Dir to store RMS transform files	Enter the target directory for the RMS transformation files used by AIP, or click Select Folder to navigate to the appropriate location.
Path to retaillogin.ksh script	Enter the target path where the retaillogin.ksh file resides on your system, or click Select File to navigate to and select the retaillogin.ksh file. The retaillogin.ksh script was created during RPAS installation. The path must include the filename retaillogin.ksh.

8. The [Domain Installation Paths Window](#) opens.

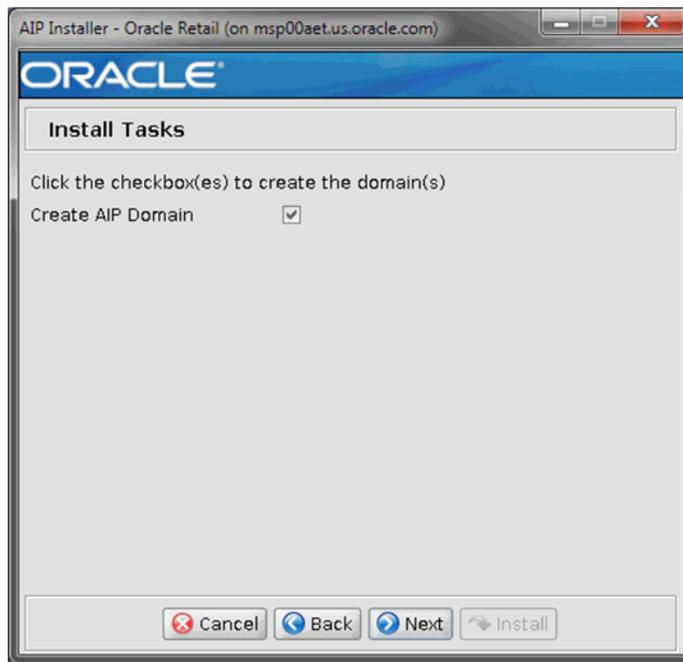
Enter the path where your AIP domain will be installed, or click **Select Folder** to navigate to the appropriate location. Click **Next** to continue to the [Install Tasks Window](#).

Figure 8–5 Domain Installation Paths Window



9. The [Install Tasks Window](#) opens. Perform the steps following [Figure 8–6](#) to continue.

Figure 8–6 Install Tasks Window



To Create the...	Then...	And...
AIP domain now	choose the Create AIP Domain option	click Next to continue to the Installation Progress Window .
AIP domain later	clear the Create AIP Domain option	click Next to continue to the Installation Progress Window .

Note: The domain build created during this installation will contain sample hierarchy positions. If you want your AIP RPAS domain to be created with your production hierarchy data, then clear the **Create AIP Domain** option and continue with the installation. Refer to the *Oracle Retail Advanced Inventory Planning Implementation Guide*, chapter “Building a Production AIP RPAS Domain.”

Created as part of this process is the `make_domain.aip` file located in the [Configurations Install Dir] entered during the install. This file contains all of the required parameters needed to support the domain install. If necessary this file may be modified if the default parameters are not appropriate for your particular environment.

Note: This release of the AIP RPAS configuration is enabled for multi-language capability as a default. This means that the domain build will set up positions in the database arrays into which translated strings may be optionally loaded by the domain administrator at a later time. See the *Oracle Retail Application Server Administration Guide* for details.

10. The [Fusion Location Information Window](#) opens.

Figure 8–7 Fusion Location Information Window

- Enter the number of servers running the RPAS Fusion Client where you want to install the RPAS Fusion Client AIP configuration. If the RPAS Fusion Client is running on a single server, enter 1. If you have a clustered installation, you can enter up to four servers.
- Enter the host name and port number of the RPAS server.

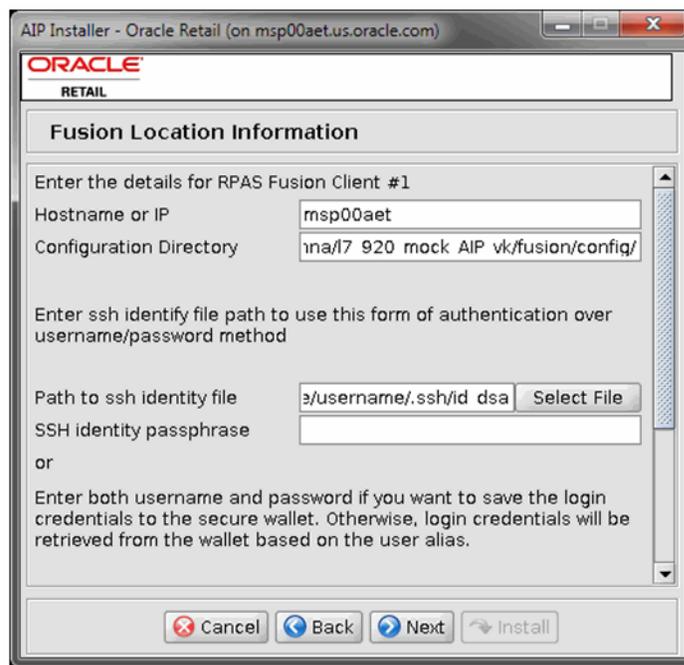
Click **Next** to continue.

Note: The Fusion Location Information windows open when you select the RPAS Fusion Client configuration check box on the [Choose Components to Install Window](#).

If you are not installing the RPAS Fusion Client configuration, proceed to step 12.

11. Based on the number of servers you entered, the [Fusion Location Information \(Details\) Window](#) opens.

Figure 8–8 Fusion Location Information (Details) Window



Enter the server details in the following set of fields for each configuration:

Note: The authentication provided needs to be either:

Path to SSH identity file and SSH identity passphrase

or

Login username, Login password, and Login username alias

Field	Description
Hostname or IP	Enter the host name or IP address of the server where the RPAS Fusion Client is installed.
Configuration Directory	Enter the location of the config directory available at the location where the RPAS Fusion Client is installed.
Path to SSH identity file	Enter the location of the SSH identity file to be used for authentication to the server where the RPAS Fusion Client is installed.
SSH identity passphrase	If your SSH identity is secured with a passphrase, then enter the passphrase. If not, then leave this field empty.
Login username	Enter the user name to log on to the server where the RPAS Fusion Client is installed.
Login password	Enter the password associated with the user name.
Login username alias	Specify an alias name for the administrative user. Specifying an alias name for the administrative user enhances the security for the application. When left blank, the alias name defaults to the administrative user name.

Note: Information such as user credentials for the RPAS Fusion Client is encrypted and stored in a secure location in the application installation directory. This location is called the Oracle Wallet.

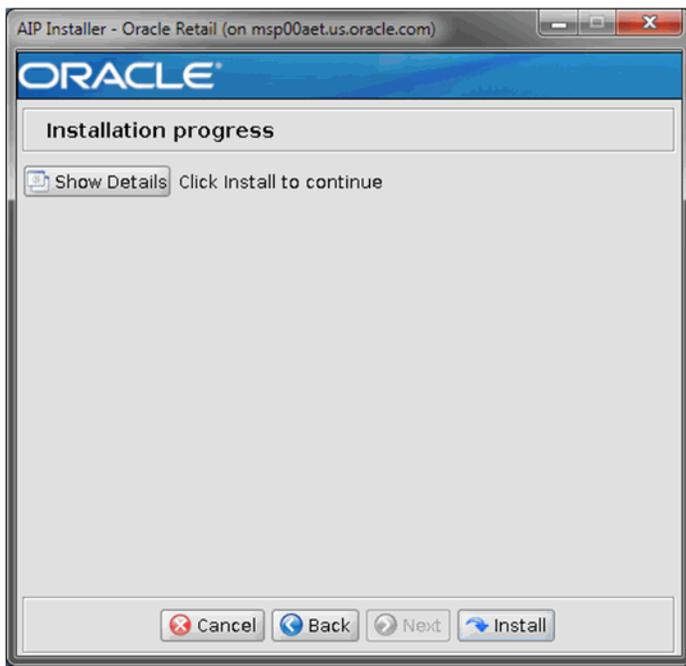
When the installation starts, the administrative user credentials are retrieved from the Oracle Wallet based on the alias name specified in this window.

Click **Next** to continue.

12. The [Installation Progress Window](#) opens.

To display the progress of the components and tasks being performed by the AIP Installer, select **Show Details**. Click **Install** to start the installation process.

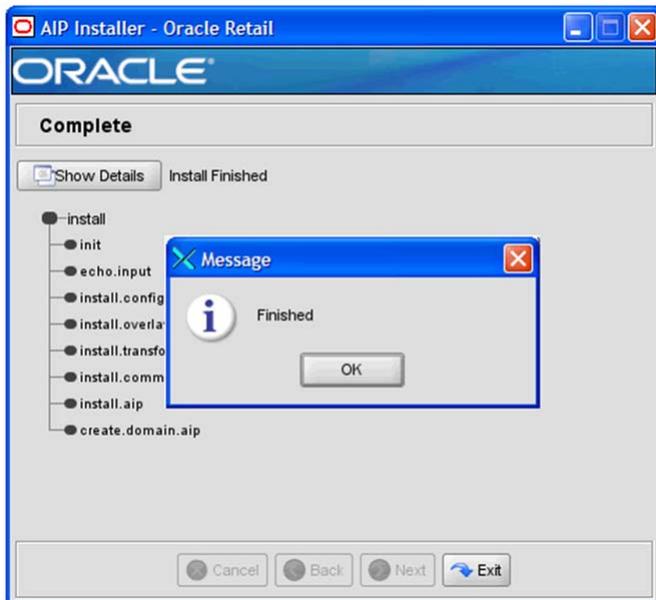
Figure 8–9 Installation Progress Window



13. When the installation process is complete, the [Complete Window](#) opens with a Message box.

Note: The installation process can vary depending on your environment. Installation time might take 30 to 60+ minutes depending on server.

Figure 8–10 Complete Window



14. Click **OK** to close the Message box.

15. Review the installation details.

To view the installation details, select **Show Details**. The window displays two tabs, the Output tab and the Error tab. It is recommended that you review these tabs for any issues that may have occurred during the installation process.

If you wish to view the log again at a later date, a text copy was saved in the directory [AIP_Installer]. The log file is named based on the product, aip, and a timestamp, followed by the .log extension.

16. Click Exit to close the AIP Installer window.

Installing the AIP Dashboard

This chapter details the steps needed to install the AIP Dashboard, which is an optional feature of AIP.

About the AIP Dashboard Installer

The AIP Dashboard Installation media includes an Oracle installer that you must run to install the AIP Dashboard. The installer installs the application based on the parameters specified in an installation properties file.

