Oracle® Retail Advanced Inventory Planning

Installation Guide
Release 13.1.2

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ORACLE

Oracle® Retail Advanced Inventory Planning Installation Guide, Release 13.1.2

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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 13.1.2 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 and Administration Guide*
- *Oracle Retail* Advanced Inventory Planning *Implementation Guide*
- *Oracle Retail* Advanced Inventory Planning *Warehouse Replenishment Planning User Guide*
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https://support.oracle.com/

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- 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

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.

1
Introduction

About the AIP Installation Process

This document provides the full and patch installation instructions for Advanced Inventory Planning™ (AIP) version 13.1.2.

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.

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 provides detailed instructions for how to install an AIP 13.1.2 solution. The AIP installation consists of the following components:

- The Oracle® Retail Predictive Applications Server (RPAS) version 13.1.1 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 13.1.2 solution appear in Part I Full Installation and Part II Patch Installation 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.

Part I

Full Installation

Part I of this guide details the steps needed to do a full installation of AIP. For information about a patch installation, see Part II Patch Installation.

> **Note:** AIP can be upgraded from release 13.0.2.x – 13.1.1.x to release 13.1.2. For information on this upgrade, see Part II Patch Installation. Part II Patch Installation describes the approach that this Oracle Retail application takes for the upgrading process, as well as this product's upgrade assumptions and considerations.

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Preparing for Installation

Package Contents

A complete AIP 13.1.2 solution is delivered in the files listed below, which can be obtained from http://edelivery.oracle.com:

- AIP 13.1.2 Media Pack

1. Download the files and unpack the **AIP Media Pack**. The media pack contains an AIP-13.1.2-install zip file in the CDROM folder, which contains the following files when extracted:
   - AIP-13.1.2-rpas-installer.zip
   - AIP13.1.2-db-upgrade.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-13.1.2-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 13.1.2 Online EAR file and binary license file for AIP Online. Inside this file is the AIP-online-integration.zip, which contains the AIP 13.1.2 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 13.1.2 Online Oracle schema database files.

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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) 13.1.2
- Oracle Retail Integration Bus (RIB) 13.1.1
- Oracle Retail Extract Transform and Load (RETL) 13.1
- Oracle Retail Replenishment Optimization 13.1.1

Server Operating Systems

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

- Sun Solaris 10
- AIX 5.3, 6.1
- HP–UX 11.31 (Integrity)
- OEL 5.2

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 10g Enterprise Release 2 (version 10.2.0.4) in in standalone configuration.
- 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 stand alone configuration
- Oracle Application Server(Version 10.1.3.4) in clustered topology

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, 6.0, 7.0.

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

- JRE 1.5.0_22

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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

   retek – dev group

> **Note:** The oracle account is used to create the Oracle 10g database. The retek 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 `retek` 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 installled 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 Scriptss 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 Scriptss 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 swill 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.
- In order to override the JAVA_HOME set by the installer to an alternate JAVA_HOME - please set the following environment variable prior to running the installer: ORACLE_ALT_JAVA_HOME. This is required if you are installing to Oracle 10g (10.2.0.4) as the installer requires JRE 1.5 or greater, but the JRE available under ORACLE_HOME in 10g is 1.4.2.
- 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:

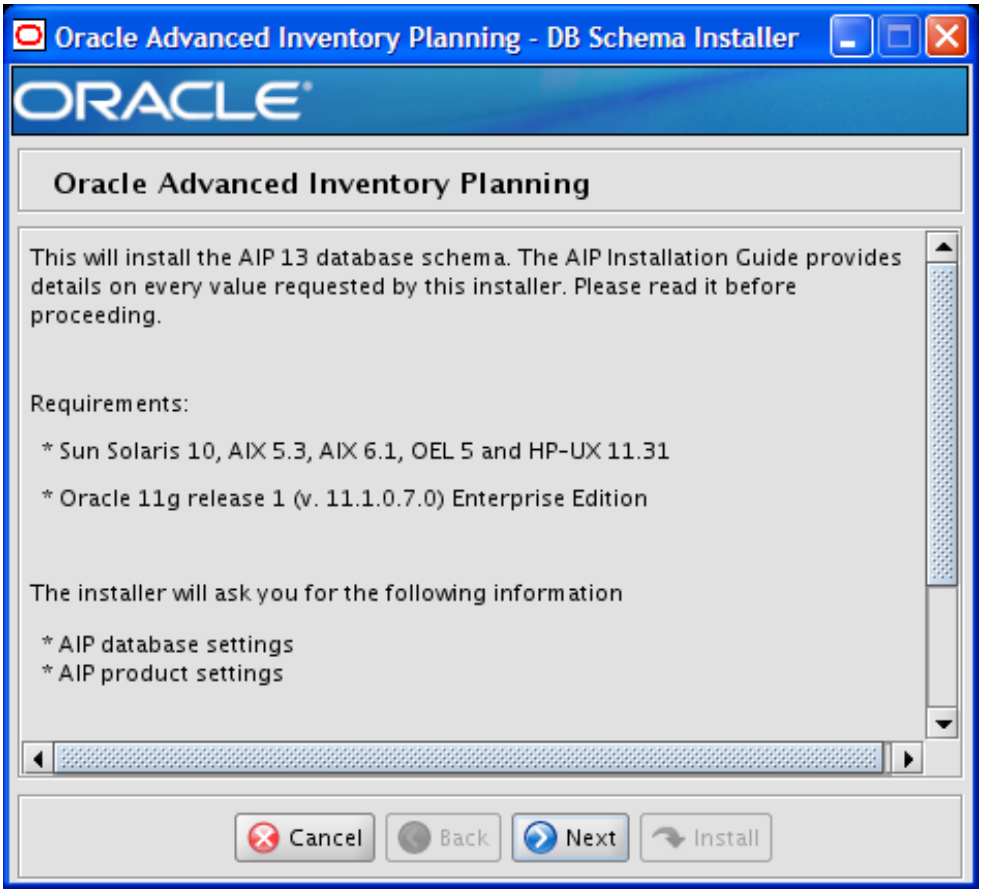
   export DISPLAY=<ipaddress>:0

   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.

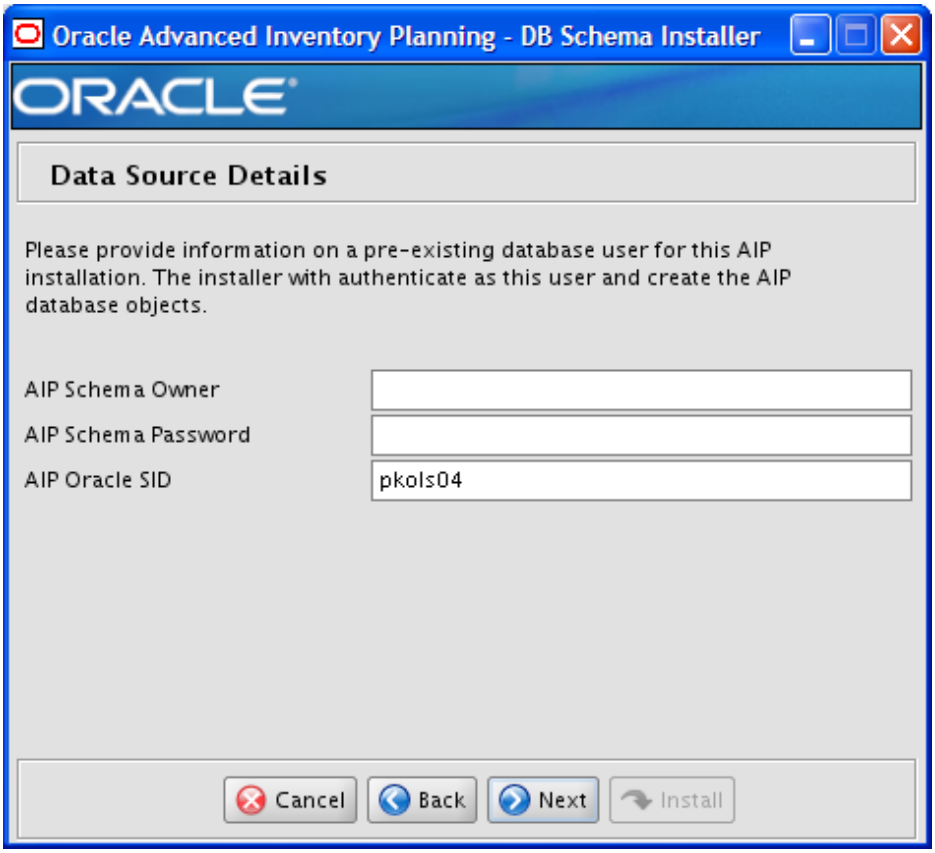
   Password fields will appear masked, but the previous and default values will appear in plain text when running in the text mode.

   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

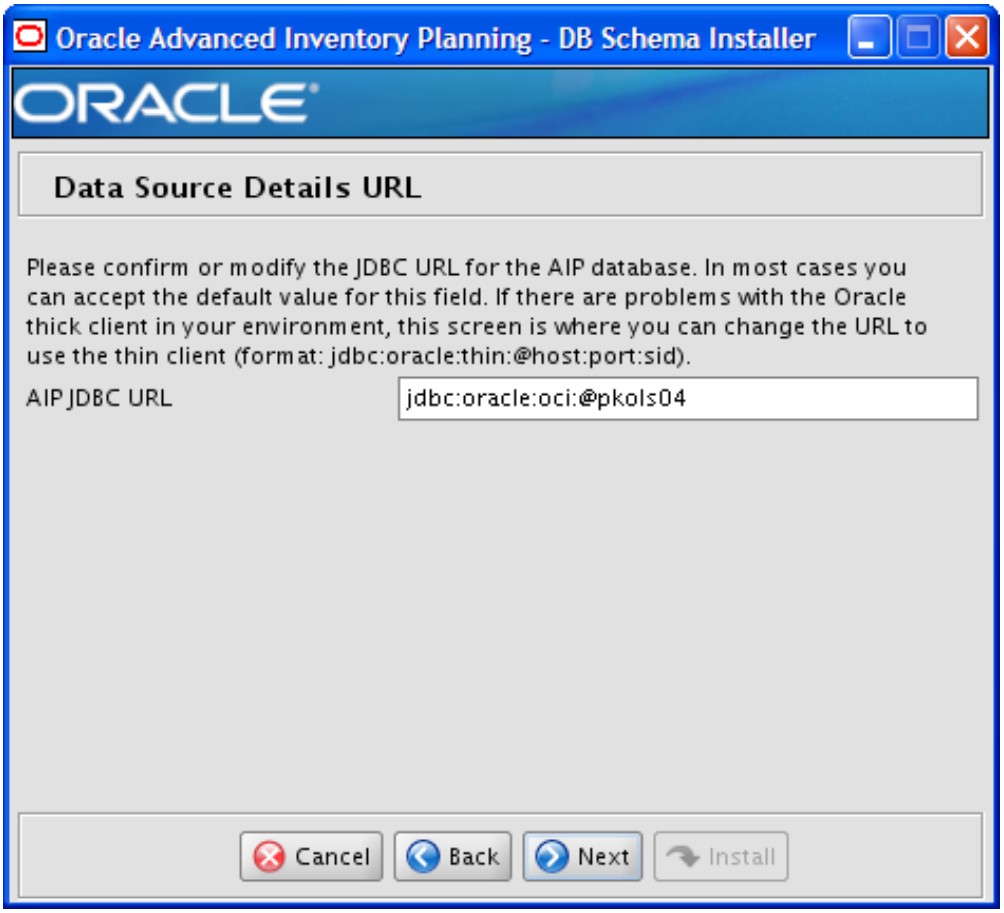
3. Click **Next** to continue. The Data Source Details screen appears.



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.

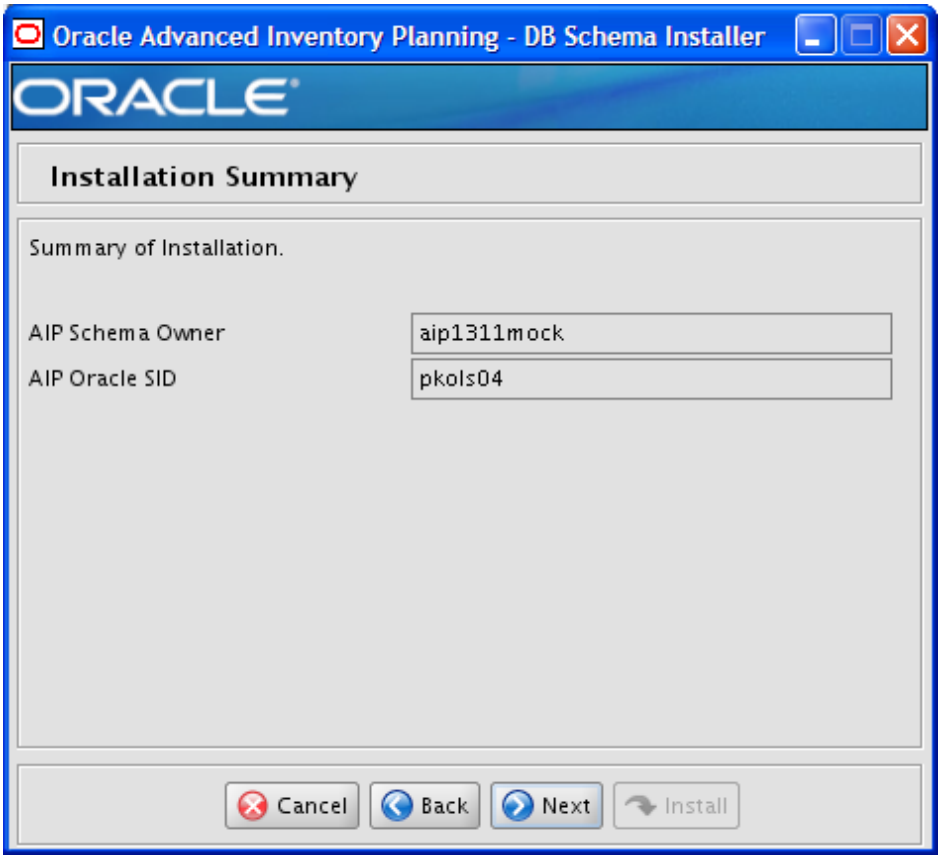


Data Source Details URL Screen

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.

