

Oracle® Retail Advanced Inventory Planning
Installation Guide
Release 12.1

January 2008

Copyright © 2008, Oracle. All rights reserved.

Primary Author: Gary O'Hara

The Programs (which include both the software and documentation) contain proprietary information; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent, and other intellectual and industrial property laws. Reverse engineering, disassembly, or decompilation of the Programs, except to the extent required to obtain interoperability with other independently created software or as specified by law, is prohibited.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. This document is not warranted to be error-free. Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose.

If the Programs are delivered to the United States Government or anyone licensing or using the Programs on behalf of the United States Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the Programs, including documentation and technical data, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement, and, to the extent applicable, the additional rights set forth in FAR 52.227-19, Commercial Computer Software—Restricted Rights (June 1987). Oracle Corporation, 500 Oracle Parkway, Redwood City, CA 94065

The Programs are not intended for use in any nuclear, aviation, mass transit, medical, or other inherently dangerous applications. It shall be the licensee's responsibility to take all appropriate fail-safe, backup, redundancy and other measures to ensure the safe use of such applications if the Programs are used for such purposes, and we disclaim liability for any damages caused by such use of the Programs.

Oracle, JD Edwards, PeopleSoft, and Siebel are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

The Programs may provide links to Web sites and access to content, products, and services from third parties. Oracle is not responsible for the availability of, or any content provided on, third-party Web sites. You bear all risks associated with the use of such content. If you choose to purchase any products or services from a third party, the relationship is directly between you and the third party. Oracle is not responsible for: (a) the quality of third-party products or services; or (b) fulfilling any of the terms of the agreement with the third party, including delivery of products or services and warranty obligations related to purchased products or services. Oracle is not responsible for any loss or damage of any sort that you may incur from dealing with any third party.

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**TM 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**TM 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**TM 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**TM 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**TM 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	3
Installation Overview	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 WAS 5.1.1.12	15
Required WebSphere Application Server (WAS) Configurations	15
WebSphere Application Server Requirements	16
Configuring WAS 5.1.1.12 for AIP Online Application	16
Preparing Your Server for Installation	18
Installing AIP Online	19
Resolving Errors Encountered During Application Installation	30
AIP Online Integration Directory (Optional)	31
Manual Deployment Tasks	31
Testing the AIP Online Application	32
Configuring the AIP Online Application	32
Creating the AIP Online Enterprise	33
Creating AIP Online Users	36

6	Installing AIPOnlineApp on OAS 10.1.3.0	37
	Creating a New OC4J Instance for AIP Online	37
	Preparing Your Server for Installation.....	38
	Running the AIP Online Application Installer.....	38
	Resolving Errors Encountered During Application Installation	49
	AIP Online Integration Directory (Optional).....	50
	Manual Deployment Tasks	50
	Testing the AIP Online Application	50
	Starting and Stopping AIP Online	50
	Configuring the AIP Online Application	51
	Creating the AIP Online Enterprise	52
	Creating AIP Online Users	54
7	Installing the AIP Integration Components.....	55
	Installing RETL 12.0.1	55
	Extracting AIP Integration Files	56
	Configuring Your Environment.....	56
	Configuring the config.xml File	56
	Editing the aip_env_online.sh to Run cron_export.sh and cron_import.sh Scripts	56
	Editing the .profile to Run cron_export.sh and cron_import.sh Scripts.....	57
8	Using the AIP Installer.....	59
	The AIP Installer.....	59
	Before You Begin.....	59
	Running the AIP Installer	59
	Post Installation Instructions.....	65
9	Installation Questions, Reinstallation, and Troubleshooting	67
	Installation Questions.....	67
	About Installation URLs.....	67
	Reinstallation	68
	Reinstalling in Silent Mode	68
	Troubleshooting.....	68
	Database Installer Hangs on Startup.....	68
	Unreadable Buttons in the Installer.....	68
	“Unable to get a deployment manager” Message	69
	Unresponsive Fields when Running Installer in GUI Mode	69
	“Could not create system preferences directory” Warning.....	70
	“Couldn't find X Input Context” Warnings	70
	ConcurrentModificationException in Installer GUI	70
A	Appendix: Sample Oracle 10.2.0.3.0 Database Creation Script.....	71
	crdb1.sql.....	71
	crdb2.sql.....	72
	crdb3.sql.....	73
	Sample Database init.ora	74
	Sample Tablespace Creation Scripts.....	75
	create_aip_tablespaces.sql	75
B	Appendix: RMS-AIP Transform Directory Contents.....	77
	Transform Interface Scripts	77
	Input Schema Files.....	77
	Output Schema Files.....	78
	RETL Extracts (Data Files from RMS)	78
	Post Execution Transform Interface Scripts	79

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 12.1 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 12.0), 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.

Introduction

About the AIP Installation Process

This document provides the installation instructions for Advanced Inventory Planning™ (AIP) version 12.1. This release is being made available on the AIX, HP-UX, and Sun UNIX operating systems.

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

- The Oracle® Retail Predictive Applications Server (RPAS) version 12.1.1.7 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 12.1 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.

Preparing for Installation

Package Contents

A complete AIP 12.1 solution is delivered in the files listed below, which can be obtained from <http://edelivery.oracle.com>:

- AIP 12.1 Media Pack
 - RPAS 12.1.1.7 Media Pack
1. Download the files and unpack the **AIP Media Pack**. The media pack contains an AIP 12.1 zip file, which contains the following files:
 - AIP-12.1-rpas-installer.zip
 - AIP-12.1-online-appserver-installer.zip
 - AIP-12.1-online-dbserver-installer.zip
 - RPAS-12.1.1.7.zip
 2. Verify that all files listed above appear in the AIP Media Pack.

Installation Setup

Preparing Your Windows Workstation

1. Ensure the following ZIP files are located on the Windows workstation where the RPAS Client will be installed:
 - AIP-12.1.zip – This ZIP file contains this *AIP Installation Guide* as well as other AIP documentation.
 - RPAS-12.1.1.7.zip – This ZIP file contains the RPAS documentation within the DOCS directory and the Windows client-side RPAS files that need to be installed in the CDROM\Clients.
2. Unpack the AIP-12.1.zip to view the documentation. The AIP documentation is located in the DOCS folder.
3. Unpack the RPAS-12.1.1.7.zip documentation package. The AIP installation will require only a subset of the RPAS documentation.

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.
 - RPAS-12.1.1.7.zip – This ZIP file contains the RPAS installation files.
 - AIP-12.1-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-12.1-online-appserver-installer.zip – This ZIP file contains the AIP 12.1 Online EAR file and binary license file for AIP Online. Inside this file is the AIP-12.1-online-integration.zip, which contains the AIP 12.1 Online integration files to exchange information between AIP Online, RPAS, and RMS (or an external system).
- AIP-12.1-online-dbserver-installer.zip – This ZIP file contains the AIP 12.1 Online Oracle schema database files.

Some of these files will be unpacked as part of the RPAS 12.1.1.7 installation instructions.

Note: As the RPAS-12.1.1.7.zip file contains both client and server-side files, it must be copied to both the Windows and UNIX machines.

Installation Overview

To install AIP Online, follow the instructions in Chapters 3 through 7. To install AIP Batch, follow the instructions in Chapter 8.

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) 11.0.13 and 10.1.20, including Oracle Retail Sales Audit (ReSA)
- Oracle Retail Demand Forecasting (RDF) 12.0
- Oracle Retail Predictive Application Server (RPAS) 12.1.1.7
- Oracle Retail Integration Bus (RIB) 11.1
 - Can only be used in conjunction with WebSphere Application Server
 - Can only be used in conjunction with SeeBeyond eGate 5.0.5
- Oracle Retail Extract Transform and Load (RETL) 12.0.1

Server Operating Systems

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

- AIX 5.3
- HP-UX 11.23 Integrity
- Solaris 5.9

Server JRE

General requirements for the server Java Run Time Environment (JRE) include:

- 1.4.2_10

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:

- IBM WebSphere Application Server (version 5.1.1.12).
- Oracle Application Server (version 10.1.3.0)

Client PC and Web Browser Requirements

Client PC Requirements

- 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

- Microsoft Internet Explorer 5.5 or higher
- Java Runtime Environment (JRE) 1.4.2_10

Installing the AIP Online Database Server Components

Creating a UNIX User Account for Oracle and Retek

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

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

Creating a Staging Directory for AIP Online Database Files

1. Log on to the UNIX server as the newly created `rettek` user and determine where the AIP Online database files will be installed. There should be a minimum of 1MB disk space available for the database installation files.
2. Copy the `AIP-12.1-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 `AIP-12.1-online-dbserver.zip` file. This location is referred to as `<DBINSTALL_DIR>`.