You can install the application in either of these modes:

Silent Mode

Silent mode is non-interactive. In silent mode, the installer processes the values set in the properties file with no manual intervention required. Refer to [Running the AIP Dashboard Installer—Silent Mode](#).

Graphical or Text Mode

In graphical or text mode, the Oracle Installer prompts you to enter or modify the value of properties specified in the installation properties file. Refer to [Running the AIP Dashboard Installer—Graphical or Text Mode](#).

Before You Begin

Before starting the AIP Dashboard Installer, ensure that these items are installed and active:

- RPAS Fusion Client
- RPAS domain
- AIP domain
- JDBC driver (installed in the WebLogic server's class path)
- ODBC server

Note: After the RPAS ODBC server user is created, run the usermgr utility on the RPAS DOMAIN. Before logging on to the AIP Dashboard, use the following command so that the password is not reset:

```
Usermgr -d . -forcePasswordChange false -user username
```

- RPAS_ODBC_Agent
- RPAS_DATA_Service

Note: Refer to the *Oracle Retail Predictive Application Server Administration Guide* for the Fusion Client for additional information on installing the RPAS JDBC driver, the ODBC server, RPAS_ODBC_Agent, and RPAS_DATA_Service.

Perform these tasks in order:

1. [Setting Up Your Installation Properties File](#)
2. [Setting up Environment Variables](#)
3. [Creating User Credentials in an Oracle Wallet](#)

Setting Up Your Installation Properties File

To install AIP Dashboard, it is recommended that you set up the installation properties file (`ant.install.properties`) before running the installer.

Note: Before installing the AIP Dashboard in silent mode, you must set up the installation properties file. This step is optional when installing in text or graphical mode.

To set up your `install.properties` file, perform the following steps:

1. Navigate to the CDROM directory, use an unzip utility to unzip `AIP-dashboard-installer.zip`.
2. Copy the `ant.install.properties.sample` file to the same directory, and rename it `ant.install.properties`.
3. Edit the `ant.install.properties` file using any text editor, specifying values as described within the file, and save it. For more information on the parameters, refer to [Installation Properties File Parameter Reference](#)

Note: Ensure that the `ant.install.properties` file is available in the same directory with the `install.sh/install.cmd` script.

Installation Properties File Parameter Reference

[Table 9-1](#) describes the parameters in the `ant.install.properties` file that you must set up before you install the AIP Dashboard application in silent mode:

Table 9–1 Installation Properties File Parameters

Parameter Name	Description
Retrieve Credentials	
input.retrieve.credentials input.ssh.authentication.mode = default input.ssh.username.alias = input.ssh.keyfile = input.app.log.location=	This applies to GUI mode of install. For silent, you must set it to Yes . You should set the value to Yes if you have stored user credentials to retrieve them later. If you do not have user credentials stored in the secure wallet, or if you want to overwrite the existing credentials or store new credentials, set the value to No . If using the silent mode installer, then you must set <code>input.retrieve.credentials</code> to Yes and prepare the Wallet with WebLogic and Database credentials, before installing.
Wallet Directory	
input.wallet.dir	Specify the location of the Credential Store Manager where the user credentials are to be saved or retrieved (This is the wallet created by the retail security API).
WebLogic Admin Server Information	
input.wls.target	Specify the host name where the application server is running. If the application server is running on the same host as the installer, you may use local host and enter any of the following: <ul style="list-style-type: none"> ■ localhost ■ 127.0.0.1 ■ The DNS name If the application server is running on a different host as the installer, enter the DNS name or IP address of the host where the application server is running.
input.admin.port	Specify the port number associated with the administrative server.
input.admin.user	Specify the administrative user name for the application server.
input.admin.username.alias	For GUI mode of install: <ul style="list-style-type: none"> ■ Specify an alias name for the application server / administrative user. ■ Specifying an alias name for the administrative user enhances the security for the application. When left blank, the alias name will default to the administrative user name. For silent mode (where the Java wallet is already created): <ul style="list-style-type: none"> ■ Enter the alias used to store the Weblogic admin user's credentials.
Application Configuration Information	
input.is.multiple.hosts	To specify that your domain contains at least one managed server machine that is different from the admin server machine, set the value to yes. If all the managed server machines are on the same machine as the admin server machine, then set the value to no. In other words, even if you have a cluster with multiple managed servers or have multiple standalone managed servers, the value should be no if all of these managed servers are on the same machine as the admin server machine.
Application Server Information	
input.target.name	Specify the cluster or managed application server names where you want to install the AIP Dashboard. This should be the same managed server or cluster on which the Fusion client is installed, for example: AIP.
Application Deployment Details	

Table 9–1 (Cont.) Installation Properties File Parameters

Parameter Name	Description
input.solution.id	Specify the Solution details for the AIP Dashboard. This should match the Solution name from the Fusion Client's Foundation.xml file. For example, input.solution.id = AIP
input.app.name.customlib	Specify the application deployment name. For example: aip.shared.lib.
Data Source Details	
input.datasource.url	Specify the Datasource URL in the format: jdbc:RPAS://<server>:<RPAS_Data_Service port>;ServerDataSource=gdom Where: <server> is the hostname of the server where RPAS_HOME is installed <RPAS_Data_Service port> is the port in which the RPAS_DATA_Service is running
input.datasource.jndiname	Specify the JNDI name. For example: jdbc/AIPDashboardDS
input.datasource.alias	Specify a DataSource alias name. The alias for the AIP RPAS user as stored in the Java wallet.
input.datasource.username	This is the username of a user that exists in the AIP Domain. If a user does not exist, then create a user in the AIP Domain and specify the details here. This is the username that the AIP Dashboard application uses to connect to the AIP Domain to retrieve data for dashboard
RPAS Fusion Client	
fusion.configpath	Specify the Fusion Client Configuration Directory, where the fusion client configuration files are located.
input.targetMachines	Specify the hostname/IP of the machine where the Fusion Client is installed (comma separated list where the Fusion Client config roots are).

Setting up Environment Variables

Before you start the installation, ensure that the following environment variables are set in the system:

WEBLOGIC_DOMAIN_HOME

Location where the WebLogic domain is installed.

ORAINST_HOME

An absolute path to the file containing the central inventory information. This file is created during Weblogic/Oracle Middleware Installation and defines the inventory_loc and inst_group variables in it. The inst_group value should be the UNIX group for the opatch utility.

Example 9–1 Content of the oralnst.loc File

```
ORAINST_HOME env variable is set as:
export ORAINST_HOME=<full path to>/oraInst1.loc
```

Note: Although it is recommended that these variables be set up in relevant bash shell startup files (`.bash_profile`) of the system, you can also set up the variables using the `EXPORT` command at the UNIX prompt. For more information on setting up these variables in the startup files, refer to the *Oracle Retail Advanced Inventory Planning Implementation Guide*.

Setting Environment Variables for the Current Session - UNIX

To set up the environment variables for the current session, at the UNIX prompt type the following commands in sequence:

```
export WEBLOGIC_DOMAIN_HOME=<path where the WebLogic domain is installed>
```

Creating User Credentials in an Oracle Wallet

Information such as user credentials for the AIP Dashboard installation is encrypted and stored in a secure location in the application installation directory. This location is called the Oracle Wallet.

When the installation starts, the administrative user credentials are retrieved from the Oracle Wallet based on the alias name specified in this window.

Note: Before installing the AIP Dashboard in silent mode, you must create user credentials in an Oracle Wallet. This step is optional when installing in text or graphical mode.

Storing Credentials

Installing the AIP Dashboard in silent mode requires two kinds of credentials to be stored in the wallet before it starts:

Weblogic Admin UserID and Password

Stored against the alias `wlsalias` (or whatever alias is configured within the `ant.install.properties` file against the `input.admin.username.alias` property).

Datasource UserID and Password

This is the username and password used to connect to the AIP RPAS Domain. Stored against the alias `dsAlias` (or whatever alias is configured within the `ant.install.properties` file against the `input.datasource.alias` property)

Note: The respective passwords are prompted for by the `save_credential.sh` script

Creating Credentials

To create the user credentials, perform the following steps:

1. Set and export the `JAVA_HOME` variable.
2. CD to `<installer>/retail-public-security-api/bin`.
3. Run `./save_credential.sh -a <userNameAlias> -u <username> -l <locationOfWalletDir>`.

For example: `./save_credential.sh -a wllias -u weblogic -l ./wallet/`

The following table describes the field options to run the script:

Field Option	Description
<userNameAlias>	The keyname for which the credentials need to be stored.
<username>	The username to be stored in a secure credential wallet for the specified userNameAlias.
<locationOfWalletDir>	The directory where the wallet will be created. This is an optional parameter. If omitted, it creates the wallet under: <installer>/retail-public-security-api/secure-credential-wallet.

Note: Credentials can be used in GUI mode if you select **Yes** to Retrieve Credentials from the wallet as shown in [Figure 9–2, "Retrieve Credentials? Window"](#).

Running the AIP Dashboard Installer—Silent Mode

To install the AIP Dashboard in silent mode, perform the following steps:

1. Ensure that you have completed the task, [Setting Up Your Installation Properties File](#).

Note: Ensure that the ant.install.properties file is available in the same directory with the install.sh script.

2. Ensure that you have saved these user credentials in an Oracle Wallet:
 - Weblogic domain admin user credential (the entry alias is configurable)
 - Database user credential

The silent mode installer does not ask for user credentials. Instead it retrieves them from the Oracle Wallet.

For more information, refer to [Creating User Credentials in an Oracle Wallet](#).

Note: The installation property input.retrieve.credentials must be set to **Yes**.

3. Ensure that the WebLogic Server is running and the datasource is accessible.
4. Navigate to the AIP Dashboard installation folder, enter the following command:

```
./install.sh silent
```

Running the AIP Dashboard Installer—Graphical or Text Mode

If you prefer to use GUI (graphical user interface), you can use the Oracle Installer in the graphical or text mode. Although this section describes how you can install the AIP Dashboard in graphical mode, the same on-screen instructions appear as text instructions in the text mode.

Note: Although you do not have to set up the installation properties file when installing in graphical or text mode, it is helpful. If you set up values in the properties file, those values will be the default values in the graphical or text mode dialog.

For instructions on setting up this file, refer to [Setting Up Your Installation Properties File](#).