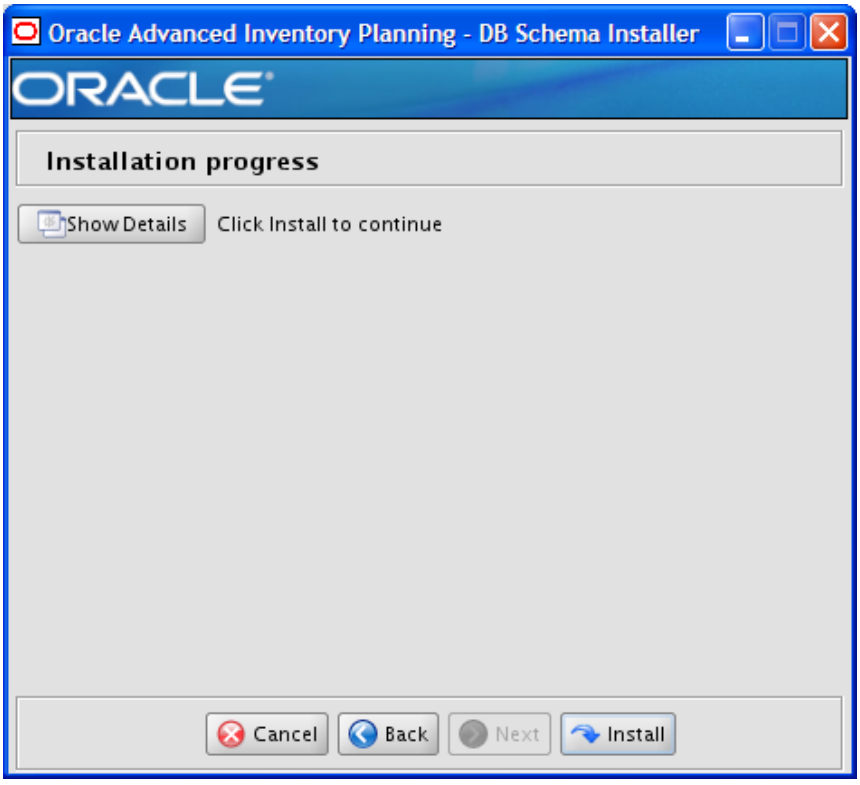
   The Installation Summary screen appears.

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.



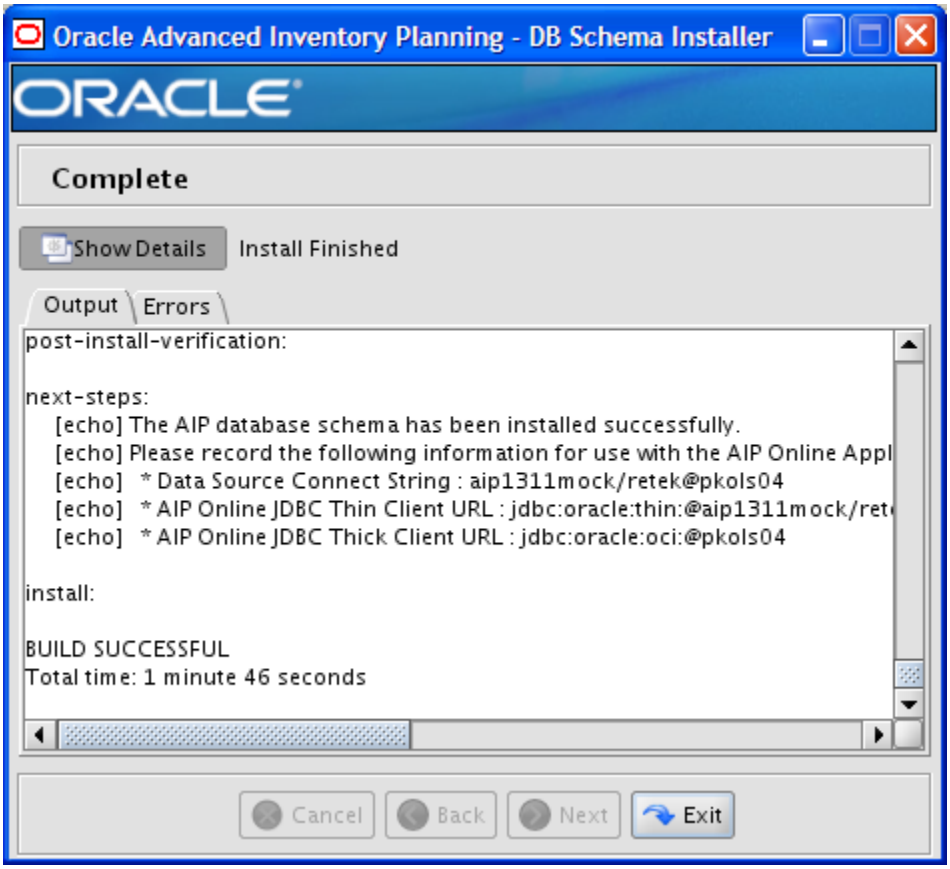
Installation Progress Screen

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.

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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. If the application is being installed to a clustered OAS, then create an instance for each node of the server. All such instances should be under the same OC4J Group.

> **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.

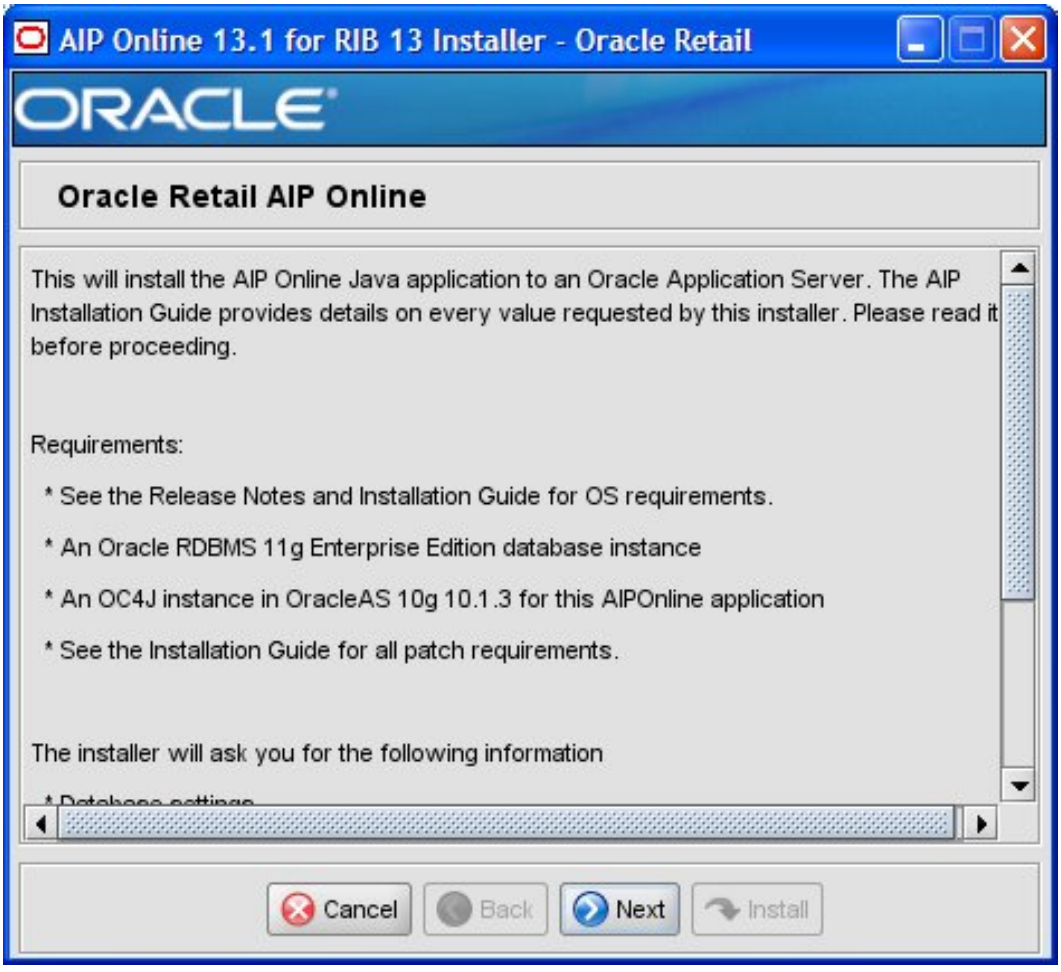
To run the Installer in the GUI mode, which is the recommended installation method, adjust the DISPLAY environment variable. For example use following command to adjust DISPLAY in Exceed:

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".

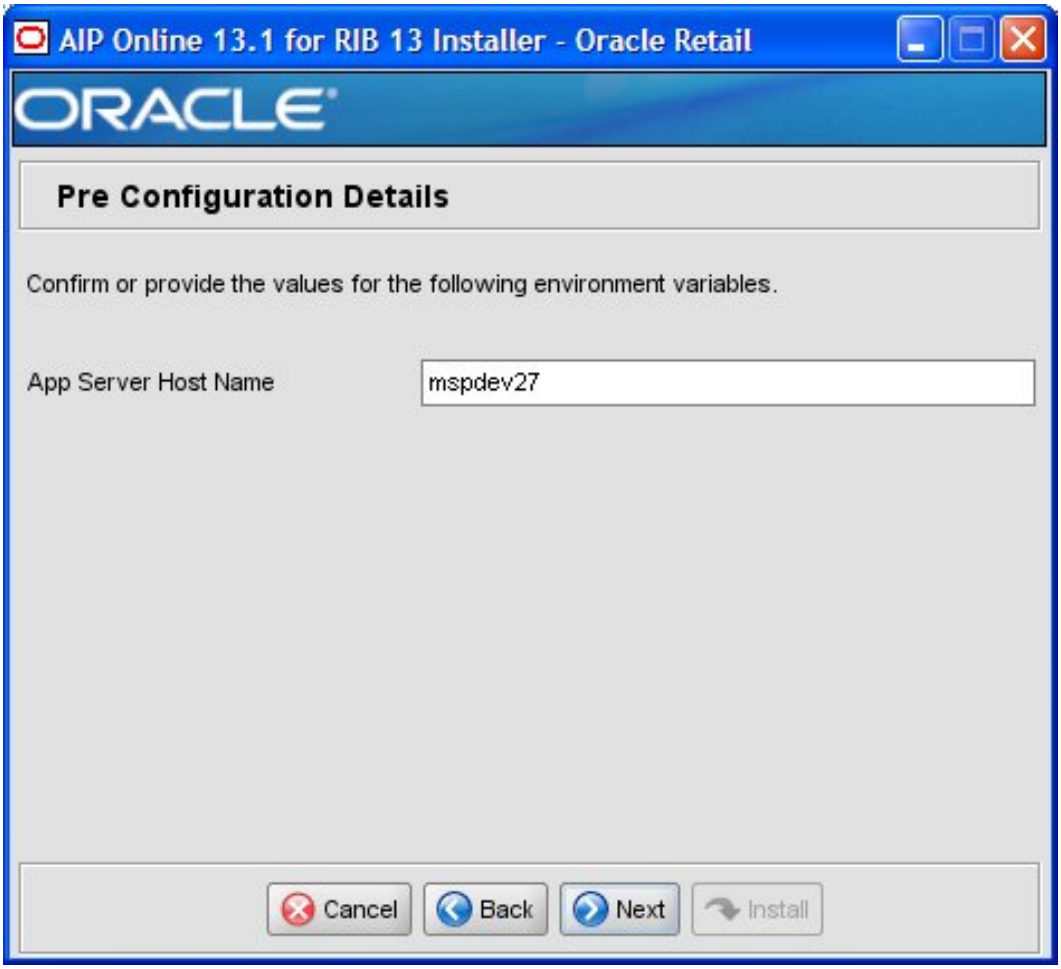
> **Note:** In text mode, the default value will appear in square brackets []. To use the default value and continue, simply hit the Enter key. If you wish to use a different value, enter the new value. When prompted to create a directory, respond with "y" or "yes" and press the Enter key.
>
> Password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