Creating the Oracle 10g Database

1. Install Oracle 10g Release 2 (version 10.2.0.3) with the oracle UNIX account and apply the latest patch set.
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>/AIPOnlineDBServer121/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 `rettek_data` tablespace and the `rettek_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>/AIPOnlineDBServer121/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`
- Set the `JAVA_HOME` environment variable to a Java 1.4.2 or newer JRE or JDK. The installer is not compatible with earlier versions of Java.
- 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.

Depending on system resources, a typical installation takes anywhere from 2 minutes to 30 minutes.

1. Change directories (`cd`) to the `<DBINSTALL_DIR>/` 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.

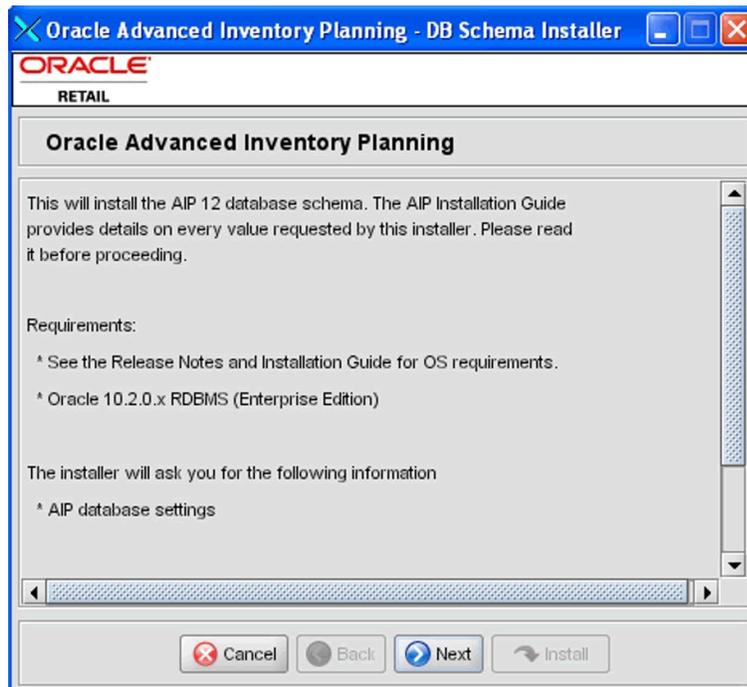
To run the Installer in the GUI mode, which is the recommended installation method, adjust the `DISPLAY` environment variable.

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.

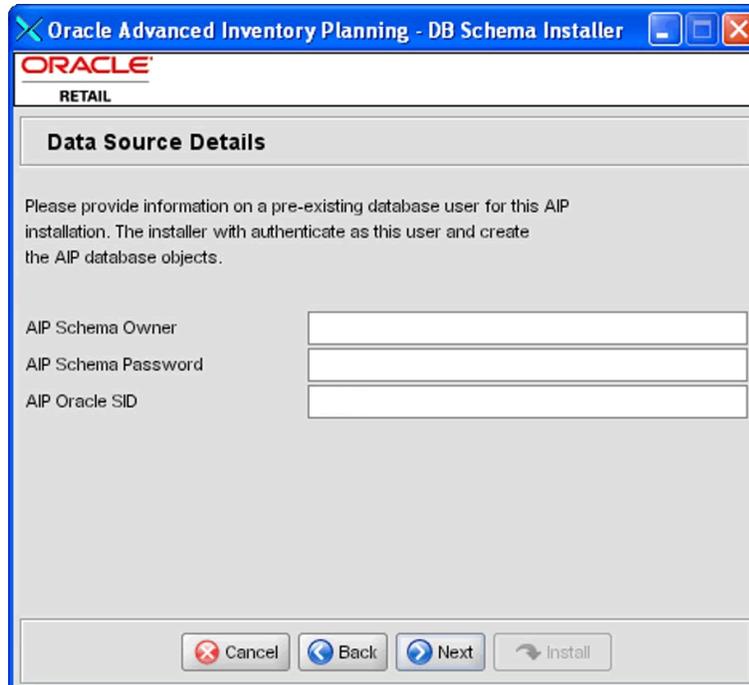
Password fields will appear masked, but the previous and default values will appear in plain text when running in the text mode.

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

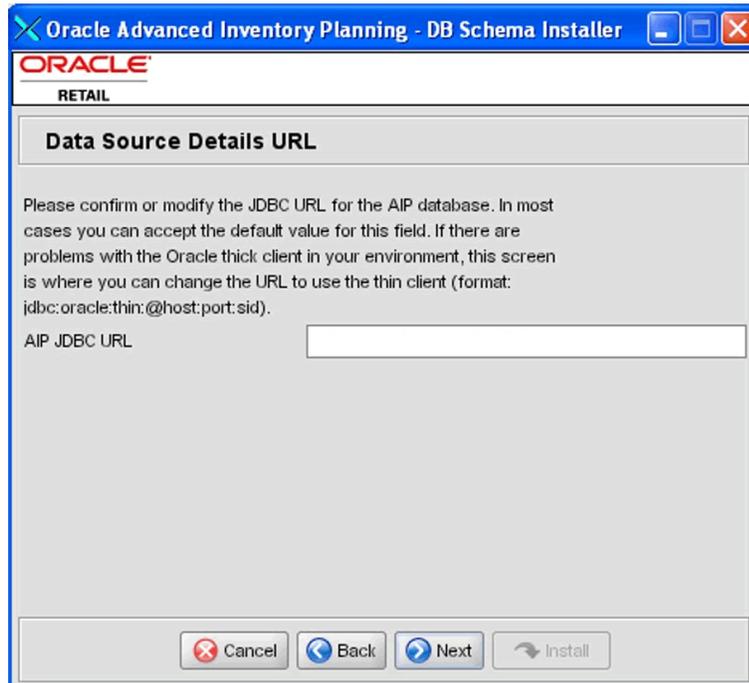
3. Click **Next** to continue. The Data Source Details screen appears.



Data Source Details Screen

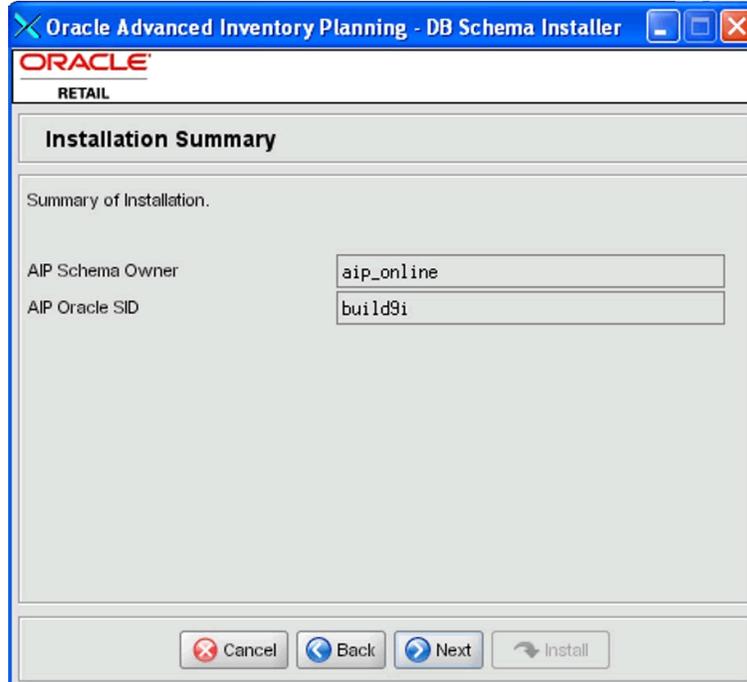
4. Enter the following information and click **Next**:
 - **AIP Schema Owner** – Enter the AIP Schema owner’s name.
 - **AIP Schema Password** – Enter the AIP Schema Owner’s password.
 - **AIP Oracle SID** – Enter the name of the database where the AIP schema will be installed.

