Oracle® Retail Advanced Inventory Planning

Installation Guide
Release 13.0.1

August 2008

ORACLE

Oracle® Advanced Inventory Planning Installation Guide, Release 13.0.1

Primary Author: Gary O'Hara

Value-Added Reseller (VAR) Language

(i) the software component known as **ACUMATE** developed and licensed by Lucent Technologies Inc. of Murray Hill, New Jersey, to Oracle and imbedded in the Oracle Retail Predictive Application Server – Enterprise Engine, Oracle Retail Category Management, Oracle Retail Item Planning, Oracle Retail Merchandise Financial Planning, Oracle Retail Advanced Inventory Planning and Oracle Retail Demand Forecasting applications.

(ii) the **MicroStrategy** Components developed and licensed by MicroStrategy Services Corporation (MicroStrategy) of McLean, Virginia to Oracle and imbedded in the MicroStrategy for Oracle Retail Data Warehouse and MicroStrategy for Oracle Retail Planning & Optimization applications.

(iii) the **SeeBeyond** component developed and licensed by Sun MicroSystems, Inc. (Sun) of Santa Clara, California, to Oracle and imbedded in the Oracle Retail Integration Bus application.

(iv) the **Wavelink** component developed and licensed by Wavelink Corporation (Wavelink) of Kirkland, Washington, to Oracle and imbedded in Oracle Retail Store Inventory Management.

(v) the software component known as **Crystal Enterprise Professional and/or Crystal Reports Professional** licensed by Business Objects Software Limited ("Business Objects") and imbedded in Oracle Retail Store Inventory Management.

(vi) the software component known as **Access Via™** licensed by Access Via of Seattle, Washington, and imbedded in Oracle Retail Signs and Oracle Retail Labels and Tags.

(vii) the software component known as **Adobe Flex™** licensed by Adobe Systems Incorporated of San Jose, California, and imbedded in Oracle Retail Promotion Planning & Optimization application.

(viii) the software component known as **Style Report™** developed and licensed by InetSoft Technology Corp. of Piscataway, New Jersey, to Oracle and imbedded in the Oracle Retail Value Chain Collaboration application.

(ix) the software component known as **WebLogic™** developed and licensed by BEA Systems, Inc. of San Jose, California, to Oracle and imbedded in the Oracle Retail Value Chain Collaboration application.

(x) the software component known as **DataBeacon™** developed and licensed by Cognos Incorporated of Ottawa, Ontario, Canada, to Oracle and imbedded in the Oracle Retail Value Chain Collaboration application.

Contents

Preface ..... **vii**
Audience vii
Related Documents vii
Customer Support vii
Review Patch Documentation viii
Oracle Retail Documentation on the Oracle Technology Network viii
Conventions viii

1 Introduction **1**
About the AIP Installation Process 1
About This Document 1

2 Preparing for Installation **3**
Package Contents 3
Installation Setup 3
Preparing Your Windows Workstation 3
Preparing Your UNIX Machine 4

3 Compatibility and Hardware Requirements **5**
Supported Oracle Retail Products 5
Server Operating Systems 5
Server JRE 5
Database 5
Application Server 5
Client PC and Web Browser Requirements 6
Client PC Requirements 6
Client Browser Requirements 6

4 Installing the AIP Online Database Server Components **7**
Creating a UNIX User Account for Oracle and Retek 7
Creating a Staging Directory for AIP Online Database Files 7
Creating the Oracle 10g Database 7
Creating AIP Online Schema Owner 8
Preparing Your Server for Installation 8
Running the AIP Online Database Schema Installer 8
Resolving Errors Encountered During Database Schema Installation 13

5 Installing AIPOnlineApp on OAS 10.1.3.3 ..... **15**
Creating a New OC4J Instance for AIP Online 15
Preparing Your Server for Installation 16
Running the AIP Online Application Installer 16
Resolving Errors Encountered During Application Installation 26
AIP Online Integration Directory (Optional) 26
Manual Deployment Tasks 27
Testing the AIP Online Application 27
Starting and Stopping AIP Online 27
Oracle Configuration Manager 28
Configuring the AIP Online Application 29
Creating the AIP Online Enterprise 31
Creating AIP Online Users 33

6 Installing the AIP Integration Components **35**
Installing RETL 35
Extracting AIP Integration Files 36
Configuring Your Environment 36

Configuring the config.xml File 36
Editing the aip_env_online.sh to Run cron_export.sh and cron_import.sh Scripts 37
Editing the .profile to Run cron_export.sh and cron_import.sh Scripts 37

7 Installing AIP RPAS 39
The AIP RPAS Installer 39
Before You Begin 39
Running the AIP RPAS Installer 39
Post Installation Instructions 44

8 Installation Questions, Reinstallation, and Troubleshooting 45
Installation Questions 45
About Installation URLs 45
Reinstallation 46
Reinstalling in Silent Mode 46
Troubleshooting 46
Database Installer Hangs on Startup 46
Unreadable Buttons in the Installer 46
“Unable to get a deployment manager” Message 47
Unresponsive Fields when Running Installer in GUI Mode 47
“Could not create system preferences directory” Warning 48
“Couldn't find X Input Context” Warnings 48
ConcurrentModificationException in Installer GUI 48

A Appendix: Sample Oracle 10.2.0.3.0 Database Creation Script 49
crdb1.sql 49
crdb2.sql 50
crdb3.sql 51
Sample Database init.ora 52
Sample Tablespace Creation Scripts 53
create_aip_tablespaces.sql 53

B Appendix: Installation Order 55

Preface

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

Audience

This Installation Guide is written for the following audiences:

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

Related Documents

For more information, see the following documents in the Oracle Retail Advanced Inventory Planning Release 13.0.1 documentation set:

- *Oracle Retail Advanced Inventory Planning Release Notes*
- *Oracle Retail Advanced Inventory Planning Data Management Online - Online Help*
- *Oracle Retail Advanced Inventory Planning Data Management Online User Guide*
- *Oracle Retail Advanced Inventory Planning Order Management - Online Help*
- *Oracle Retail Advanced Inventory Planning Order Management User Guide*
- *Oracle Retail Advanced Inventory Planning Data Model Volume 1 Oracle Database Data Model*
- *Oracle Retail Advanced Inventory Planning Data Model Volume 2 Measure Reference Guide*
- *Oracle Retail Advanced Inventory Planning Operations Guide*
- *Oracle Retail Advanced Inventory Planning Implementation Guide*
- *Oracle Retail Advanced Inventory Planning Administration Guide*
- *Oracle Retail Advanced Inventory Planning Warehouse Replenishment Planning User Guide*
- *Oracle Retail Advanced Inventory Planning Store Replenishment Planning User Guide*

Customer Support

- https://metalink.oracle.com

When contacting Customer Support, please provide:

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

Review Patch Documentation

For a base release (".0" release, such as 13.0), Oracle Retail strongly recommends that you read all patch documentation before you begin installation procedures. Patch documentation can contain critical information related to the base release, based on new information and code changes that have been made since the base release.

Oracle Retail Documentation on the Oracle Technology Network

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

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 installation instructions for Advanced Inventory Planning™ (AIP) version 13.0.1. This guide pertains **ONLY** to AIP 13.0.1 on the **Sun Solaris 10** UNIX operating system.

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 13.0.1 solution. The AIP installation consists of the following components:

- The Oracle® Retail Predictive Applications Server (RPAS) version 13.0.1.2 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 13.0.1 solution appear in the following chapters of this document.

Before you begin installing AIP, you should have 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.