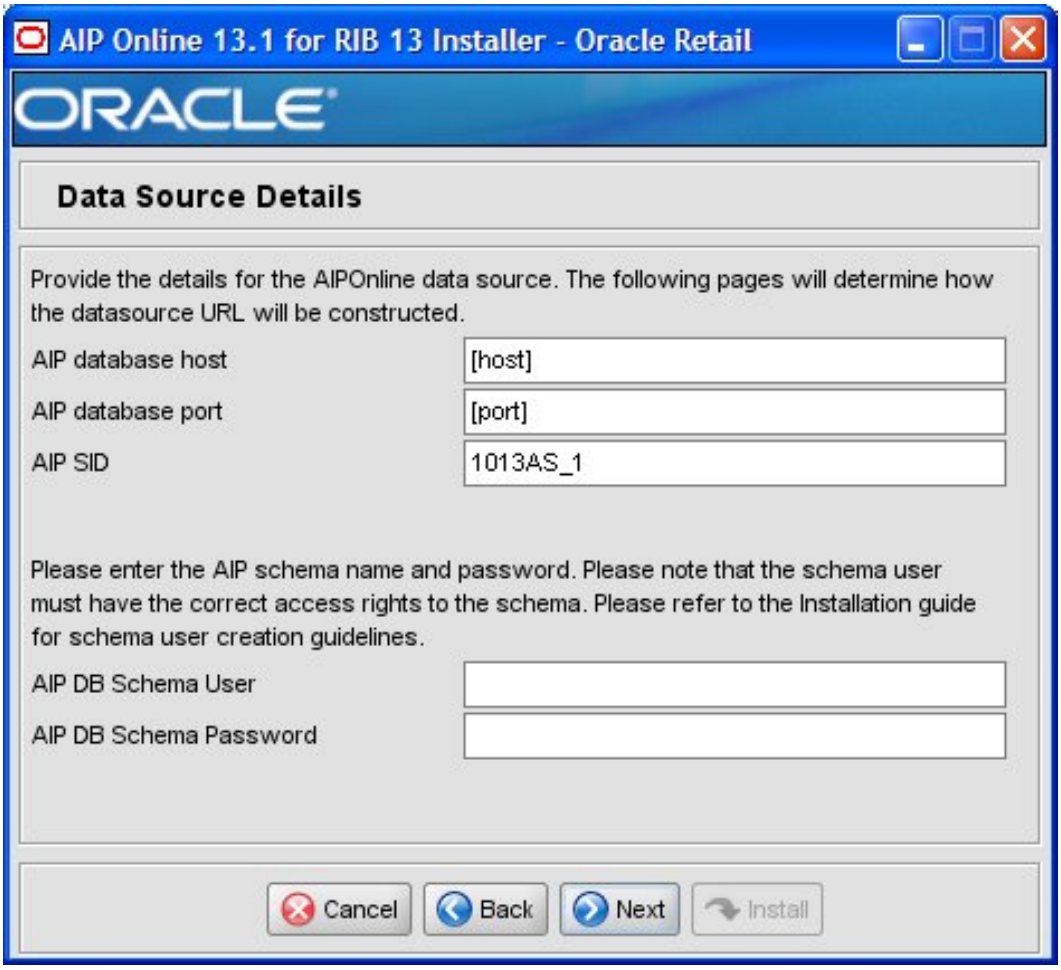
AIP Online Installer Screen

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



Pre Configuration Details Screen

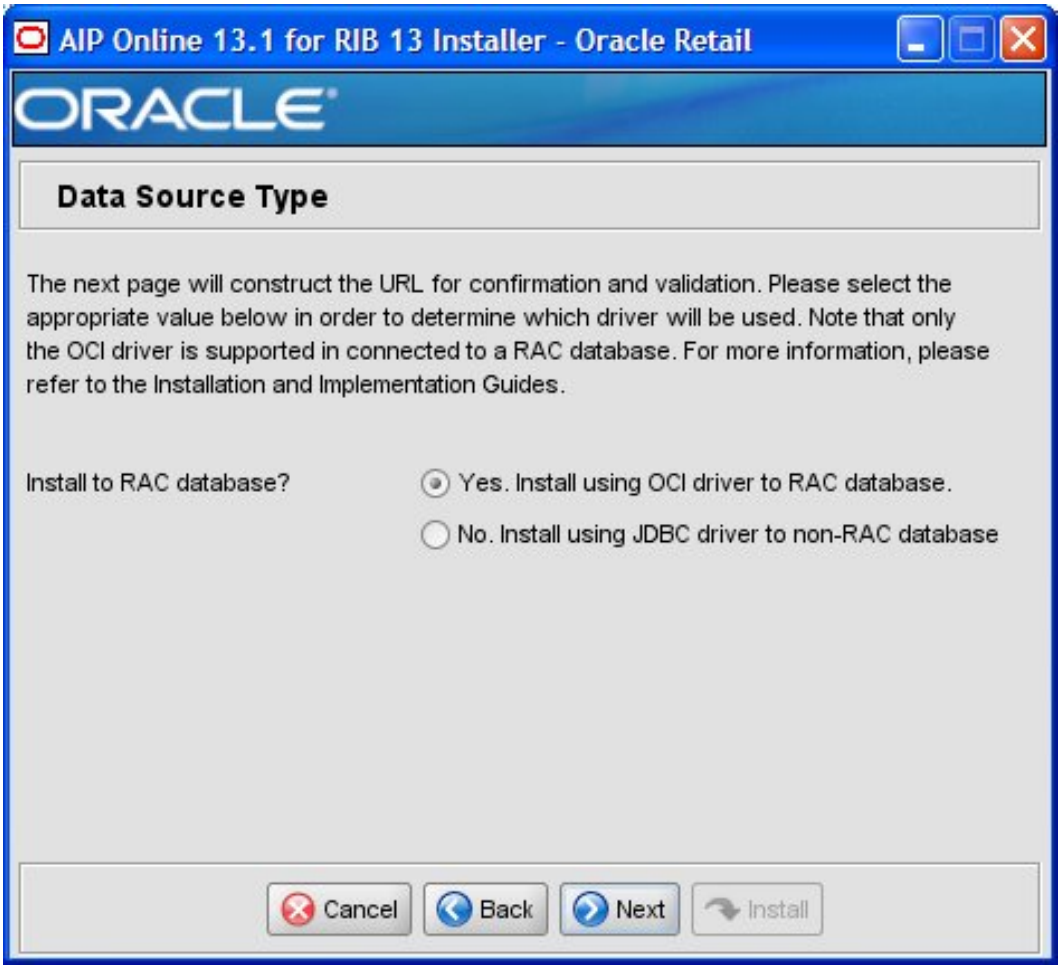
5. Enter the application server name where AIP Online is being deployed and click **Next**. The Data Source Details screen appears.



Data Source Details Screen

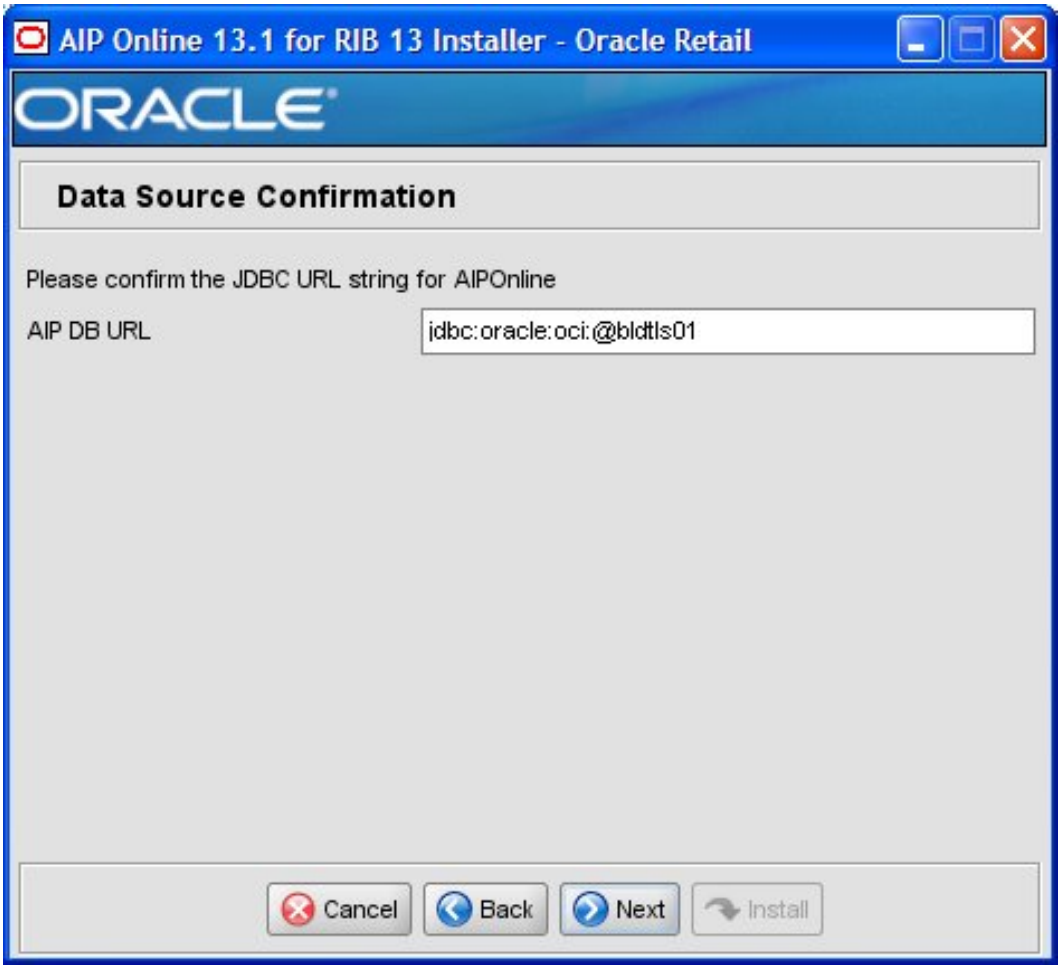
6. Enter the following information and click **Next**:
   - **AIP database host –** Enter the AIP database host name.
   - **AIP database port –** Enter the port number on which the database listens.
   - **AIP SID –** Enter the AIP Online database SID.
   - **AIP DB Schema User –** Enter the AIP database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

The Data Source Type screen appears.

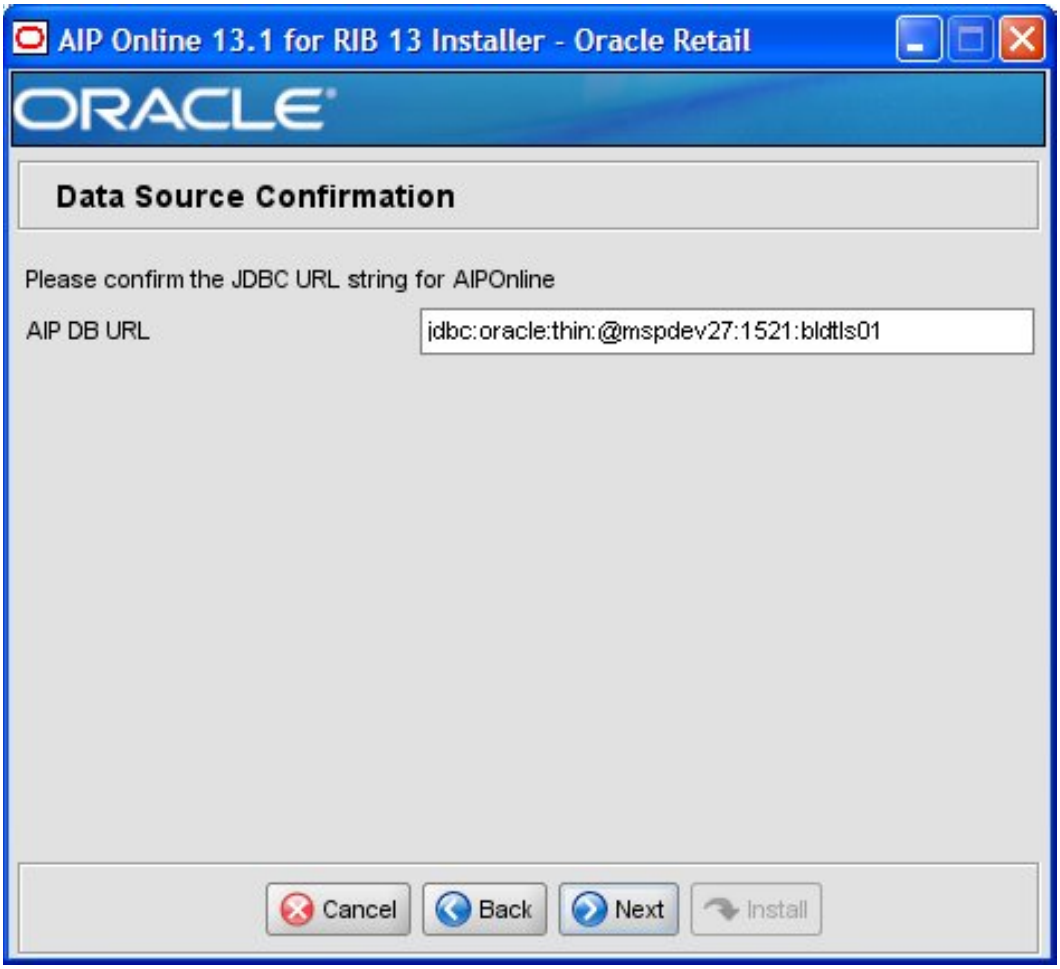


Data Source Type Screen

7. If you have an RAC database, select **Yes**. If you have a non-RAC database, select **No.** One of the following **Data Source Confirmation screens** appears.