To install the AIP Dashboard in graphical mode, perform the following steps:

1. Ensure that the WebLogic server is running and the Database is accessible.
2. If you are viewing the installer from a Windows client:
 - On the Windows client, start an Xserver program that enables you to emulate the X terminal.
 - On the application server, set the display for the Windows client where you want the Oracle Installer to display as follows:

```
export DISPLAY=<IP address>:0.0
```

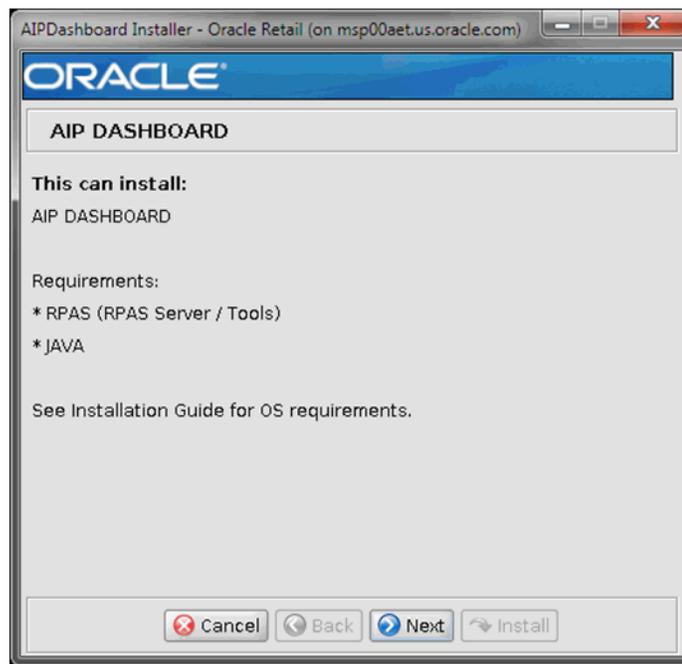
3. From your application server machine, enter the following command:

```
./install.sh
```

When the installer runs, it attempts to validate the version of WebLogic and the associated Oracle Application Development Framework that are used by the WebLogic domain. If you encounter a validation error, fix the problem and try again.

4. The [AIP Dashboard Installer Window](#) opens. Click **Next**.

Figure 9–1 AIP Dashboard Installer Window



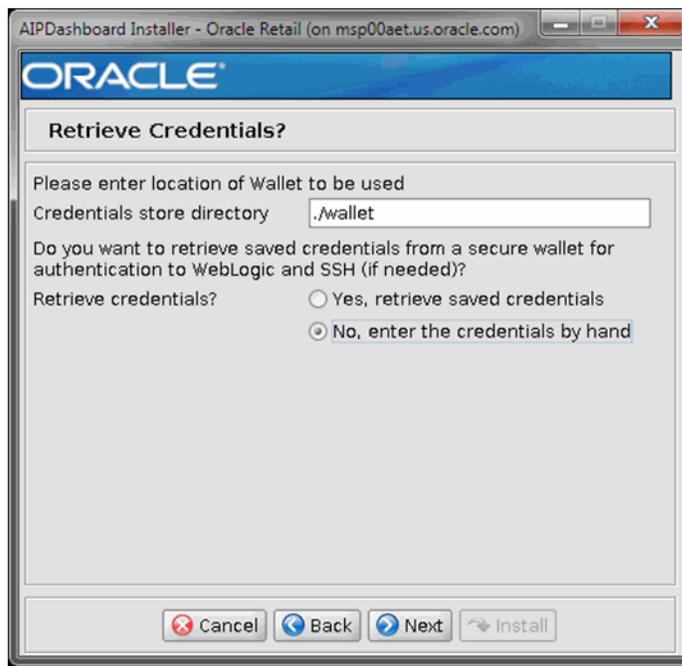
5. The [Retrieve Credentials? Window](#) opens.

- a. In the Credentials store directory text box, specify the location of the Oracle Wallet you want to use to save or retrieve user credentials.
- b. Select whether to retrieve user credentials from the Oracle Wallet:

Option	Description
Yes, retrieve saved credentials	Indicates that the installer will read the user credentials from an Oracle Wallet
No, enter the credentials by hand	Indicates that you will enter the user credentials in the user interface.

- c. Click **Next**.

Figure 9–2 Retrieve Credentials? Window



- 6. The [Application Deployment Details Window](#) opens. Enter appropriate information for the following fields and click **Next**:

Field	Description
Admin Server Host Name	Specify the host name of the application server.
Admin Server Port Number	Specify the port number associated with the admin server of application server.
Admin User Name	Specify the administrative user name for the application server.
Admin User Name Alias	Specify an alias name for the administrative user. Specifying this name enhances the security for the application. When left blank, the alias name defaults to the administrative user name.
Admin Password	Specify the password associated with administrative user name.

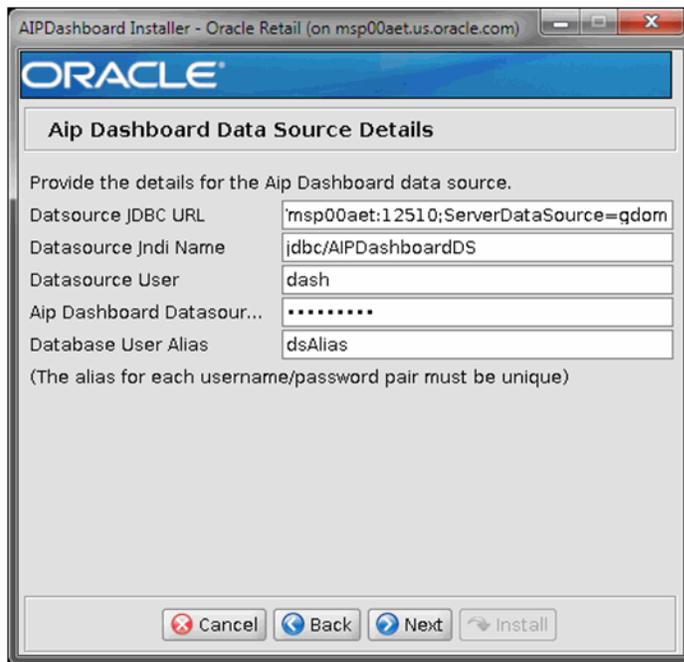
Field	Description
Test admin server connection?	Select Yes if you want to test the connection to the admin server. Select No if you want to advance to the next window without testing the connection.
Application Solution ID	Enter the solution ID for AIP that matches the solution name from Fusion Client's Foundation.xml. For example: AIP
Deployment Library Name	Enter the deployment library name: aip.shared.lib
App log file	Location to create the AIP Dashboard application log.

Figure 9–3 Application Deployment Details Window

- The [AIP Dashboard Data Source Details Window](#) opens. Enter relevant information for the following fields and click **Next**:

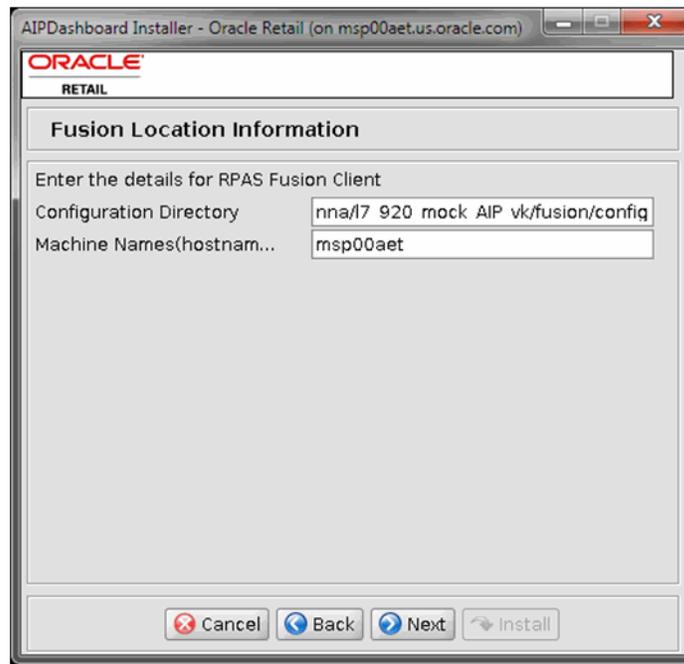
Field	Description
Datasource JDBC URL	Enter the JDBC URL in the format: jdbc:RPAS://<server>:<RPAS_Data_Service port>;ServerDataSource=gdom
Datasource Jndi Name	Enter the JNDI name. For example, jdbc/AIPDashboardDS
Datasource Schema user	Enter the datasource user name user name.
Dashboard Datasource Password	Enter the password for the datasource user name.
Database User Security Alias	Enter the security alias for datasource user.

Figure 9–4 AIP Dashboard Data Source Details Window

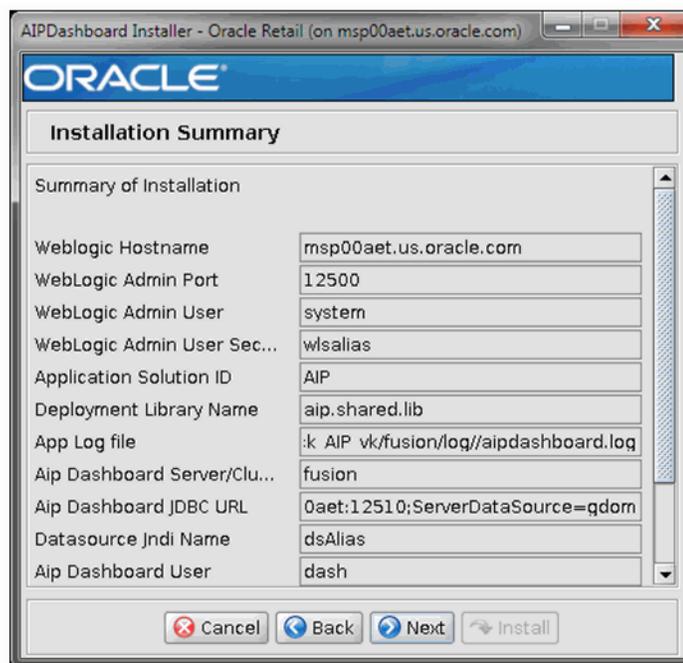


8. The [Fusion Location Information Window](#) opens. Enter relevant information for the following fields and click **Next**:

Field	Description
Configuration Directory	Specify the location where the RPAS Fusion Client is installed.
Machine Names (hostname/Ip)	Enter the hostname/IP of the machine where Fusion Client is installed.