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



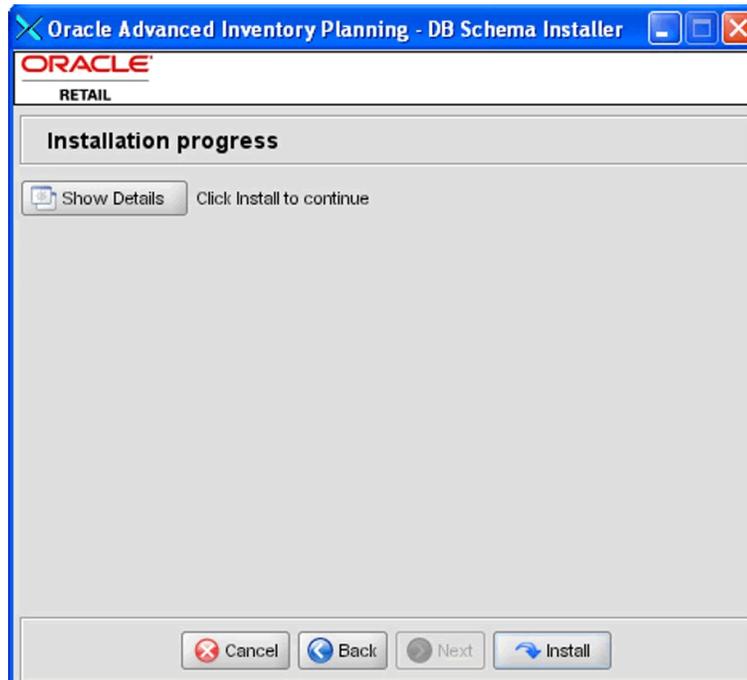
Data Source Details URL Screen

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.



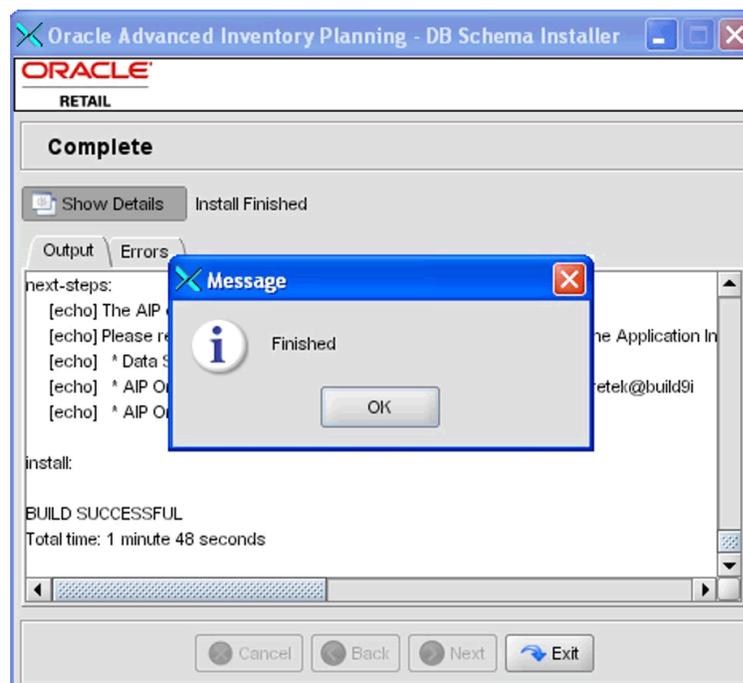
Installation Progress Screen

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.

Installing AIPOnlineApp on WAS 5.1.1.12

AIP 12.1 is packaged as an EAR file, AIPOnlineApp.ear. Install the AIPOnlineApp.ear file on the J2EE application server according to the vendor's documentation.

This chapter contains the typical steps for deploying an EAR file in WebSphere Application Server (WAS) version 5.1.1.12, assuming that WAS 5.1.1.12 is currently installed.

Note: The following patch **MUST** be applied to the WebSphere Application Server 5.1.1.12 for the AIP Online application to work properly:

Patch: PQ93388

URL: <http://www-1.ibm.com/support/docview.wss?rs=0&uid=swg24007848>

Note: In the event that a previous version of the AIP Online application is already installed on the WAS, AIP Online will need to be stopped and uninstalled before you install version 12.1 of the AIP 12.1 Online application. The existing data source and J2C Authentication Data Entry in the WAS can be re-used for the AIP 12.1 Online application installation (assuming these values remain unchanged for the AIP 12.1 schema). Any customizations made to previously installed version(s) of AIP Online application will need to be manually replicated in AIP 12.1 online application.

Required WebSphere Application Server (WAS) Configurations

The AIP WAS installation configurations below have been tested. You are required to use one of these configurations when deploying the AIP Online application. Alternate configurations are not supported.

1. AIPOnlineApp and RIBforAIP are installed on separate WAS instances on separate physical servers.
2. AIPOnlineApp and RIBforAIP installed on separate WAS servers within a single WAS instance.

RIBforAIP installation/configuration is required to integrate RMS 11.0.13 or 10.1.20 with AIP 12.1. For RIBforAIP installation and configuration instructions, refer to Chapter 6 in the *Retail Integration Bus 11.1 Installation Guide* (rib-111-ig).

WebSphere Application Server Requirements

Before preceding you must install WebSphere Application Server (WAS) 5.1.1.12, plus patch PQ93388 mentioned at the beginning of this chapter. AIP Online will be deployed to a server instance within the WAS framework. It is assumed Oracle RDBMS has already been configured and loaded with the appropriate AIP Online schema for your installation.

The Oracle 10.2.0.3.0 classes12.jar driver file is required for AIP 12.1. This file can be obtained from the Oracle Technology Network Web site, and must be copied to a staging directory on the Web server where WAS 5.1.1.12 is installed. The classes12.jar driver file may also be copied from the Oracle RDBMS 10g Release 2 Enterprise Edition location (\$ORACLE_HOME/jdbc/lib) on the database server.

Note: The JVM bundled with WebSphere 5.1.1.12 is supported for the AIP Online application.

Configuring WAS 5.1.1.12 for AIP Online Application

Note: The following WAS configuration steps are not necessary if the AIP 11.x application has already been installed and the AIP Oracle schema has not changed. If this is the case, proceed to Installing AIP Online this chapter.

1. Open the WAS Administrative Console that is to be used for administering the AIP 12.1 online application – `http://<server>:<port>/admin`. Replace the text in brackets with the correct information stated below.

Replace	With
<server>	The name or IP address of the server where WAS 5.1.1.12 is running
<port>	WAS Administration Console Port

Example: `http://server:9090/admin`

If the administrative console URL is unknown, consult the WAS 5.1.1.12 documentation for the correct URL.

2. Select **Security – JAAS Configuration – J2C Authentication Data**.
3. Under J2C Authentication Data Entries, click **New** and enter the following information in the fields provided:
 - a. In the Alias field, enter the alias for the Authentication Data Entry.
 - b. In the UsedID field, enter the AIP database schema owner.
 - c. In the Password field, enter the AIP database schema password.
 - d. Click **Apply**.
 - e. Click **OK**.

Example:

Alias: AIPOnlineDBUser
 User ID: aip121
 Password: MyPassword

4. Select **Resources – JDBC Providers**.
5. Under JDBC Providers, select the **Server** option and then click **Apply**.

6. Create a new JDBC Provider.
 - a. Click **New** to create a new JDBC provider.
 - b. Select **Oracle JDBC Driver (XA)** from the JDBC Providers list.
 - c. Click **Apply**.
7. In the **General Properties** section, set the **Classpath** field to the location of the Oracle driver archive file, `classes12.jar`, and click **Apply**. Make sure to include the file name and extension in the **Classpath** field.

Example: `/u00/webbsp/jdbc/classes12.jar`
8. Under **Additional Properties**, select **Data Sources** and then click **New**.
9. Enter the following information in the Configuration – General Properties fields:
 - a. Enter AIPOnlineDB in the Name field. This value is case sensitive and must be entered as shown.
 - b. Enter jdbc/AIPOnlineDB in the JNDI Name. This value is case sensitive and must be entered as shown.
 - c. Select the **Container managed persistence (CMP)** option.
 - d. From the Component-managed Authentication Alias option, select the J2C Authentication Alias that was created in step 5 above.
 - e. From the Container-managed Authentication Alias option, select the J2C Authentication Alias that was created in step 5 above.
 - f. Leave all other field as the defaults displayed.
 - g. Click **Apply**.