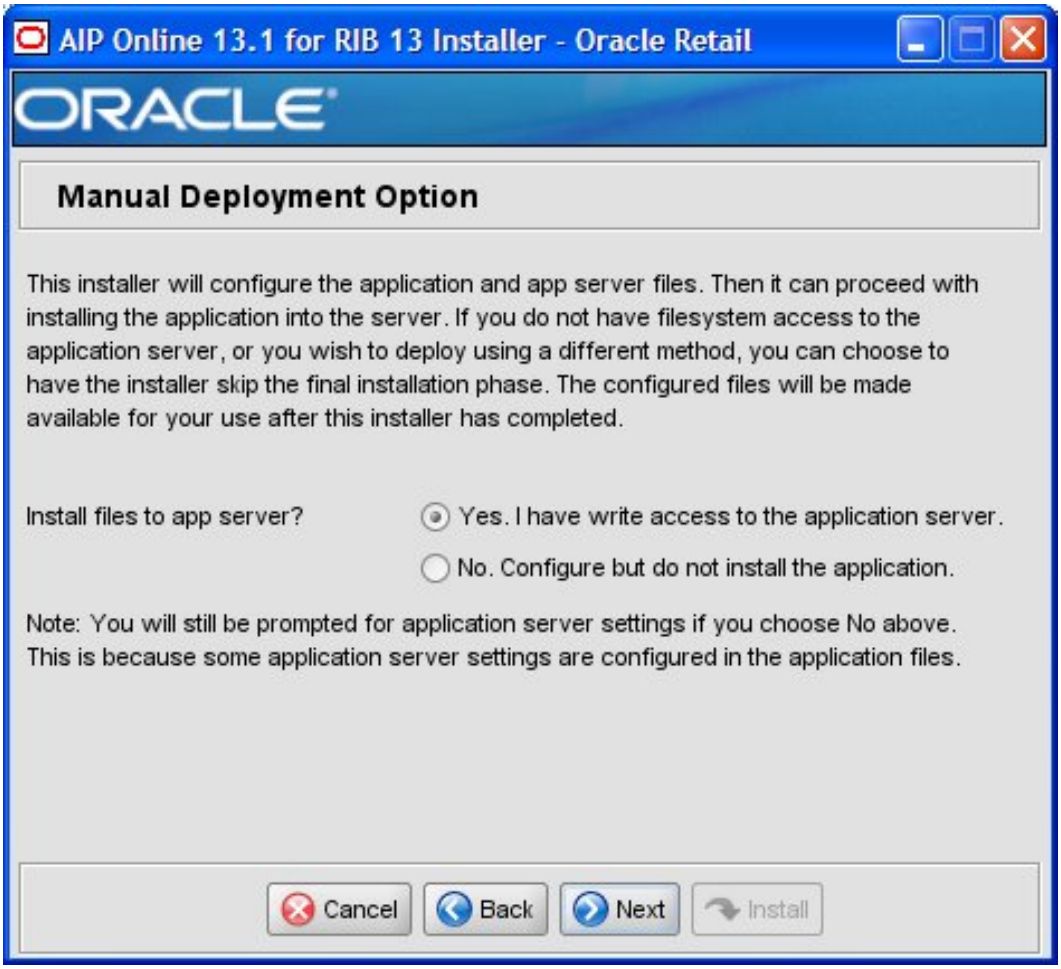
Example of Data Source Confirmation Screen for RAC database



Example of Data Source Confirmation Screen for non-RAC database

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.

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



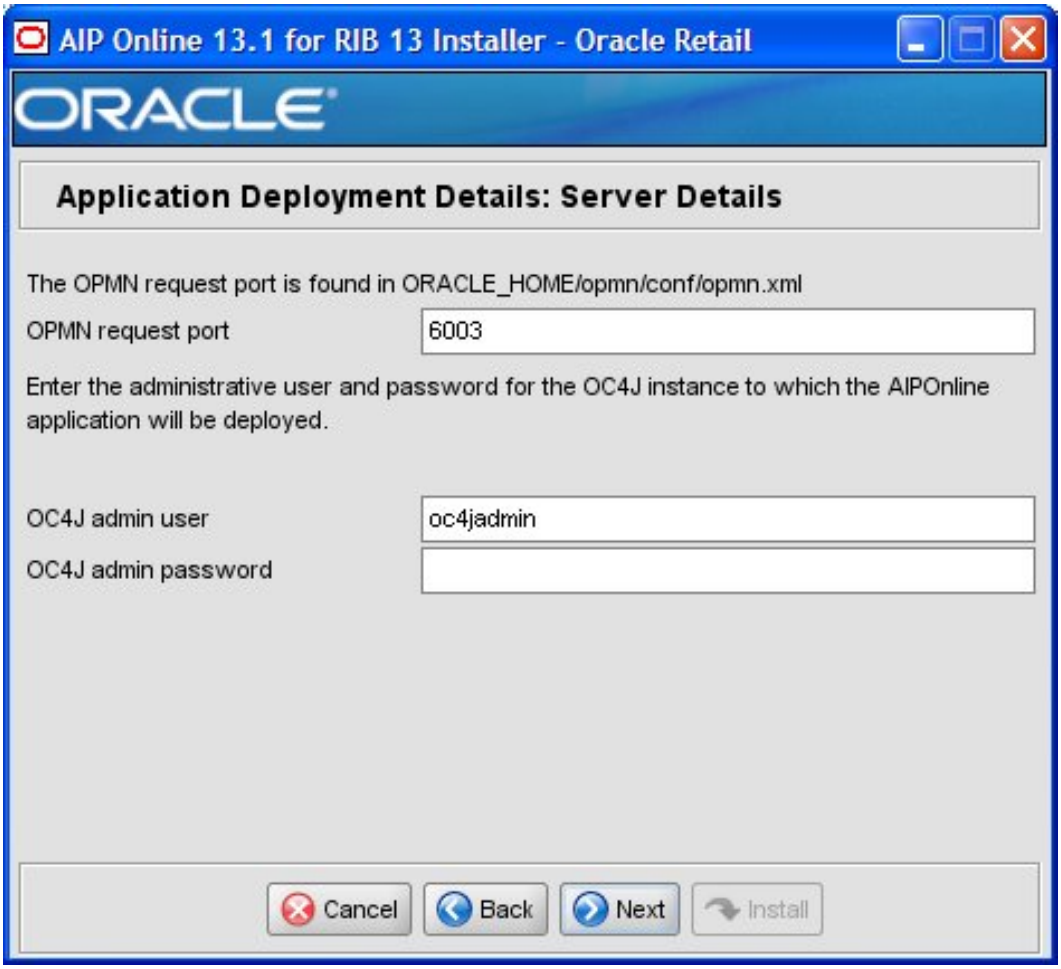
Manual Deployment Option Screen

9. 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 manual 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.



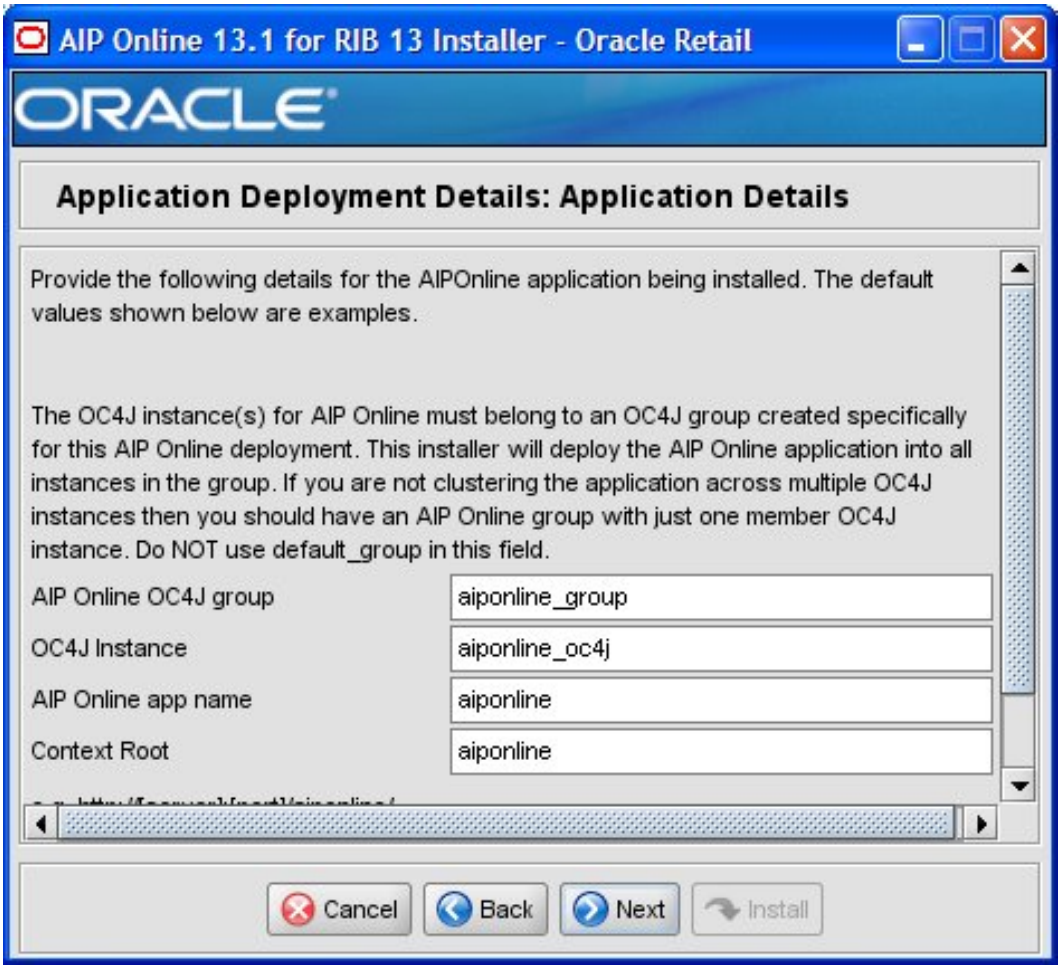
Example of Application Deployment Details: Server Details Screen

10. 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.

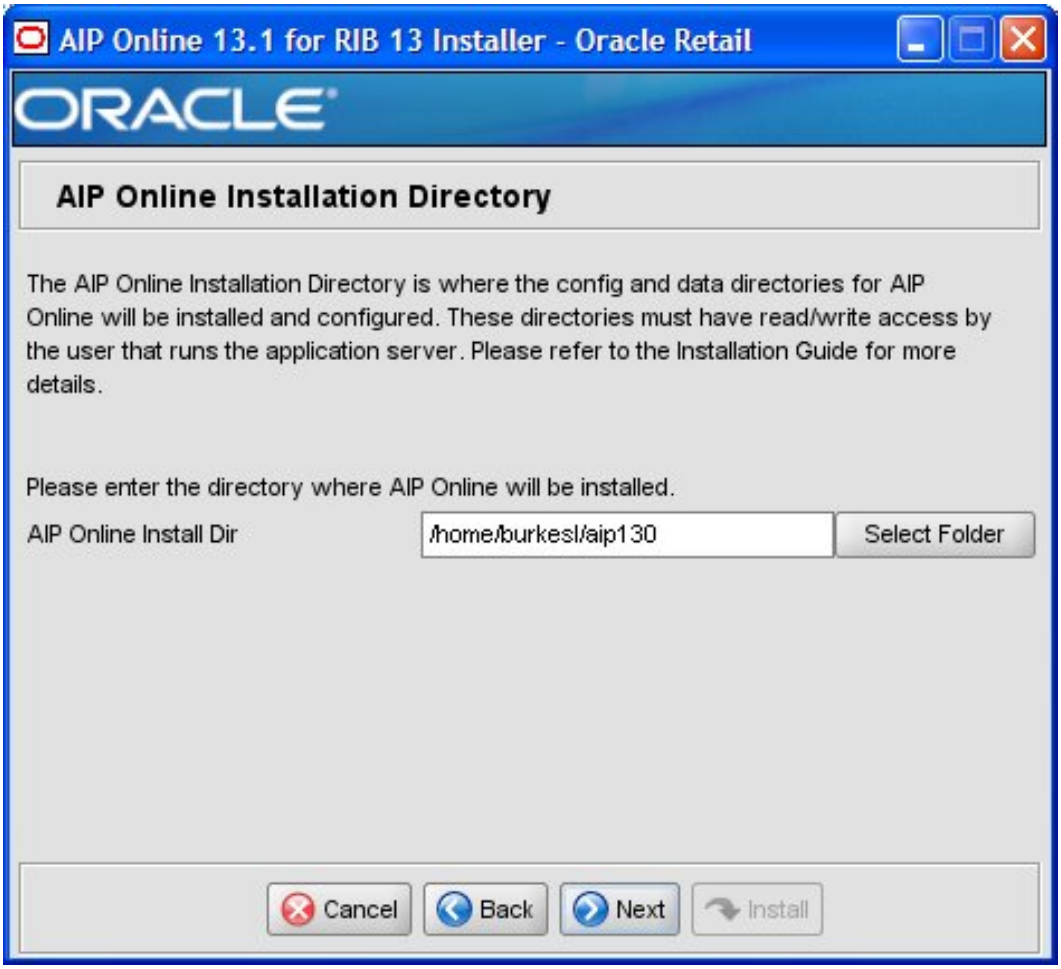


Application Deployment Details: Application Details Screen

11. 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.