Figure 9–5 Fusion Location Information Window

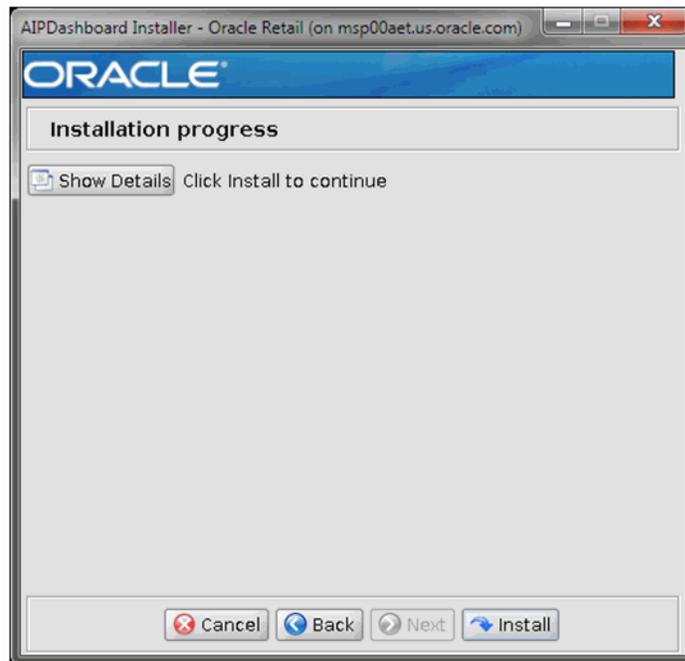
9. The [Installation Summary Window](#) opens. Review the installation summary and click **Next**.

Figure 9–6 Installation Summary Window

10. The [Installation Progress Window](#) opens. To start the installation, click **Install**.

Note: If the AIP Dashboard has already been installed with the Fusion Client and you are reinstalling the AIP Dashboard, you need to stop the Fusion Client application first from the WebLogic console before running the AIP Dashboard installer.

Figure 9–7 *Installation Progress Window*



Postinstallation Tasks

After successfully completing installation, complete [Fusion Client Install](#) postinstallation.

Fusion Client Install

For details on Fusion Client setup refer to the *Oracle Retail Predictive Application Server Installation Guide*.

After the AIP Dashboard installation is complete, the RPAS Fusion Client must be re-installed with the same properties used during the initial install, except providing values for the following three properties:

- List of bundles
- List of shared libraries
- Homepage module value

Note: These properties are found in the RPAS Fusion Client Installer, [Installed Bundles Details Window](#)

Note: Edit the `ant.install.properties` file using any text editor and set

- `input.installed.bundles = aip`
- `input.installed.bundles.shared.libs = aip.shared.lib`
- `input.homepage.module = aip:aipdashboard`

Where `aip.shared.lib` is the same value as `input.app.name.customlib` in the AIP Dashboard installer.

Figure 9–8 *Installed Bundles Details Window*

RPAS Fusion Client Installer - Oracle Retail

ORACLE
RETAIL

Installed Bundles Details.

Enter the list of installed bundles below, comma separated.

List of installed bundles

Enter the list of installed bundles below, comma separated.

List of installed bundles shared libs

Leave blank if no homepage module is to be configured, this is an optional field.

Homepage module value:

Cancel Back Next Install

After the installation is finished, login to the AIP-RPAS application using the Fusion Client to verify that the AIP Dashboard displays in the home page.

Installation Questions, Reinstallation, and Troubleshooting

This chapter provides information about installation questions, reinstalling your AIP software components, and troubleshooting the installation process.

Installation Questions

Both the database schema and application installers will ask for several different URLs. This section provides information about the URLs and their syntax.

About Installation URLs

Both the database schema and application installers ask for several different URLs, such as the JDBC URL for a database. The following sections describe these path statements.

JDBC URL for a Database

Used by the Java application and by the installer to connect to the database.

Item	Description
Syntax	<code>jdbc:oracle:thin:@<host>:<port>/<sid></code>
<host>	hostname of the database server
<port>	database listener port
<sid>	system identifier for the database
Example	<code>jdbc:oracle:thin:@myhost:1521/mysid</code>

Reinstalling in Silent Mode

Once you have successfully installed the various AIP software components, you may wish to repeat the installation if needed. When the AIP installers run, they generate and store installation information to the `ant.install.properties` file. You can reinstall your AIP software using the information stored in this file. When using this information, there is no need to enter any information on the window, since everything required is in the `ant.installer.properties` file, the reinstallation can be run from the command line and is referred to as reinstalling in silent mode since no prompts or data input is required.

To reinstall your AIP software in silent mode using the information stored in the `aip.install.properties` file, perform the following procedure.

1. Edit the ant.install.properties file to correct or modify any settings.
2. Run the installer again from the installation directory using the following command.

```
./install.sh silent
```

Troubleshooting

This section provides information about potential issues that may be encountered during installation.

Database Installer Hangs on Startup

This section provides symptoms and solutions for when a database installer hangs on startup.

Symptom

When the database schema installer is run, the following is written to the console and the installer hangs indefinitely:

```
Running pre-install checks  
Running tnsping to get listener port
```

Solution

The installer startup script is waiting for control to return from the **tnsping** command, but tnsping is hanging. Type Control+C to cancel the Installer, and investigate and solve the problem that is causing the **tnsping <sid>** command to hang. This can be caused by duplicate database listeners running.

Unreadable Buttons in the Installer

If you are unable to read the text within the installer buttons, it probably means that your JAVA_HOME is pointed to a pre-1.7 JDK. Set JAVA_HOME to a Java Development Kit of version 1.7 or later and run the installer again.

Unresponsive Fields when Running Installer in GUI Mode

This section provides symptoms and solutions for when there are unresponsive fields when running the Installer in GUI mode.

Symptom

In GUI mode, you may click in a field and find it unresponsive, and the following message appears in the console window:

```
XTEST extension not installed on this X server: Error 0
```

Solution

To run the AIP Online installer in GUI mode you must have the XTEST extension enabled in your X server. Perform the following procedure to enable XTEST in Exceed.

Note: As this issue is specific to Exceed, you could also use any X11 server like Cygwin + X11 packages or other tools to avoid the problem.

1. Open Xconfig to edit your X Server configuration settings.
2. Go to the X Server Protocol settings.
3. Select the Extensions tab.
4. Make sure the XTEST extension is selected.
5. Restart the X Server and re-run the AIP Online Installer.

Warning: Could not find X Input Context

This section provides symptoms and solutions for the warning: Could not find X Input Context.

Symptom

The following text appears in the console window during execution of the installer in GUI mode:

```
Couldn't find X Input Context
```

Solution

This message is harmless and can be ignored.

ConcurrentModificationException in Installer GUI

This section provides symptoms and solutions for when there is an ConcurrentModificationException in the Installer GUI.

Symptom

In GUI mode, the errors tab shows the following error:

```
java.util.ConcurrentModificationException
    at
java.util.ArrayList$Itr.checkForComodification(ArrayList.java:448)
    at java.util.ArrayList$Itr.next(ArrayList.java:419)
... etc
```

Solution

You can ignore this error. It is related to third-party Java Swing code for rendering of the installer GUI and does not affect the retail product installation.

Appendix: Database Parameter File

This appendix provides information on database requirements and sample database scripts.

Physical Database Upgrade Requirements

At the physical database level, the following two conditions must be met in order to be Release 15.0 compatible:

Characteraset

The characteraset must be AL32UTF8.

Tablespaces

Rename the tablespace RETEK_DATA to RETAIL_DATA and rename the tablespace RETEK_INDEX to RETAIL_INDEX.

Note: Releases 14.0 and later no longer use tablespaces RETEK_DATA and RETEK_INDEX and they should be renamed to RETAIL_DATA and RETAIL_INDEX. It is absolutely essential that a complete backup has been taken before performing this task.

Refer to ["Installing the AIP Oracle Database - Patch Mode"](#) on page 4-2,

Create the Database Instance Using the Oracle Generic Template

This section provides information to create the database instance using the Oracle generic template; including:

- [Prerequisites to Create the Database Instance](#)
- [Instance Creation Using the Generic Template Using DBCA](#)
- [Sample Parameter File](#)
- [Sample Tablespace Creation Scripts](#)

Prerequisites to Create the Database Instance

The following prerequisites are required before creating the database instance:

- Oracle 12c Enterprise Edition Release 1 (version 12.1.0.2) must already be installed along with the appropriate one-off hotfixes. Refer to [One-off Patches](#) for all the required one-off hotfixes.

- Oracle Retail no longer delivers custom database template files. Instead, databases can be created using the Oracle-delivered generic template file in the directory: `$ORACLE_HOME/assistant/dbca/template`.

```
$ORACLE_HOME/assistantsdbca/templates>
--> ls -l General_Purpose.dbc
-rw-r--r-- 1 oracle rgbudba 4908 May 24 2013 General_Purpose.dbc
```

Instance Creation Using the Generic Template Using DBCA

Perform the following steps to create the database instance using the Oracle-delivered generic template.

1. Ensure ORACLE_HOME and ORACLE_BASE is in the path:

```
export ORACLE_HOME=<Location for Oracle Home >
export ORACLE_BASE=<Location for Oracle Base>
export PATH=$ORACLE_HOME/bin:$PATH
.cd into $ORACLE_HOME/assistants/dbca/templates
```

2. Run the following command to create an instance:

```
$ORACLE_HOME/bin/dbca -silent -createDatabase -templateName General_
Purpose.dbc -gdbName DB_NAME -sid DB_SID -createAsContainerDatabase
true -SysPassword oracle1 -SystemPassword oracle1 -emConfiguration NONE
-datafileDestination <Datafile Location> -characterSet AL32UTF8
-nationalCharacterSet AL16UTF16 -redoLogFileSize 100 -initParams nls_
date_format=DD-MON-RR,nls_language=AMERICAN,nls_
calendar=GREGORIAN,fast_start_mttr_target=900
```

Note: This command creates a container database using all the default parameters set by DBCA.

Replace the pfile with a copy from <https://docs.oracle.com/database/121/ADMIN/create.htm#ADMIN002>, but customize the values according to the need of your environment.

To create a non-container database, replace `[-createAsContainerDatabase true]` with `[-createAsContainerDatabase false]`.

3. Run the following command to create a pluggable database if this is a container environment:

```
CREATE PLUGGABLE DATABASE PDB_NAME ADMIN USER PDBADMIN
IDENTIFIED BY pdbname_pwd ROLES=(CONNECT) file_name_convert=('<Old
Location of PDB Datafiles>', '<New Location for PDB Datafiles>');
alter pluggable database pdb_name open;
alter system register;
```

4. Post Database Creation Setup.

The previous commands create a database with all files in one directory. Multiplex the redo logs and the control files following the OFA architecture.

5. Configure the listener and the tnsnames entry.
6. Log into the pluggable database to create the required tablespaces accordingly. For non-container databases, log into the database as normal to create the tablespaces.

