

Oracle® Retail Advanced Inventory Planning
Installation Guide
Release 13.1.1

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Preface

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

Audience

This Installation Guide is written for the following audiences:

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

Related Documents

For more information, see the following documents in the Oracle Retail Advanced Inventory Planning Release 13.1.1 documentation set:

- *Oracle Retail Advanced Inventory Planning Release Notes*
- *Oracle Retail Advanced Inventory Planning Data Management Online - Online Help*
- *Oracle Retail Advanced Inventory Planning Data Management Online User Guide*
- *Oracle Retail Advanced Inventory Planning Order Management - Online Help*
- *Oracle Retail Advanced Inventory Planning Order 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 Operations Guide*
- *Oracle Retail Advanced Inventory Planning Implementation Guide*
- *Oracle Retail Advanced Inventory Planning Administration Guide*
- *Oracle Retail Advanced Inventory Planning Warehouse Replenishment Planning User Guide*
- *Oracle Retail Advanced Inventory Planning Store Replenishment Planning User Guide*

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:
<https://metalink.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

If you are installing the application for the first time, you install either a base release (for example, 13.0) or a later patch release (for example, 13.0.2). 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.

Oracle Retail Documentation on the Oracle Technology Network

In addition to being packaged with each product release (on the base or patch level), all Oracle Retail documentation is available on the following Web site (with the exception of the Data Model which is only available with the release packaged code):

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

Documentation should be available on this Web site within a month after a product release. Note that documentation is always available with the packaged code on the release date.

Conventions

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

Note: This is a note. It is used to call out information that is important, but not necessarily part of the procedure.

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

A hyperlink appears like this.

Introduction

About the AIP Installation Process

This document provides the installation instructions for Advanced Inventory Planning™ (AIP) version 13.1.1.

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.

Note: AIP can be upgraded from release 13.0.2 to release 13.1.1. For information on this upgrade, see the Oracle Retail Upgrade Guide (Doc ID 837368.1) at My Oracle Support (formerly MetaLink).

The Oracle Retail Upgrade Guide describes the approach that this Oracle Retail application takes for the upgrading process, as well as this product's upgrade assumptions and considerations.

About This Document

This document provides detailed instructions for how to install an AIP 13.1.1 solution. The AIP installation consists of the following components:

- The Oracle® Retail Predictive Applications Server (RPAS) version 13.0.4 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 13.1.1 solution appear in the following chapters of this document.

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

Please 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 Online 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.

Preparing for Installation

Package Contents

A complete AIP 13.1.1 solution is delivered in the files listed below, which can be obtained from <http://edelivery.oracle.com>:

- AIP 13.1.1 Media Pack
1. Download the files and unpack the **AIP Media Pack**. The media pack contains an AIP-13.1.1-install zip file in the CDROM folder, which contains the following files when extracted:
 - AIP-13.1.1-rpas-installer.zip
 - AIP-online-appserver-installer.zip – Requires RIB 13.1.1 on Oracle Application Server 10.1.3.4
 - AIP-online-dbserver -installer.zip – Requires RIB 13.1.1 on Oracle Application Server 10.1.3.4.
 2. Verify that all files listed above appear in the AIP Media Pack.

Installation Setup

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.

- AIP-13.1.1-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)

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

- AIP-online-appserver -installer.zip – This ZIP file contains the AIP 13.1.1 Online EAR file and binary license file for AIP Online. Inside this file is the AIP-online-integration.zip, which contains the AIP 13.1.1 Online integration files to exchange information between AIP Online, RPAS, and RMS (or an external system).
- AIP-online-dbserver -installer.zip – This ZIP file contains the AIP 13.1.1 Online Oracle schema database files.

Compatibility and Hardware Requirements

Supported Oracle Retail Products

This version of AIP is compatible with the following Oracle Retail products:

- Oracle Retail Merchandising System (RMS) 13.1.1
- Oracle Retail Integration Bus (RIB) 13.1.1
- Oracle Retail Predictive Application Server (RPAS) 13.0.4
- Oracle Retail Extract Transform and Load (RETL) 13.1
- Oracle Retail Replenishment Optimization 13.0.4

Server Operating Systems

This version of AIP is compatible with the following server operating systems:

- Sun Solaris 10
- AIX 5.3, 6.1
- For AIP-Oracle: HP –UX 11.31 (Integrity); For AIP-RPAS: HP-UX 11.23
- OEL 5 (AIP-Oracle), OEL 4.5 (AIP-RPAS)

Server JRE

General requirements for the server Java Run Time Environment (JRE) are as follows:

- JRE 1.5 – Required for OAS 10.1.3.4.

Note: Clients using AIX must use the IBM JRE version 1.5 SR7 or newer.

- JRE 1.6 – Required for use with RPAS and RETL

Database

This version of AIP is compatible with the following database:

- Oracle 11g Enterprise Edition Release 1 (version 11.1.0.7.0) in clustered topology.
- Oracle 11g Enterprise Edition Release 1 (version 11.1.0.7.0) in standalone configuration.

JDBC drivers

- This release requires OCI (thick) driver for use in RETL 13.1.

Application Server

General requirements for an application server capable of running the AIP Online application include:

- Oracle Application Server (version 10.1.3.4) in standalone (non clustered) configuration only.

Note: In this release, AIP is not certified on clustered Oracle Application Server. However it is certified on clustered Oracle Database.

Client PC and Web Browser Requirements

Client PC Requirements

The client PC requirements are as follows:

- Windows XP operating system
- 1024x768 or higher display resolution
- 1GHz or higher processor
- 256 MB or higher memory
- Intranet network connectivity with at least 10Mbps data rate

Client Browser Requirements

The client browser requirements are as follows:

- Microsoft Internet Explorer 5.5 or higher

General requirements for the client Java Run Time Environment (JRE) are as follows:

- JRE 1.5.0_19

Installing the AIP Online Database Server Components

Creating a UNIX User Account for Oracle and Retek

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

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

Note: The oracle account is used to create the Oracle 10g database. The rettek account is the owner of the AIP Online files that reside on the UNIX server.

Creating a Staging Directory for AIP Online Database Files

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

1. Log on to the UNIX server as the newly created `rettek` user and determine where the AIP Online database files will be installed. There should be a minimum of 1MB disk space available for the database installation files.
2. Copy the `AIP-online-dbserver.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 11g Database

If Oracle 11g is already installed then skip this section. Perform the following procedure to create the Oracle 11g database:

1. Install Oracle 11g Release 1 (version 11.1.0.7.0) with the Oracle UNIX account. Oracle 11g can be installed either in clustered topology or as standalone database..
2. Create a 11g 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: Sample Database Scripts 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 Online schema.

3. Create the retek_data tablespace and the retek_index tablespace.
Refer to Appendix: Sample Database Scripts in this document for sample tablespace creation script. The size of these tablespaces will vary from client to client. For the initial installation, minimum tablespaces of 500MB are recommended.

Creating AIP Online Schema Owner

A script called create_user.sql in <DBINSTALL_DIR>/AIPOnlineDBServer131/aip13/utility can be used to create the schema owner. This script will prompt you for schema owner name, password, and a temporary tablespace. This script should be run as sys.

1. Create the Oracle db user that will be used for the AIP Online application.
Log on to sqlplus as the user "sys" and enter the following commands, replacing the text brackets < > with appropriate names.

```
SQL> create user <AIP Online Schema Owner> identified by <password> default tablespace retek_data temporary tablespace <temporary tablespace name>;
```
2. Log on to sqlplus as the user "sys" and grant the Oracle user <AIP Online Schema Owner>, which serves as the owner of the database objects, the following permissions:

```
SQL> grant connect, resource, create view to <AIP Online Schema Owner>;  
SQL> alter user <AIP Online Schema Owner> quota unlimited on retek_data;  
SQL> alter user <AIP Online Schema Owner> quota unlimited on retek_index;
```

Preparing Your Server for Installation

Before you run the AIP Online 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.
Example: NLS_LANG=AMERICAN_AMERICA.UTF8; export NLS_LANG
- The JAVA_HOME variable will be set by the installer based on the ORACLE_HOME that you have defined. In the event that it doesn't, please make sure that your JAVA_HOME is set to 1.6 or above.
- 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 XTEST 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 Exceed:

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

where ipaddress is machine rendering the graphics

Running the AIP Online Database Schema Installer

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

1. Change directories (cd) to the <DBINSTALL_DIR>/AIPOnlineDBServer131 directory.
2. Run the install.sh script, as shown below, 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 appears. If you are running in console mode through a terminal emulator, the text interface to the Installer appears.

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:

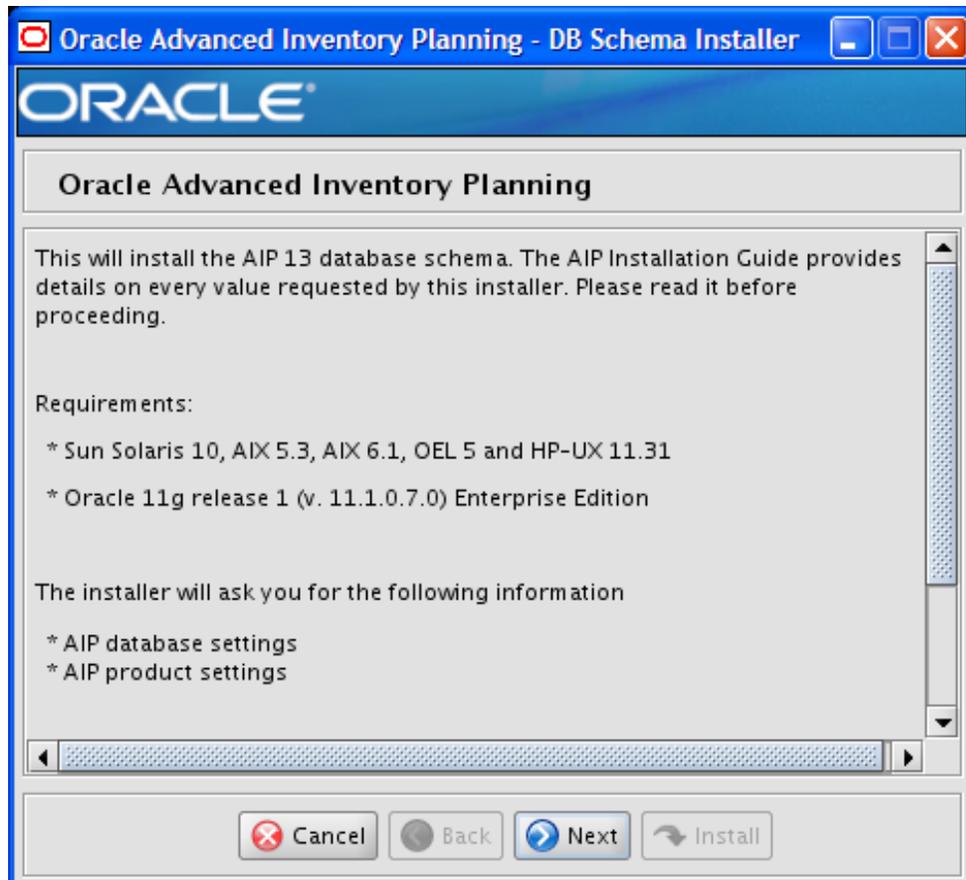
```
export DISPLAY=<ipaddress>:0
```

In both cases, the requested information is identical. In the GUI, you may be shown a checkbox to signal whether you want a component installed; in text mode, you will be 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, simply hit the Enter key. If you wish to use a different value, enter the new value. When prompted to create a directory, respond with "y" or "yes" and press the Enter key.

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

The Oracle Advanced Inventory Planning – DB Schema Installer screen appears and displays the components that will be installed during installation process, as well as the required components.



Oracle Advanced Inventory Planning – DB Schema Installer Screen

3. Click **Next** to continue. The Data Source Details screen appears.

Oracle Advanced Inventory Planning - DB Schema Installer

ORACLE

Data Source Details

Please provide information on a pre-existing database user for this AIP installation. The installer will authenticate as this user and create the AIP database objects.