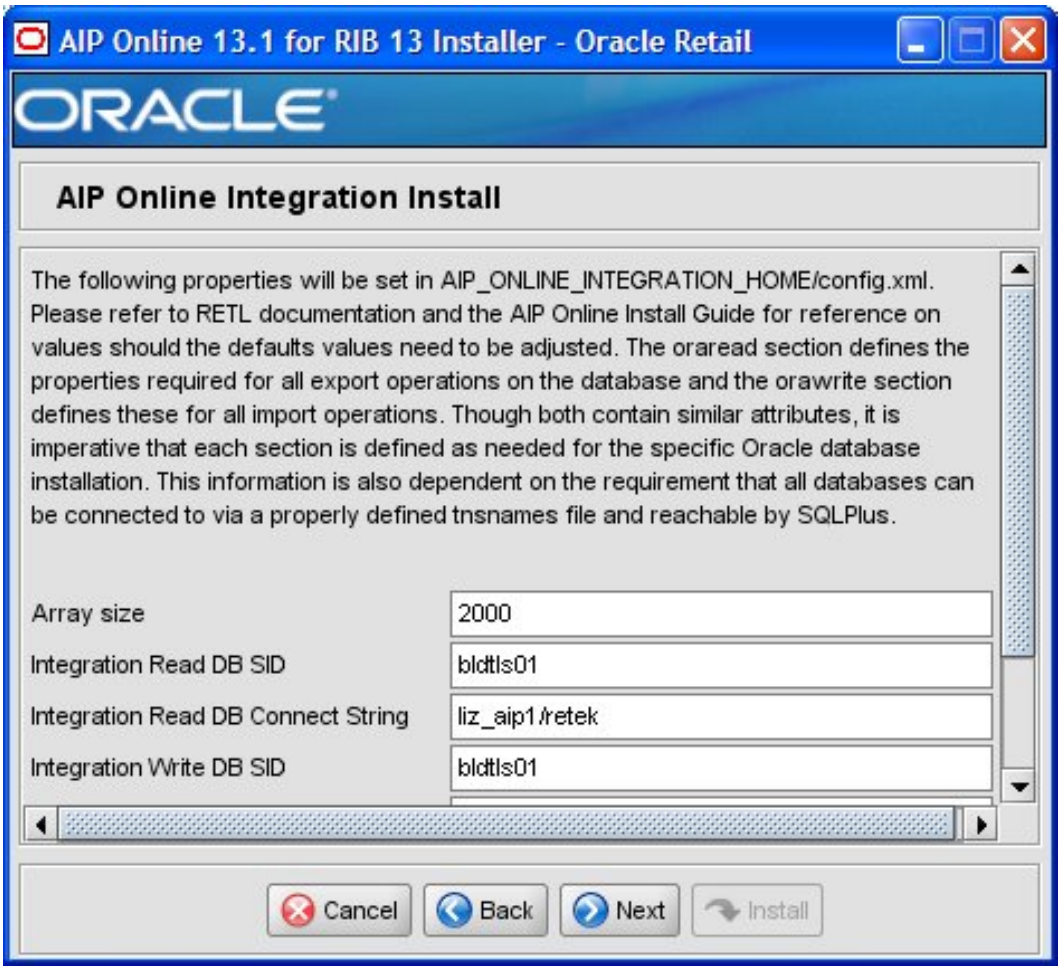
AIP Online Installation Directory Screen

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

AIP Online Integration Screen

13. 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.

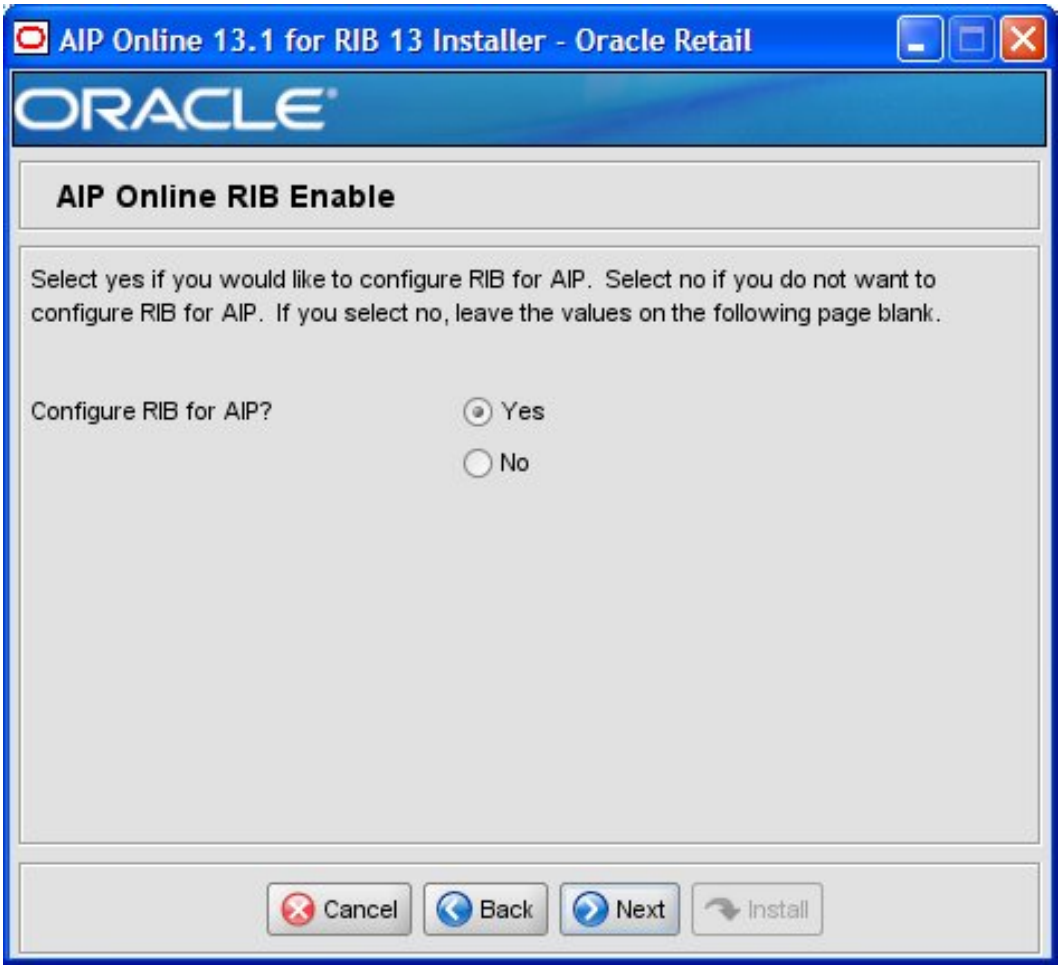
Though both sections contain similar attributes, it is imperative that each section is defined as needed for the specific Oracle database installation. This information is also dependent on the following requirements

- All databases can be connected to using a properly defined tnsnames file.
- All databases are reachable by SQLPlus.

14. 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**

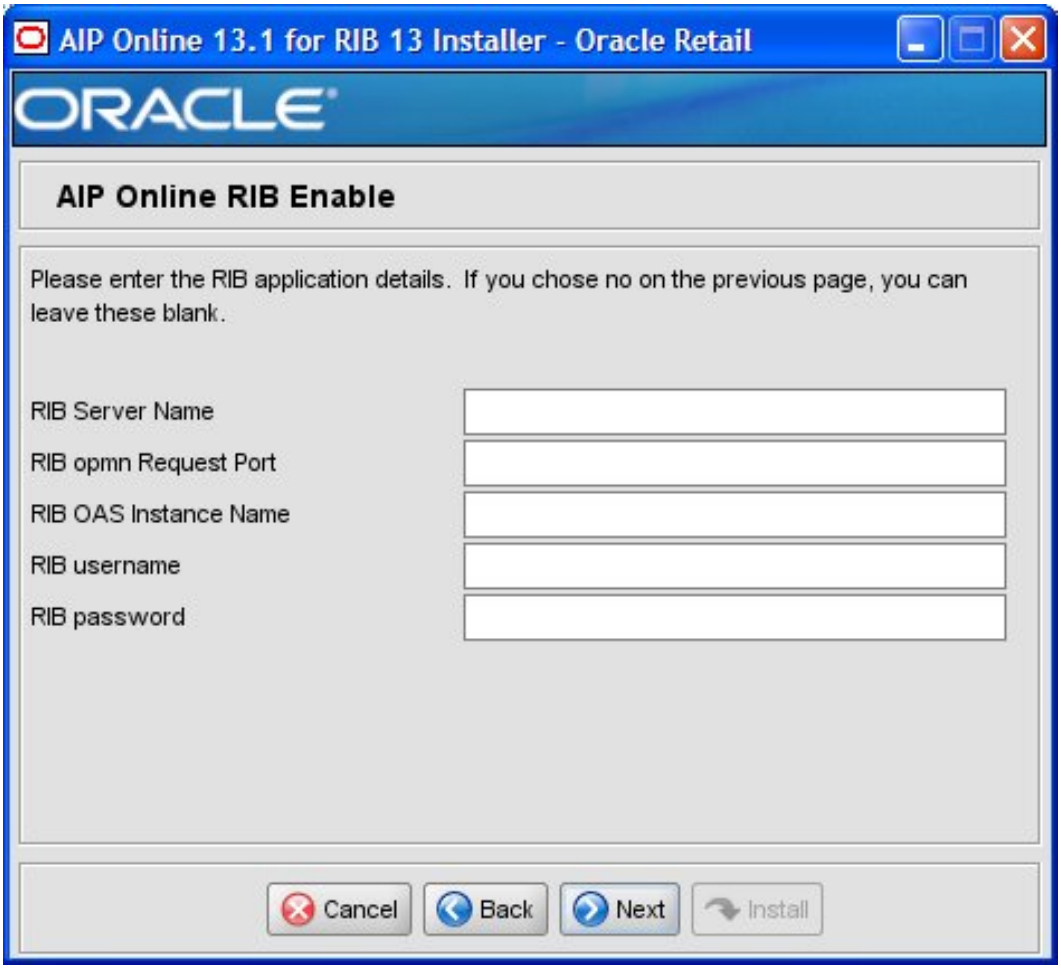
    Please refer to the *AIP Online Implementation Guide* as well as the *RETL 13.1 Installation Guide* for further details on the AIP Integration fields.

    The AIP Online RIB enable screen appears.



Enable RIB for AIP Screen

15. 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.

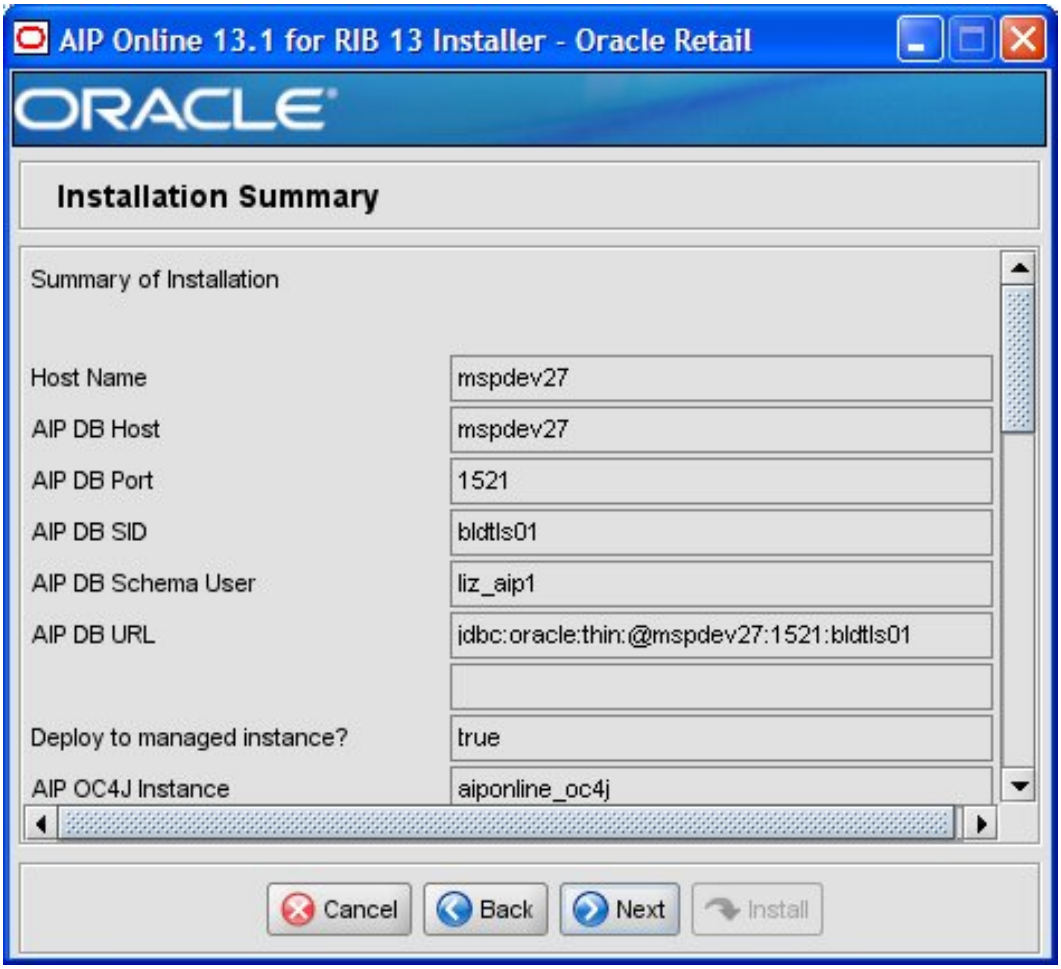


Enable RIB Details for AIP Screen

16. 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.