Sample Parameter File

The following code provides a sample parameter file. The commented code provides instructions about making the necessary modifications for your environment.

```
#####
# Copyright (c) 2014 by Oracle Corporation
# Oracle 12.1.0.x Parameter file
# NOTES: Before using this script:
#       1. Change <datafile_path>, <admin_path>, <utl_file_path>, <diag_path>
#       and <hostname>
#       values as appropriate.
#       2. Replace the word SID with the database name.
#       3. Size parameters as necessary for development, test, and production
#       environments.
# -----

*.audit_file_dest=full_path_of_audit_dir
*.audit_trail='db'
*.compatible='12.1.0.2.0'
*.control_files='full_path_of_controlfile_1','full_path_of_controlfile_2'
#####
# Memory Settings:
# xxxM = Some reasonable starting value for your environment.
#####
*.db_block_size=xxxM
*.db_cache_size=xxxM
*.java_pool_size=xxxM
*.memory_target=xxxM
*.pga_aggregate_target=xxxM
*.shared_pool_size=xxxM
*.streams_pool_size=xxxM

#####

*.db_block_size=8192
*.db_domain=''
*.db_name='dbName'
*.diagnostic_dest='full_path_of_diag_dir'
*.enable_pluggable_database=true|false
*.fast_start_mttr_target=900
*.nls_calendar='GREGORIAN'
*.nls_date_format='DD-MON-RR'
*.nls_language='AMERICAN'
*.nls_numeric_characters='.,'
*.nls_sort=BINARY
*.open_cursors=900
*.os_authent_prefix=''
*.plsql_optimize_level=2
*.processes=2000
*.query_rewrite_enabled='true'
*.remote_dependencies_mode='SIGNATURE'
*.remote_login_passwordfile='EXCLUSIVE'
*.remote_os_authent=true
*.sec_case_sensitive_logon=false
*.undo_tablespace='UNDOTBS1'
```

Sample Tablespace Creation Scripts

The tablespaces displayed in the following code example are required.

Note: Oracle Retail recommends the use of locally managed tablespaces with auto segment space management.

create_aip_tablespaces.sql

Execute as:**sysdba**

Modify file paths and **ORACLE_SID** for your environment.

```
CREATE TABLESPACE RETAIL_INDEX DATAFILE
  '/u01/oradata/$ORACLE_SID/retail_index01.dbf' SIZE 500M
  AUTOEXTEND ON NEXT 100M MAXSIZE 2000M
  EXTENT MANAGEMENT LOCAL
  SEGMENT SPACE MANAGEMENT AUTO
```

```
CREATE TABLESPACE RETAIL_DATA DATAFILE
  '/u01/oradata/$ORACLE_SID/retail_data01.dbf' SIZE 500M
  AUTOEXTEND ON NEXT 100M MAXSIZE 2000M
  EXTENT MANAGEMENT LOCAL
  SEGMENT SPACE MANAGEMENT AUTO
```

```
CREATE TABLESPACE LOB_DATA DATAFILE
  '/u01/oradata/$ORACLE_SID/lob_data01.dbf' SIZE 500M
  AUTOEXTEND ON NEXT 100M MAXSIZE 2000M
  EXTENT MANAGEMENT LOCAL
  SEGMENT SPACE MANAGEMENT AUTO
```

Appendix: Setting Up Password Stores with Oracle Wallet

As part of an application installation, administrators must setup password stores for database user accounts using Oracle Wallet. These password stores must be installed on the application database side. While the installer handles much of this process, the administrators must perform some additional steps.

A password store for the application and application server user accounts must also be installed; however, the installer takes care of this entire process.

About Password Stores and Oracle Wallet

Oracle databases have allowed other users on the server to see passwords in case database connect strings (user name/password@db) were passed to programs. In the past, users could navigate to `ps -ef | grep <username>` and see the password if the password was supplied in the command line when calling a program.

To make passwords more secure, sensitive information such as user credentials now must be encrypted and stored in a secure location. This location is called password stores or wallets. These password stores are secure software containers that store the encrypted user credentials.

Users can retrieve the credentials using aliases that were set up when encrypting and storing the user credentials in the password store. For example, if `username/password@db` is entered in the command line argument and the alias is called `db_username`, then the argument to a program would be the following:

```
sqlplus /@db_username
```

This would connect to the database as it did previously, but it would hide the password from any system user. After this is configured, as in the previous example, the application installation and the other relevant scripts are no longer need to use embedded usernames and passwords. This reduces any security risks that may exist because usernames and passwords are no longer exposed.

When the installation starts, all the necessary user credentials are retrieved from the Oracle Wallet based on the alias name associated with the user credentials. There are two different types of password stores or wallets. One type is for database connect strings used in program arguments (such as `sqlplus /@db_username`). The other type is for java application installation and application use.

Setting Up Password Stores for Database User Accounts

After the database is installed and the default database user accounts are set up, administrators must set up a password store using the Oracle Wallet. This involves assigning an alias for the username and associated password for each database user account. The alias is used later during the application installation. This password store must be created on the system where the application server and database client are installed.

This section describes the steps you must take to set up a wallet and the aliases for the database user accounts. For more information on configuring authentication and password stores, refer to the *Oracle Database Security Guide*.

Note: In this section, <wallet_location> is a placeholder text for illustration purposes. Before running the command, ensure that you specify the path to the location where you want to create and store the wallet.

Steps to Set Up a Password Store

To set up a password store for the database user accounts, perform the following steps:

1. Create a wallet using the following command:

```
mkstore -wrl <wallet_location> -create
```

After you run the command, a prompt appears. Enter a password for the Oracle Wallet in the prompt.

Note: The `mkstore` utility is included in the Oracle Database Client installation.

The wallet is created with the auto-login feature enabled. This feature enables the database client to access the wallet contents without using the password. For more information, refer to the *Oracle Database Advanced Security Administrator's Guide*.

2. Create the database connection credentials in the wallet using the following command:

```
mkstore -wrl <wallet_location> -createCredential <alias-name>  
<database-user-name>
```

After you run the command, a prompt appears. Enter the password associated with the database user account in the prompt. You are prompted to re-enter the password. Then you are prompted for the wallet password used in Step 1.

3. Repeat step 2 for all the database user accounts.
4. Update the `sqlnet.ora` file to include the following statements:

```
WALLET_LOCATION = (SOURCE = (METHOD = FILE) (METHOD_DATA = (DIRECTORY =  
<wallet_location>)))  
SQLNET.WALLET_OVERRIDE = TRUE  
SSL_CLIENT_AUTHENTICATION = FALSE
```

5. Update the `tnsnames.ora` file to include the following entry for each alias name to be set up.

```
<alias-name> =  
  (DESCRIPTION =
```

```

(ADDRESS_LIST =
  (ADDRESS = (PROTOCOL = TCP) (HOST = <host>) (PORT = <port>))
)
(CONNECT_DATA =
  (SERVICE_NAME = <service>)
)
)

```

Note: In the previous example, <alias-name>, <host>, <port>, and <service> are placeholder text for illustration purposes. Ensure that you replace these with the relevant values.

Setting Up Wallets for Database User Accounts

The following examples show how to set up wallets for database user accounts for the following applications:

- [For RMS, RWMS, RPM Batch, RETL, RMS, RWMS, and ARI](#)
- [For Java Applications: \(SIM, ReIM, RPM, Alloc, RIB, RSL, AIP, RETL\)](#)

For RMS, RWMS, RPM Batch, RETL, RMS, RWMS, and ARI

Follow this procedure to set up wallets for database user accounts for the applications, RMS, RWMS, RPM Batch, RETL, RMS, RWMS, and ARI:

1. Create a new directory called wallet under your folder structure.

```

cd /projects/rms15.0.0/dev/
mkdir .wallet

```

Note: The default permissions of the wallet allow only the owner to use it, ensuring the connection information is protected. If you want other users to be able to use the connection, you must adjust permissions appropriately to ensure only authorized users have access to the wallet.

2. Create a sqlnet.ora in the wallet directory with the following content.

```

WALLET_LOCATION = (SOURCE = (METHOD = FILE) (METHOD_DATA =
(DIRECTORY = /projects/rms15.0.0/dev/.wallet)) )
SQLNET.WALLET_OVERRIDE=TRUE
SSL_CLIENT_AUTHENTICATION=FALSE

```

Note: WALLET_LOCATION must be on line 1 in the file.

3. Set up a tnsnames.ora in the wallet directory. This tnsnames.ora includes the standard tnsnames.ora file. Then, add two custom tns_alias entries that are only for use with the wallet. For example: sqlplus /@dvols29_rms01user.

```

ifile = /u00/oracle/product/11.2.0.1/network/admin/tnsnames.ora

```

```

dvols29_rms01user =
(DESCRIPTION = (ADDRESS_LIST = (ADDRESS = (PROTOCOL = tcp)

```

```
(host = mspdv311.us.oracle.com) (Port = 1521))
(CONNECT_DATA = (SID = dvols29) (GLOBAL_NAME = dvols29))

dvols29_rms01user.world =
(DESCRIPTION = (ADDRESS_LIST = (ADDRESS = (PROTOCOL = tcp)
(host = mspdv311.us.oracle.com) (Port = 1521)))
(CONNECT_DATA = (SID = dvols29) (GLOBAL_NAME = dvols29)))
```

Note: It is important to not copy the tnsnames.ora file because it can quickly become out of date. The ifile clause (shown previously) is key.

4. Create the wallet files. These are empty initially.

1. Ensure you are in the intended location.

```
$ pwd
/projects/rms15.0.0/dev/.wallet
```

2. Create the wallet files.

```
$ mkstore -wrl . -create
```

3. Enter the wallet password you want to use. It is recommended that you use the same password as the UNIX user you are creating the wallet on.

4. Enter the password again.

Two wallet files are created from the previous command: ewallet.p12 and cwallet.sso.

5. Create the wallet entry that associates the username and password to the custom tns alias that was setup in the wallet's tnsnames.ora file.

```
mkstore -wrl . -createCredential <tns_alias> <username> <password>
```

Example: mkstore -wrl . -createCredential dvols29_rms01user rms01user passwd

6. Test the connectivity. The ORACLE_HOME used with the wallet must be the same version or higher than what the wallet was created with.

```
$ export TNS_ADMIN=/projects/rms15.0.0/dev/.wallet /* This is very
import to use wallet to point at the alternate tnsnames.ora created in
this example */
```

```
$ sqlplus /@dvols29_rms01user
```

```
SQL*Plus: Release 11
```

```
Connected to:
Oracle Database 12c
```

```
SQL> show user
USER is "rms01user"
```

Running batch programs or shell scripts would be similar:

```
Ex: dtesys /@dvols29_rms01user
script.sh /@dvols29_rms01user
```

Set the UP unix variable to help with some compiles :

```
export UP=@dvols29_rms01user
```

for use in RMS batch compiles, and RMS, RWMS, and ARI forms compiles.

As shown in the previous example, users can ensure that passwords remain invisible.

Additional Database Wallet Commands

The following is a list of additional database wallet commands.