2

Preparing for Installation

Package Contents

A complete AIP 13.0.1 solution is delivered in the files listed below, which can be obtained from http://edelivery.oracle.com:

- AIP 13.0.1 Media Pack

1. Download the files and unpack the **AIP Media Pack**. The media pack contains an AIP-13.0.1-install zip file in the CDROM folder, which contains the following files when extracted:
   - AIP-13.0.1-rpas-installer.zip
   - AIP-online-appserver-rib13-installer.zip – Requires RIB 13.0.1 on Oracle Application Server 10.1.3.3
   - AIP-online-dbserver-rib13-installer.zip – Requires RIB 13.0.1 on Oracle Application Server 10.1.3.3.
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-13.0.1-rpas-installer.zip – This file contains the AIP Installer which is an installation wizard that installs the following AIP components:
     - AIP batch components
     - Domains
     - RMS transformation file

     It also provides the ability to define the AIP domain path and create the AIP domain.
   - AIP-online-appserver-rib13-installer.zip – This ZIP file contains the AIP 13.0.1 Online EAR file and binary license file for AIP Online. Inside this file is the AIP-13.0-online-integration.zip, which contains the AIP 13.0.1 Online integration files to exchange information between AIP Online, RPAS, and RMS (or an external system).
   - AIP-online-dbserver-rib13-installer.zip – This ZIP file contains the AIP 13.0.1 Online Oracle schema database files.

3

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) 13.0.1
- Oracle Retail Integration Bus (RIB) 13.0.1
- Oracle Retail Demand Forecasting (RDF) 13.0.1
- Oracle Retail Predictive Application Server (RPAS) 13.0.1.2
- Oracle Retail Extract Transform and Load (RETL) 13.0.1

Server Operating Systems

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

- Sun Solaris 10

Server JRE

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

- Sun Java Runtime Environment (JRE) 1.5

Database

This version of AIP is compatible with the following database:

- Oracle 10g Enterprise Edition Release 2 (version 10.2.0.3.0)

Application Server

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

- Oracle Application Server (version 10.1.3.3)

Client PC and Web Browser Requirements

Client PC Requirements

The client PC requirements are as follows:

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

Client Browser Requirements

The client browser requirements are as follows:

- Microsoft Internet Explorer 5.5 or higher

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

- JRE 1.5.0_12 or higher

4

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-rib13.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 10g Database

Perform the following procedure to create the Oracle 10g database:

1. Install Oracle 10g Release 2 (version 10.2.0.3) with the Oracle UNIX account and apply the latest update.
2. Create a 10g database.

   Refer to Appendix: Sample Oracle 10.2.0.3.0 Database Creation Script in this document for a sample database creation script and sample init.ora files. These samples are stored in the following location:

   <DBINSTALL_DIR>/AIPOnlineDBServer130/samplefiles

   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.

   The size of these tablespaces will vary from client to client. For the initial installation, tablespaces of 500MB are recommended.

Creating AIP Online Schema Owner

A script called create_user.sql in <DBINSTALL_DIR>/AIPOnlineDBServer130/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> indentified 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 should 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 1.5 or above.
- If you are going to run the Installer in GUI mode using an X server, which is the recommended installation method, you need to have the XTEST extension enabled. This setting is not always enabled by default in your X server. Verify the extension is enabled.

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>/AIPOnlineDBServer130 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 (./).

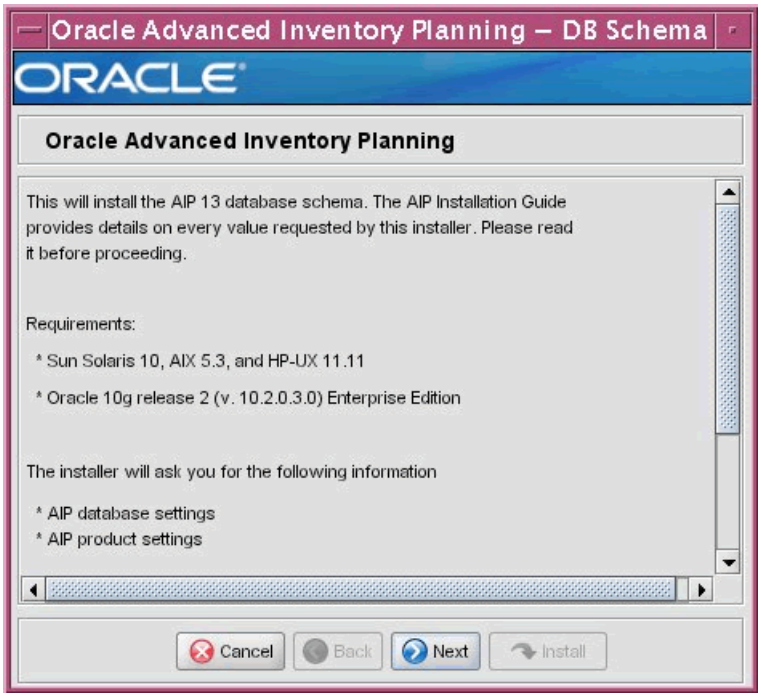
If this process is being run on an X-Windows emulator (such as Exceed), a graphical user interface (GUI) to the Installer appears. If you are running in console mode through a terminal emulator, the text interface to the Installer appears.

To run the Installer in the GUI mode, which is the recommended installation method, adjust the DISPLAY environment variable.

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".

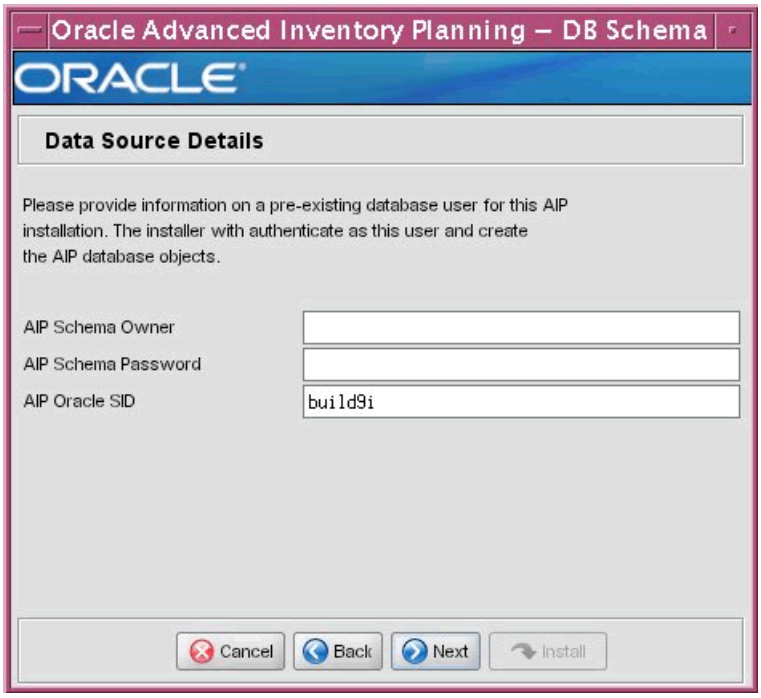
> **Note:** In text mode, the default value will appear in square brackets []. To use the default value and continue, simply hit the Enter key. If you wish to use a different value, enter the new value. When prompted to create a directory, respond with "y" or "yes" and press the Enter key.
>
> Password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

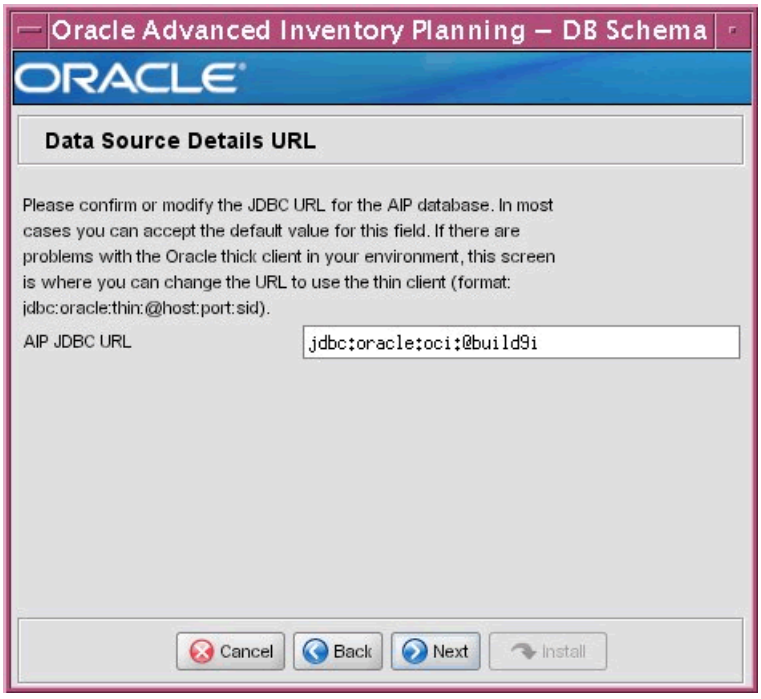
3. Click **Next** to continue. The Data Source Details screen appears.