AIP Schema Owner

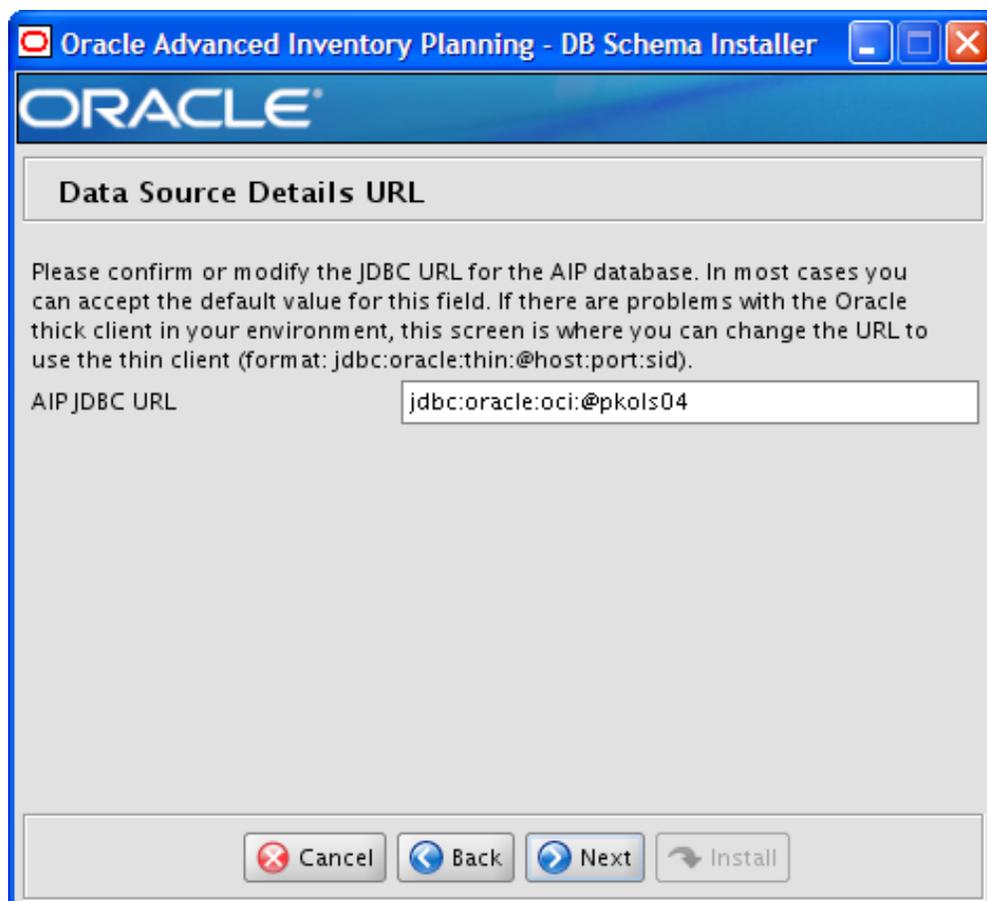
AIP Schema Password

AIP Oracle SID

Data Source Details Screen

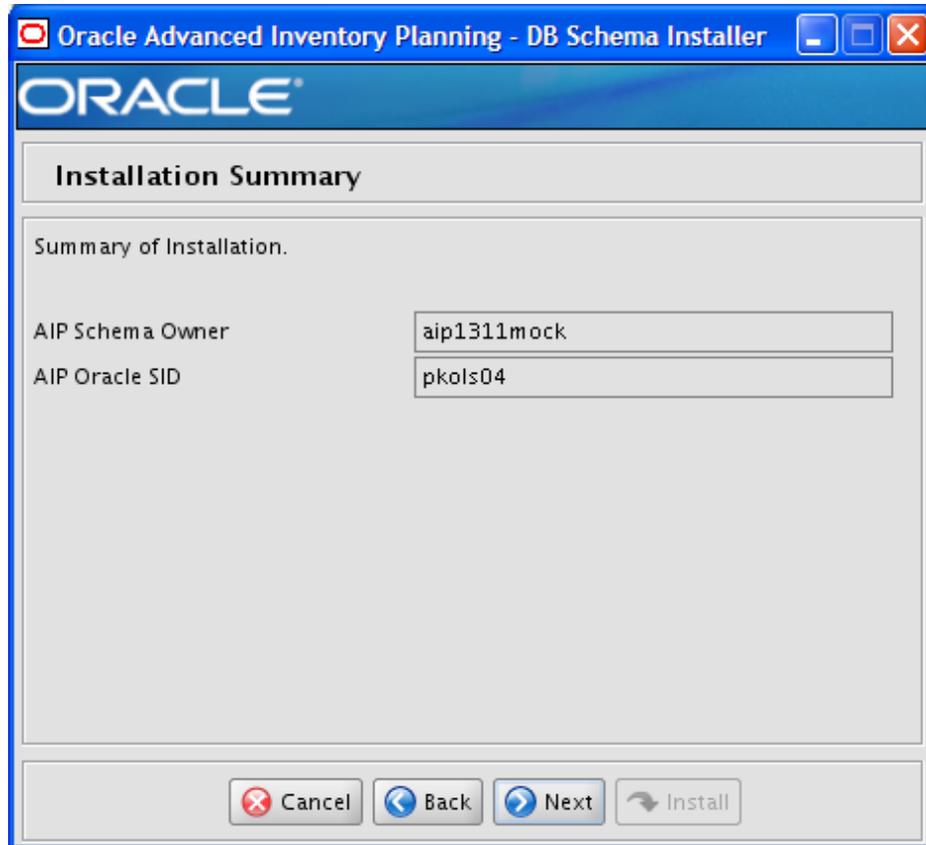
4. Enter the following information and click **Next**:
 - **AIP Schema Owner** – Enter the AIP Schema owner’s name.
 - **AIP Schema Password** – Enter the AIP Schema Owner’s password.
 - **AIP Oracle SID** – Enter the name of the database where the AIP schema will be installed.

The Data Source Details URL screen appears. The default setting is thick client.



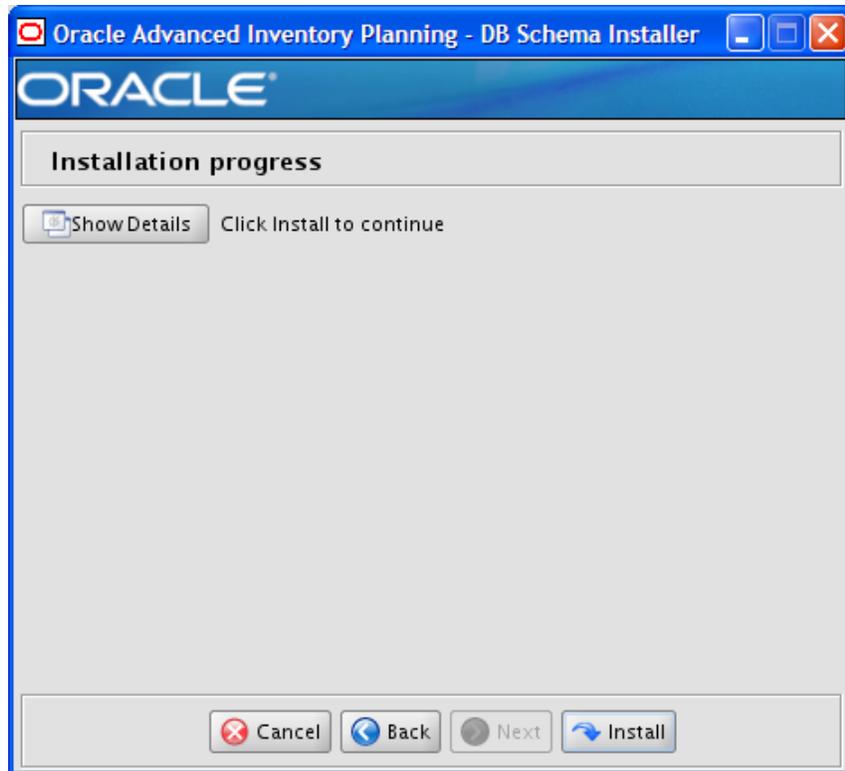
Data Source Details URL Screen

5. Enter the **AIP JDBC URL** and click **Next**. This is the URL that will be used by AIP to access the database. The expected format for the field appears on screen.
The Installation Summary screen appears.
6. Click **Next**. The database connection is validated using the information provided.
The Installation Summary screen appears.



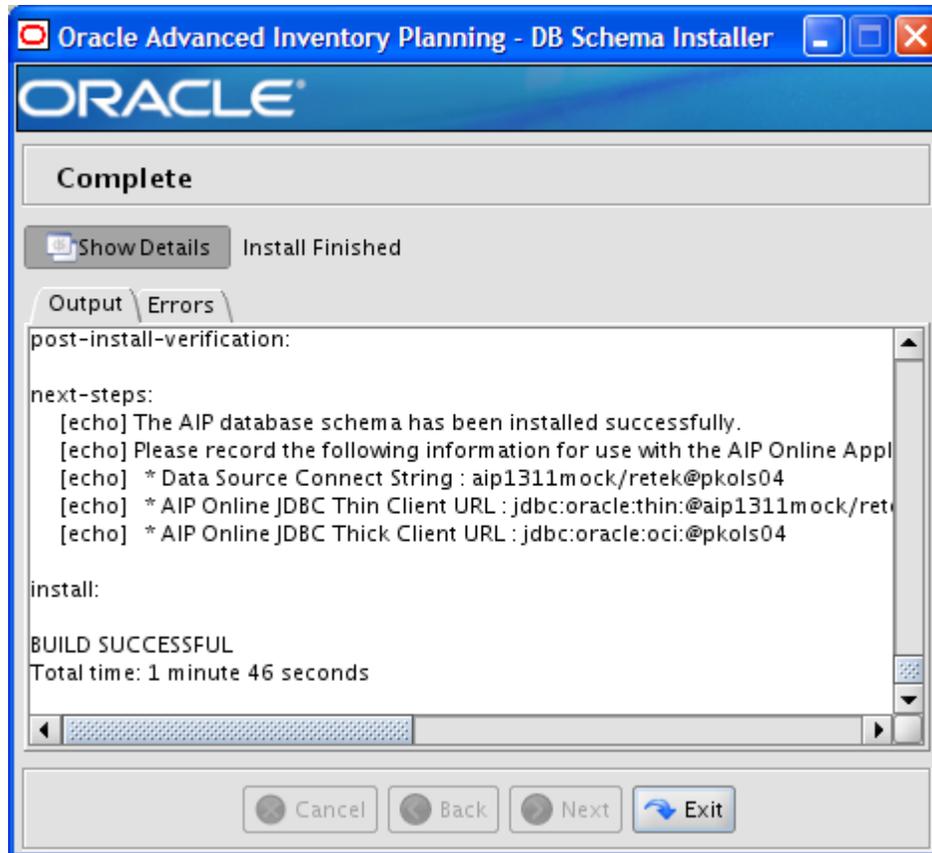
Installation Summary Screen

7. Click **Next** to continue. The Installation Progress screen appears.



Installation Progress Screen

8. Once you are ready to begin the installation, click **Install**.
This screen displays the progress of the installation routine. Select **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.
When the installation has finished, the Complete screen appears.



Complete Screen

9. Click **OK** to close the dialog box.
10. To view the installation details, select the **Show Details** button. The screen 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.
 When 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.
 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 screens, including passwords. As a security precaution, make sure that the file has restrictive permissions as shown in the example below.
Example: `chmod 600 ant.install.properties`
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 Installation

If the database schema installer encounters any errors, it will print to the screen which SQL script it was running when the error occurred. It will also write 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" of this document for instructions on silent mode.

Refer to "Troubleshooting" of this document for a list of common installation errors.

Subsequent executions of the Installer will skip 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.

Installing AIPOnlineApp on OAS 10.1.3.4

This chapter contains the typical steps for installing the AIP Online application to your Oracle Application Server (OAS).

Before proceeding, you must install Oracle Application Server 10g 10.1.3.4, plus any patches listed in the Chapter 1 of this document. AIP Online will be deployed to an OC4J instance within the Oracle Application Server 10g installation. It is assumed that Oracle RDBMS 11g has already been configured and loaded with the appropriate AIP Online schema for your installation.

Creating a New OC4J Instance for AIP Online

Perform the procedure below to create a new OC4J instance for the AIP Online installation.

Note: If you are deploying to an existing OC4J instance, you can skip this step since your environment is already prepared for installing AIP Online.

1. Log in to the server which is running your OracleAS 10g installation. Set your ORACLE_HOME environment variable to point to this installation.
2. Choose a name for the new OC4J instance.

Example: aiponline_oc4j

3. Create this OC4J instance as documented in the *Oracle Application Server Administrator's Guide*.

Sample Syntax:

```
$ORACLE_HOME/bin/createinstance -instanceName aiponline_oc4j
```

4. When prompted for the oc4jadmin password, provide the same administrative password you used for the Oracle Application Server installation. All OC4J instances running Oracle Retail applications must have the same oc4jadmin password.
5. Start the OC4J instance. You can do this through the Enterprise Manager Web interface, or on the command line using the `opmnctl` utility using the sample syntax shown below.

Sample Syntax:

```
$ORACLE_HOME/opmn/bin/opmnctl startproc process-type=aiponline_oc4j
```

6. Verify that the OC4J instance was fully started. If you are using the Enterprise Manager Web interface, the instance should have a green arrow indicating that it is running. If you are using the command line, verify that the instance has a status of "Alive" as shown in the example below.

Sample Syntax:

```
$ORACLE_HOME/opmn/bin/opmnctl status
```

Note: If you are unable to start the OC4J instance after several attempts, try increasing the startup timeouts in ORACLE_HOME/opmn/conf/opmn.xml. If that does not help, consult the Oracle Application Server documentation for further assistance.