- Delete a credential on wallet


```
mkstore -wrl . -deleteCredential dvols29_rms01user
```
- Change the password for a credential on wallet


```
mkstore -wrl . -modifyCredential dvols29_rms01user rms01user passwd
```
- List the wallet credential entries


```
mkstore -wrl . -list
```

This command returns values such as

```
oracle.security.client.connect_string1
oracle.security.client.user1
oracle.security.client.password1
```
- View the details of a wallet entry


```
mkstore -wrl . -viewEntry oracle.security.client.connect_string1
```

Returns the value of the entry:

```
dvols29_rms01user
```

```
mkstore -wrl . -viewEntry oracle.security.client.user1
```

Returns value of the entry:

```
rms01user
```

```
mkstore -wrl . -viewEntry oracle.security.client.password1
```

Returns value of the entry:

```
passwd
```

For Java Applications: (SIM, ReIM, RPM, Alloc, RIB, RSL, AIP, RETL)

For Java application, consider the following:

- For database user accounts, ensure that you set up the same alias names between the password stores (database wallet and Java wallet). You can provide the alias name during the installer process.
- Document all aliases that you have set up. During the application installation, you must enter the alias names for the application installer to connect to the database and application server.
- Passwords are not used to update entries in Java wallets. Entries in Java wallets are stored in partitions, or application-level keys. In each retail application that has been installed, the wallet is located in <WEBLOGIC_DOMAIN_HOME>/retail/<appname>/config

Example:

```
mspdv351:[1036_WLS] /u00/webadmin/product/12.1.3/WLS/user_projects/
domains/150_mck_soa_domain/retail/reim14/config
```

- Application installers should create the Java wallets for you, but it is good to know how this works for future use and understanding.
- Scripts are located in <WEBLOGIC_DOMAIN_HOME>/retail/<appname>/retail-public-security-api/bin for administering wallet entries.

Example:

```
mspdv351:[1036_WLS] /u00/webadmin/product/12.1.3/WLS/user_projects/
domains/150_mck_soa_domain/retail/reim14/retail-public-security-api/bin
```

- In this directory is a script to help you update each alias entry without having to remember the wallet details. For example, if you set the RPM database alias to rms01user, you will find a script called update-RMS01USER.sh.

Note: These scripts are available only with application installed by way of an installer.

- Two main scripts are related to this script in the folder for more generic wallet operations: dump_credentials.sh and save_credential.sh.
- If you have not installed the application yet, you can unzip the application zip file and view these scripts in <app>/application/retail-public-security-api/bin.

Example:

```
mspdv351:[1036_WLS]
/u00/webadmin/reim/application/retail-public-security-api/bin
```

update-<ALIAS>.sh

update-<ALIAS>.sh updates the wallet entry for this alias. You can use this script to change the user name and password for this alias. Because the application refers only to the alias, no changes are needed in application properties files.

Usage:

```
update-<username>.sh <myuser>
```

Example:

```
mspdev71:[1036WLS] /u00/webadmin/product/12.1.3/WLS/user_projects/domains/java_
domain/retail/rpm150test/retail-public-security-api/bin> ./update-RMS01USER.sh
```

```
usage: update-RMS01USER.sh <username>
```

```
<username>: the username to update into this alias.
```

```
Example: update-RMS01USER.sh myuser
```

Note: this script will ask you for the password for the username that you pass in.

```
mspdev71:[1036WLS] /u00/webadmin/product/12.1.3/WLS/user_projects/domains/java_
domain/retail/rpm150test/retail-public-security-api/bin>
```

dump_credentials.sh

dump_credentials.sh is used to retrieve information from wallet. For each entry found in the wallet, the wallet partition, the alias, and the username are displayed. Note that the password is not displayed. If the value of an entry is uncertain, run save_credential.sh to resave the entry with a known password.

```
dump_credentials.sh <wallet location>
```

Example:

```
dump_credentials.sh: /u00/webadmin/product/12.1.3/WLS/user_
projects/domains/150_mck_soa_domain/retail/sim14/config
```

```
=====
Retail Public Security API Utility
=====
```

Following are the credentials found in the wallet at the location:

```
/u00/webadmin/product/12.1.3/WLS/user_projects/domains/150_mck_soa_
domain/retail/sim14/config
```

```
Application level key partition name:reim14
User Name Alias:WLS-ALIAS User Name:weblogic
User Name Alias:RETAIL-ALIAS User Name:retail.user
User Name Alias:LDAP-ALIAS User Name:RETAIL.USER
User Name Alias:RMS-ALIAS User Name:rms141mock
User Name Alias:REIMBAT-ALIAS User Name:reimbat
```

save_credential.sh

save_credential.sh is used to update the information in wallet. If you are unsure about the information that is currently in the wallet, use dump_credentials.sh as indicated previously.

```
save_credential.sh -a <alias> -u <user> -p <partition name> -l <path of
the wallet file location where credentials are stored>
```

Example:

```
mspdv351:[1036_WLS] /u00/webadmin/mock150_
testing/rtil/rtil/application/retail-public-security-api/bin> save_
credential.sh -l wallet_test -a myalias -p mypartition -u myuser
```

```
=====
Retail Public Security API Utility
=====
```

```
Enter password:
```

```
Verify password:
```

Note: -p in the previous command is for partition name. You must specify the proper partition name which is used in application code for each Java application.

save_credential.sh and dump_credentials.sh scripts are the same for all applications. If using save_credential.sh to add a wallet entry or to update a wallet entry, bounce the application/managed server so that your changes are visible to the application. Also, save a backup copy of your cwallet.sso file in a location outside of the deployment path, because redeployment or reinstallation of the application will wipe the wallet entries you made after installation of the application. To restore your wallet entries after a redeployment/reinstallation, copy the backed up cwallet.sso file over the cwallet.sso file. Then bounce the application/managed server.

Usage:

```
=====
```

```
Retail Public Security API Utility
=====
usage: save_credential.sh -au[plh]
E.g. save_credential.sh -a rms-alias -u rms_user -p rib-rms -l ./
-a,--userNameAlias <arg>          alias for which the credentials
needs to be stored
-h,--help                          usage information
-l,--locationofWalletDir <arg>    location where the wallet file is
created.If not specified, it creates the wallet under secure-credential-wallet
directory which is already present under the retail-public-security-api/
directory.
-p,--appLevelKeyPartitionName <arg> application level key partition name
-u,--userName <arg>              username to be stored in secure
credential wallet for specified alias*
```

How Does the Wallet Relate to the Application?

The ORACLE Retail Java applications include the wallet alias information you create in an <app-name>.properties file. Below is a sample from the reim.properties file. Database information and the user are presented below. The property called `datasource.credential.alis=RMS-ALIAS` uses the ORACLE wallet with the argument of `RMS-ALIAS` that is at the `csm.wallet.path` (Java wallet) with the `csm.wallet.partition.name` of `reim14` to retrieve the password for application use.

Reim.properties code sample:

```
datasource.url=jdbc:oracle:thin:@mspdv349.us.oracle.com:1521:pkols07
datasource.schema.owner=rms141mock
datasource.credential.alias=RMS-ALIAS
# =====
# ossa related Configuration
#
# These settings are for ossa configuration to store credentials.
# =====

csm.wallet.path=/u00/webadmin/product/12.1.3/WLS/user_projects/domains/150_mck_
soa_domain/retail/reim14/config
csm.wallet.partition.name=reim
```

How Does the Wallet Relate to Java Batch Program Use?

Some of the ORACLE Retail Java batch applications have an alias to use when running Java batch programs. For example, alias `REIMBAT-ALIAS` maps through the wallet to `dbuser reimbat`, already on the database. To run a ReIM batch program, the format would be: `reimbatchpgmname REIMBAT-ALIAS <other arguments as needed by the program in question>`

Setting up RETL Wallets

RETL creates a wallet under `$RFX_HOME/etc/security`, with the following files:

- `cwallet.sso`
- `jazn-data.xml`
- `jps-config.xml`
- `README.txt`

To setup RETL wallets, perform the following steps:

1. Set the following environment variables:
 - ORACLE_SID=retaildb
 - RFX_HOME=/u00/rfx/rfx-13.2.5
 - RFX_TMP=/u00/rfx/rfx-13.2.5/tmp
 - JAVA_HOME=/usr/jdk1.7
 - LD_LIBRARY_PATH=\$ORACLE_HOME
 - PATH=\$RFX_HOME/bin:\$JAVA_HOME/bin:\$PATH
2. Change directory to \$RFX_HOME/bin.
3. Run setup-security-credential.sh.
 - Enter 1 to add a new database credential.
 - Enter the dbuseralias. For example, retl_java_rms01user.
 - Enter the database username. For example, rms01user.
 - Enter the database password.
 - Reenter the database password.
 - Enter D to exit the setup script.
4. Update your RETL environment variable script to reflect the names of both the Oracle Networking wallet and the Java wallet.

For example, to configure RETLforRPAS, modify the following entries in \$MMHOME/RETLforRPAS/rfx/etc/rmse_rpas_config.env

 - The RETL_WALLET_ALIAS should point to the Java wallet entry:
export RETL_WALLET_ALIAS="retl_java_rms01user"
 - The ORACLE_WALLET_ALIAS should point to the Oracle network wallet entry:
export ORACLE_WALLET_ALIAS="dvols29_rms01user"
 - The SQLPLUS_LOGON should use the ORACLE_WALLET_ALIAS:
export SQLPLUS_LOGON="/@\${ORACLE_WALLET_ALIAS}"
5. To change a password later, run setup-security-credential.sh.
 - Enter 2 to update a database credential.
 - Select the credential to update.
 - Enter the database user to update or change.
 - Enter the password of the database user.
 - Re-enter the password.