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.

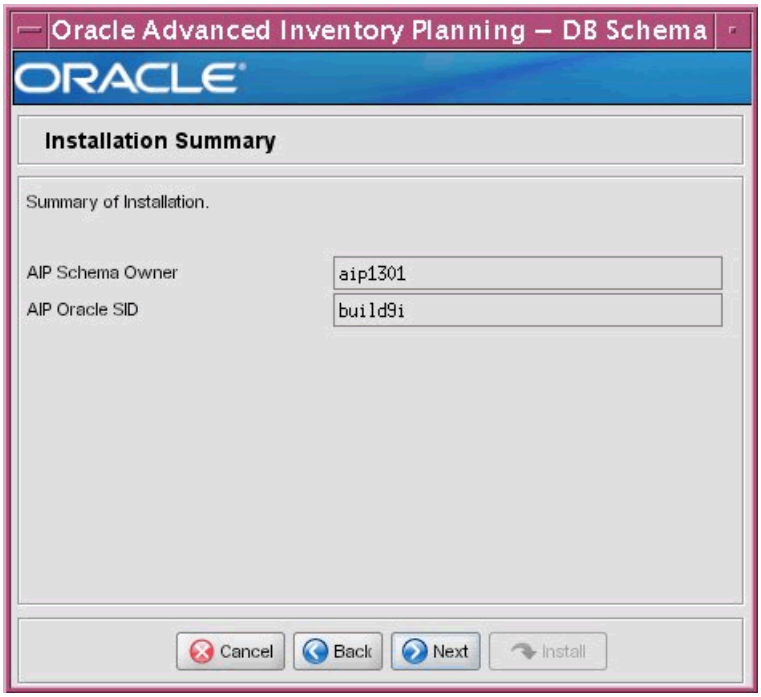


Data Source Details URL Screen

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.

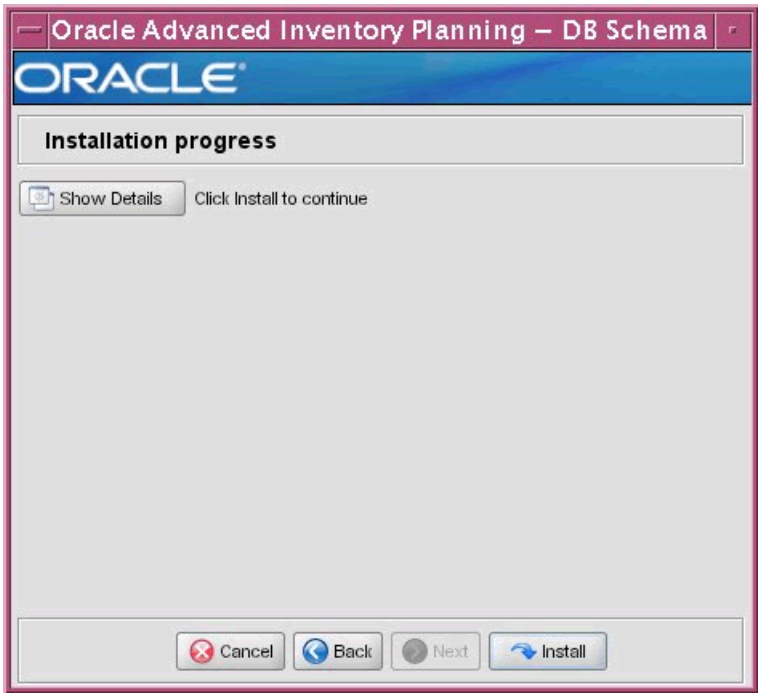
   The Installation Summary screen appears.

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.



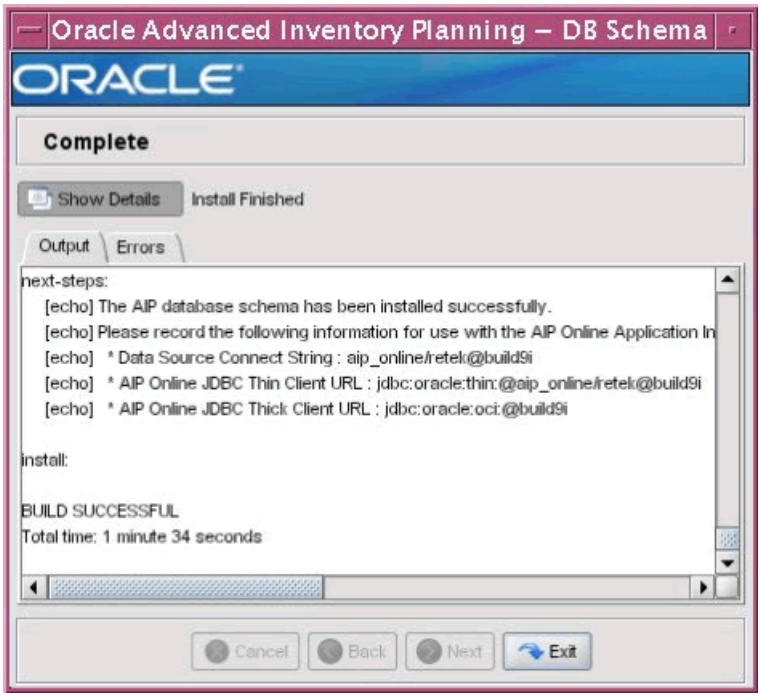
Installation Progress Screen

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 halt execution immediately and 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.

5

Installing AIPOnlineApp on OAS 10.1.3.3

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 10.1.3.3, plus the 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 10g has already been configured and loaded with the appropriate AIP Online schema for your installation.

Creating a New OC4J Instance for AIP Online

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

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

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

   Example: aiponline_oc4j
3. Create this OC4J instance as documented in the *Oracle Application Server Administrator's Guide*.

   Sample Syntax:

   ```
   $ORACLE_HOME/bin/createinstance –instanceName aiponline_oc4j
   ```
4. When prompted for the oc4jadmin password, provide the same administrative password you used for the Oracle Application Server installation. All OC4J instances running Oracle Retail applications must have the same oc4jadmin password.
5. Start the OC4J instance. You can do this through the Enterprise Manager Web interface, or on the command line using the `opmnctl` utility using the sample syntax shown below.

   Sample Syntax:

   ```
   $ORACLE_HOME/opmn/bin/opmnctl startproc process-type=aiponline_oc4j
   ```
6. Verify that the OC4J instance was fully started. If you are using the Enterprise Manager Web interface, the instance should have a green arrow indicating that it is running. If you are using the command line, verify that the instance has a status of "Alive" as shown in the example below.

   Sample Syntax:

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

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

Preparing Your Server for Installation

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

- Log in to the UNIX server as the user who owns the OracleAS 10g installation. Create a new staging directory for the AIP Online application distribution (AIP-online-appserver-rib13-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-rib13-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-rib13-installer.zip to <INSTALL_DIR> directory.
2. Change directories (cd) to the <INSTALL_DIR>/AIPOnlineAppServer130 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 aip130install-app.<timestamp>.log where <timestamp> represents the date and time the installation was performed. This file is located in the <INSTALL_DIR>/AIPOnlineAppServer130 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.