Preparing Your Server for Installation

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

- Log in to the UNIX server as the user who owns the OracleAS 10g installation. Create a new staging directory for the AIP Online application distribution (AIP-online-appserver-installer.zip).
Example: `$ORACLE_HOME/j2ee/aiponline_oc4j/aiponline_staging`
This location will be referred to as `<INSTALL_DIR>` for the remainder of this chapter.
- Make sure there is a minimum of 500 MB disk space available for the application installation files.
- Copy AIP-online-appserver-installer.zip to `<INSTALL_DIR>` and extract its contents.
- If you are going to run the Installer in GUI mode using an X server, which is the recommended installation method, you need to have the XTEST extension enabled. This setting is not always enabled by default in your X server. Verify the extension is enabled.
- Set the `ORACLE_HOME` and `JAVA_HOME` environment variables. `ORACLE_HOME` should point to your Oracle Application Server 10g installation. `JAVA_HOME` should point to `$ORACLE_HOME/jdk`. The AIP Application Installer should set the `JAVA_HOME` variable during the installation process.

Running the AIP Online Application Installer

Once you have an OC4J instance that is started, you can run the AIP Online application installer. This installer will configure and deploy the AIP Online application and AIP Online Integration files.

1. Extract AIP-online-appserver-installer.zip to `<INSTALL_DIR>` directory.
2. Change directories (`cd`) to the `<INSTALL_DIR>/AIPOnlineAppServer131` directory.
3. Run the `install.sh` script, as shown below, 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 `aip131install--app.<timestamp>.log` where `<timestamp>` represents the date and time the installation was performed. This file is located in the `<INSTALL_DIR>/AIPOnlineAppServer131` directory.

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

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:

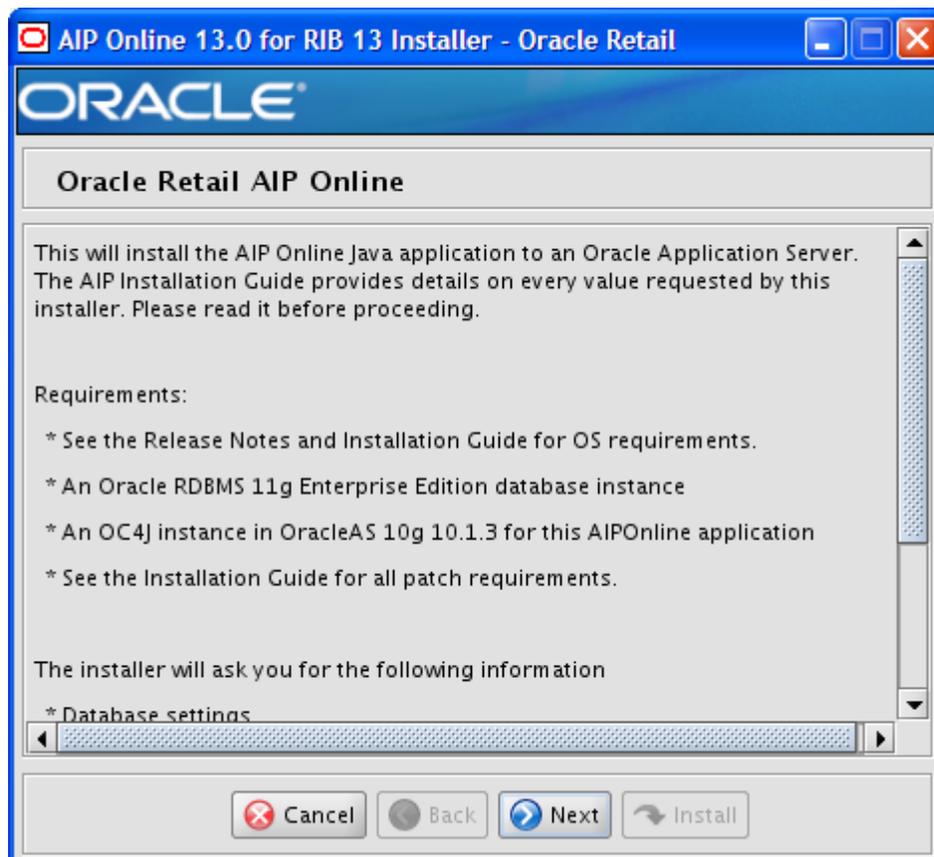
```
export DISPLAY=<ipaddress>:0
```

In both cases, the requested information is identical. In the GUI, you may be shown a checkbox to signal whether you want a component installed; in text mode, you will be 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, simply hit the Enter key. If you wish to use a different value, enter the new value. When prompted to create a directory, respond with "y" or "yes" and press the Enter key.

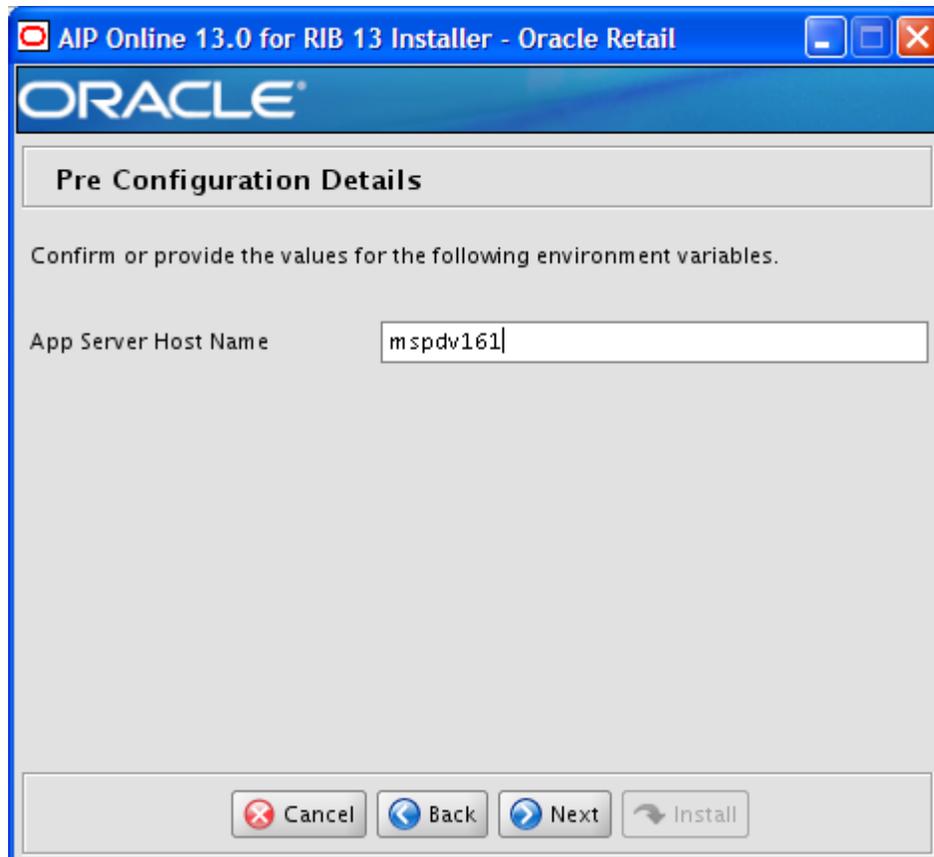
Password fields will appear masked, but the previous and default values will appear in plain text when running in the text mode.

The AIP Online Installer screen appears and displays the components that will be installed during installation process, as well as the required components.



AIP Online Installer Screen

4. Click **Next** to continue. The Pre Configuration Details screen appears.



Pre Configuration Details Screen

5. Enter the application server name where AIP Online is being deployed and click **Next**. The Data Source Details screen appears.

AIP Online 13.0 for RIB 13 Installer - Oracle Retail

ORACLE

Data Source Details

Provide the details for the AIPOnline data source. The following pages will determine how the datasource URL will be constructed.

AIP database host

AIP database port

AIP SID

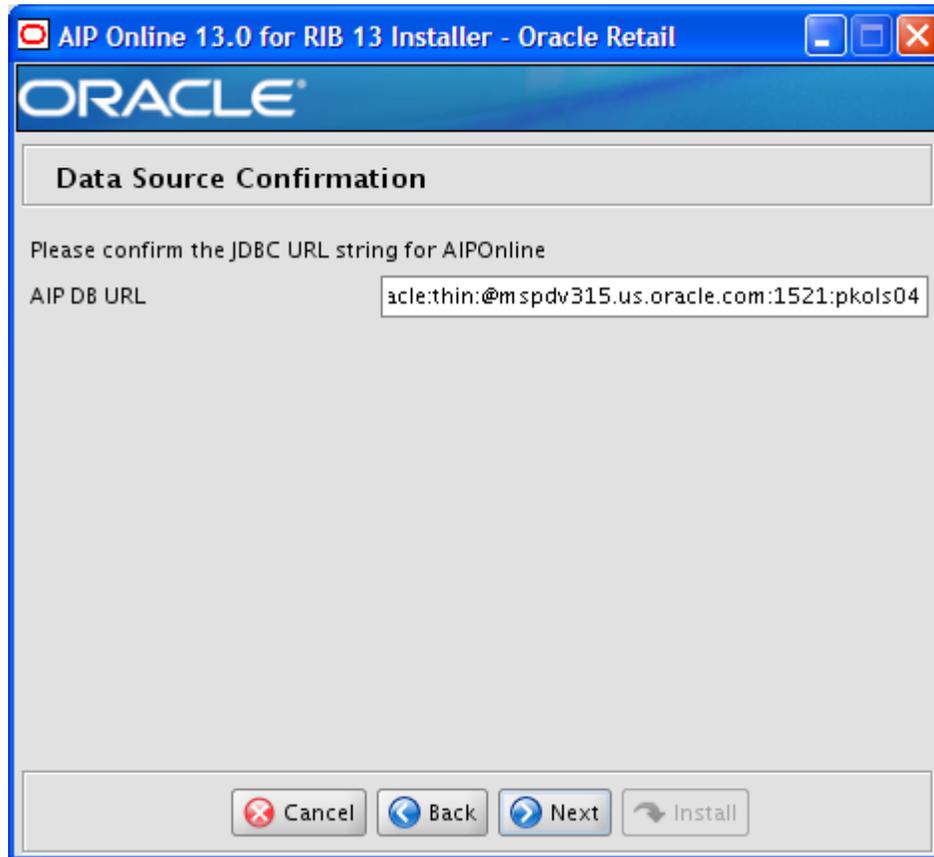
Please enter the AIP schema name and password. Please note that the schema user must have the correct access rights to the schema. Please refer to the Installation guide for schema user creation guidelines.

AIP DB Schema User

AIP DB Schema Password

Data Source Details Screen

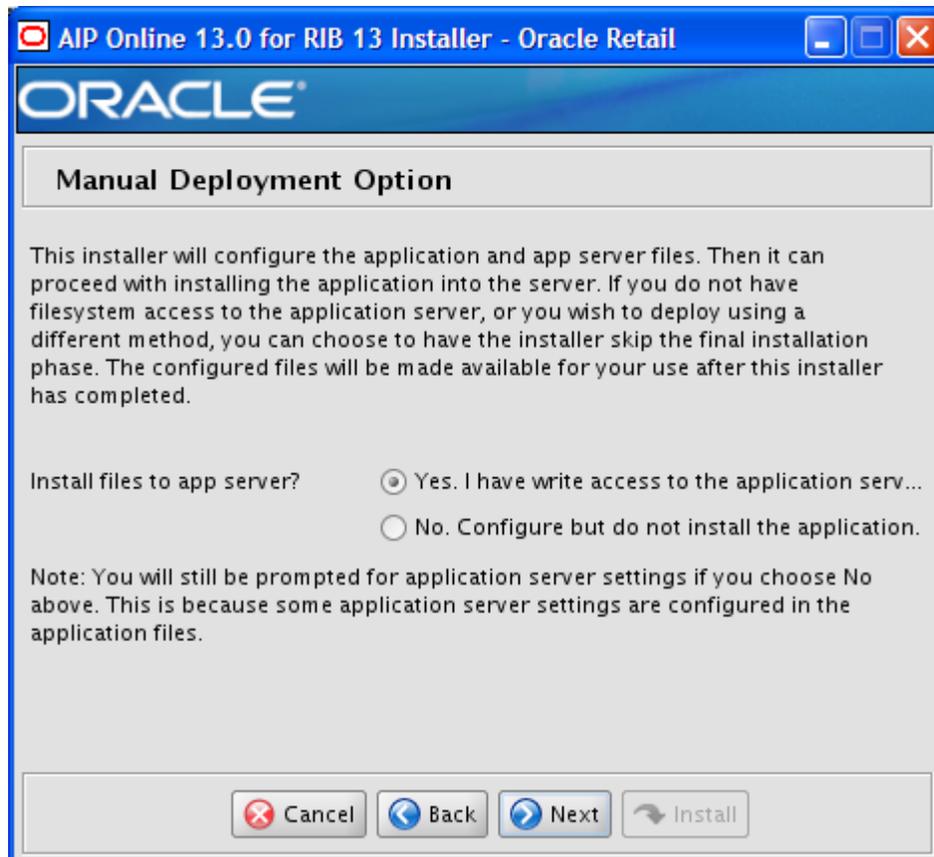
6. Enter the following information and click **Next**:
 - **AIP database host** – Enter the AIP database host name.
 - **AIP database port** – Enter the port number on which the database listens.
 - **AIP SID** – Enter the AIP Online database SID.
 - **AIP DB Schema User** – Enter the AIP database schema user name.
 - **AIP DB Schema Password** – Enter the AIP database schema password.The Data Source Confirmation screen appears.