Example:

Name: AIPOnlineDB
 JNDI Name: jdbc/AIPOnlineDB
 Component-managed Authentication Alias: AIPOnlineDBUser
 Container-managed Authentication Alias: AIPOnlineDBUser
10. Under Additional Properties, select **Custom Properties for the Data Source** and perform the following:
 - a. Remove all properties **except** for URL and `transactionBranchesLooselyCoupled` by selecting the options all other properties and then clicking **Delete**.
 - b. Select **URL** and enter the following information in the Value field:

Value: `jdbc:oracle:thin:@<DB Server IP address>:<DB Listener Port>:<Database_name>`

Example: `jdbc:oracle:thin:@dbserver:1521:prod_db1`
 - c. Click **Apply**, and then click **OK**.
 - d. Select **transactionBranchesLooselyCoupled** option and set the Value field to `true`.
 - e. Click **Apply**, and then click **OK**.
11. Save your configuration settings.
 - a. Select the **Save** link in the **Message(s)** section.
 - b. Click **Save** in the **Save to Master Configuration** section.

12. Verify the configuration by using the “Test Connection” option in the Data Sources configuration section (Resources – JDBC Providers – Oracle JDBC Driver (XA) – Data Sources – Data Source Name – Test Connection button). A successful message in the Message(s) section should appear. In the event of an unsuccessful connection test, review all previous steps to ensure that the configuration settings were defined correctly.

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 WAS installation. Create a new staging directory for the AIP Online application distribution (AIP-online-appserver-installer.zip).
Example: /u00/webasp/aiponline/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 WAS_HOME and JAVA_HOME environment variables. WAS_HOME should point to your WAS installation. JAVA_HOME should point to \$WAS_HOME/java.

Installing AIP Online

Once you have a WAS server instance started, you can run the AIP Online Installer. This installer configures and deploys the AIP Online application and AIP Online Integration files.

Perform the procedure below to use the AIP Online Installer. Depending on system resources, a typical installation can take up to 30 minutes.