Quick Guide for Retail Wallets

Table B–1 Quick Guide for Retail Wallets

Retail app	Wallet type	Wallet loc	Wallet partition	Alias name	User name	Use	Create by	Alias Example
RMS batch	DB	<RMS batch install dir (MMHOME)>/ .wallet	n/a	<Database SID>_ <Database schema owner>	<rms schema owner>	Compile, execution	Installer	n/a
RMS forms	DB	<forms install dir>/base/.wallet	n/a	<Database SID>_ <Database schema owner>	<rms schema owner>	Compile	Installer	n/a
ARI forms	DB	<forms install dir>/base/.wallet	n/a	<Db_Ari01>	<ari schema owner>	Compile	Manual	ari-alias
RMWS forms	DB	<forms install dir>/base/.wallet	n/a	<Database SID>_ <Database schema owner>	<rwms schema owner>	Compile forms, execute batch	Installer	n/a
RPM app	DB	<RPM batch install dir>/wallet	n/a	<rms schema owner alias>	<rms schema owner>	Execute batch	Manual	rms-alias
RWMS auto-login	JAVA	<forms install dir>/base/.java wallet	<RWMS Installation name>	<RWMS database user alias>	<RWMS schema owner>	RWMS forms app to avoid dblogin window	Installer	rwms14inst
			<RWMS Installation name>	BI_ALIAS	<BI Publisher administrative user>	RWMS forms app to connect to BI Publisher	Installer	n/a
AIP app	JAVA	<weblogic domain home>/retail/ <deployed aip app name>/config	aip13	<AIP weblogic user alias>		App use	Installer	aip-weblogic-alias
			aip13	<AIP database schema user alias>		App use	Installer	aip01user-alias
			aip13	<rib-aip weblogic user alias>	<rib-aip weblogic user name>	App use	Installer	rib-aip-weblogic-alias

Table B-1 (Cont.) Quick Guide for Retail Wallets

Retail app	Wallet type	Wallet loc	Wallet partition	Alias name	User name	Use	Create by	Alias Example
RPM app	JAVA	<weblogic domain home>/retail/<deployed rpm app name>/config	rpm13	<rpm weblogic user alias>	<rpm weblogic user name>	App use	Installer	rpm-weblogic
			rpm13	<rms shema user alias>	<rms shema user name>	App, batch use	Installer	rms01user-alias
			rpm13	<rpm application user one alias>	<rpm application user one name>	App use	Installer	user1-alias
			rpm13	<rpm application user two alias>	<rpm application user two name>	App use	Installer	user2-alias
			rpm13	<rpm batch user alias>	<rpm batch user name>	App, batch use	Installer	rpmbatch-alias
			rpm13	<rib-rpm weblogic user alias>	<rib-rpm weblogic user name>	App use	Installer	rib-rpm-weblo
ReIM app	JAVA	<weblogic domain home>/retail/<deployed reim app name>/config	<installed app name>	<reim weblogic user alias>	<reim weblogic user name>	App use	Installer	weblogic-alias
			<installed app name>	<rms shema user alias>	<rms shema user name>	App, batch use	Installer	rms01user-alias
			<installed app name>	<reim webservice validation user alias>	<reim webservice validation user name>	App use	Installer	reimwebservice
			<installed app name>	<reim batch user alias>	<reim batch user name>	App, batch use	Installer	reimbatch-alias
Alloc app	JAVA	<weblogic domain home>/retail/<deployed alloc app name>/config	<installed app name>	<alloc weblogic user alias>	<alloc weblogic user name>	App use	Installer	weblogic-alias
			<installed app name>	<rms shema user alias>	<rms shema user name>	App use	Installer	rms01user-alias
			<installed app name>	<rsl for rms weblogic user alias>	<rsl for rms weblogic user name>	App use	Installer	rsl-rms-weblo
RSL app	JAVA	<RSL INSTALL DIR>/rsl-rms/security/config	rsl-rsm	<rsl weblogic user alias>	<rsl weblogic user name>	App use	Installer	weblogic-alias
			rsl-rsm	<rms shema user alias>	<rms shema user name>	App use	Installer	rms01user-alias

Table B-1 (Cont.) Quick Guide for Retail Wallets

Retail app	Wallet type	Wallet loc	Wallet partition	Alias name	User name	Use	Create by	Alias Example
SIM app	JAVA	<weblogic domain home>/retail/<deployed sim app name>/config	rpm	<rpm weblogic user alias>	<rpm weblogic user name>	App use	Installer	rpm-weblogic-alias
			rms	<rsl for rms weblogic user alias>	<rsl for rms weblogic user name>	App use	Installer	rsl-rms-weblogic-alias
			rib-sim	<rib-sim weblogic user alias>	<rib-sim weblogic user name>	App use	Installer	rib-sim-weblogic-alias
RETL	JAVA	<RETL home>/etc/security	n/a	<target application user alias>	<target application db userid>	App use	Manual	retl_java_rms01user
RETL	DB	<RETL home>/wallet	n/a	<target application user alias>	<target application db userid>	App use	Manual	<db>_<user>
RIB	JAVA	<RIBHOME DIR>/deployment-home/conf/security						
JMS			jms<1-5>	<jms user alias> for jms<1-5>	<jms user name> for jms<1-5>	Integration use	Installer	jms-alias
WebLogic			rib-<app>-app-server-instance	<rib-app weblogic user alias>	<rib-app weblogic user name>	Integration use	Installer	weblogic-alias
Admin GUI			rib-<app>#web-app-user-alias	<rib-app admin gui user alias>	<rib-app admin gui user name>	Integration use	Installer	admin-gui-alias
Application			rib-<app>#user-alias	<app weblogic user alias>	<app weblogic user name>	Integration use	Installer	app-user-alias
DB			rib-<app>#app-db-user-alias	<rib-app database schema user alias>	<rib-app database schema user name>	Integration use	Installer	db-user-alias
Error Hospital			rib-<app>#hosp-user-alias	<rib-app error hospital database schema user alias>	<rib-app error hospital database schema user name>	Integration use	Installer	hosp-user-alias

Appendix: Configuration Name Changes

This appendix provides a reference for the configuration adjustments that are necessary when upgrading from a previous AIP release to the current release. For additional information, refer to the *Oracle Retail Predictive Application Server Configuration Tools User Guide*.

Configuration Adjustments for RPAS Names from 13.2.3/13.2.4 to 13.3

Perform the following procedure to update the 13.2.3/13.2.4 to 13.3 configuration for the names of the:

- Workbook RPAS Names
 - Workbook Tab RPAS Names
 - Worksheet RPAS Names
1. Use Configuration Tools to open the 13.2.3/13.2.4 configuration.
 2. Update the 13.2.3/13.2.4 Workbook RPAS Name to the 13.3 Workbook RPAS Name as listed in [Table C-1](#).

Note: After changing the workbook RPAS name, the file name automatically changes when you save the configuration.

Table C-1 Configuration Adjustments for Workbook RPAS Names from 13.23 to 13.3

13.2.3/13.2.4 Workbook User Label	13.2.3/13.2.4 Workbook RPAS Name	Workbook RPAS Name
SRP Intra-day	IdWorkbook	SrpIntraDay

- Update the 13.2.3/13.2.4 Workbook Tab RPAS Names to the 13.3 Workbook Tab RPAS Names as listed in [Table C-2](#).

Table C-2 Configuration Adjustments for Workbook Tab RPAS Names from 13.2.3/13.2.4 to 13.3

13.2.3/13.2.4 Workbook User Label	13.2.3/13.2.4 Workbook Tab User Label	13.2.3/13.2.4 Workbook Tab RPAS Name	13.3 Workbook Tab RPAS Name
SRP Intra-day	SRP Intra-day	IdSrpSummaryTab	wtSrpIntraDay

- Update the 13.2.3/13.2.4 Worksheet RPAS Names to the 13.3 Worksheet RPAS Names as listed in [Table C-3](#).

Table C-3 Configuration Adjustments for Worksheet RPAS Names from 13.2.3/13.2.4 to 13.3

13.2.3/13.2.4 Workbook User Label	13.2.3/13.2.4 Worksheet Base Intersection	13.2.3/13.2.4 Worksheet User Label	13.2.3/13.2.4 Worksheet RPAS Name	13.3 Worksheet RPAS Name
SRP Intra-day	day_str_sku	SRP Intra-day Summary (SKU/Store/Day)	IdSrpSummary	wsSrpIntraD
WRP Administration	day_dstk_scls	WRP Default Parameters (Sub-class/Dstk/Day)	Worksheet24	wsWrpDefS
	dept	WRP Global Parameters (Dept)	AdmParGlbWksht	wsWrpGlob
	dstk_scls	WRP Default Parameters (Sub-class/Dstk)	Worksheet29	wsWrpDefS
	week_dstk_scls	WRP Default Parameters (Sub-class/Dstk/Week)	Worksheet28	wsWrpDefS
WRP Alert Maintenance	day_dstk_skug	Alert Masks (SKU Group/Dstk/Day)	Worksheet3	wsWrpAltM
	dept	WRP Alert Global Default (Dept)	Worksheet27	wsWrpAlert
	dow	Alert Day Masks (DOW)	Worksheet26	wsWrpRunM
	dstk_sku	WRP Alert Exception (SKU/Dstk)	AltExpWksht	wsWrpAlert
	dstk_skug	Alert Masks (SKU Group/Dstk)	Worksheet37	wsWrpAltM
	scls	WRP Alert Default (Sub-class)	Worksheet25	wsWrpAlert

Table C-3 (Cont.) Configuration Adjustments for Worksheet RPAS Names from 13.2.3/13.2.4 to 13.3

13.2.3/13.2.4 Workbook User Label	13.2.3/13.2.4 Worksheet Base Intersection	13.2.3/13.2.4 Worksheet User Label	13.2.3/13.2.4 Worksheet RPAS Name	13.3 RPAS Name
WRP Interactive Evaluation	day_dstk_skug	Credit Details	ESCrdDtdWks	wsW
	day_dstk_skug	Overstock Details	Worksheet35	wsW
	day_dstk_skug	WRP Receipt Plan By SKU Group	WhtlfrpGrpWkst	wsW
	day_sstk_dstk_dmgp	WRP Historical Supplier Orders	WhtlfrOHstWksht	wsW
	day_sstk_dstk_skps	WRP Receipt Plan By SKU Pack Size	WhtlfrpPsWksht	wsW
	day_sstk_dstk_skug	In Transit Details	ESITDtdWks	wsW
	day_sstk_dstk_skug	WRP Temporarily Un-Orderable	WhtlfrTUnoWksht	wsW
	dstk	Warehouse Credit Totals	ESCrdTtlWks	wsW
	dstk	WRP Replenishment Parameters by Warehouse	WhtlfrpWhWksht	wsW
	dstk_skug	Credit Summary	ESCrdSumWks	wsW
	dstk_skug	WRP Replenishment Parameters By SKUG Warehouse	WhtlfrSpWksht	wsW
	sku	Promotional SKU View	Worksheet5	wsW
	skug	SKU Group Credit Totals	ESCrdTtlSGWks	wsW
	sstk	Source Credit Totals	ESCrdTtlSrcWks	wsW
	week_dstk_skug	WRP Replenishment Parameters By Week - By SKU Group	WhtlfrpWkWksht	wsW
	week_skug	Company Level Inventory Analysis	CmpnLvIAWksht	wsW
	week_splr_skug	SPQ Analysis	WhtlfrSpqAWksht	wsW
WRP Maintenance	day_dstk_sku	WRP Exception Parameters (SKU/Dstk/Day)	MntParWksht	wsW
	day_sstk_dstk_sku	WRP Exception Parameters (SKU/Dstk/Sstk/Day)	Worksheet30	wsW
	dstk_skps	WRP Exception Parameters (Skps/Dstk)	Worksheet33	wsW
	dstk_sku	WRP Exception Parameters (SKU/Dstk)	Worksheet31	wsW
	week_dstk_sku	WRP Exception Parameters (SKU/Dstk/Week)	Worksheet32	wsW
WRP Network Throughput Plan	day_dstk_dept	Warehouse Summary	WhSumWksht	wsW
	day_dstk_nwgp	Open Inventory and Stock Cover	OiScWksht	wsW
	day_dstk_nwgp	Outbound Distribution Capacity	ObDistCpcWksht	wsW
	day_dstk_nwgp	Warehouse Holding Capacity	WhHldCpcWksht	wsW
WRP Network Threshold Maintenance		Excessive Stock Cover Threshold	EscThrWksht	wsW
	day_dstk_nwgp	Day on Day Change Threshold	DODChgWks	wsW
	day_dstk_nwgp	Target Stock Cover Screen	TgtStkCvrWksht	wsW
	dow	Network Alert Run Days	NTMntRDWks	wsW
	dstk_nwgp	Stocking Point Holding Capacity	WhHldCpcSWksht	wsW
SRP Evaluation	day_str_sku	SRP Overstock Details (SKU/Store/Day)	Worksheet34	wsSr
	sku	SRP Overstock Alert (SKU)	Worksheet6	wsSr