Example of Data Source Confirmation Screen

The AIP JDBC URL string that appears is defined by the information you have entered. This URL is used by the AIP Online application to access the AIP database schema.

7. Verify the AIP JDBC URL string is correct and click **Next**. The Manual Deployment Options screen appears.



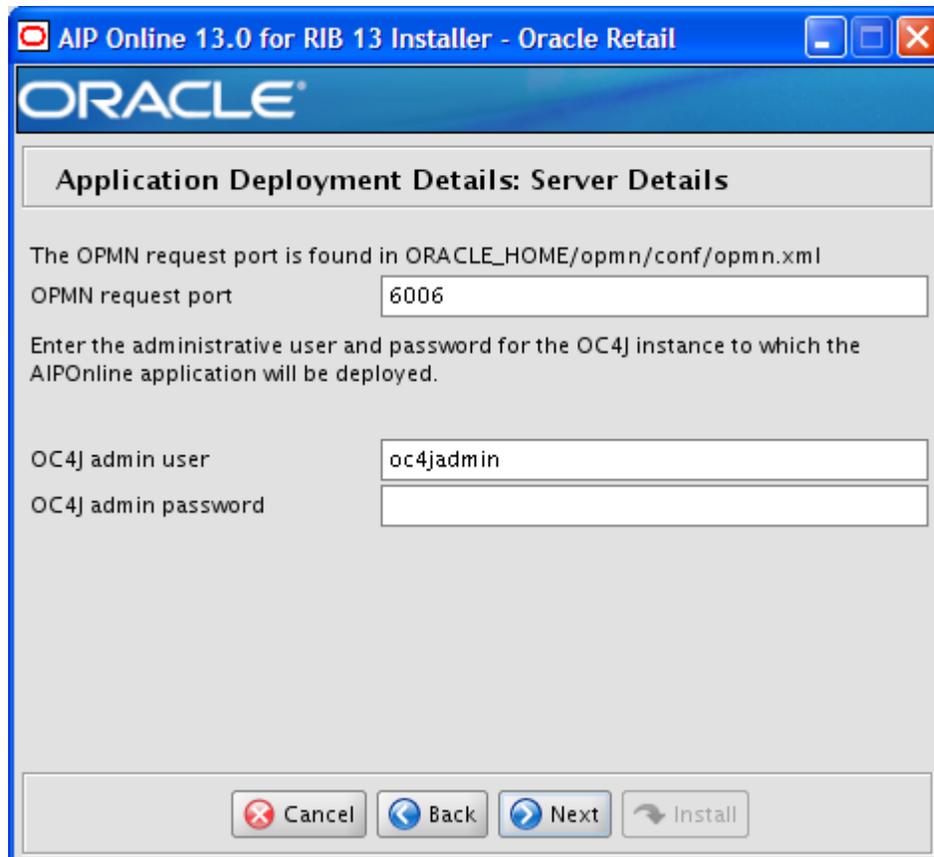
Manual Deployment Option Screen

8. Select the appropriate option and click **Next**.

If you have write access to the application server, select **Yes**. The Installer will install the necessary files to the ORACLE_HOME folder.

If you are running the AIP Online Installer as user who does not have write permissions to the filesystem under the ORACLE_HOME, select **No**. The Installer will perform all the necessary configuration changes within the staging directory, but it will not install any files to the ORACLE_HOME. If you select **No**, you will need to manually complete the installation process. Even if you select **No**, you will still need to complete the subsequent Installer screens.

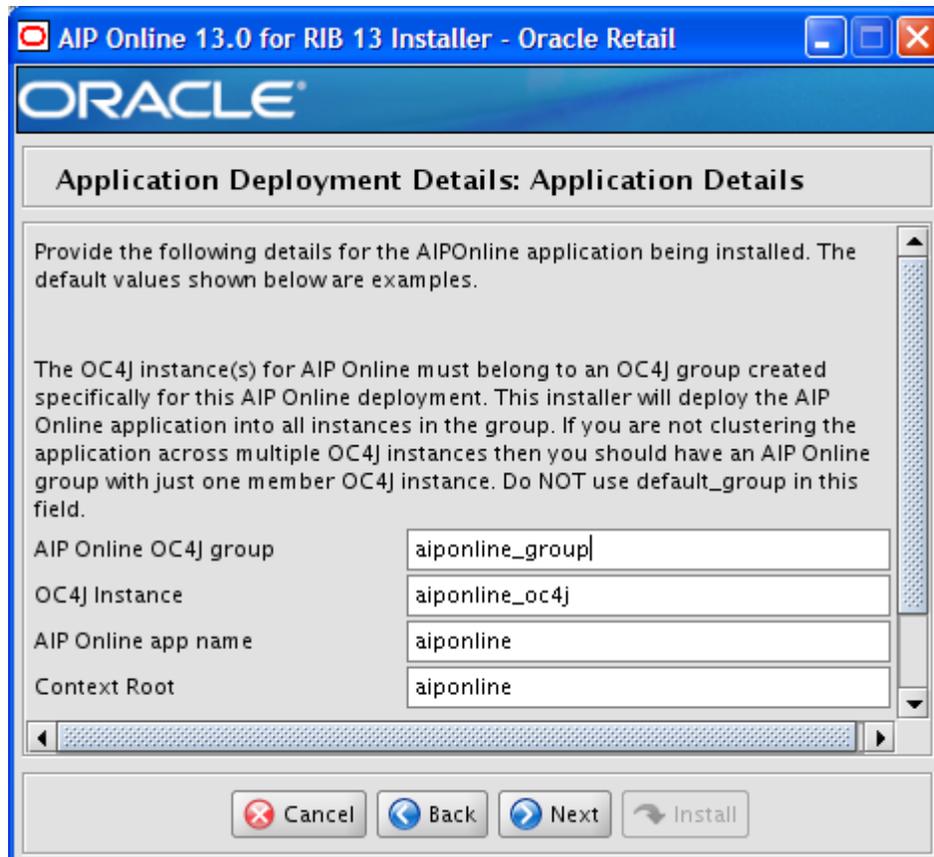
The Application Deployment Details: Server Details screen appears.



Example of Application Deployment Details: Server Details Screen

9. Enter the following information and click **Next**:
 - **OPMN Request Port** – Enter the OPMN request port found in \$ORACLE_HOME/opmn/conf/opmn.xml file.
Example of Port Definitions in opmn.xml File:
`<port local="6100" remote="6200" request="6003">`
 - **OC4J Admin User** – Enter the OC4J admin user name.
 - **OC4J Admin Password** – Enter the OC4J admin user password.

The Application Deployment Details: Application Details screen appears.

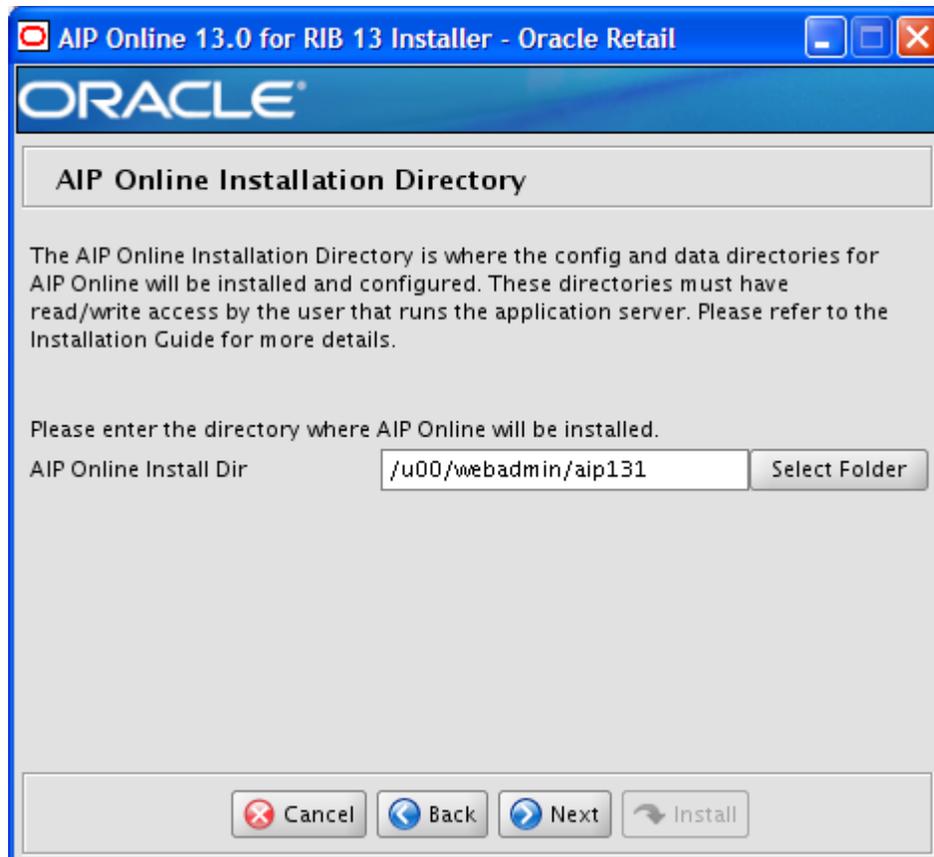


Application Deployment Details: Application Details Screen

10. Enter the following information and click **Next**:

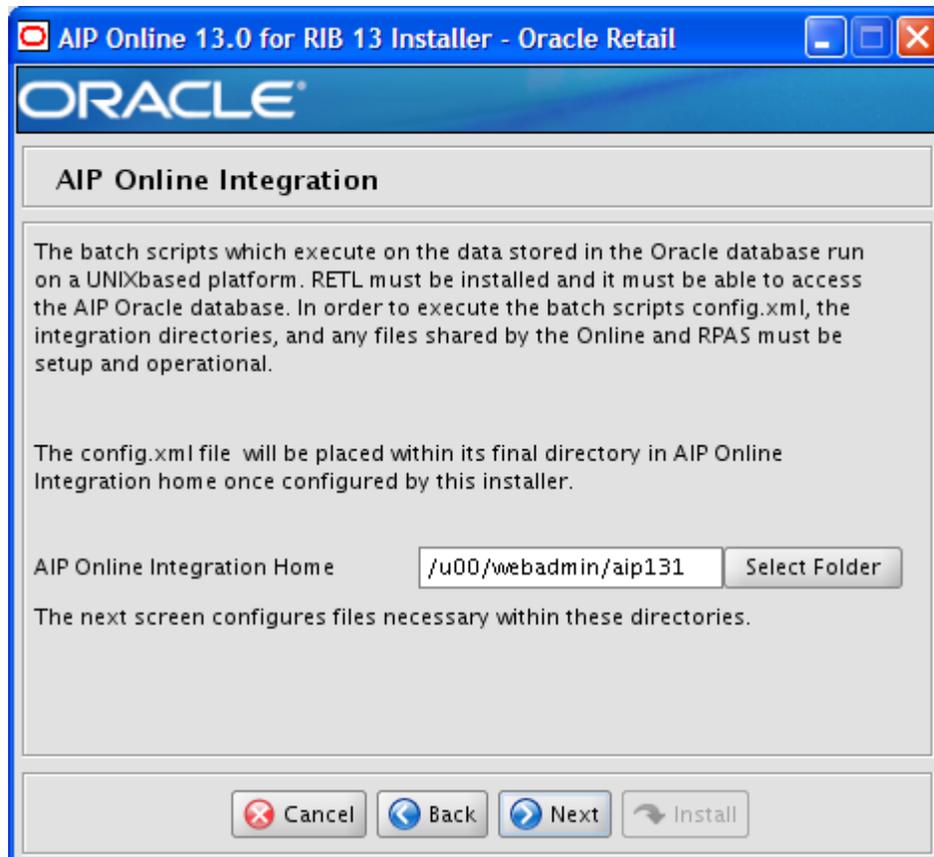
- **AIP Online OC4J Group** – Enter the group name of the OC4J instance where AIP Online application will be deployed.
- **OC4J Instance** – Enter the name of the OC4J instance where AIP Online application will be deployed.
- **AIP Online App Name** – Enter the name that will be used by the application server to identify the AIP Online application.
- **Context Root** – Enter the context root that the application will be using. For example, `http://myhost:7777/aiponline` where `aiponline` represents the context root required for this field.
- **HTTP Port** – Enter the HTTP port found in the application URL. For example, `http://myhost:7777/aiponline` where `7777` represents the HTTP Port required for this field.

The AIP Online Installation Directory screen appears.