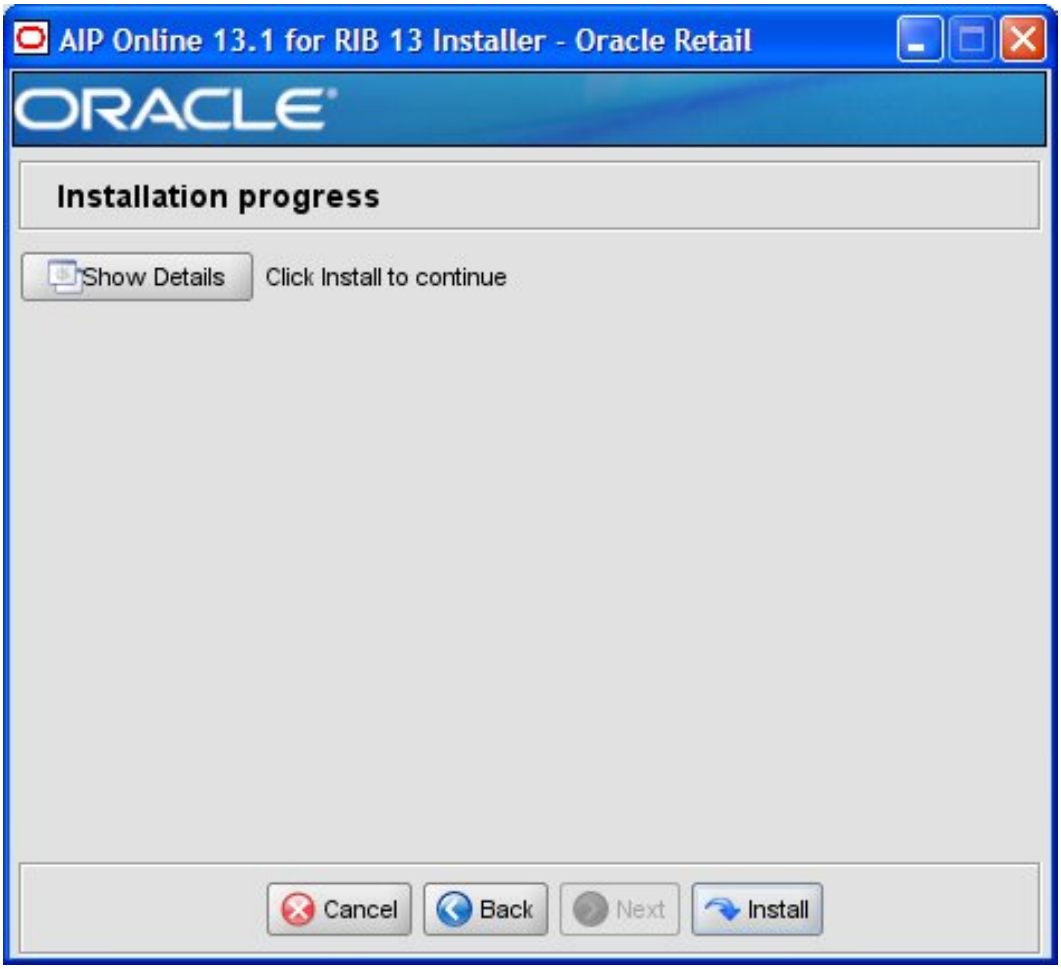
The installation summary screen appears



Installation Summary Screen

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

The Installation Progress screen appears.



Installation Progress Screen

18. 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.

19. Click **OK** to close the Finished dialog box.

20. 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://support.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. If the application is being installed to a clustered OAS, then this procedure needs to be performed on each node of the RAC OAS.

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.

6

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 13.1.2. *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 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/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:$JAVA_HOME/jre/bin:$PA
TH
```

export

PATH=$TEST_ONL_INTEGRATION_HOME:$TEST_ONL_INTEGRATION_HOME/bs
a:$TEST_ONL_INTEGRATION_HOME/scripts:$PATH

7

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 13.1.2.3, 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-13.1.2-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.

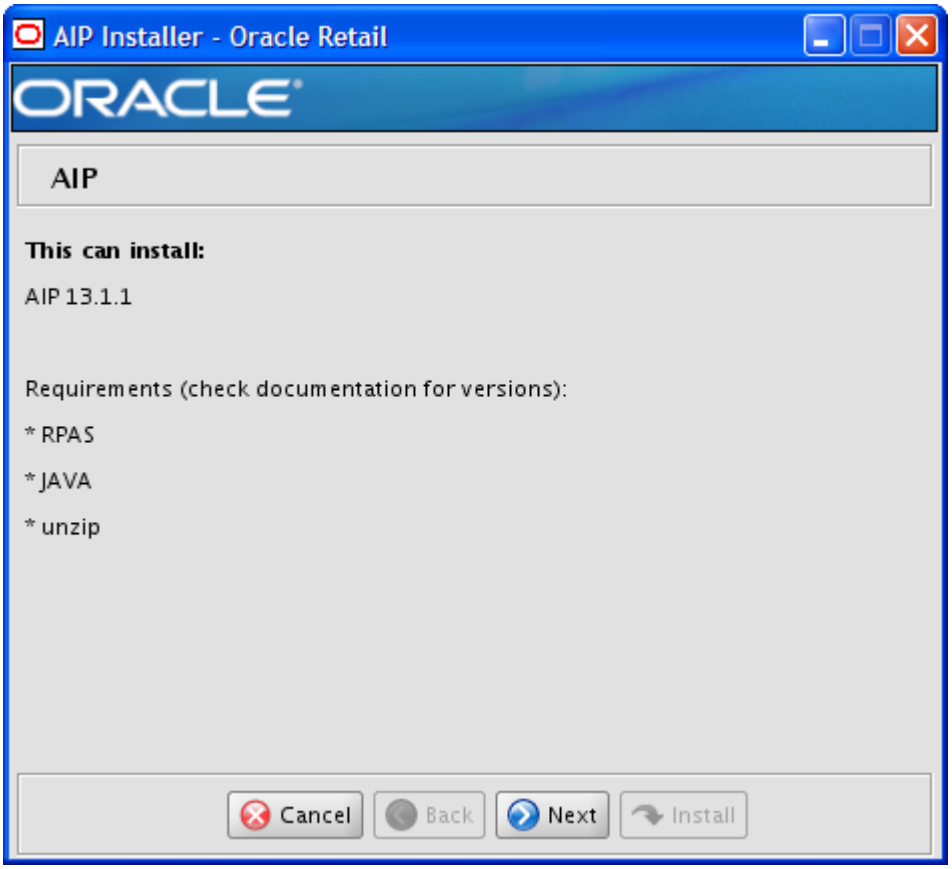
To run the Installer in the GUI mode, which is the recommended installation method, adjust the DISPLAY environment variable. For example use following command to adjust DISPLAY in Exceed:

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.

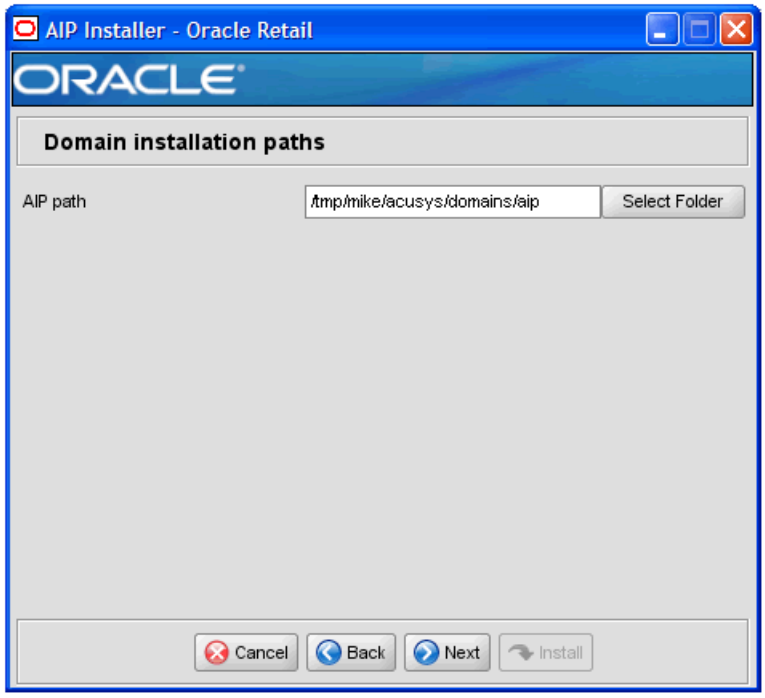


AIP Installer Window

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

Base Paths for Solution Screen

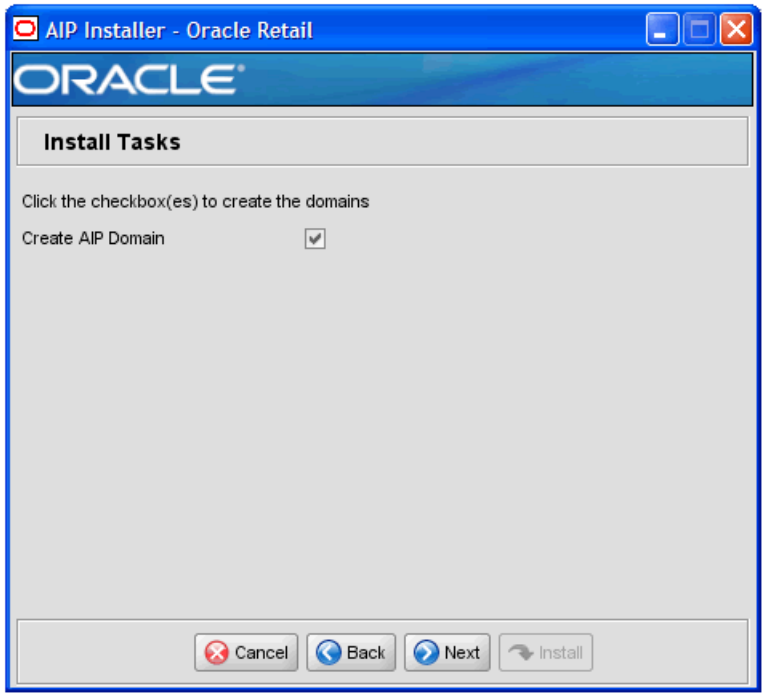
5. Enter the following path information and click **Next**:
   - **Dir to store configurations –** Enter the target directory for your configurations, or click the **Select Folder** button to navigate to the appropriate location. This is the path that will be assigned to the environment variable $AIP_INSTALL.
   - **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.



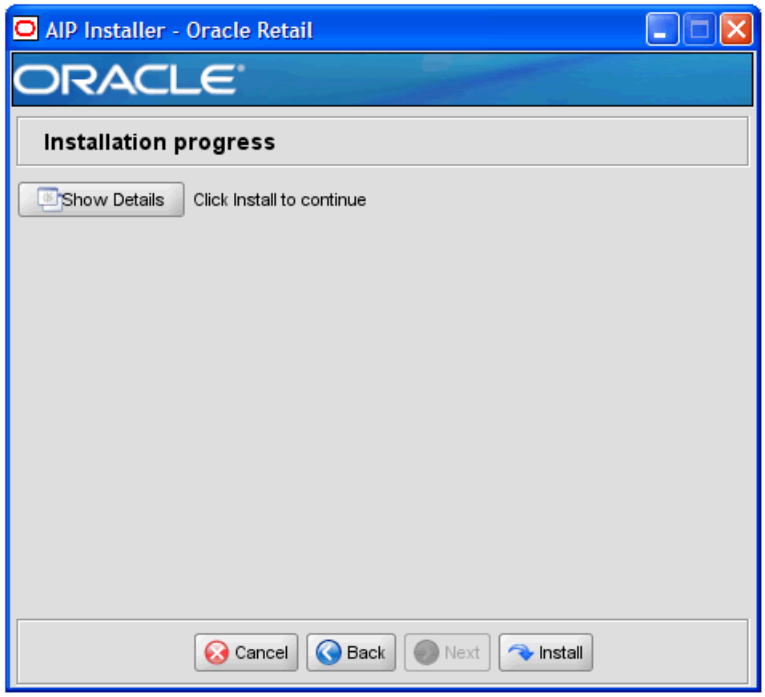
Install Tasks Screen

7. 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.

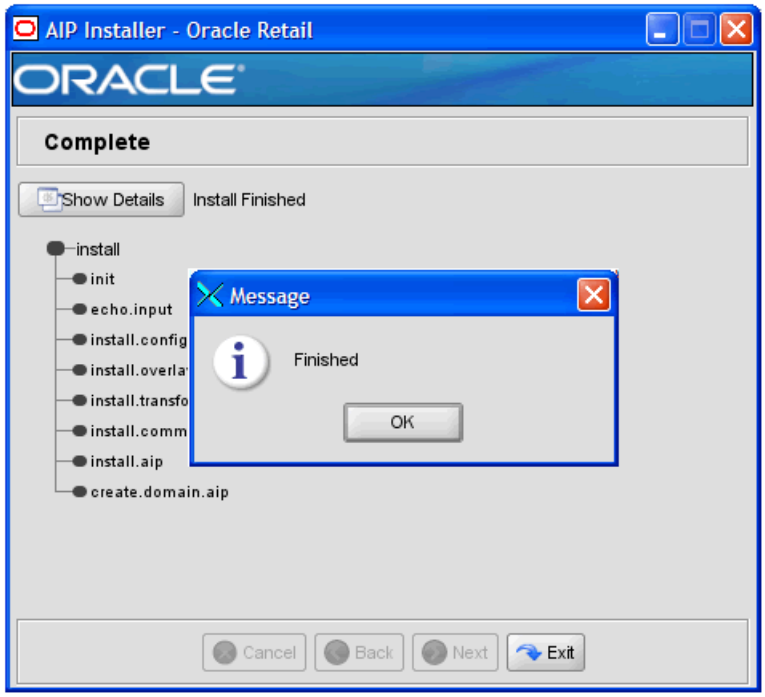


Installation Progress Screen

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.

The AIP RPAS domain does not contain any accounts. The domain build process for previous versions of AIP and RPAS created the default accounts of **adm** and **usr** during the domain build. These accounts are not created in the domain build process for this release.

For details and instructions on how to create admin and user accounts for the AIP RPAS domain, read the:

- *Oracle Retail Predictive Application Server Release Notes*
- *Oracle Retail Predictive Application Server Administration Guide* for the description of the usermgr utility in the "Operational Utilities" chapter
- *Oracle Retail Predictive Application Server Administration Guide*'s chapter on "Security and User Administration"

8

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 the 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 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.
```

6. **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.