Table C-3 (Cont.) Configuration Adjustments for Worksheet RPAS Names from 13.2.3/13.2.4 to 13.3

13.2.3/13.2.4 Workbook User Label	13.2.3/13.2.4 Worksheet Base Intersection	13.2.3/13.2.4 Worksheet User Label	13.2.3/13.2.4 Worksheet RPAS Name	13.3 Worksheet RPAS Name
SRP Interactive Evaluation	day_str_sku	SRP Overstock Details (SKU/Store/Day)	srpoverstkdtls	wsSrpIEOvr
	sku	SRP Overstock Alert (SKU)	srpoverstkalt	wsSrpIEOvr
SRP Inventory Capping Management	day_str_dept	Inventory Caps (Dept/Store/Day)	wsIcDept	wsSrpICPar
	day_str_sku	Inventory Caps (SKU/Store/Day)	wsIcMgmt	wsSrpInvCa
	sku	Inventory Caps (SKU)	wsIcSku	wsSrpICPar
SRP Inventory Capping Parameters	day_str_dept	Department Capacity	wsIcParmDpt	wsSrpInvCa
	scls	Inventory Capping Parameters (Sub-class)	wsIcParmScls	wsSrpInvCa
	sku	Inventory Capping Parameters (SKU)	wsIcParmSku	wsSrpInvCa
SRP Maintenance	day_str_sku	SRP Exception Parameters (SKU/Store/Day)	MaintTpWrkSht	wsSrpExcSS
	sku	SRP Exception Parameters (SKU)	Worksheet11	wsSrpExcS
	str_sku	SRP Exception Parameters (SKU/Store)	MainParmWrkSht	wsSrpExcSS
	week_str_sku	SRP Exception Parameters (SKU/Store/Week)	Worksheet14	wsSrpExcSS
SRP Presentation Stock Calculations	day_str_sku	Store Presentation Stock Calculations (SKU/Store/Day)	wsSrpPrsStk	wsSrpPrsStk
USA Create Rule Based Index	str_sku	Rule Based Manual Index	usaRulManIdx	wsUsaCrtRE
USA Create Store Based Index	day_str_sku	Reference Measures	RefMeaSh	wsUsaCrtSB
	str_usa	Store Based Manual Index	manIdxSh	wsUsaCrtSB
	usa	Label and Description Change Information	Worksheet10	wsUsaCrtSB
USA Delete	day_splr_sku	Delete Supplier USA	usaDel_SplSh	wsUsaDelet
	day_str_sku	Delete USA	usaDel_strSh	wsUsaDelet
	day_wh_sku	Delete Warehouse USA	usaDel_WjhSh	wsUsaDelet
USA Allocation on Dynamic Rule Based Index	day_splr_sku	Supplier Level Information	Worksheet23	wsUsaDRBA
	day_str_sku	Store Level Information	Worksheet21	wsUsaDRBA
	day_wh_sku	Warehouse Level Information	Worksheet22	wsUsaDRBA
USA Replacement, Additive and Delivery Window	day_splr_sku	Supplier Level Information	SplrSh	wsUsaRADV
	day_str_sku	Store Level Information	Worksheet12	wsUsaRADV
	day_wh_sku	Warehouse Level Information	WhSh	wsUsaRADV
USA Allocation on Rule Based Index	day_splr_sku	Supplier Level Information	Worksheet20	wsUsaRBAC
	day_str_sku	Store Level Information	Worksheet18	wsUsaRBAC
	day_wh_sku	Warehouse Level Information	Worksheet19	wsUsaRBAC
USA Allocation on Store Based Index	day_splr_sku	Supplier Level Information	Worksheet17	wsUsaSBAC
	day_str_sku	Store Level Information	Worksheet15	wsUsaSBAC
	day_wh_sku	Warehouse Level Information	Worksheet16	wsUsaSBAC

Appendix: Using Sample Hierarchy and Data

This appendix provides information for using sample hierarchy and data for AIP.

Sample Data

In addition to the sample hierarchy, the AIP-rpas-installer.zip also provides sample data that can be used by the AIP batch process to populate the sample domain created in [Chapter 8, "Installing AIP RPAS - Full Version."](#) As mentioned in ["Extracting the Installer"](#), when the AIP-rpas-installer.zip is extracted, there is a file data.tar located in the folder [AIP_Installer]/aip/[platform]/env/AIP_INSTALL.

To extract the AIP sample data from data.tar, run the following command from \$AIP_INSTALL:

```
$ tar -xf data.tar
```

This command creates \$AIP_INSTALL/data folder which contains following sub-folders and data:

- External data (located in \$AIP_INSTALL/data/external)
- Forecast data (located in \$AIP_INSTALL/data/forecast)
- RMS Extracts data (located in \$AIP_INSTALL/data/rms_extracts)
- RMS Transforms data (located in \$AIP_INSTALL/data/rms_transforms)

RDF and External Sample Data

The Forecast and External data represent sample data coming from Oracle Retail Demand Forecasting (RDF) or from external source which are in AIP-ready format and which can be loaded directly into the domain using AIP batch process (as described in the Oracle Retail Advanced Inventory Planning Implementation Guide and the Oracle Retail Advanced Inventory Planning Operations Guide).

For detailed information on the format of these files, refer to the chapters, "RDF Integration" and "External System Integration" in the Oracle Retail Advanced Inventory Planning Implementation Guide.

RMS Sample Data

The other data folders, RMS Extracts and Transforms data represent sample data coming from RMS. The RMS Transforms data, similar to Forecast and External data, is also in AIP-ready format which can be loaded directly into the domain using AIP batch process without having to use RMS-AIP Transform Script.

Alternatively, the RMS Extracts data needs to be transformed by RMS-AIP Transform Script into the AIP format before it can be used by the AIP batch process. In order to use this data, clients need to run `aip_t_master_rms<RMS_version>.ksh` to reproduce the RMS Transforms data from the RMS Extracts data, and then use the output data from the RMS-AIP Transformation for AIP batch run.

For detailed information on the data format and transformation scripts, refer to the chapter, "RMS Integration and Data Mapping" in the Oracle Retail Advanced Inventory Planning Implementation Guide or the chapter, "AIP Interfaces and Transformation Scripts", in the Oracle Retail Advanced Inventory Planning Operations Guide.

Using Sample Data

In order to use these sample data with the domain created in [Chapter 8, "Installing AIP RPAS - Full Version,"](#) refer to these chapters from the Oracle Retail Advanced Inventory Planning Operations Guide:

- "AIP RPAS Batch Processing"
- "AIP RPAS Daily Batch Scripts"

For information on loading sample data into the sample domain and for practical use of the AIP batch, refer to these chapters from the Oracle Retail Advanced Inventory Planning Implementation Guide:

- "System Configuration"
- "First Day of AIP"

Note: In order for the AIP batch to properly generate the plans using the provided sample data set, the following data is needed:

- `RPAS_TODAY` is set to a date in 2014 (for example, 20140201)
- The replenishment method is set to user's desired value along with all supporting measures

For information about the replenishment's supporting measures, refer to either the Classic Client or Fusion Client version of the Oracle Retail Advanced Inventory Planning Store and Warehouse Replenishment Planning User Guide.

Appendix: Installation Order

This section provides a guideline for the order in which the Oracle Retail applications should be installed. If a retailer has chosen to use only some 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)
2. Oracle Retail Sales Audit (ReSA)
3. Oracle Retail Extract, Transform, Load (RETL)
4. Oracle Retail Active Retail Intelligence (ARI)
5. Oracle Retail Warehouse Management System (RWMS)
6. Oracle Retail Invoice Matching (ReIM)
7. Oracle Retail Price Management (RPM)
8. Oracle Retail Allocation
9. Oracle Retail Mobile Merchandising (ORMM)
10. Oracle Retail Xstore Office
11. Oracle Retail Xstore Point-of-Service, including Xstore Point-of-Service for Grocery, and including Xstore Mobile
12. Oracle Retail Xstore Environment
13. Oracle Retail EFTLink
14. Oracle Retail Store Inventory Management (SIM), including Mobile SIM
15. Oracle Retail Predictive Application Server (RPAS)
16. Oracle Retail Batch Script Architecture (BSA)
17. Oracle Retail Demand Forecasting (RDF)
18. Oracle Retail Category Management Planning and Optimization/Macro Space Optimization (CMPO/MSO)
19. Oracle Retail Replenishment Optimization (RO)

20. Oracle Retail Analytic Parameter Calculator Replenishment Optimization (APC RO)
21. Oracle Retail Regular Price Optimization (RPO)
22. Oracle Retail Merchandise Financial Planning (MFP)
23. Oracle Retail Size Profile Optimization (SPO)
24. Oracle Retail Assortment Planning (AP)
25. Oracle Retail Item Planning (IP)
26. Oracle Retail Item Planning Configured for COE (IP COE)
27. Oracle Retail Advanced Inventory Planning (AIP)
28. Oracle Retail Integration Bus (RIB)
29. Oracle Retail Services Backbone (RSB)
30. Oracle Retail Financial Integration (ORFI)
31. Oracle Retail Data Extractor for Merchandising (ORFI)
32. Oracle Retail Clearance Optimization Engine (COE)
33. Oracle Retail Analytic Parameter Calculator for Regular Price Optimization (APC-RPO)
34. Oracle Retail Insights, including Retail Merchandising Insights (previously Retail Merchandising Analytics) and Retail Customer Insights (previously Retail Customer Analytics)