AIP Online Installation Directory Screen

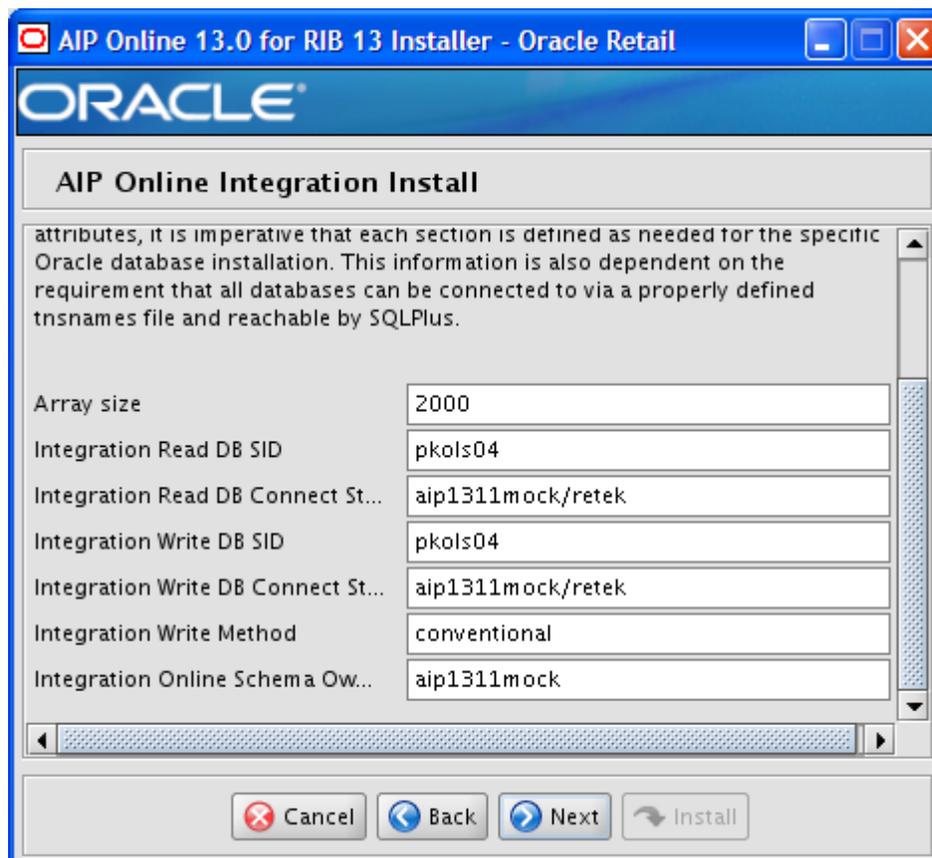
11. Enter the directory where AIP Online will be installed and click **Next**. The AIP Online Integration screen appears.



AIP Online Integration Screen

12. Enter the directory where AIP Online Integration components will be installed and click **Next**. The AIP online Integration Home field defaults to AIPONLINE_DIR.

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. The AIP Online Integration Install screen appears.



Example of AIP Integration Install Screen

Note: If there is an existing directory in the location specified, the installer will make a backup of the existing directory, appending the current timestamp to the name of the directory. This backup is non-essential to functionality, and may be moved to another location for archival or space management purposes.

The RETL interface process, which runs from a UNIX-based platform, is designed to be fully automated once configured. In addition to the environment variables display on the screen, config.xml is required when invoking the RETL scripts. This file should be located in the root integration directory on the UNIX server where the AIP Online application is installed.

This configuration file (config.xml) contains the database connection information required by RETL when performing import and export operations. Refer to the RETL documentation for detailed descriptions of element definitions.

There are two operator sections that need to be completed:

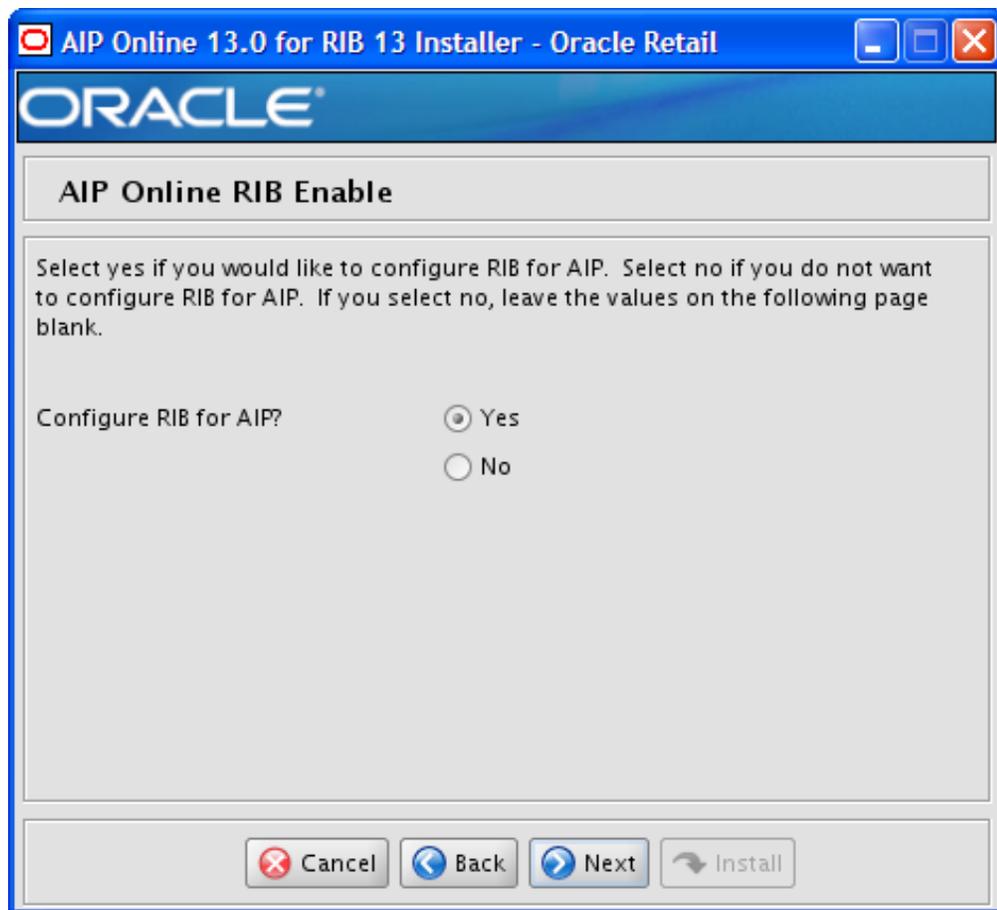
- **oraread** – The oraread section defines the properties required for all export operations on the database.
- **orawrite** – The orawrite section defines these for all import operations.

Though both sections contain similar attributes, it is imperative that each section is defined as needed for the specific Oracle database installation. This information is also dependent on the following requirements

- All databases can be connected to using a properly defined tnsnames file.
 - All databases are reachable by SQLPlus.
13. Enter the following information in the AIP Integration Install screen and click **Next** to continue:
- **Array Size**
 - **Integration Read DB SID**
 - **Integration Read DB Connect String**
 - **Integration Write DB SID**
 - **Integration Write DB Connect String**
 - **Integration Write Method**
 - **Integration Online Schema Owner**

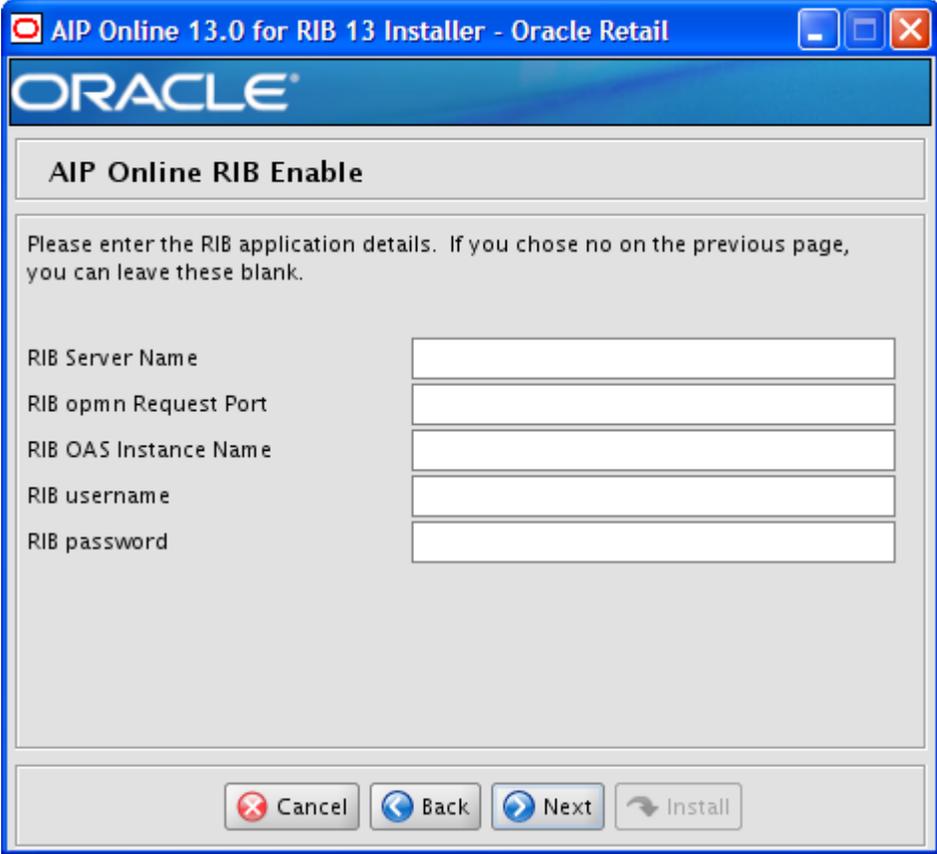
Please refer to the *AIP Online Implementation Guide* as well as the *RETL 13.0 Installation Guide* for further details on the AIP Integration fields.

The AIP Online RIB enable screen appears.



Enable RIB for AIP Screen

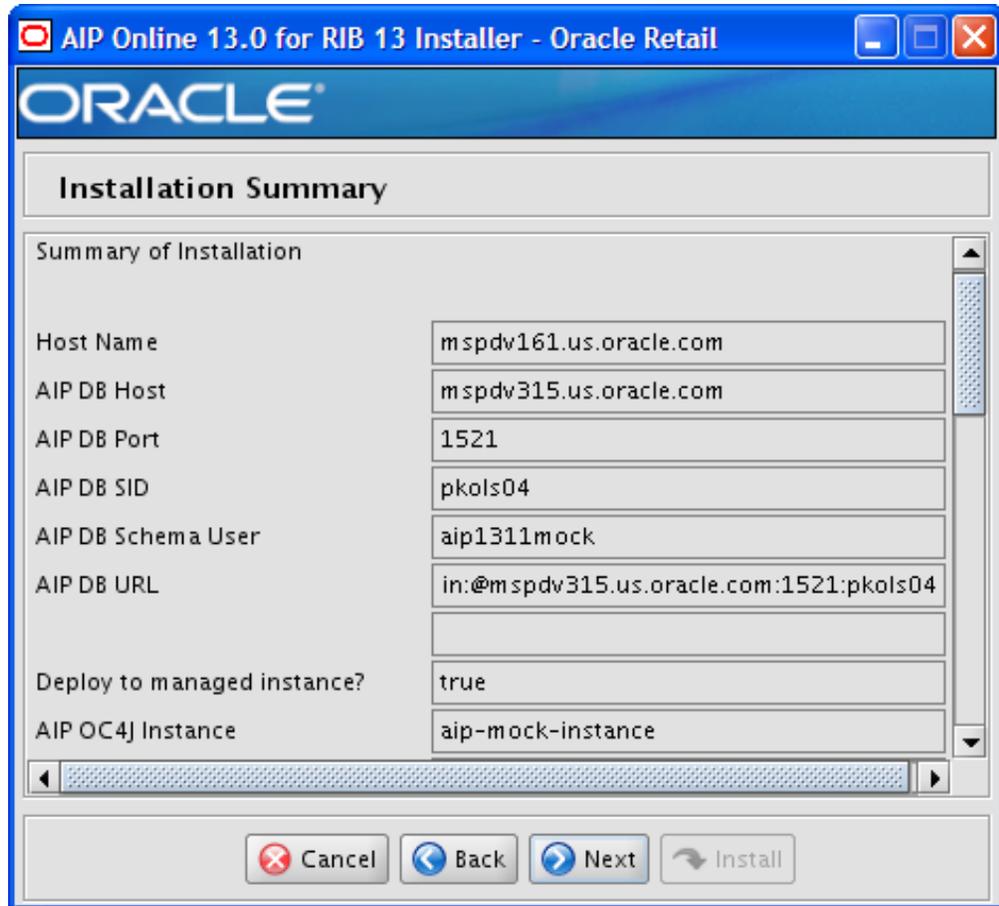
14. Indicate whether or not you would like to configure RIB for AIP at this point in time. If you do not, please refer to the Operations Guide in manually configuring RIB for AIP.



The screenshot shows a Windows-style dialog box titled "AIP Online 13.0 for RIB 13 Installer - Oracle Retail". The dialog has a blue header with the Oracle logo. Below the header, the title "AIP Online RIB Enable" is displayed. The main area contains the text: "Please enter the RIB application details. If you chose no on the previous page, you can leave these blank." Below this text are five input fields, each with a label to its left: "RIB Server Name", "RIB opmn Request Port", "RIB OAS Instance Name", "RIB username", and "RIB password". At the bottom of the dialog, there are four buttons: "Cancel" (with a red X icon), "Back" (with a left arrow icon), "Next" (with a right arrow icon), and "Install" (with a circular arrow icon).