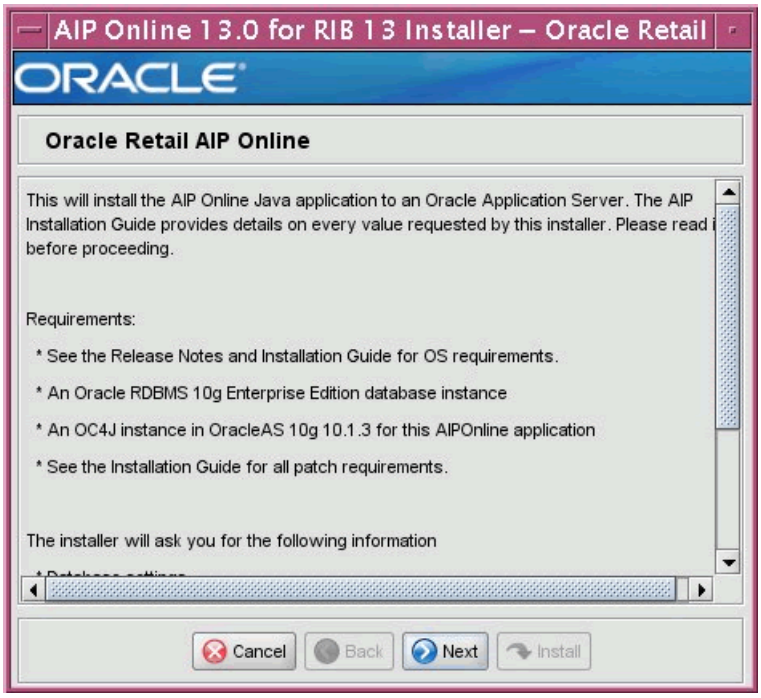
   To run the Installer in the GUI mode, which is the recommended installation method, adjust the DISPLAY environment variable.

   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.

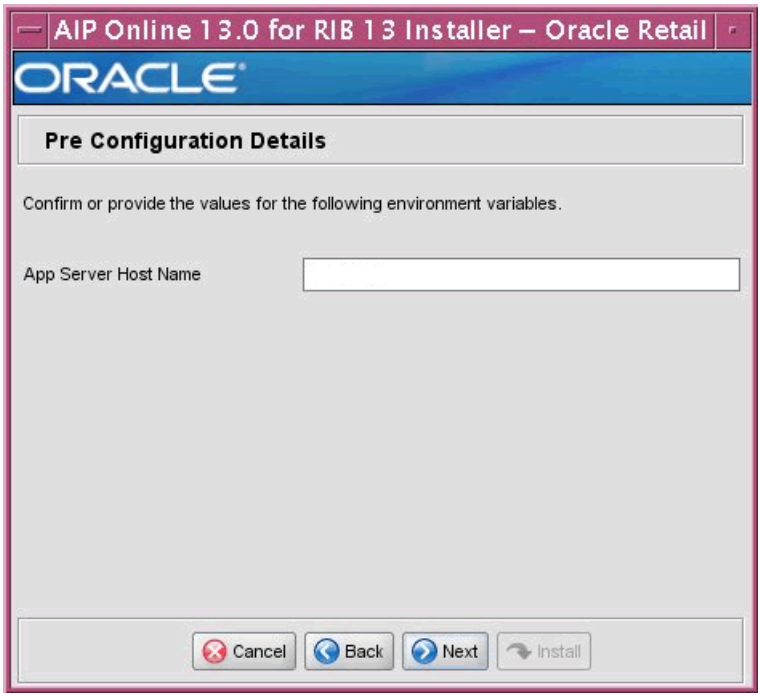
Password fields will appear masked, but the previous and default values will appear in plain text when running in the text mode.

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



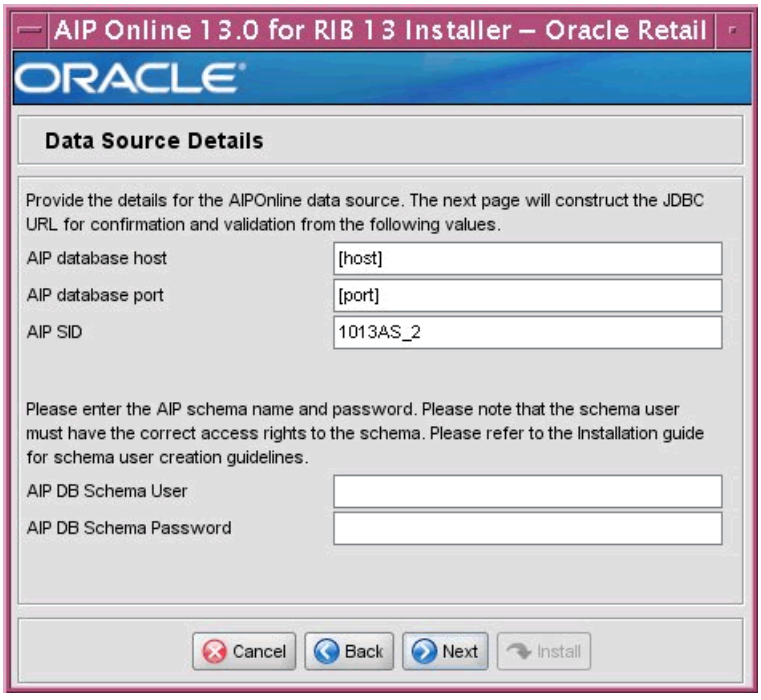
AIP Online Installer Screen

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



Pre Configuration Details Screen

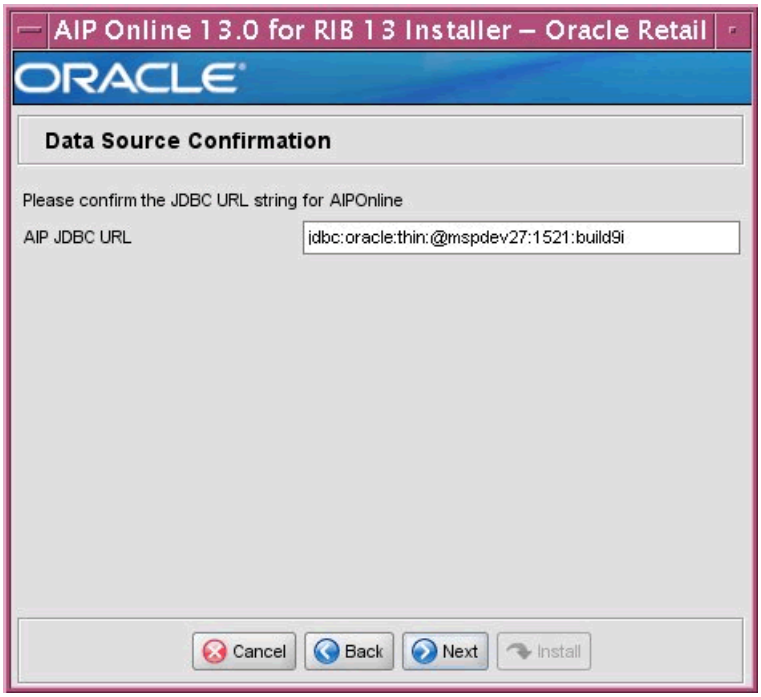
5. Enter the application server name where AIP Online is being deployed and click **Next**. The Data Source Details screen appears.



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.

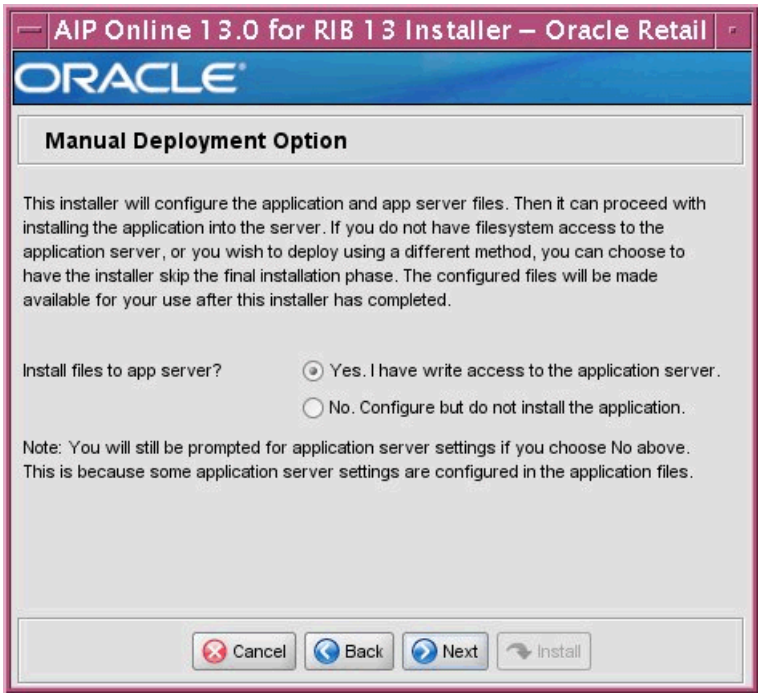
   The Data Source Confirmation screen appears.