1. Extract the AIP-12.1-online-appserver-installer.zip distribution into <INSTALL_DIR> directory.
2. Change directories (cd) to the <INSTALL_DIR>/AIPOnlineAppServer121 directory.
3. Run the install.sh script, as shown below, to start the Installer. When the installation is complete, a detailed installation log file is created. This file is named aip121install-app.<timestamp>.log where <timestamp> represents the date and time the installation was performed. This file is located in the <INSTALL_DIR>/AIPOnlineAppServer121 directory.

```
./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.

You are prompted for the type of application server for your deployment.

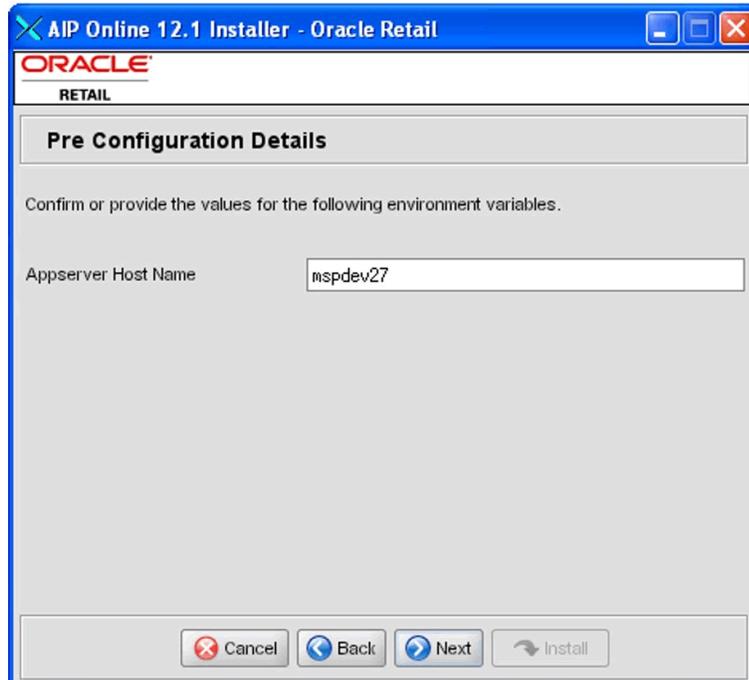
4. Type was to run the WebSphere Application Server (WAS) Installer and press the Enter key.

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

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



Pre Configuration Details Screen

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



Data Source Details Information Screen

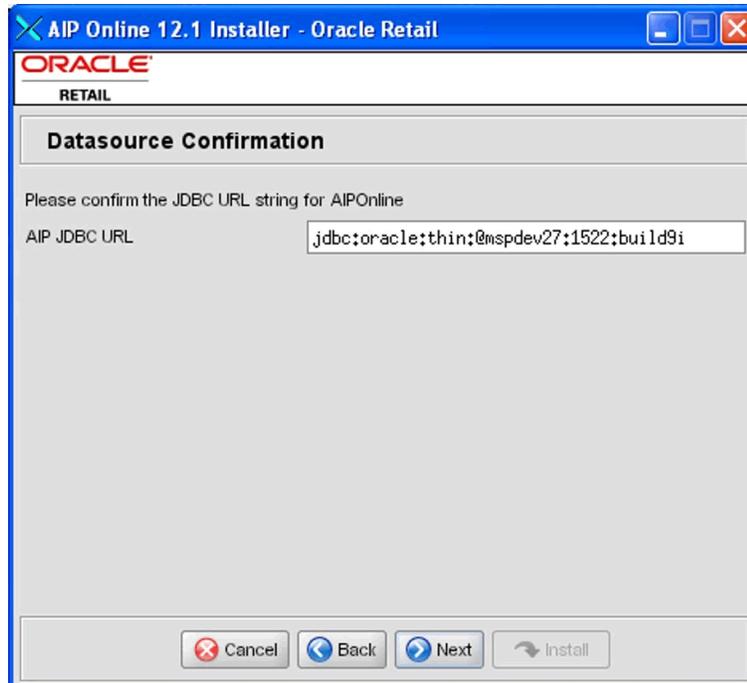
7. Click **Next** to verify that your WebSphere Application Server has the proper settings to install the AIP Online components. If the proper settings are defined, the Data Source Details screen appears.

Note: If the AIP Online Installer discovers any issues, a message box appears with the issues encountered. Make the necessary changes to your WAS environment and run the AIP Online Installer again.

The screenshot shows a window titled "AIP Online 12.1 Installer - Oracle Retail". The window contains the Oracle Retail logo and the text "RETAIL". Below this is a section titled "Data Source Details". The text in this section reads: "Provide the details for the AIPOnline datasource. The next page will construct the JDBC URL for confirmation and validation from the following values." There are three input fields: "AIP database host" with the placeholder "[host]", "AIP database port" with the placeholder "[port]", and "AIP SID" with the value "build9i". Below these fields is a paragraph: "Please enter the AIP schema name and password. Please note that the schema user must have the correct access rights to the schema. Please refer to the Installation guide for schema user creation guidelines." There are two more input fields: "AIP DB Schema User" and "AIP DB Schema Password". At the bottom of the window are four buttons: "Cancel", "Back", "Next", and "Install".

Data Source Details Screen

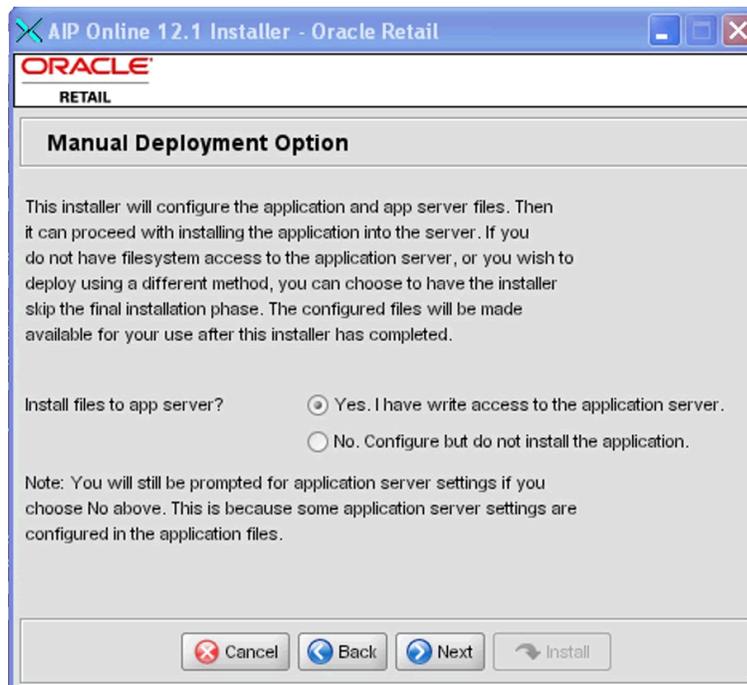
8. Enter the following information and click **Next**:
 - **AIP database host** – Enter the AIP database host name.
 - **AIP database port** – Enter the port number on which the database listens.
 - **AIP SID** – Enter the AIP Online database SID.
 - **AIP DB Schema User** – Enter the AIP database schema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



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.

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



Manual Deployment Option Screen

10. 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 AIPONLINE_DIR folder.

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

The 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 WebSphere Configuration screen appears.

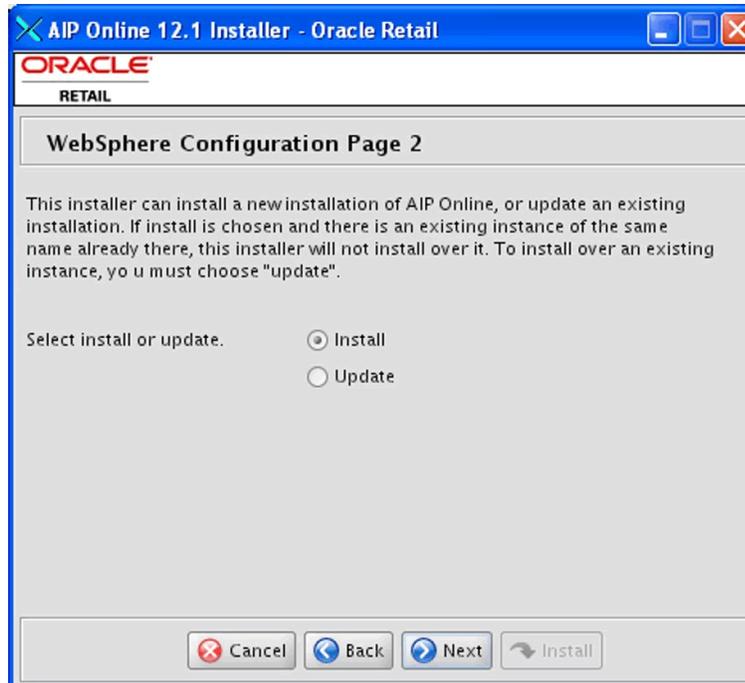
Example of WebSphere Configuration Screen Settings

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

- **WAS Home Directory** – Enter the directory where WAS is installed.
- **WAS Bootstrap Port** – Enter the WAS bootstrap port number.
- **WAS SOAP Port** – Enter the WAS SOAP port number.
- **AIP HTTP Port** – Enter the HTTP port used in the AIP Online URL.
Example: `http://www.mydomain.com:8080/aiponline/`
- **WAS Cell** – Enter the WAS cell.
- **WAS Node** – Enter the WAS node.
- **WAS Server** – Enter the WebSphere Application Server name.
- **WAS Application Name** – Enter **AIPOnlineApp** as the WAS application name.
- **Oracle JAR Path** – Enter the directory location where AIP will be installed, which is referred to as <INSTALL_DIR> in this chapter. This is the location where you previously copied the JAR file. Please refer to WebSphere Application Server Requirements for information on where to obtain the classes12.jar or ojdbc14.jar file.

Note: Please refer to the WebSphere Administration Console and IBM WebSphere documentation for information on WAS specific information, such as WAS bootstrap, WAS cell, WAS node, etc.

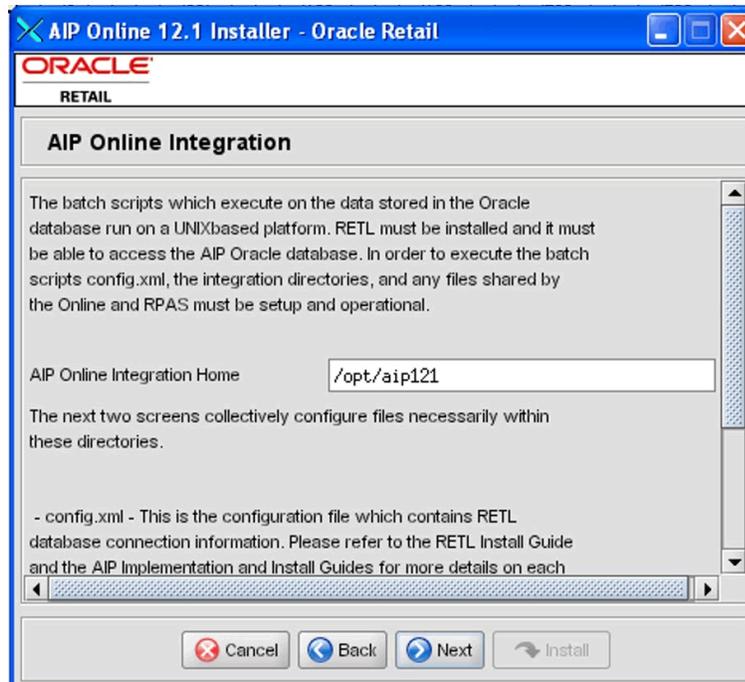
The WebSphere Confirmation Page appears.



WebSphere Configuration Page 2 Screen

13. Select the appropriate installation option and click **Next**.

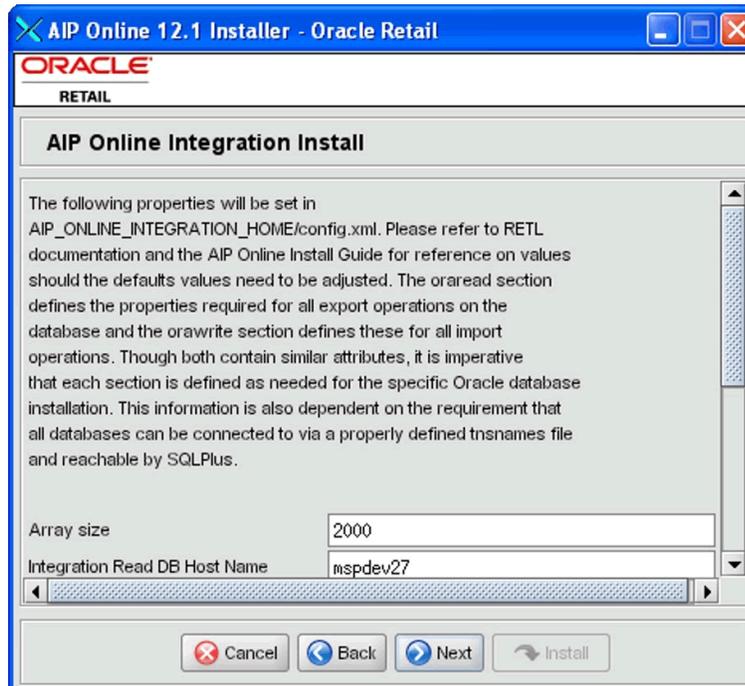
Select **Install** if you want to install a new instance of AIP Online. Select **Update** to update or install over an existing installation of AIP Online. The AIP Online Integration screen appears.



AIP Online Integration Screen

14. 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.



AIP Integration Install Screen

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.

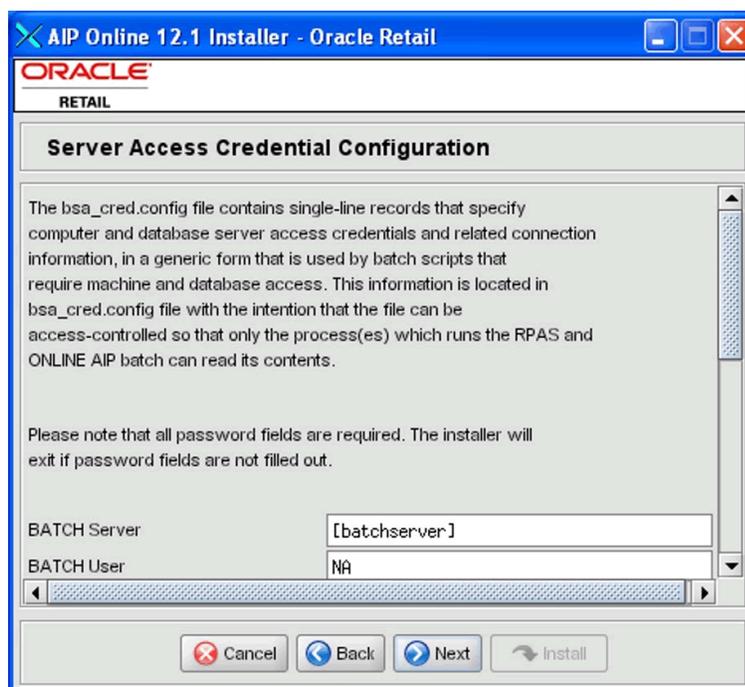
15. Enter the following information in the AIP Integration Install screen and click **Next** to continue:

- **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 Installation Guide* for further details on the AIP integration fields.

The Server Access Credential Configuration screen appears.

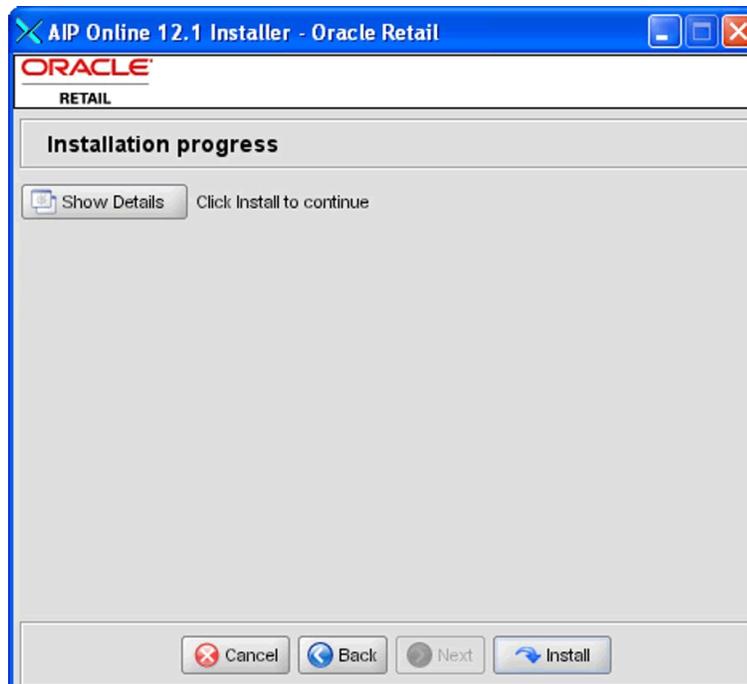


Server Access Credential Configuration

This screen is used to define the Batch Server Access (BSA) credential configuration file (`bsa_cred.config`). The `bsa_cred.config` file contains single-line records that specify computer and database server access credentials and related connection information. It provides this information in a generic form that so it can be used by batch scripts that require machine and database access. The `bsa_cred.config` file is intended to be access-controlled so that only the process(es) which runs the RPAS and ONLINE AIP batch can read its contents.

16. Enter the following Batch Server Access information below and click **Next**:
- **Batch Server** – Enter the server name used for batch processing.
 - **Batch User** – Enter the user name credential for the batch processing. Enter “NA” if not required.
 - **Batch Password** – Enter the password credential for the batch processing. Enter NA if a password is not required. Because password may contain spaces, must be entered with quotation marks (“ ”).
 - **AIP-ONLINE Server** – Enter the AIP Online server name. Enter “NA” if not applicable for the given application.

- **AIP-ONLINE User** – Enter the AIP Online user name credential. Enter “NA” if not required.