A

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/$ORACLE_SID/retek_index01.dbf'  SIZE 500M
    AUTOEXTEND ON NEXT 100M MAXSIZE 2000M
    EXTENT MANAGEMENT LOCAL
    SEGMENT SPACE MANAGEMENT MANUAL
;
CREATE TABLESPACE RETEK_DATA DATAFILE
    '/u01/oradata/$ORACLE_SID/retek_data01.dbf'  SIZE 500M
    AUTOEXTEND ON NEXT 100M MAXSIZE 2000M
    EXTENT MANAGEMENT LOCAL
    SEGMENT SPACE MANAGEMENT MANUAL
;
```

B

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)

Part II

Patch Installation

Part II of this guide details the steps needed to do apatch installation of AIP. For information about a full installation, see Part I Full Installation.

9

AIP Upgrade

This chapter describes how to upgrade an AIP 13.0.2.x or 13.1.1.x installation to AIP 13.1.2. Since AIP is a product distributed across two database technologies, the Oracle Retail Predictive Application Server (AIP-RPAS) and the Oracle Enterprise Edition (AIP-Oracle), the instructions below are divided likewise into AIP-RPAS and AIP-Oracle sections. Please read the upgrade instructions in entirety before starting the upgrade.

> **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.

AIP Upgrade Scope and Support

As of AIP 13.1.2, there are two code lines of AIP which are directly patchable to AIP 13.1.2: AIP 13.0.2 and AIP 13.1.1.

As of the AIP 13.1.2 release, the latest hot fix for AIP 13.0.2 is the 13.0.2.23 fix. Any AIP 13.0.2 hot fixes delivered after AIP 13.0.2.20 are not included in the AIP 13.1.2 package but will be delivered (also referred to as 'forward-ported'), as 13.1.2 hot fixes if applicable.

As of the AIP 13.1.2 release, the latest hot fix for AIP 13.1.1 is the 13.1.1.8 fix. Any AIP 13.1.1 hot fixes delivered after AIP 13.1.1.5 are not included in the AIP 13.1.2 package but will be delivered (also referred to as 'forward-ported'), as 13.1.2 hot fixes if applicable..

Prior to upgrading, it is imperative that clients contact AIP Sustaining Engineering to confirm which, if any, AIP hot fixes need to be applied post-upgrade. The following example illustrates the need for this guidance:

Example:

- If an AIP 13.0.2.24 hot fix is released, and the issue is deemed applicable to AIP 13.1.2, the fix would be 'forward-ported' and released as a 13.1.2.x hot fix.
- If a client upgraded from AIP 13.0.2.23 to AIP 13.1.2, they would need to apply the forward-ported 13.1.2.x hot fix.
- If a client applied the AIP 13.0.2.24 hot fix and subsequently performed the upgrade to 13.1.2, executing the forward-ported 13.1.2.x hot fix may or may not be necessary, depending on code module(s) involved.

AIP Packaged Content

This section explains the differences between the AIP 13.1.2 upgrade package and the AIP 13.1.2 full installation package. While the full installation and upgrade packages are different, the resulting AIP 13.1.2 installations are equivalent.

AIP-RPAS Package Content

The delivery mechanism of the full install is the AIP- RPAS 13.1.2 Installer, which is a UNIX command-line or graphical user interface program that unpacks the AIP 13.1.2

release package and installs the AIP-RPAS binaries, libraries, scripts and domain configuration according to customer input directories and environment variables.

The delivery mechanism of the upgrade release is the AIP-RPAS 13.1.2 patch, which is a UNIX command-line interface program which upgrades the already established AIP-RPAS environment, namely the AIP-RPAS binaries, libraries, scripts and AIP RPAS domain.

While the infrastructure and delivery system of the full install and the upgrade install are different, the resulting AIP-RPAS production code is identical. For more information about the full installation package and installation process, read the *Oracle Retail Advanced Inventory Planning Installation Guide*. For more information about the upgrade install, read the AIP-RPAS section of this *Upgrade Guide*.

AIP-Online Package Content

The delivery mechanisms of the full install are the following AIP-Online installers, which can be executed from the UNIX command-line or via a graphical user interface:

1. AIP-Online 13.1.1 AppServer Installer: installs the AIP-Online Web application component on the Oracle Application Server and also installs the AIP-Online Integration component.
2. AIP-Online 13.1.1 DB Installer: installs the AIP-Online Database component.

The delivery mechanism of the upgrade install is through an installer and a database upgrade script:

3. AIP-Online 13.1.1 AppServer Installer: installs AIP Online Web application component on the Oracle Application Server and also installs the AIP Online Integration component. This installer can be executed from the UNIX command-line or a graphical user interface and is the same installer used for the full installation.
4. The upgrade.sql script executes the following items used to upgrade the AIP-Online database schema:
   a. Database change scripts used for altering, creating or deleting the structure of database objects.
   b. Data migration scripts to insert new required data such as system parameters.
   c. PL/SQL stored procedures, functions, packages, etc.

While the infrastructure and delivery system of the full install and the patch install are different, the resulting AIP-Oracle production code is identical. For more information about the full installation package and installation process, read the *Oracle Retail Advanced Inventory Planning Installation Guide*. For more information about the upgrade install, read the AIP-Online section of this *Upgrade Guide*.

Database Upgrade

This upgrade.sql is delivered under the zip file: AIP13.1.2-db-upgrade.zip. Manually run this to sql script to upgrade your database schemas from 13.1.1 to 13.1.2 level.

For the database upgrade from 13.0.2-> 13.1.2, do the following:

1. Upgrade 13.0.2-> 13.1.1
2. Run AIP13.1.2-db-upgrade->upgrade.sql
   a. Running Instructions:
      – $ unzip AIP13.1.2-db-upgrade.zip AIP13.1.2-db-upgrade
      – $ cd AIP13.1.2-db-upgrade\AIPOnlineDBServer131\aip13\patch
      – $ sqlplus schema_owner/password@database
      – $ @upgrade.sql

AIP Installation Overview

AIP Package Extraction

Download the 13.1.2 package (i.e. aip_13.1.2.zip) from My Oracle Support (https://support.oracle.com/) to a staging folder (e.g. $PACKAGEDIR) that is accessible to all components of your AIP 13.1.2 installation. The following sample commands are provided to guide you through the file extraction process and identify the files provided in this patch.

Example of Package Extraction:

```
$ cd $PACKAGEDIR
$ unzip aip_13.1.2.zip
$ unzip aip-13.1.2.tar.zip
$ tar xf aip-13.1.2.tar
```

The sample listing below shows the contents of files and directories extracted under the $PACKAGEDIR for AIX server operating system:

AIP-RPAS Installation Files

```
aip/13.1.2/Retek.pm
aip/13.1.2/rsp_manager
aip/13.1.2/aix/Version
aip/13.1.2/aix/domain/
aip/13.1.2/aix/domain-scripts/
aip/13.1.2/aix/domain-scripts/postproc.005
aip/13.1.2/aix/env/
aip/13.1.2/aix/env/AIP_INSTALL/
aip/13.1.2/aix/env/AIP_INSTALL/aip_13.1.2_measure_backup_list.txt
aip/13.1.2/aix/env/AIP_INSTALL/configuration.tar
aip/13.1.2/aix/env/AIP_INSTALL/input.tar
aip/13.1.2/aix/env/AIP_INSTALL/domain_build.tar
aip/13.1.2/aix/notice
aip/13.1.2/aix/rpas/
aip/13.1.2/aix/rpas/bin/*
aip/13.1.2/aix/rpas/applib/*
aip/13.1.2/aix/rpas/applib/resources/*
```

AIP-Oracle Installation Files

```
$PACKAGEDIR/AIP-online-appserver-installer.zip
$PACKAGEDIR/AIP13.1.2-db-upgrade.zip
```

Compatibility and Hardware Requirements

The following table summarizes the changes in supporting technologies and supporting Oracle Retail products for AIP from 13.0.2 to 13.1.2 release

Supporting Product/Technology	AIP 13.0.2 certified version	AIP 13.1.1 certified version	AIP 13.1.2 certified version
Supporting Oracle Retail Product			
RPAS	13.0.2.1 (orig) 13.0.2.12 (per AIP 13.0.2.7)	13.0.4	13.1.2.3
RIB	13.0.2	13.1.1	13.1.1
RETL	11.3 or greater	13.1	13.1
RMS	10.1.x, 11.0.x, 13.0.2	13.1.1	13.1.2
RO	-	13.0.4	13.1.1
Supporting Technology			
Database	10.2.0.3 (10g R2)	11g (11.1.0.7.0)	10g r2 (10.2.0.4) 11g (11.1.0.7.0)
Application Server	OAS 10.1.3.3	OAS 10.1.3.4	OAS 10.1.3.4
Server Operating System	AIX 5.3	AIX 5.3, AIX 6.1 Sun Solaris 10, HP –UX 11.31 (AIP-Oracle), HP-UX 11.23 (AIP-RPAS) OEL 5 (AIP-Oracle), OEL 4.5 (AIP-RPAS)	AIX 5.3, 6.1 Sun Solaris 10 HP–UX 11.31 (Integrity) OEL 5.2
Java SE (used by RPAS and RETL)	1.5	1.6	1.6
JDBC driver used by RETL	Thin	OCI (thick)	OCI (thick)

Recommended Upgrade Path

The general guidelines for upgrading AIP to 13.1.2 are as follows:

1. First upgrade supporting Oracle retail products including AIP as described in table above while using the existing supporting technology.
2. Then upgrade the supporting technologies afterwards. Please note that some environment variables and some configuration parameters may need to be updated after supporting technologies are upgraded. Examples may include RFX_HOME,

ORACLE_HOME, JAVA_HOME variables in .profile, database connection details in db.properties used by Application Server, config.xml and aip_env_online.sh files in the integration folder. Please read the sections below for further details about AIP online and AIP-RPAS upgrade process.

Supported Oracle Retail Products

AIP 13.1.2 is compatible with the following Oracle Retail products:

- Oracle Retail Merchandising System (RMS) 13.1.2
- Oracle Retail Predictive Application Server (RPAS) 13.1.2.3
- Oracle Retail Integration Bus (RIB) 13.1.1
- Oracle Retail Extract Transform and Load (RETL) 13.1
- Oracle Retail Replenishment Optimization 13.1.1

> **Note:** AIP 13.1.2 can integrate with RMS 10.1.x and 11.0.x if a custom interface is used to transmit AIP-generated purchase orders and transfers to RMS.

Server Operating Systems

AIP 13.1.2 is compatible with the following server operating systems:

- AIX 5.3, AIX 6.1
- Sun Solaris 10
- HP –UX 11.31 (Integrity)
- OEL 5.2

Server JRE

This version of AIP requires the following server Java Run Time Environments (JRE):

- 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 10g Enterprise Release 2 (version 10.2.0.4) in in standalone configuration.
- 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) standalone database.

JDBC drivers

- This patch requires the use of OCI (thick) driver by RETL to connect to Oracle.
  - (OCI drivers are generally available as part of Oracle Client or Oracle Database and do not need separate installation).

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 stand alone configuration
- Oracle Application Server(Version 10.1.3.4) in clustered topology

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, 6.0, 7.0.

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

- JRE 1.5.0_22

AIP-RPAS Installation

AIP-RPAS Upgrade Prerequisites

In order to upgrade the AIP 13.0.2 RPAS components to AIP 13.1.2, first verify the following criteria for the AIP 13.0.2 RPAS system:

- Verify that AIP 13.0.2.x or 13.1.1.x is currently installed.
  - Check that the $AIP_INSTALL environment variable is set and points to a valid AIP install directory. This should be the $AIP_INSTALL directory used when installing or patching to the currently installed version of AIP.
- Verify that UNIX operating system is one of the operating systems listed in the "Server Operating Systems" section, above.
- Upgrade RPAS to RPAS 13.1.2.3. Refer to the *RPAS Installation Guide* for information.
  - Change directories to RPAS home and execute rpaslogin.ksh to set $RPAS_HOME variable.