Example of Data Source Confirmation Screen

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

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



Manual Deployment Option Screen

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

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

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

9. Enter the following information and click **Next**:
   - **OPMN Request Port –** Enter the OPMN request port found in $ORACLE_HOME/opmn/conf/opmn.xml file.

     Example of Port Definitions in opmn.xml File:

     <port local="6100" remote="6200" request="6003">
   - **OC4J Admin User –** Enter the OC4J admin user name.
   - **OC4J Admin Password –** Enter the OC4J admin user password.

   The Application Deployment Details: Application Details screen appears.

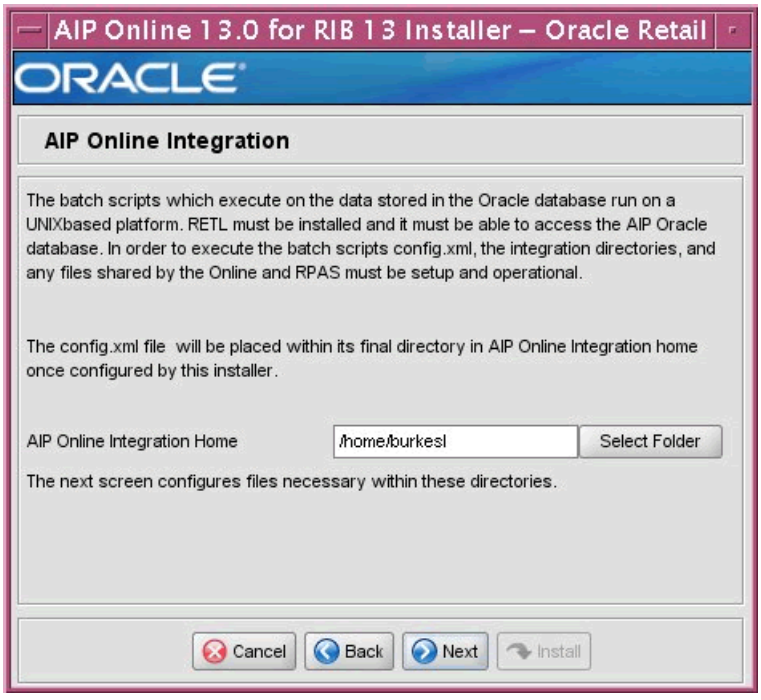
Application Deployment Details: Application Details Screen

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

    The AIP Online Installation Directory screen appears.

AIP Online Installation Directory Screen

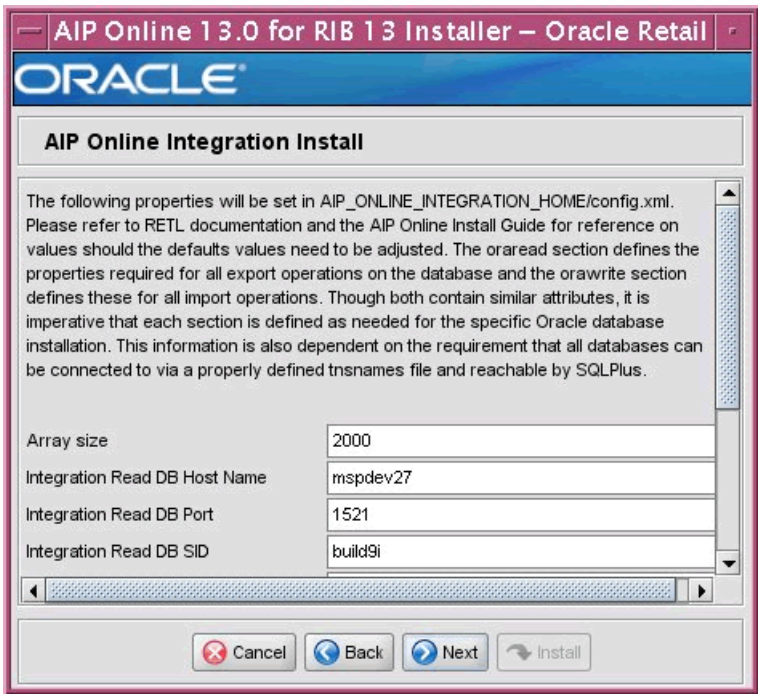
11. Enter the directory where AIP Online will be installed and click **Next**. The AIP Online Integration screen appears.



AIP Online Integration Screen

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

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



Example of AIP Integration Install Screen

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

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

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

There are two operator sections that need to be completed:

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

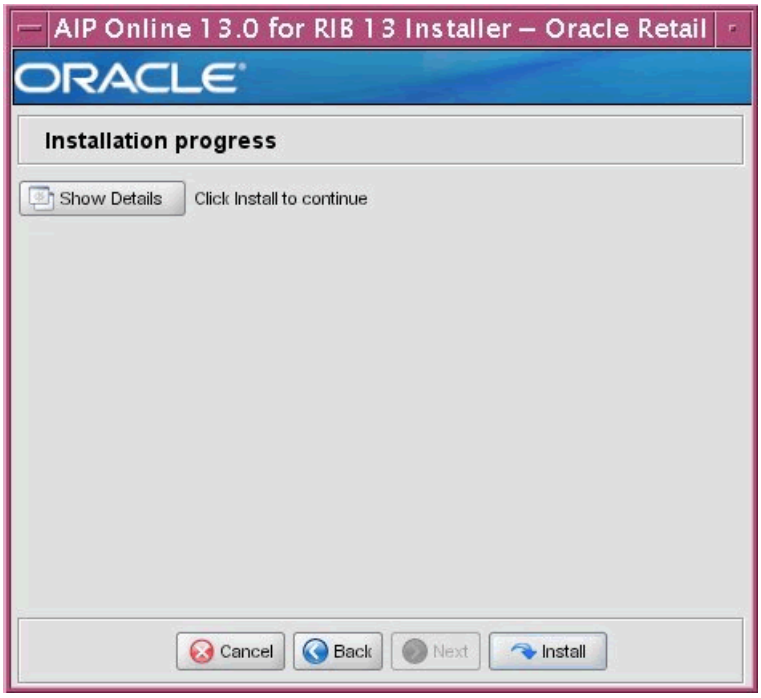
Though both sections contain similar attributes, it is imperative that each section is defined as needed for the specific Oracle database installation. This information is also dependent on the following requirements

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

13. Enter the following information in the AIP Integration Install screen and click **Next** to continue:
    - **Array Size**
    - **Integration Read DB Host Name**
    - **Integration Read DB Port**
    - **Integration Read DB SID**
    - **Integration Read DB Connect String**
    - **Integration Write DB Host Name**
    - **Integration Write DB Port**
    - **Integration Write DB SID**
    - **Integration Write DB Connect String**
    - **Integration Write Method**
    - **Integration Online Schema Owner**

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

    The Installation Progress screen appears.