- **AIP-ONLINE Password** – Enter the AIP Online password credential. Enter NA if a password is not required. Because password may contain spaces, must be entered with quotation marks (“ ”).
- **AIP-RPAS Server** – Enter the AIP-RPAS server name. Enter “NA” if not applicable for the given application.
- **AIP-RPAS User** – Enter the AIP-RPAS user name credential. Enter “NA” if not required.
- **AIP-RPAS Password** – Enter the AIP-RPAS password credential. Enter NA if a password is not required. Because password may contain spaces, must be entered with quotation marks (“ ”).
- **DATABASE SID** – Enter the database SID. Enter “NA” if not applicable for the given application.
- **DATABASE User** – Enter the database SID user name credential. Enter “NA” if not required.
- **DATABASE Password** – Enter the database SID password credential. Enter NA if a password is not required. Because password may contain spaces, must be entered with quotation marks (“ ”).
- **RMS Server** – Enter the RMS server name. Enter “NA” if not applicable.
- **RMS User** – Enter the RMS user name. Enter “NA” if not required.
- **RMS Password** – Enter the RMS password credential. Enter NA if a password is not required. Because password may contain spaces, must be entered with quotation marks (“ ”).



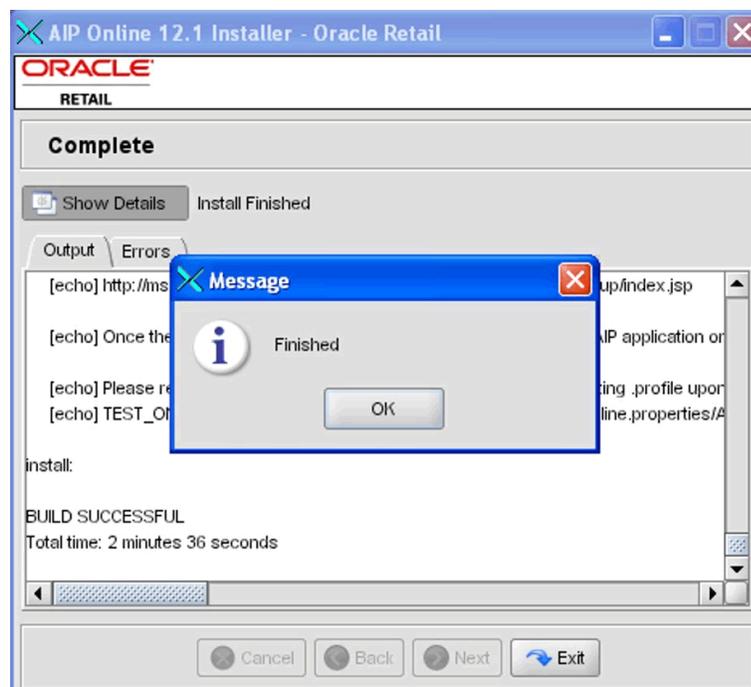
Installation Progress Screen

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

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

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

When the installation has finished, the Complete screen appears.



Complete Screen

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

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

When the installation is complete, a detailed installation log file is created. This file is named `aip121install-app.<timestamp>.log` where `<timestamp>` represents the date and time the installation was performed. This file is located in the `<INSTALL_DIR>/aip/application/logs` 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 "Troubleshooting" 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 just copy the entire \$AIPONLINE_DIR/AIPOnlineIntegration121 directory to the appropriate destination. Refer to “Installing the AIP Integration Components” of this guide for more information.

Manual Deployment Tasks

Note: Skip this section if you chose the default option of allowing the installer to complete installation to the application server. Refer to “Installing the AIP Integration Components” of this guide 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>/aip/application/aip121/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>/aip/application/aip121/configured-output into your application server installation.

Note: bsa_cred.config WILL NOT be configured here; however, this does not affect the EAR file.

2. Deploy the AIPOnlineApp EAR file using the WAS Web interface.

The configured EAR file is located at

<INSTALL_DIR>/aip/application/aip121/configured-output/AIPOnlineApp.ear.
When deploying the EAR file, you should provide the same application name you entered in the Installer. This value is stored in the <INSTALL_DIR>/aip/application/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:20085/aiponline/`

Configuring the AIP Online Application

A setup page is used to configure the properties files for AIP Online.

1. Load the new AIP Online application by entering the following URL in a Web browser:

`http://<server>:<http_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 WebSphere is running.
<http_port>	The WAS HTTP port as defined by the HTTPTransport_1 value in the file <code>WAS_HOME/config/cells/<cell>/nodes/<node>/servers/server1/server.xml</code> .

Example: `http://server:9080/aiponline`

A page displaying a link to the setup page appears.

2. Click the **setup page** link. The AIP Online Setup page appears.
3. Configuration and Data directories are created by the AIP Online Application Installer. 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/websp/aip121/config`

Data Directory: `/u00/websp/aip121/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/websp/aip121/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: aip121
 Password: MyPassword
 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. Restart the WebSphere Application Server to apply the AIP Online configuration changes.
10. If necessary, start the AIP Online application through the WAS Administrative Console. To start the AIP online application, select the option next to the application on the Enterprise Applications page and click **Start**. Make sure that the status of the AIP Online application is now up, indicated by a green arrow.

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 Configuring the AIP Online Application) 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:9080/aiponline/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: aip121online
Retype New Password: aip121online

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: aip121online
Retype New Password: aip121online
Password Status: Normal

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

Installing AIPOnlineApp on OAS 10.1.3.0

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 10.1.3.0, 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 Oracle RDBMS has already been configured and loaded with the appropriate AIP Online schema for your installation.

Creating a New OC4J Instance for AIP Online

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

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

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

Example: aiponline_oc4j

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

Sample Syntax:

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

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

Sample Syntax:

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

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

Sample Syntax:

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

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

Preparing Your Server for Installation

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

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

Running the AIP Online Application Installer

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

1. Extract the AIP-12.1-online-appserver-installer.zip distribution into `<INSTALL_DIR>` directory.
2. Change directories (`cd`) to the `<INSTALL_DIR>/AIPOnlineAppServer121` directory.
3. Run the `install.sh` script, as shown below, to start the Installer. When the installation is complete, a detailed installation log file is created. This file is named `aip121install-app.<timestamp>.log` where `<timestamp>` represents the date and time the installation was performed. This file is located in the `<INSTALL_DIR>/AIPOnlineAppServer121` directory.