```
$ cd <RPAS home>
$ . ./rpaslogin.ksh
```

  - Check that the $RIDE_HOME environment variable is set correctly.
  - Check that $PATH includes $RIDE_HOME/bin and $RIDE_HOME/lib

```
$ export PATH=$RIDE_HOME/bin:$RIDE_HOME/lib:$PATH
```

> **Note:** Ensure that $RPAS_HOME and $RIDE_HOME have read/write execute permission by running "`chmod –R 775 $RIDE_HOME`"

- Verify your JAVA home is set properly, and that the $PATH includes $JAVA_HOME/bin

```
$ export JAVA_HOME=<Java home location>
$ export PATH=$JAVA_HOME/bin:$PATH
```

- Depending on the Operating System, modify your the appropriate environment variable: LIBPATH (AIX), SHLIB_PATH (HP-UX), or LD_LIBRARY_PATH (Linux, SunOS) to include the jre library files.
- Verify the AIP 13.1.2 package.
  - Check that $PACKAGEDIR is accessible.
  - If it does not already exist (to support a previously applied patch), create a $PACKAGEDIR/aip/13.1.2/domainlist.txt which lists the full path of the master domain but does not list sub/local domains.
- Verify domain.

  Perform the following:

```
$ domaininfo -d $(cat $PACKAGEDIR/aip/13.1.2/domainlist.txt) -apptag -terse
```

  The result should reveal one of the following as the current version:

```
AIP: 13.0.2
AIP: 13.1.1
AIP: 13.1.1.x (where x=hot-fix number)
```

- 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 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.

AIP-RPAS Executables and Definitions Upgrade

This section provides the procedure to upgrade the AIP RPAS executables and definitions from AIP 13.0.2.x or AIP 13.1.1.x to AIP 13.1.2.

> **Note:** This section does not patch the AIP RPAS domain since the `-no_domain` flag is used in rsp_manager call described in this section.

1. Clients who are patching AIP 13.1.2 must first back up their $RPAS_HOME/bin/aip_env_rpas.sh script.

   This script contains variables which can be customized by the client. When the AIP RPAS Executables and Definitions are upgraded, a new aip_env_rpas.sh will be copied into the $RPAS_HOME/bin directory, overwriting the previous copy. Once the new RPAS executable programs are installed into the $RPAS_HOME/bin directory, clients should copy back into $RPAS_HOME/bin/aip_env_rpas.sh their specific values for any of the environment variables they had previously changed from the default values.

2. To upgrade the RPAS executables and definitions, run the following command from $PACKAGEDIR/aip/13.1.2/:

   ```
   $ ./rsp_manager –install –sp <OS> –no_domain –log aip1312part1.log
   ```

   In above command, <OS> must be one of:

   – aix53
   – aix61
   – hpux
   – linux
   – solaris10

   By running the command above, the following tasks are performed:

- Copies AIP 13.1.2 executables (programs, shared libraries, and resource XML files) from $PACKAGEDIR/aip/13.1.2/<OS>/rpas to $RPAS_HOME.
- Copies AIP 13.1.2 configuration definitions from $PACKAGEDIR/aip/13.1.2/<OS>/env/AIP_INSTALL to $AIP_INSTALL
- Compares the integrity of files in RPAS_HOME and RIDE_HOME, due to implicit default `–validate` flag in the AIP RPAS Executables and Definitions Upgrade Process.
- Generates a log file, aip1312part1.log, that can be searched for error keywords such as “error”, “exception”, and “<E”.

3. Now that the $RPAS_HOME has been updated with this patch's contents, edit $RPAS_HOME/bin/aip_env_rpas.sh and insert custom values from the backup copy of aip_env_rpas.sh made in step 1. This must be done before the 2nd rsp_manager call is made below, since the rsp_manager part 2 call refers to the custom values in the aip_env_rpas.sh script.
4. For AIX installations only, turn off the read permissions for the world/other group for all shared objects in $RPAS_HOME/applib, to avoid a possible shared object caching issue.

   $ cd $RPAS_HOME/applib

   $ chmod o-r *.so

AIP-RPAS Definitions Customizations Upgrade

If clients 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 13.1.2 RPAS configuration, perform the following procedure.

> **Note:** The pre-existing configuration in $AIP_INSTALL was packaged as configuration_*.tar.Z (where * = current domain version from domaininfo output, e.g. configuration_13.1.1.tar.Z) during the previous rsp_manager call, so that the previous configuration with any customizations would be preserved.

1. To extract the AIP 13.1.2 RPAS definitions configuration, execute the following command from $AIP_INSTALL:

   ```
   $ tar –xf configuration.tar
   ```

2. Refer to the RPAS 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.

3. Repackage the $AIP_INSTALL/configuration.tar:

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

AIP-RPAS Domain Upgrade

Perform the following procedure to upgrade your RPAS domains to AIP 13.1.2.

1. Run the following command to check your AIP domain path. This text file should contain your master domain, but no sub/local domains.

```
$ more $PACKAGEDIR/aip/13.1.2/domainlist.txt
```

2. Run rsp_manager as shown below to upgrade the domains using the combined 13.1.2 configuration and customized 13.0.2 configuration.

```
$ ./rsp_manager –install –sp <OS> -no_rpas –no_env –domain domainlist.txt -log aip1312part2.log
```

In above command, <OS> must be one of:

- aix53
- aix61
- hpux
- linux
- solaris10

By running the command above, the following tasks are performed:

- Upgrades the AIP domain's configuration, including measure attributes and rules, to the AIP 13.1.2 configuration.
- Copies the existing AIP domain's interface directory to interface_13.1.2, and drops in a new interface directory corresponding with the current release's interface files. If the client has made supported customizations to any of the interface files, as described in the *Oracle Advanced Inventory Planning Implementation Guide*, these customizations must be re-introduced into the interface directory's configuration files.
- Generates a log file, aip1312part2.log, that can be searched for error keywords such as "error", "exception", and "<E".

3. Perform the following to verify the patch level of the RPAS domain:

```
$ domaininfo –d $(cat $PACKAGEDIR/aip/13.1.2/domainlist.txt) –apptag
```

The result should display the following as the current version:

```
AIP: 13.1.2
```

Note: The AIP 13.1.2 upgrade contains RPAS upgrades to the domain password policy. This policy may require users to modify their passwords at next login if they do not meet the password policy as described in the *Oracle Retail Predictive Application Server Administration Guid*e.

Review AIP-RPAS Environment Variables

As part of the upgrade, examine the environment variables used by AIP RPAS to ensure they are up to date. If any of these environment variables are not up to date, edit the script where the environment variable is defined.

The current hierarchy of scripts which set environment variables, and the list of variables each defines, follows:

- retaillogin.ksh
  - rpaslogin.ksh (`RPAS_HOME`, `PATH`, <library path>*)
  - toolslogin.ksh (`RIDE_HOME`, `JAVA_HOME`)
  - jdbclogin.ksh (`JDBC_HOME`, `CLASSPATH`, `OPENRDA_INI`)
  - aiplogin.ksh (`RPAS_TODAY`, `AIP_INSTALL`, `TEST_AIPDOMAIN`)

* Depending on the operating system, <library path> will be `LIBPATH` (AIX), `LD_LIBRARY_PATH` (SunOS, Linux), or `SHLIB_PATH` (HP-UX).

Internally controlled components and their environment variables, such as RPAS, Tools, JDBC and AIP, should be updated by the patching process. Values of these variables should be inspected to confirm they are current.

External components such as Java are not controlled by RGBU upgrade procedures. As part of an AIP upgrade, one prerequisite may be to first apply the appropriate RPAS upgrade. As part of that RPAS upgrade one prerequisite may be to first apply a new version of Java. Therefore, the setting of JAVA_HOME in the environment must be inspected to ensure that it is up to date, since the RPAS and AIP patches will *not* modify toolslogin.ksh to point to the new JAVA_HOME.

AIP-RPAS Manual Upgrades

This section is reserved for any patch-specific instructions that must be executed manually which the shell-script driven patching above is not able to automatically perform.

There are no manual updates required for patching from AIP 13.0.2.x or AIP 13.1.1.x to AIP 13.1.2.

Upgrading the AIP Online Oracle Components

There are basically 3 components that need to be upgraded for AIP Oracle part of AIP application.

1. AIPOnlineApp on OAS Upgrading this component means installing the delivered EAR file on Oracle Application Server. This essentially replaces the existing EAR file.
2. AIP -Online Integration Files: Upgrading this component means replacing the entire integration folder (containing scripts, schema files etc) with the delivered integration folder. **Therefore it is strongly recommended to take a full back up of existing AIP integration folder in order to reduce the post upgrade time required for configuring and/or customizing integration scripts**.

3. AIP-Online Oracle Database Schema. Upgrading this component means changing existing or creating new database objects and/or data in tables. Unlike the upgrade of first two components, this is not a replace type of upgrade. **Backing up of existing database schema is recommended as it helps in restoring the database in case of any patching failures and in reapplying any customizations.**

Upgrading AIP-Online Oracle Database Schema

By upgrading the AIP Online Oracle database schema, your AIP Online 13.1.1 installation data will be upgraded to AIP 13.1.2. The upgrade script that is used for upgrading AIP Oracle database from 13.1.1 to 13.1.2 is called "upgrade.sql". This script executes following other scripts.

1. Database change scripts used for altering, creating or deleting the structure of database objects like creating new tables, adding columns to existing tables etc.
2. Data migration scripts such as new system parameters etc.
3. Scripts to create or replace AIP 13.1.2 stored procedures, functions and packages.

Any customizations done on AIP 13.1.2 stored procedures, database functions or database packages will need to be reapplied after upgrade. **Therefore please back up the database schema before performing the following procedure.**

1. Make sure the database connection is available on the machine where $PACKAGEDIR is located.
2. Back up the current database schema.
3. Change directories to where the schema upgrade patch is located and unpack it.
   ```
   $ cd $PACKAGEDIR
   $ unzip AIP13.1.2-db-upgrade.zip
   ```
4. To update the database schema to AIP 13.1.2, locate the upgrade.sql and execute it using following commands:
   ```
   cd $PACKAGEDIR/aip/13.1.2/aix/online/db_patch
   sqlplus schema_owner/password@database
   SQL> SET FEEDBACK OFF
   SQL> @upgrade.sql
   SQL> EXIT
   ```

Troubleshooting

In the event of any failures while executing the upgrade.sql script, check the upgrade.log file. The `upgrade.log`.log file is created in the same directory as upgrade.sql script. Look for any customizations as possible reasons for errors in failed scripts. Once the errors are resolved, the upgrade script should be manually modified such that scripts that completed successfully are not executed again. This can be done with the help of upgrade.log file.

The modified upgrade.sql script should be executed again using the same set of commands as mentioned above.

In the event that the seq_system_paramater sequence gets out of sync, (due to some customizations in system_parameter table like records added without using sequence), then you can fix the sequence by performing the following.

```
cd $PACKAGEDIR/aip/13.1.2/aix/online/13.1.2
sqlplus schema_owner/password@database
SQL> select max( parameter_id ) from system_parameters;
```

returns an integer value, RETURNED_VALUE

```
SQL> drop sequence seq_system_parameters;
SQL> create sequence seq_system_parameters
start with <RETURNED_VALUE + 1>
MAXVALUE 999999999999999999999999999 MINVALUE 1
NOCYCLE CACHE 20 NOORDER;
```

In case of invalid AIP database objects, recompile them in following order:

1. Recompile all invalid Functions
2. Recompile all invalid Views
3. Recompile all invalid package specs
4. Recompile all invalid package bodies.
5. Recompile all invalid procedures

When recompiling invalid package specs or invalid package bodies in steps 3 and 4 above, following sequence should be maintained:

1 AIP_UTIL

2 ALERTS

3 BATCH_VALIDATION

4 DEFAULT_ORDER_CYCLE

5 LOC_COPY

6 ORDER_EXPORTER

7 RETL_LOAD

8 AIP_PURGE_CUSTOM

9 AIP_PURGE

10 SUPPLIER_MINIMUM_SCALING

11 ORDER_MERGE

12 OCS_VALIDATION

13 CONTAINER_SCALING

14 UI_VALIDATION

Please consult your DBA in assisting with commands required for recompiling.

Upgrading AIPOnlineApp on OAS and AIP-Online Integration Files

Both the "AIPOnlineApp on OAS" and "AIP-Online Integration Files" components are upgraded using AIP-online-app-server installer provided with the patch. The installer first upgrades the AIPOnlineApp on OAS and then upgrades the AIP-Online Integration files.

1. Upgrading "AIPOnlineApp on OAS" component is equivalent to installing and configuring AIP 13.1.2 AIPOnlineApp EAR file on OAS.
2. Upgrading "AIP-Online Integration Files" component means replacing the entire integration folder (containing scripts, schema files etc) with the delivered integration folder. **So a full back up of existing integration folder is required before upgrade. Configuration changes and any customizations will need to be reapplied after upgrade.**

The instructions for upgrading the "AIPOnline App of OAS" and "AIP-Online Integration Files" components are the same as installing them. For installation instructions, please follow instructions described in chapter "Installing AIPOnlineApp on OAS 10.1.3.4 "and in chapter "Installing the AIP Integration Components" of Oracle Retail AIP 13.1.1 Installation Guide. While reading the installation guide, please note following:

3. The AIP-online-appserver-installer.zip file referenced in *Oracle Retail AIP 13.1.2 Installation Guide* is provided in patch under following location:

   $PACKAGEDIR/AIP-online-appserver-installer.zip

4. In chapter "Installing AIPOnlineApp on OAS 10.1.3.4" skip the sections on "Creating the AIP Online Enterprise" and "Creating AIP Online Users" if enterprise user and online users are already created. In chapter "Installing the AIP Integration Components" skip the RETL installation part if RETL is already installed.