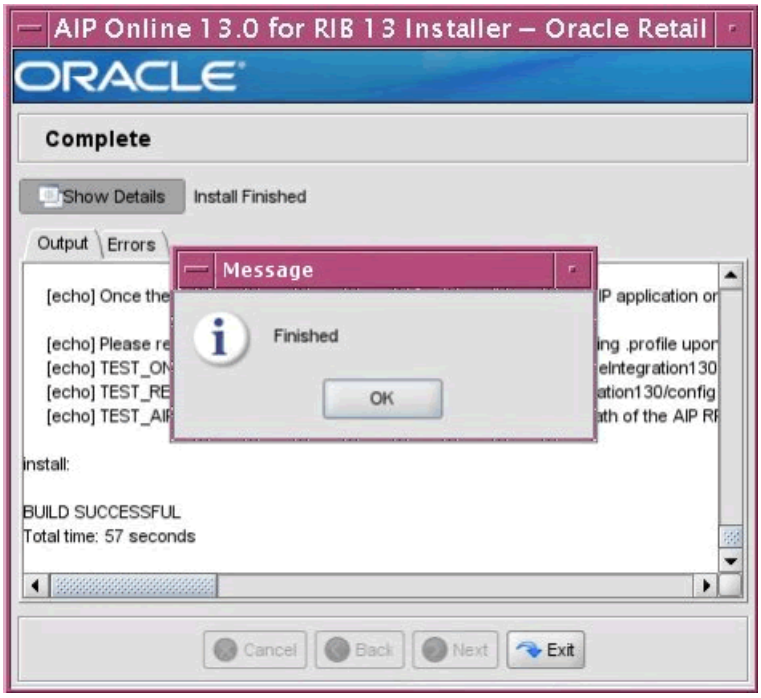
Installation Progress Screen

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

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

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

    When the installation has finished, the Complete screen appears.



Complete Screen

15. Click **OK** to close the dialog box.
16. 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 aip130install-app.<timestamp>.log where <timestamp> represents the date and time the installation was performed. This file is located in the<INSTALL_DIR>/AIPOnlineAppServer130 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/AIPOnlineIntegration130 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>/AIPOnlineAppServer130/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>/AIPOnlineAppServer130/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>/AIPOnlineAppServer130/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>/AIPOnlineAppServer130/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

The first OCM collector distribution that will be aware of the Oracle Retail applications is in development. This version of OCM is scheduled to be posted for download but is not yet available. Oracle Retail recommends that retailers download OCM 10.3.0 from ARU and use the "emCCR update_components" command to upgrade installed OCM collectors. See the OCM Installation and Administration Guide for further instructions. The Retail OCM Installer released with Oracle Retail 13.0 and 13.0.1 applications will install OCM 10.2.7. If the collector remains at version 10.2.7 and is installed in connected mode, an automatic update to version 10.3.0 is expected to occur later this year, the time at which 10.3.0 becomes a mandatory upgrade.

For more information, see the following:

Metalink Note: 559539.1

The Oracle Configuration Manager Installer 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.

Configuring the AIP Online Application

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

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

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

   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

   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/aip130/config

   Data Directory: /u00/oas/aip130/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/aip130/AIPOnlineAppServer/license-aip.bin
5. Under **Database setup**, set the following values in the fields provided:
   - **Database type –** Enter Oracle.
   - **Database name –** Enter the Oracle database SID name.
   - **Username and password –** Enter the Oracle AIP schema owner and password.
   - **Network host –** Enter the IP address or name of server where the Oracle database is running.
   - **Port Number –** Enter the Oracle database port number.

   Example:

   Database type: Oracle

   Database name: prod_db1

   Username: aip130

   Password: YourPassword

   Network host: dbserver

   Port number: 1521

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: aip130online

Retype New Password: aip130online

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: aip130online

   Retype New Password: aip130online

   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.
- **cron_import.sh –** This script performs the necessary data imports and is run by the scheduler.
- **cron_export.sh –** This script performs the necessary data exports and is run by the scheduler.

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 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 500M. However, it can be changed dynamically to 'xxxM' or 'yG' to limit the memory usage by the virtual machine.