```
./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".

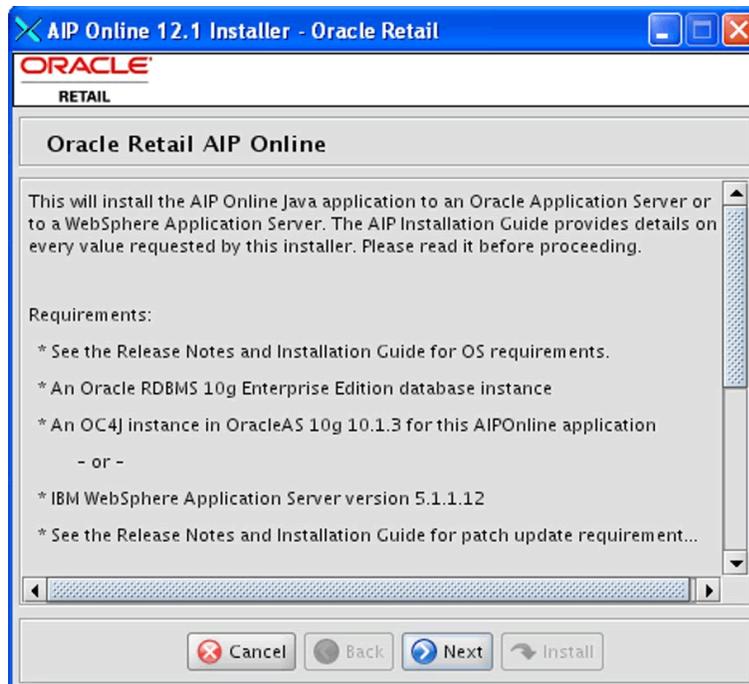
Note: In text mode, the default value will appear in square brackets []. To use the default value and continue, simply hit the Enter key. If you wish to use a different value, enter the new value. When prompted to create a directory, respond with "y" or "yes" and press the Enter key.

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

You are prompted for the type of application server for your deployment.

4. Enter `oas` to run the Oracle Application Server (OAS) Installer and press the Enter key.

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



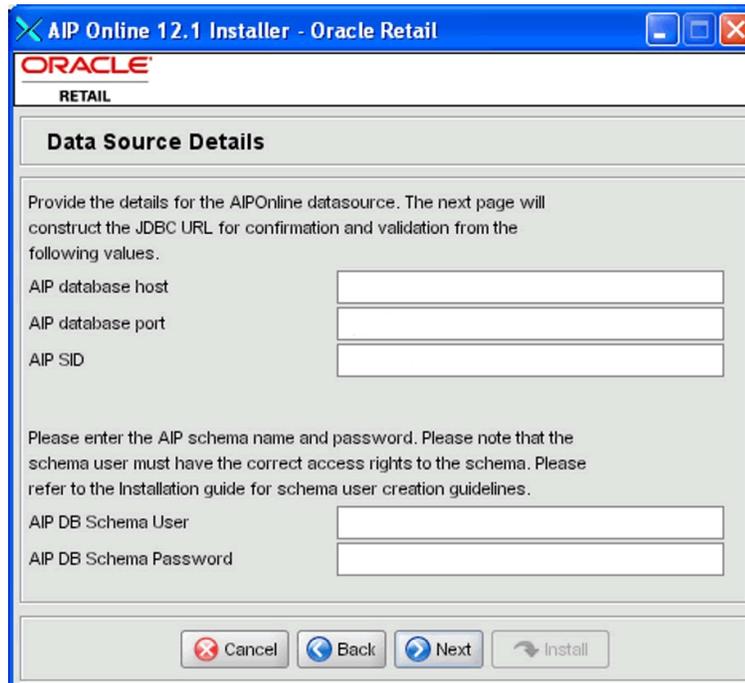
AIP Online Installer Screen

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



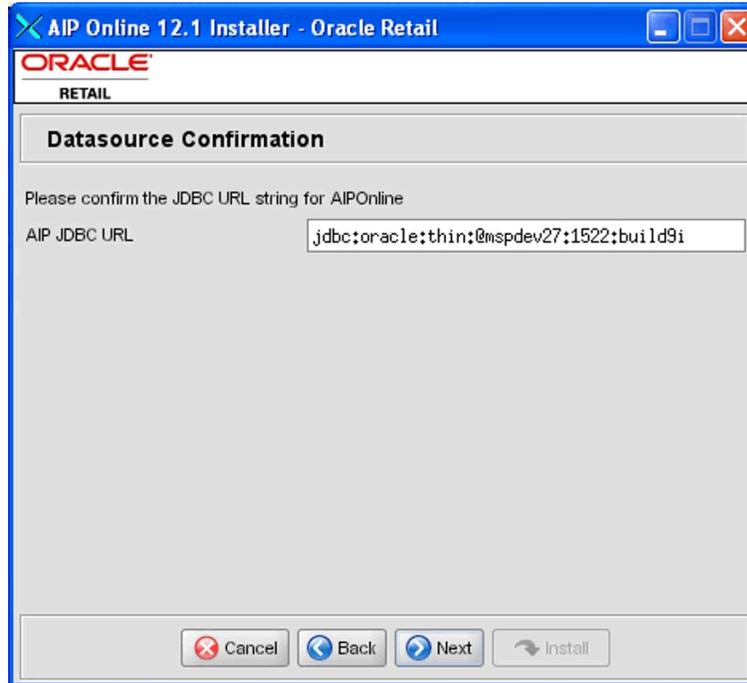
Pre Configuration Details Screen

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



Data Source Details Screen

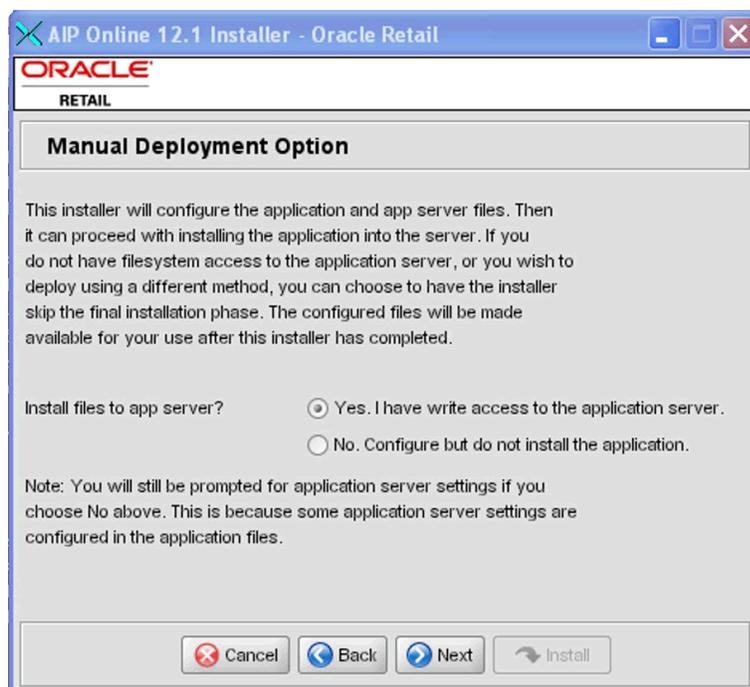
7. Enter the following information and click **Next**:
 - **AIP database host** – Enter the AIP database host name.
 - **AIP database port** – Enter the port number on which the database listens.
 - **AIP SID** – Enter the AIP Online database SID.
 - **AIP DB Schema User** – Enter the AIP database schema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

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 manually complete the installation process. Even if you select **No**, you will still need to complete the subsequent Installer screens.