15. Enter the following information and click **Next**:
- **RIB Server Name** – The server name where RIB for AIP is installed.
 - **RIB OPMN Request Port** – the OPMN request port where RIB for AIP is installed.
 - **RIB OAS Instance Name** – The name of the OC4J instance on the OAS server where RIB for AIP is installed.
 - **RIB Username** – Enter the OC4J admin user name for the RIB instance where RIB for AIP is installed.
 - **RIB Password** – Enter the OC4J admin user password for the RIB instance where RIB for AIP is installed.

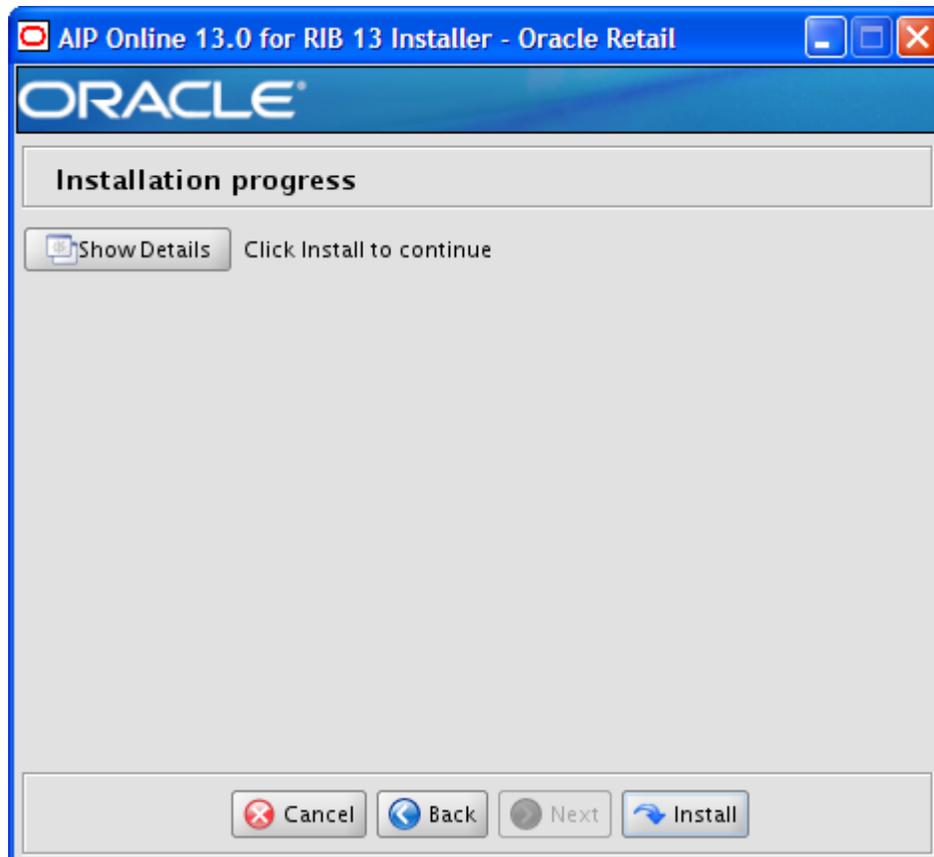
The installation summary screen appears



Installation Summary Screen

16. Verify the values in installation summary screen. If everything looks OK, click Next.

The Installation Progress screen appears.



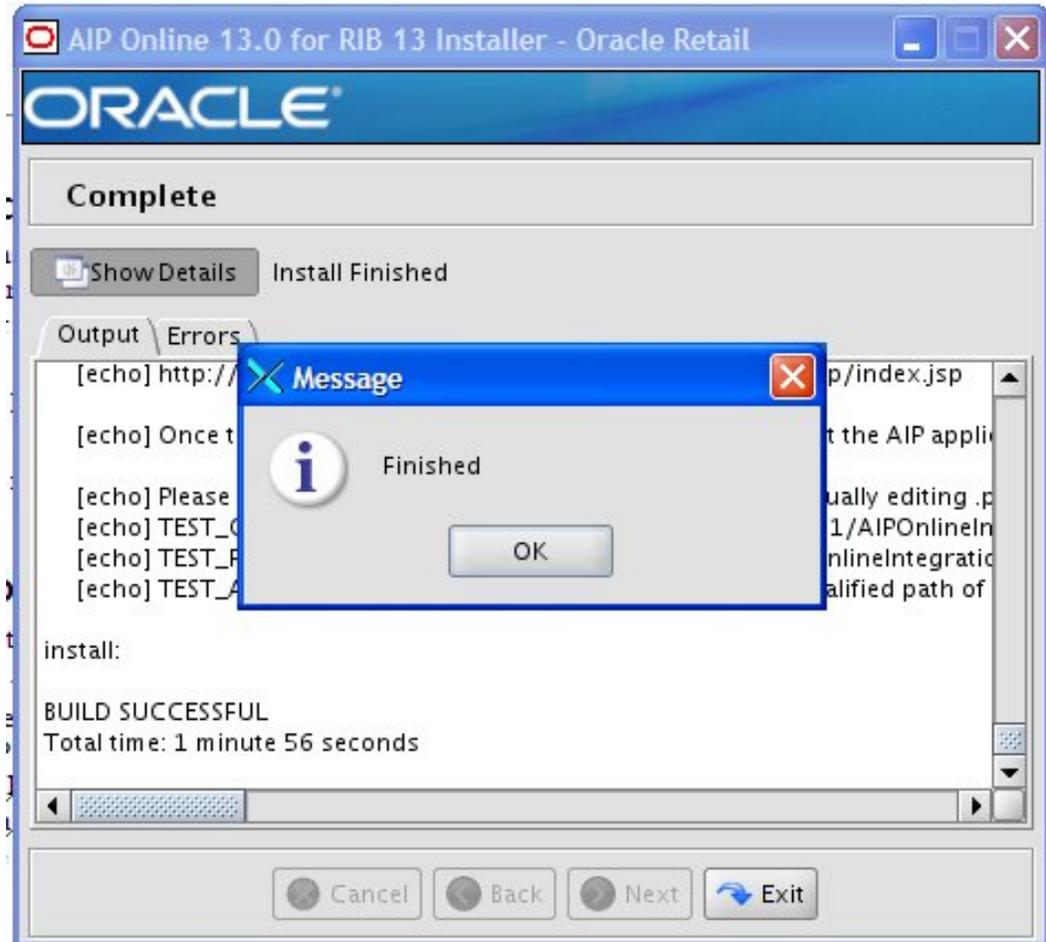
Installation Progress Screen

17. Once you are ready to begin installation, click the **Install** button.

This screen displays the progress of the installation routine. Select **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.

When the installation has finished, the Complete screen appears.



Complete Screen

18. Click **OK** to close the dialog box.
19. To view the installation details, select the **Show Details** button. The screen 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.
When the installation is complete, a detailed installation log file is created. This file is named `aip131install-app.<timestamp>.log` where `<timestamp>` represents the date and time the installation was performed. This file is located in the `<INSTALL_DIR>/AIPOnlineAppServer131` directory.

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" of this document for instructions on silent mode.

Refer to the "Troubleshooting" section of this document 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 Online Integration Directory (Optional)

The AIP Online Installer places the AIP Online Integration directory, AIPONLINE_DIR, with the rest of the AIP Online 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/ AIPOnlineIntegration131 directory to the appropriate destination. Refer to “Installing the AIP Integration Components” of this document 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 “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>/AIPOnlineAppServer131/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>/AIPOnlineAppServer131/aip/configured-output/ into your application server installation.
2. Deploy the AIPOnlineApp EAR file using the Enterprise Manager Web interface. The configured EAR file is located at <INSTALL_DIR>/AIPOnlineAppServer131/aip/ear/AIPOnlineAppForRIB11.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>/AIPOnlineAppServer131/ant.install.properties file by the Installer for later reference.

Testing the AIP Online Application

When you have successfully and you have finished the post-installation steps noted below you should have a working AIP Online 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:7777/aiponline/>

Starting and Stopping AIP Online

AIP Online can be restarted by using the Enterprise Manager to restart the OC4J instance that contains AIP Online.

Oracle Configuration Manager (OCM)

The Oracle Retail OCM Installer packaged with this release installs the latest version of OCM.

The following document is available through My Oracle Support (formerly MetaLink). Access My Oracle Support at the following URL:

<https://metalink.oracle.com>

Oracle Configuration Manager Installer Guide (Doc ID: 835024.1)

This guide describes the procedures and interface of the Oracle Retail Oracle Configuration Manager Installer that a retailer runs near the completion of its installation process.

OCM Documentation Link:

<http://www.oracle.com/technology/documentation/ocm.html>

Configuring the AIP Online Application

A setup page is used to configure the properties files for AIP Online. Perform the procedure below to configure the AIP Online Application.

1. Load the new AIP Online application by entering the URL in a Web browser, as shown in the example below.

Sample Path Syntax: `http://<server>:<port>/<contextroot>`

Replace the text in brackets <> with the appropriate information described below.

Replace	With
<server>	The name or IP address of the server where OAS is running.
<port>	The OAS HTTP port
<contextroot>	The context root specified in the installer

Example: `http://server:7778/aiponline`

A page displaying a link to the setup page appears.

2. Click the **setup page** link. The AIP Online Setup page appears. Configuration and Data directories are created by the AIP Online Application Installer.
3. Using the Install directory specified in the installer, please use the following values:

Configuration Directory: `INSTALL_DIR/config`

Data Directory: `INSTALL_DIR/data`

Example:

Configuration Directory: `/u00/oas/ aip131/config`

Data Directory: `/u00/oas/ aip131/data`

4. Under **Application Licensing**, set the License file field to the license-aip.bin file as shown below.

License file: `INSTALL_DIR/AIPOnlineAppServer/license-aip.bin`

Example:

License file: `/u00/oas/ aip131/AIPOnlineAppServer/license-aip.bin`

5. Under **Database setup**, set the following values in the fields provided:
 - **Database option** – Choose whether this is a standard non-clustered database or clustered database
 - **Database type** – Enter Oracle .
 - **Database URL** – This is only enabled if clustered database is selected.
 - **Database name** – This field is enabled only when selected database option is “Standard non-clustered database”. Enter the Oracle database SID name.
 - **Username and password** – Enter the Oracle AIP schema owner and password.
 - **Network host** – This field is enabled only when selected database option is “Standard non-clustered database”. Enter the IP address or name of server where the Oracle database is running.
 - **Port Number** – This field is enabled only when selected database option is “Standard non-clustered database”. Enter the Oracle database port number.
 - **Connection Pool size:** Used for limiting the maximum number of concurrent database connections. In some ways, this parameter also controls the number of concurrent users supported by AIP Online.

Example for standard, non-clustered database is:

Database option	Standard, non-clustered database
Database type:	Oracle
Database name:	prod_db1
Username:	aip130
Password:	YourPassword
Network host:	dbserver
Port number:	1521
Connection Pool Size	40

Example for clustered database is:

Database option	Clustered database
Database type:	Oracle
Database URL:	jdbc:oracle:oci@prod_db1
Username:	aip130
Password:	YourPassword
Connection Pool Size	40

6. Under **E-mail setup**, retain the default settings for the following fields as this version of AIP Online does not provide e-mail functionality:

Example:

External Host Name: localhost:http_port
E-mail From Address: admin@server.com
SMTP Mail Server: localhost

The AIP Online Setup: Part II: confirm settings page appears if no configuration errors were encountered.

7. Verify that all settings are correct. If any values are incorrect, click the Back button in the Web browser to go to the previous page and make the proper adjustments. If the settings are correct, click **Next**.

The AIP Online Setup: Part III: installing page briefly appears, followed by the AIP Online: Part IV: status page. A message appears stating that the installation was successful and informs you to restart the application server to continue configuring AIP Online.

8. Review the installation log to ensure that no errors were encountered during the installation process.
9. If the application will NOT connect to the database as the schema owner, then perform the following:

Navigate to <INSTALL_DIR>/config directory and add a line within the **db.properties** file:

common.prop.oracle.schema=<schema name>

Example: common.prop.oracle.schema=aip13owner

Note: This line should be added right above the following line in the db.properties file: common.prop.user=<schema user>/<password>.

10. Restart the AIP Online Application from OAS Enterprise Manager to apply the AIP Online configuration changes.
 - a. Log in to OAS Enterprise Manager console.
 - b. Click on the instance that is hosting the AIP Online application.
 - c. Select the **Applications** tab.
 - d. Select the checkbox to the left of the AIP Online application.
 - e. Click **Stop**. A Confirmation page appears.
 - f. Click **Yes**. The Application tab appears with AIP Online application stopped.
 - g. Make sure the checkbox to the left of AIP Online application is still selected and click **Start**. A confirmation page appears.
 - h. Click **Yes**.

The AIP Online application restarts.