> **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.
- **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 code can be defined in user .profile file:

```
export RFX_HOME=<path from root>/rfx/rfx-13.0.1
export RFX_TMP=$RFX_HOME/tmp
export ORACLE_HOME=<path from root>/oracle/product/10.2.0.3.0
export TEST_ONL_INTEGRATION_HOME=<path to integration directory>
export TEST_RETL_CONFIG_FILE=<path and filename of RETL config file>
export TEST_AIPDOMAIN=<path of the AIP RPAS global domain>
export PATH=$RFX_TMP:$RFX_HOME/bin:$ORACLE_HOME/bin:$BSA:$AIPONLINE_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 batch components
- Domains
- RMS transformation file

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

Before You Begin

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

- RPAS 13.0.1.2, which includes RPAS Server and RPAS Configuration Tools. Refer to the RPAS documentation for information on installing and administering RPAS.
- Java 1.5.x
- Unzip utility

Running the AIP RPAS Installer

Perform the following procedure to run the AIP Installer:

1. Locate and extract AIP-13.0.1-rpas-installer.zip into a newly created staging directory, which is referred to as <AIP_Installer>.
2. Make sure you have run the retaillogin.ksh script or set up RPAS_HOME and RIDE_HOME properly. The package contents will be installed to those locations during the installation process.
3. Begin the Installer by changing to the root of the <AIP_Installer/aip> directory and by running the following command:

   ```
   ./install.sh
   ```

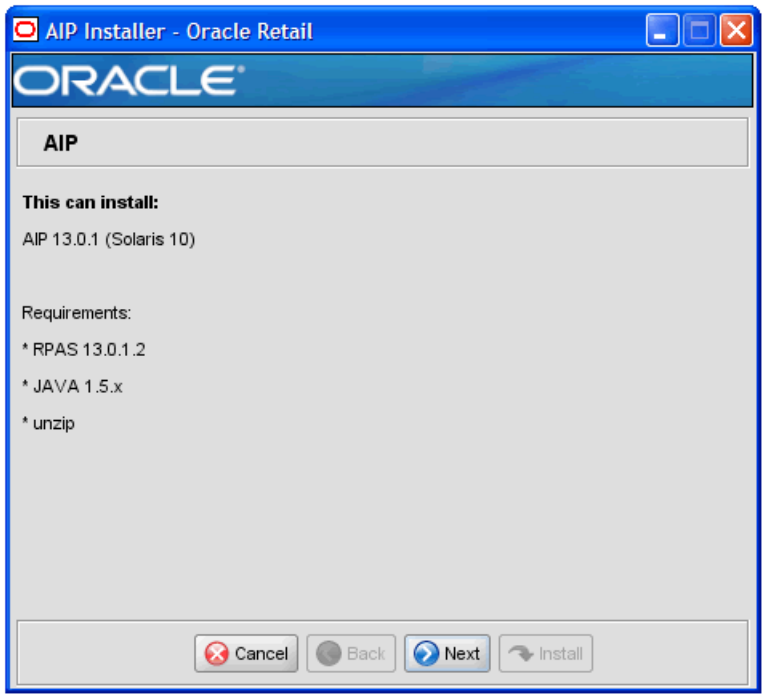
   > **Note:** The command must be executed with the preceding period and forward slash (`./`).

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

   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".

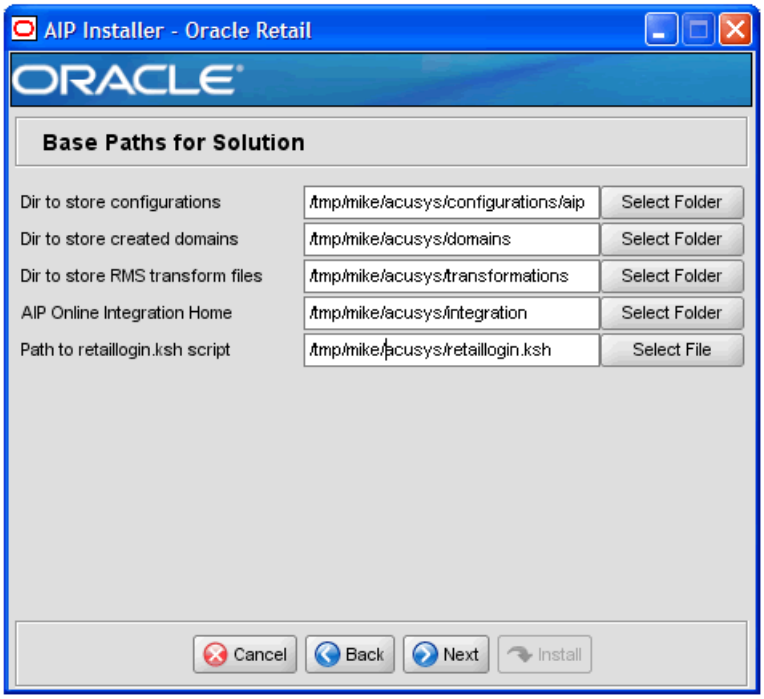
   > **Note:** In text mode, the default value will appear in square brackets. To use the default value and continue, press the **Enter** key. If you want to use a different value, enter the new value. When prompted to create a directory, respond with "y" or "yes" and press the **Enter** key.

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

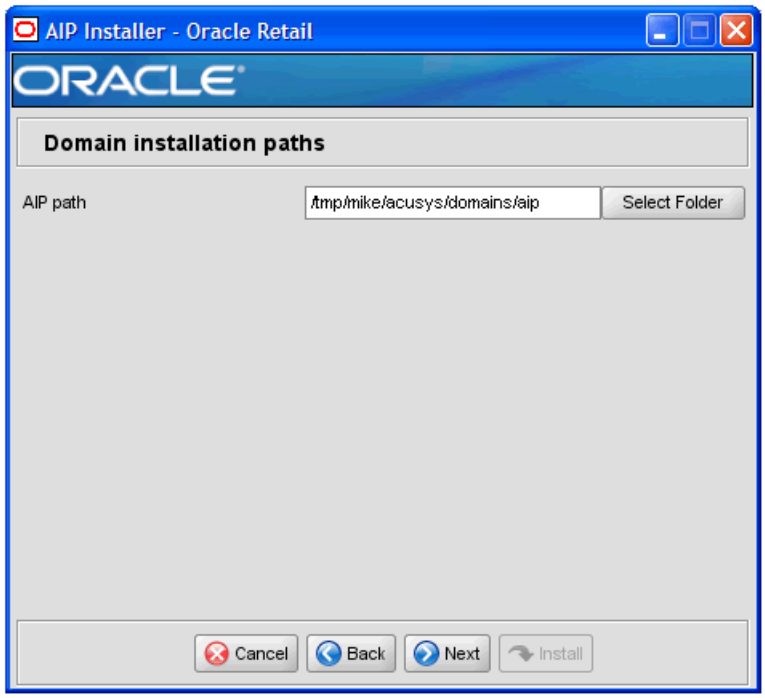
4. Click **Next** to continue. The Base Paths for Solution screen appears.



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.
   - **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.
   - **AIP Online Integration Home–** Enter the AIP Online integration home path, or click the **Select Folder** button to navigate to the appropriate location.
   - **Path to retaillogin.ksh script –** Enter the target path where the retaillogin.hsh 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.

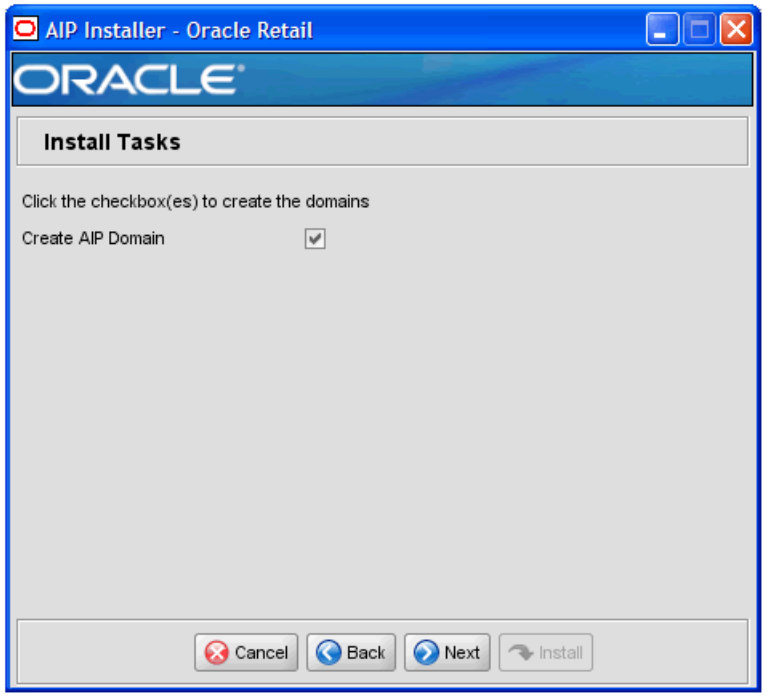
   The Domain installation paths screen appears.



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.

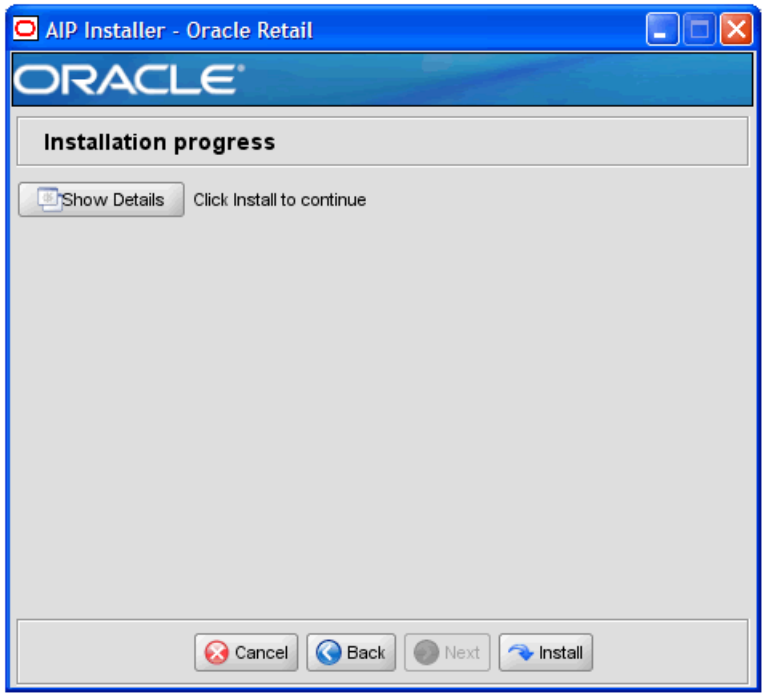


Install Tasks Screen

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.

   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: The domain install process also includes post-install data loading scripts specific to the AIP configuration. These scripts may also be modified.

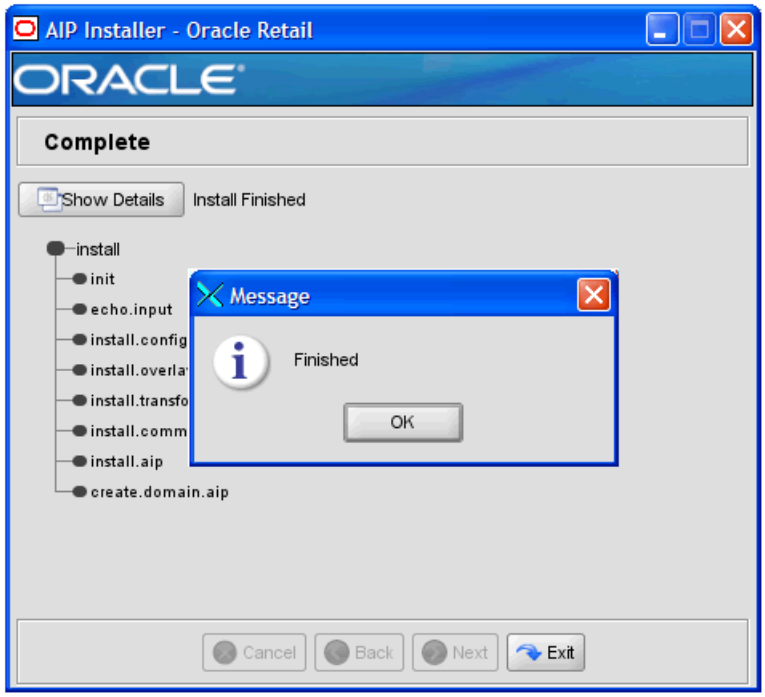


Installation Progress Screen

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 domains are not usable for business application until measure data is loaded into them. 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 domains and for practical use of the AIP batch domains.

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.
```

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 Oracle 10.2.0.3.0 Database Creation Script

crdb1.sql

Execute as: sysdba

> **Note:** Modify file paths and "SID" for your environment. Adjust redo logs, TEMP and UNDO sizes accordingly.

```
spool SID.log
startup nomount pfile=${ORACLE_HOME}/dbs/initSID.ora
create database "SID"
        maxdatafiles 1000
        character set UTF8
    DATAFILE
        '/u00/oradata/SID/system01.dbf' SIZE 500M
        AUTOEXTEND ON NEXT 10M MAXSIZE 2000M
    LOGFILE
        group 1 ('/u00/oradata/SID/redo1a.log') size 1000M,
        group 2 ('/u00/oradata/SID/redo2a.log') size 1000M,
        group 3 ('/u00/oradata/SID/redo3a.log') size 1000M
DEFAULT TEMPORARY TABLESPACE TEMP
        TEMPFILE '/u01/oradata/SID/temp01.dbf' SIZE 5000M
        EXTENT MANAGEMENT LOCAL UNIFORM SIZE 1M
undo tablespace UNDO_TS
        DATAFILE '/u00/oradata/SID/undo_ts01.dbf' SIZE 5000M
;

spool off
exit
```

crdb2.sql

Execute as: sysdba

This script installs the data dictionary views.

```
spool crdb2.log

REM # install data dictionary views:
PROMPT Running catalog.sql
@$ORACLE_HOME/rdbms/admin/catalog.sql
PROMPT Running catproc.sql
@$ORACLE_HOME/rdbms/admin/catproc.sql
PROMPT Running catblock.sql
@$ORACLE_HOME/rdbms/admin/catblock.sql
create user oracle identified externally;
grant dba to oracle;

REM * These privs needed for users to run proper grant code when creating users.
grant select on dba_jobs to public with grant option;
grant select on dba_roles to public with grant option;
grant select on dba_role_privs to public with grant option;
grant execute on dbms_rls to public with grant option;

REM * These privs needed to be granted to all due to 9i security changes.
grant select_catalog_role to public;
grant execute_catalog_role to public;
grant execute on dbms_lock to public;
grant execute on dbms_rls to public;

REM * query rewrite privilege needed to create function-based indexes
grant query rewrite to public;

REM * dbms_system is needed for tracing
grant execute on sys.dbms_system to public;

connect system/manager
PROMPT Running pupbld.sql
@$ORACLE_HOME/sqlplus/admin/pupbld.sql

PROMPT Creating PLAN table owned by SYSTEM
@$ORACLE_HOME/rdbms/admin/utlxplan.sql
PROMPT Creating public synonyn for the plan table
create public synonym PLAN_TABLE for SYSTEM.PLAN_TABLE;

disconnect

exit
```

crdb3.sql

Execute as: sysdba

This script installs Java and XML components.

```
spool crdb3.log

REM *  Install XDK and XSU
PROMPT altering system to set _system_trig_enabled to false
ALTER SYSTEM SET "_system_trig_enabled"=FALSE SCOPE=MEMORY;

PROMPT Running initjvm.sql to install Java objects
@$ORACLE_HOME/javavm/install/initjvm.sql

PROMPT Running initxml.sql to install XML and XSU
@$ORACLE_HOME/rdbms/admin/initxml.sql

PROMPT Running xmlja.sql to install NCOMP'ed XML Parser
@$ORACLE_HOME/xdk/admin/xmlja.sql

PROMPT Running catjava.sql to install catalog scripts for Java
@$ORACLE_HOME/rdbms/admin/catjava.sql

PROMPT Creating public synonyms and grants
CREATE PUBLIC SYNONYM XMLQUERY for SYS.DBMS_XMLQUERY;
GRANT EXECUTE ON XMLQUERY TO PUBLIC;

GRANT EXECUTE ON XMLPARSER TO PUBLIC;
GRANT EXECUTE ON XMLDOM TO PUBLIC;
CREATE PUBLIC SYNONYM XSLPROCESSOR for SYS.XSLPROCESSOR;
GRANT EXECUTE ON XSLPROCESSOR TO PUBLIC;

PROMPT Revaliding invalid objects
@$ORACLE_HOME/rdbms/admin/utlrp.sql

spool off
```

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 10.2.0.3.0 Parameter file
#
# NOTES:
# 1.  Change all file directory paths as necessary for your environment.
# 2.  Search and replace the string "SID" with your database name.   Do not change
SID in $ORACLE_SID.
# 3.  Search and replace "SID" in SID_01 and SID_02 with your database name.
# 4.  Modify parameters as necessary for your development, test,
#     and production environments.
#
# ----------------------------------------------------------------------
# MAINTENANCE LOG
#
# Date     By          Parameter           Old/New         Notes
# +------+ +---------+ +-----------------+ +-------------+ +-------------+
# 07/01/04 Retek      NA                     NA              creation
#
##############################################################################

# ---------------------------------------------------------------------------
# The following SGA parameters are CRITICAL to the performance of the
# database. The following settings are based off 1GB of allotted memory.
# Adjust these parameters for your environment.
# The SGA is composed of:
#    db_cache_size, log_buffer,java_pool_size, large_pool_size, shared_pool_size
# ---------------------------------------------------------------------------
db_cache_size                = 256M
java_pool_size               = 24M                #150M or higher for applying
oracle patchsets; 70M if using RMAN
log_buffer                   = 10485760
shared_pool_size             = 150M

# ---------------------------------------------------------------------------
# The following parameters do not affect SGA size and should be adjusted for
# your environment.
# ---------------------------------------------------------------------------
background_dump_dest         = $ORACLE_BASE/admin/$ORACLE_SID/bdump
compatible                   = 9.2.0
control_files                = (/u01/oradata/SID/SID_01.ctl
                               ,/u01/oradata/SID/SID_02.ctl)
core_dump_dest               = $ORACLE_BASE/admin/$ORACLE_SID/cdump
db_block_size                = 8192               # default is 2k; adjust
before db creation, cannot change after db is created
db_files                     = 999                # default is 200; set to
max number of database files
db_file_multiblock_read_count   = 16                 # (max io size)/(block
size); adjust as needed; platform specific

db_name                      = SID
db_writer_processes          = 4
job_queue_processes          = 9                  # Retek required; number
of cpu's +1
local_listener               =
"(ADDRESS=(PROTOCOL=TCP)(HOST=localhost)(PORT=1521))"
nls_date_format              = DD-MON-RR          # Retek required
nls_calendar                 = GREGORIAN
nls_language                 = AMERICAN           # default
```

```
nls_territory                  = AMERICA              # default
open_cursors                   = 900                  # Retek required
(minimum=900); default is 50
optimizer_features_enable      = 9.2.0
optimizer_mode                 = CHOOSE               # Retek required
processes                      = 500                  # max number of os
processes that can connect to oracle
query_rewrite_enabled          = TRUE                 # fct based indexes
sessions                       = 1500                 # ~(3*processes);
session_cached_cursors         = 100                  # default is 0
undo_management                = AUTO
undo_tablespace                = undo_ts              # match with tablespace
name used in your creation script
undo_retention                 = 1800                 # currently set for 30
minutes; set to avg length of transactions in secs
user_dump_dest                 = $ORACLE_BASE/admin/$ORACLE_SID/udump
utl_file_dir                   = $ORACLE_BASE/utl_file

# ***  Archive Logging, set if needed  ***
#log_archive_dest              = 'location=$ORACLE_BASE/admin/$ORACLE_SID/arch/'
#log_archive_format            = $ORACLE_SIDarch%s.log
#log_archive_min_succeed_dest  = 1
#log_archive_start             = TRUE
#log_checkpoint_interval       = 9999999999
```

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 for the order in which the Oracle Retail applications should be installed. If a retailer has chosen to use only some of the applications, the order is still valid, less the applications not being installed.

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 Advanced Inventory Planning (AIP)
14. Oracle Retail Integration Bus (RIB)
15. Oracle Retail Point-of-Service (ORPOS)
16. Oracle Retail Mobile Point-of-Service (ORMPOS)
17. Oracle Retail Analytics Applications
18. Oracle Retail Data Warehouse (RDW)
19. Oracle Retail Workspace (ORW)