Creating the AIP Online Enterprise

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

1. Select the link displayed in the AIP Online Setup: Part IV (step 10 from **Error! Reference source not found.**) to load the AIP Online 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 example below.

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

2. Enter **admin** in User Name field and **admin** in the Password field to log on to the System Administration page. These are the default system administrator user name and password. The System Administration page appears.

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 appears, click **Yes**.

3. Click **Enterprises** in the Enterprise Data section. The Enterprise Administration window appears.
4. Click **New**.
5. On the **Company Info** tab, enter the following information as shown below:
 - **Company name** – Enter your company name.
 - **Enterprise code** – Enter **aiponline**.
 - **Contact Email** – Enter the AIP Administrator’s e-mail address.

The Industry and Company type fields are not required.

Example:

Company Name: My Company

Enterprise Code: aiponline

Contact Email: admin@server.com

6. On the initial Admin tab, enter the following information:
 - **First Name** – Enter the AIP Administrator’s first name.
 - **Last Name** – Enter the AIP Administrator’s last name.
 - **Username** – Enter the AIP Administrator’s user name to be used when logging into AIP Online.
 - **New Password** – Enter the AIP Administrator’s AIP Online password.
When selecting a password, make sure it meets the following requirements:
 - Minimum 6 characters; maximum 128 characters
 - At least 5 different characters
 - Must not be simple pattern of characters (i.e. 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

- **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.

Example:

First Name: John
Last Name: Doe
Username: doejohn
New Password: aip131online
Retype New Password: aip131online

7. Navigate to the Services tab. Two services are displayed, Core Administration and AIP Online. Perform the following:
 - 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 the Enter key to accept your input.
 - d. Click the **Enabled** cell of AIP Online.
 - e. Double-click the **User Limit** cell of AIP Online 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 the Enter key 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 Online Users

This section provides the procedures to create AIP online 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 Online application login page.

Example: `http://server:9080/aiponline/index.jsp`

2. Input the administrator username and password, and click **LOG IN**. The Application page appears.
3. Click the **Core Administration** link. The Administration page appears.
4. Click the **Users** button in the **Application Setup** section. The Core Administration: User Administration window appears.
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.

Example:

First Name: John
Last Name: Doe
Email: jdoe@company.com
Username: doejohn
New Password: aip131online
Retype New Password: aip131online
Password Status: Normal

7. Click the **Permissions** tab. A user permissions form appears.
8. Select the **Enabled** cell of the AIP Online 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. Click the **LOG OUT** link in the Administration page to exit the application.

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

Installing RETL

Refer to the *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 example below.

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_retl" 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_retl -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/verifyretl-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 *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” section and perform the necessary tasks.
4. Once the integration files have been installed, you can use the rfx or retek 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:

- **config.xml** – The RETL configuration file.
- **aip_env_online.sh**– The AIP configuration file.

Configuring the config.xml File

This configuration file contains the database connection information for RETL for both import and export. Refer to the 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 (i.e. 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. Properties `jdbcdriver`, `jdbcdriverstring` and `jdbcconnectionstring` are not configurable. These are for use by RETL and should not be changed. As indicated by these variables, an OCI (thick) driver is required for connecting to Oracle database. Properties `hostname` and `port` used in earlier release are not used anymore in 13.1.1. `Hostname` and `port` information is resolved by OCI driver by using `dbname (or SID)` through properly configured `tnsnames.ora`.

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.

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 AIPOnline Application Server Installer configures the aip_env_online.sh file with the following environment variable

- **ONL_SCHEMA_OWNER** – This variable must be set to the owner of AIP online schema.

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

- **INTEGRATION_HOME** – This is the path to the integration directory extracted earlier (where the cron_export.sh and cron_import.sh shell scripts reside). Refer to the *AIP Implementation Guide* 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 variables listed below must be modified in the UNIX user .profile file. Please refer to the *AIP Implementation Guide* for further details on how these values are used.

- **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 database home.
- **JAVA_HOME** – This variable points to required JRE version for use by RETL.
- **TEST_ONL_INTEGRATION_HOME** – This value should be the directory where cron_import.sh and cron_export.sh reside. The INTEGRATION_HOME variable in aip_env_online.sh references this externally-defined variable by default. Using this externally-defined variable allows multiple testers to use the same aip_env_online.sh while working in different test directories. If the INTEGRATION_HOME variable in aip_env_online.sh 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 RETL_CONFIG_FILE variable in aip_env_online.sh references this externally-defined variable by default. Using this externally-defined variable allows multiple testers to use the same aip_env_online.sh while referencing different RETL configuration files. If the RETL_CONFIG_FILE variable in aip_env_online.sh 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 AIPDOMAIN variable in aip_env_online.sh references this externally-defined variable by default. Using this externally-defined variable allows multiple testers to use the same aip_env_online.sh while working with different test

domains. If the AIPDOMAIN variable in aip_env_online.sh 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 sqldr 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/11.1.0.7
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=$TEST_ONL_INTEGRATION_HOME:$TEST_ONL_INTEGRATION_HOME/bs
a:$TEST_ONL_INTEGRATION_HOME/scripts:$PATH
```

Installing AIP RPAS

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 13.0.4, which includes RPAS Server and RPAS Configuration Tools. Refer to the RPAS documentation for information on installing and administering RPAS.
- Java SE 1.6
- 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.

Before running this installer, consider whether you are ready to build your production domain. If you are, read the “Building a Production AIP RPAS Domain” chapter of the *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-13.1.1-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 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 checkbox to signal whether you want a component installed. In text mode, you will be prompted for a response of "yes" or "no".

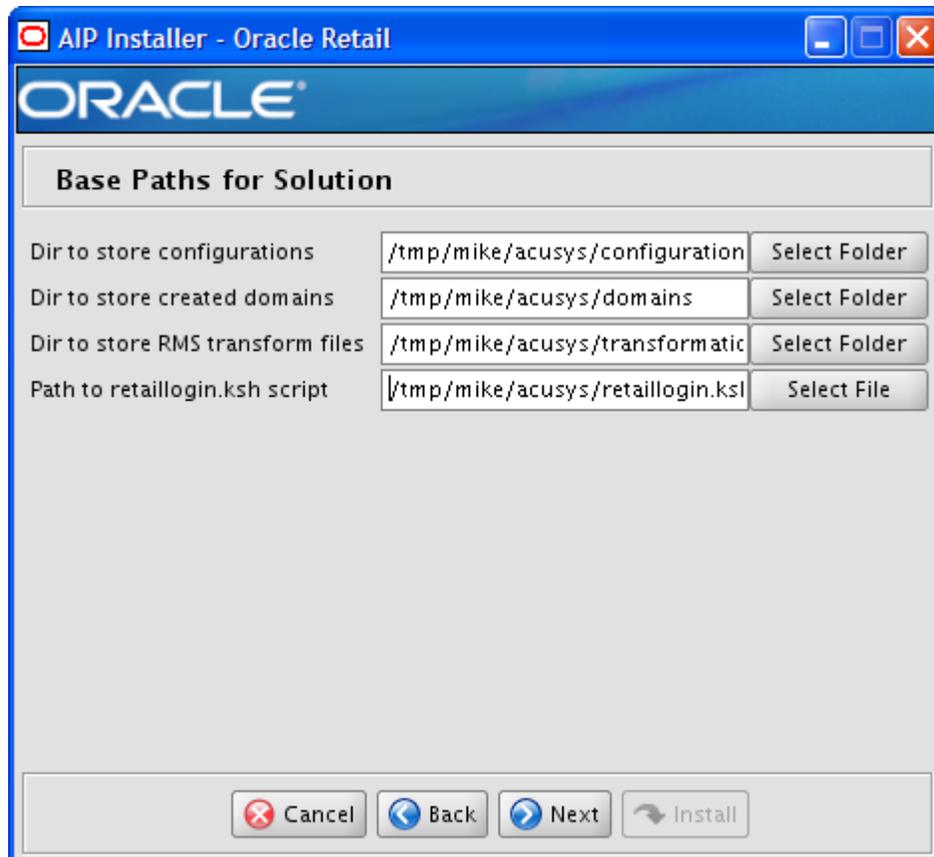
Note: In text mode, the default value will appear in square brackets. To use the default value and continue, press the **Enter** key. If you want to use a different value, enter the new value. When prompted to create a directory, respond with "y" or "yes" and press the **Enter** key.

The AIP Installer window appears and displays the AIP requirements, which you should already have installed. If you have not installed these items, please perform the necessary installations before continuing.



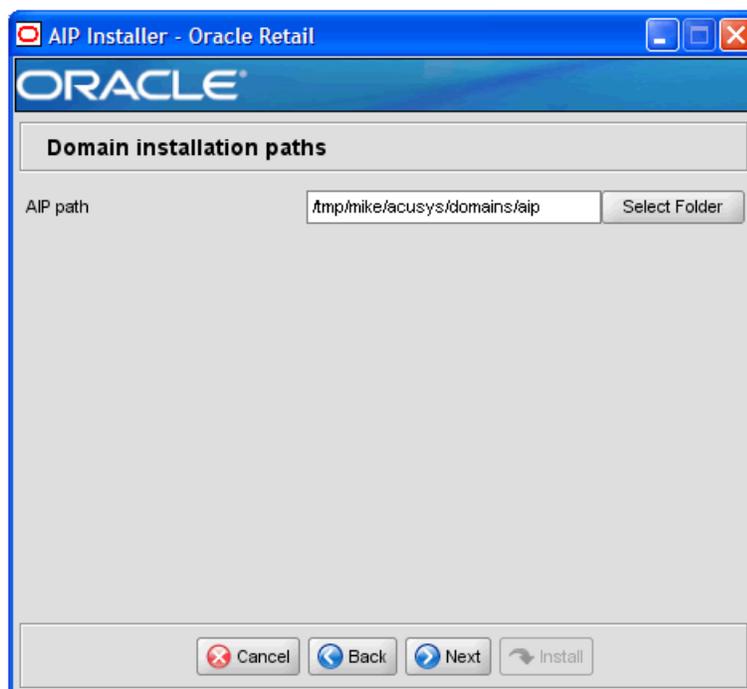
AIP Installer Window

4. Click **Next** to continue. The Base Paths for Solution screen appears.



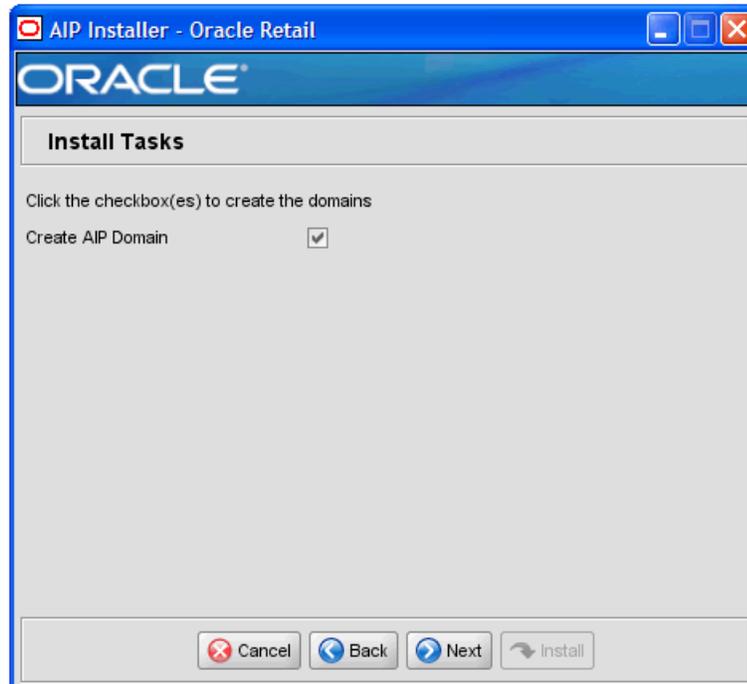
Base Paths for Solution Screen

5. Enter the following path information and click **Next**:
 - **Dir to store configurations** – Enter the target directory for your configurations, or click the **Select Folder** button 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 the **Select Folder** button 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 the **Select Folder** button 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 the **Select File** button 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'.
 - The Domain installation paths screen appears.



Domain Installation Paths Screen

6. Enter the path where your AIP domain will be installed, or click the **Select Folder** button to navigate to the appropriate location. Click **Next** to continue.
The Install Tasks screen appears.



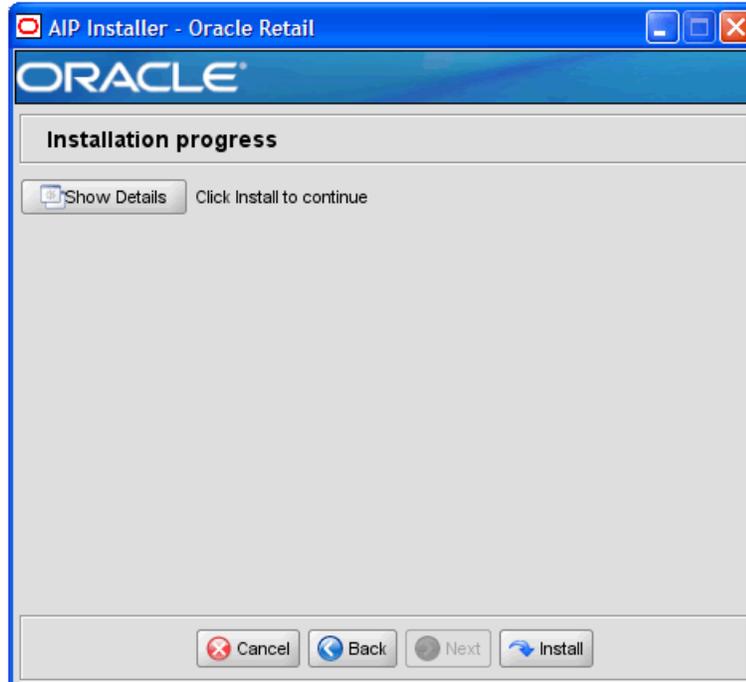
Install Tasks Screen

- To have the AIP Installer create the AIP domain, make sure the **Create AIP Domain** option is selected and click **Next**. If you want to create the AIP domain later, deselect the **Create AIP Domain** option and click **Next**. The AIP Progress screen appears.

Reminder: 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, cancel the installation, and instead read 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.

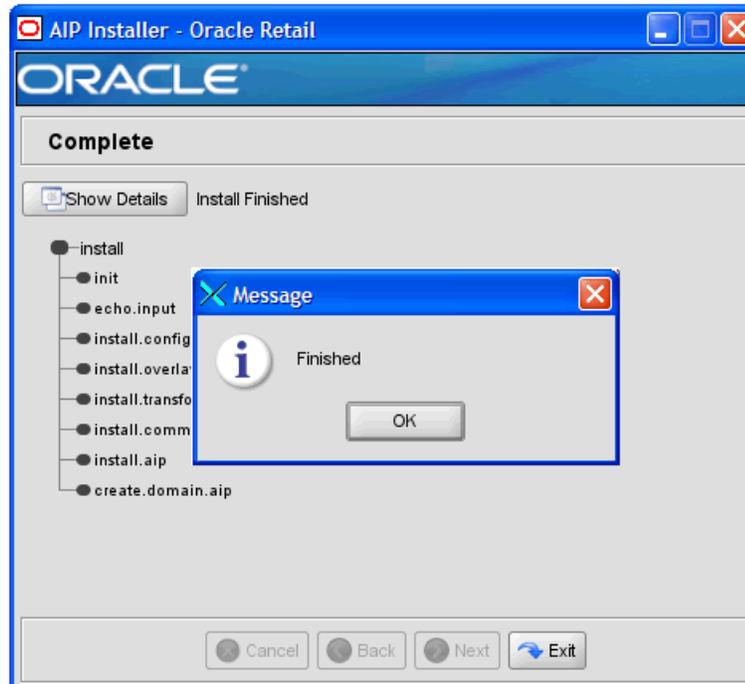
Note: This release of the AIP RPAS configuration is enabled for multi-language capability as a default. This means that the domain build will set up positions in the database arrays into which translated strings may be optionally loaded by the domain administrator at a later time. See the *Oracle Retail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



Installation Progress Screen

8. 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. When the installation process is complete, the Completed screen appears with Message dialog box.

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



Complete Screen

9. Click **OK** to close the dialog box.
10. Review the installation details.

To view the installation details, select the **Show Details** button. The screen 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 will be named based on the product, aip, and a timestamp, followed by the ".log" extension.

11. Click **Exit** to close the AIP Installer window.

Post Installation Instructions

The AIP RPAS domain is not usable for business application until production hierarchy and measure data are loaded into it. That task is out of scope for this installation guide. Refer to the *AIP Implementation Guide* and *AIP Operations Guide* for information on loading data into the domain and for practical use of the AIP batch domain.

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 will ask for several different URLs, such as the JDBC URL for the database and the deployer URI. These path statements are discussed below.

JDBC URL for a Database

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

Syntax: `jdbc:oracle:thin:@<host>:<port>:<sid>`

- `<host>`: hostname of the database server
- `<port>`: database listener port
- `<sid>`: system identifier for the database

Example: `jdbc:oracle:thin:@myhost:1521:mysid`

Deployer URI

The Deployer URI is used by the Oracle ANT installer tasks to deploy an application to an OC4J instance. The application installer does not ask the user for this value; it is constructed based on other inputs and written to the `ant.install.properties` file for input to the installation script. For repeat installations using silent mode, you may need to correct mistakes in the deployer URI.

Note: There are several different formats for the deployer URI depending on your cluster topology. Consult the *Deploying with the OC4J Ant Tasks* chapter of the *OC4J Deployment Guide* for further details.

Managed OC4J

Syntax: `deployer:cluster:opmn://<host>:<port>/<instance>`

- `<host>`: hostname of the OracleAS environment
- `<port>`: OPMN request port of the OracleAS environment. This can be found in the `<ORACLE_HOME>/opmn/conf/opmn.xml` file.
- `<instance>`: Name of the OC4J instance where the application will be deployed.

Example: `deployer:cluster:opmn://myhost:6003/sim-oc4j-instance`

Standalone OC4J**Syntax:** `deployer:oc4j:<host>:<port>`

- `<host>`: hostname of the OracleAS environment
- `<port>`: RMI port of the OC4J server. This can be found in the `ORACLE_HOME/j2ee/home/config/rmi.xml` file.

Example: `deployer:oc4j:myhost:23791`

Reinstallation

Reinstalling in Silent Mode

Once you have successfully installed the various AIP software components, you may wish to repeat the installation. 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 stored information in this file. When using this information, there is no need to enter any information on screen, 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 procedure below.

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

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

Troubleshooting

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

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-1.4.2 JDK. Set `JAVA_HOME` to a Java development kit of version 1.4.2 or later and run the installer again.

“Unable to get a deployment manager” Message

Symptom:

The application installer quits with the following error message:

```
[oracle:deploy] Unable to get a deployment manager.  
[oracle:deploy]  
[oracle:deploy] This is typically the result of an invalid deployer URI format  
being supplied, the target server not being in a started state or incorrect  
authentication details being supplied.  
[oracle:deploy]  
[oracle:deploy] More information is available by enabling logging -- please see  
the Oracle Containers for J2EE Configuration and Administration Guide for details.
```

Solution:

This error can be caused by any of the following conditions:

- OC4J instance provided is not running.
- Incorrect OC4J instance name provided
- Incorrect OC4J administrative username and/or password
- Incorrect OPMN request port provided.

Make sure that the OC4J instance is running, and then check the **ant.install.properties** file for entry mistakes. Pay close attention to the `input.deployer.uri` (refer to “Installation Questions, Reinstallation, and Troubleshooting” section of this document for more information on URL references), `input.oc4j.instance`, `input.admin.user`, and `input.admin.password` properties. If you need to make a correction, you can run the installer again with this file as input by running silent mode (refer to “Reinstalling in Silent Mode” of this document for more information).

Unresponsive Fields when Running 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 procedure below to enable XTEST in Exceed.

1. Open Xconfig to edit your Exceed 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.

“Could not create system preferences directory” Warning

Symptom:

The following text appears in the installer Errors tab:

```
May 22, 2006 11:16:39 AM java.util.prefs.FileSystemPreferences$3 run
WARNING: Could not create system preferences directory. System preferences are
unusable.
May 22, 2006 11:17:09 AM java.util.prefs.FileSystemPreferences
checkLockFile0ErrorCode
WARNING: Could not lock System prefs. Unix error code -264946424.
```

Solution:

This is related to Java bug 4838770. The `/etc/.java/.systemPrefs` directory may not have been created on your system. See <http://bugs.sun.com> for details on this Java error.

This is an issue with your installation of Java and does not affect the Oracle Retail product installation.

“Couldn't find X Input Context” Warnings

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

Symptom:

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

```
java.util.ConcurrentModificationException
    at
java.util.AbstractList$Itr.checkForComodification (AbstractList.java:448)
    at java.util.AbstractList$Itr.next (AbstractList.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: Sample Database Scripts

Sample Database init.ora

The following code provides a sample database, init.ora. The commented code provides instructions about making the necessary modifications for your environment.

```
#####
#####
# Oracle 11.1.0.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.
# -----
-
# MAINTENANCE LOG
#
# Date By Parameter Old/New Notes
# +-----+ +-----+ +-----+ +-----+ +-----+
+
#
#####
#####
def# -----
-----
# The policy is to give 60% for sga and 40% for PGA out of Memory Target
at
startup
# -----
-----
memory_target = 2000M
# -----
-----
audit_file_dest = <admin_path>/adump
compatible = 11.1.0
control_files = (<datafile_path>/control01.ctl
,<datafile_path>/control02.ctl)
db_block_size = 8192 # Default is 2k; adjust before db creation,
cannot change after db is created
db_file_multiblock_read_count = 16 # Platform specific (max io
size)/(block size)
db_name = SID
diagnostic_dest = '<diag_path>'
java_pool_size = 100M
job_queue_processes = 5 # Oracle Retail required; number of
cpu's + 1
local_listener =
"(ADDRESS=(PROTOCOL=TCP) (HOST=<hostname>) (PORT=1521))"
nls_calendar = GREGORIAN
nls_date_format = DD-MON-RR # Oracle Retail required; if RDW
database see later entry for proper format
nls_language = AMERICAN # Default
```

```
nls_numeric_characters = "." # Should be explicitly set to ensure all
users/batch get the same results
nls_sort = BINARY # Should be explicitly set to ensure all
sessions get the same order
nls_territory = AMERICA # Default
open_cursors = 900 # Oracle Retail required (minimum=900);
default is 50
optimizer_features_enable = 11.1.0.7
optimizer_mode = CHOOSE # Oracle Retail required
Appendix: Oracle 11g Database Parameter File
56 Oracle Retail Merchandising System
plsql_optimize_level = 2 # 10g change; use this setting
to optimize plsql performance
processes = 500 # Max number of OS processes that can connect
to the db
query_rewrite_enabled = TRUE # Oracle Retail required for functionbased
indexes
session_cached_cursors = 900 # Oracle Retail required;
undo_management = AUTO
undo_retention = 1800 # Currently set for 30 minutes; set to avg
length of transactions in sec
undo_tablespace = undo_ts
user_dump_dest = <admin_path>/udump
utl_file_dir = <utl_file_path>
workarea_size_policy = auto # Should be set to auto
when pga_aggregate_target is set
#
# *** Set these parameters for Oracle Retail Data Warehouse (RDW)
database ***
#nls_date_format = DD-MON-RRRR # Required by MicroStrategy
#query_rewrite_integrity = TRUSTED
#star_transformation_enabled = TRUE
#utl_file_dir = <Windows_utl_file_path>,
<UNIX_util_file_path>
#
# *** Archive Logging, set if needed ***
#log_archive_dest_1 = 'location=<admin_path>/arch/'
#log_archive_format = SIDarch_%r_%s_%t.log
#log_buffer = 10485760 # Set to (512K or 128K)*CPUs
#log_checkpoint_interval = 51200 # Default:0 - unlimited
#log_checkpoint_timeout = 7200 # Default:1800 seconds
```

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 manual segment space management. These tablespaces are not sized for a production environment!

create_aip_tablespaces.sql

Execute as: sysdba

Modify file paths and "ORACLE_SID" for your environment.

```
CREATE TABLESPACE RETEK_INDEX DATAFILE
  '/u01/oradata/$ORACLE_SID/retex_index01.dbf' SIZE 500M
  AUTOEXTEND ON NEXT 100M MAXSIZE 2000M
  EXTENT MANAGEMENT LOCAL
  SEGMENT SPACE MANAGEMENT MANUAL
;
CREATE TABLESPACE RETEK_DATA DATAFILE
  '/u01/oradata/$ORACLE_SID/retex_data01.dbf' SIZE 500M
  AUTOEXTEND ON NEXT 100M MAXSIZE 2000M
  EXTENT MANAGEMENT LOCAL
  SEGMENT SPACE MANAGEMENT MANUAL
;
```

Appendix: Installation Order

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

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

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

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

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

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

12. Oracle Retail Predictive Application Server (RPAS)
13. Oracle Retail Demand Forecasting (RDF)
14. Oracle Retail Category Management (CM)
15. Oracle Retail Replenishment Optimization (RO)
16. Oracle Retail Analytic Parameter Calculator Replenishment Optimization (APC RO)
17. Oracle Retail Regular Price Optimization (RPO)
18. Oracle Retail Merchandise Financial Planning (MFP)
19. Oracle Retail Size Profile Optimization (SPO)
20. Oracle Retail Assortment Planning (AP)
21. Oracle Retail Item Planning (IP)
22. Oracle Retail Item Planning Configured for COE (IPCOE)

- 23.** Oracle Retail Advanced Inventory Planning (AIP)
 - 24.** Oracle Retail Integration Bus (RIB)
 - 25.** Oracle Retail Point-of-Service (ORPOS)
 - 26.** Oracle Retail Analytics Applications
 - 27.** Oracle Retail Data Warehouse (RDW)
 - 28.** Oracle Retail Workspace (ORW)
-
-