The Application Deployment Details screen appears.

Example of Application Deployment Details Screen

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

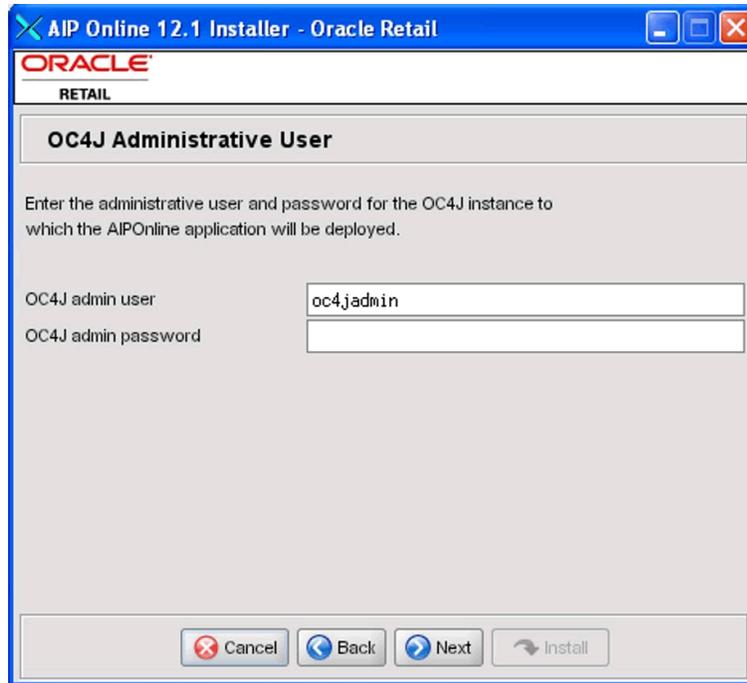
- **OPMN Request Port** – Enter the OPMN request port found in \$ORACLE_HOME/opmn/conf/opmn.xml file.

Example of Port Definitions in opmn.xml File:

```
<port local="6100" remote="6200" request="6003">
```

- **AIPOnline OC4J Instance** – Enter the name of the OC4J instance where AIP Online application will be deployed.
- **AIPOnline App Deployment Name** – Enter the name that will be used by the application server to identify the AIP Online application.
- **AIPOnline App 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 OC4J Administrative User screen appears.



OC4J Administrative User Screen

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

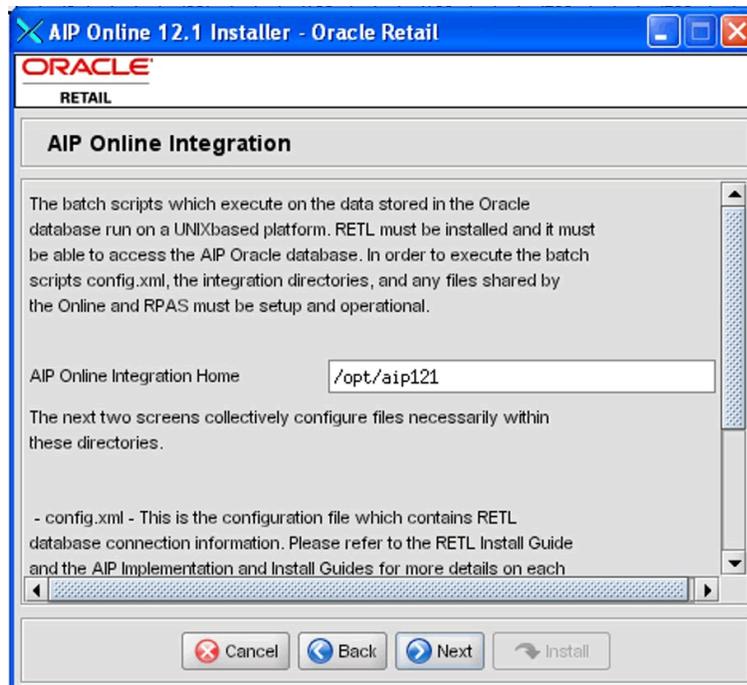
- **OC4J Admin User** – Enter the OC4J admin user name.
- **OC4J Admin Password** – Enter the OC4J admin user password.

The AIP Online Installation Directory screen appears.



AIP Online Installation Directory Screen

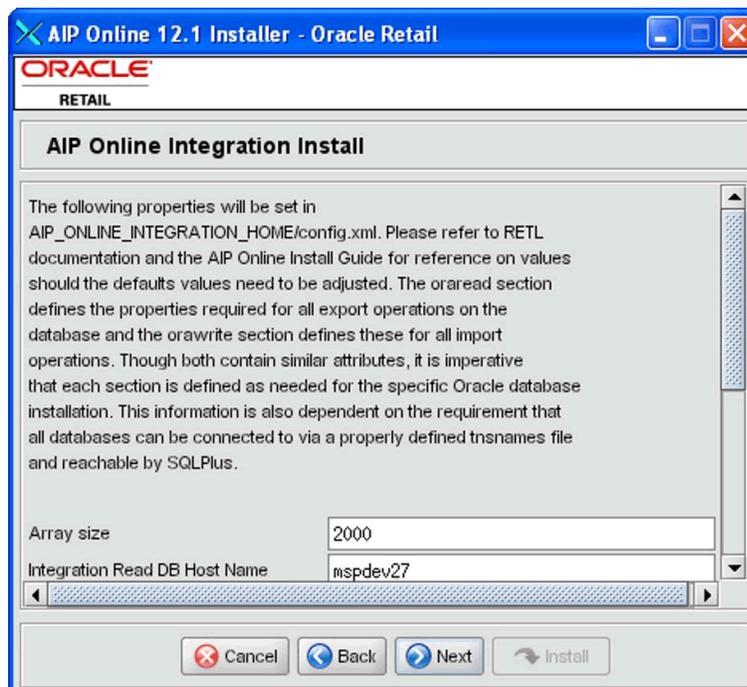
12. Enter the directory where AIP Online will be installed and click **Next**. The AIP Online Integration screen appears.



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

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

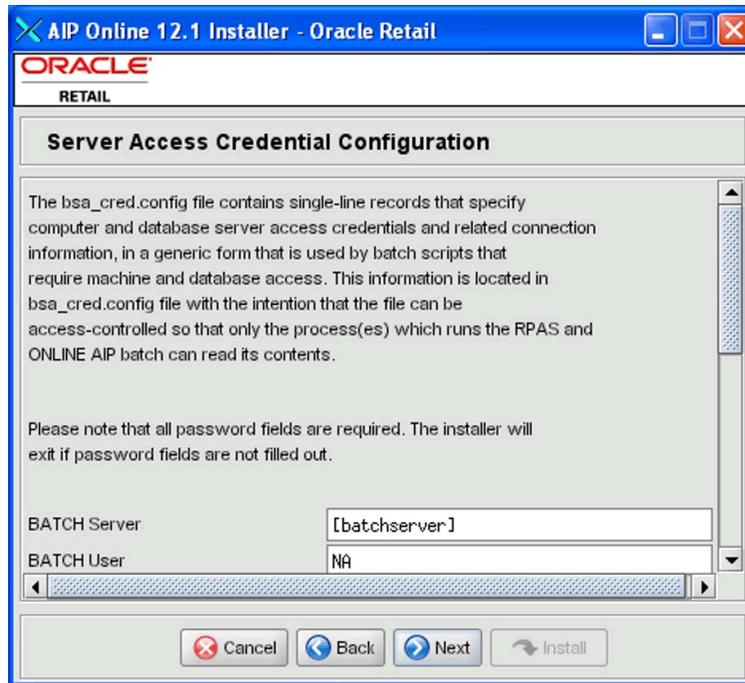
- All databases can be connected to using a properly defined tnsnames file.
- All databases are reachable by SQLPlus.

14. Enter the following information in the AIP Integration Install screen and click **Next** to continue:

- **Array Size**
- **Integration Read DB 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 Installation Guide* for further details on the AIP Integration fields.

The Server Access Credential Configuration screen appears.



Example of Server Access Credential Configuration

This screen is used to define the Batch Server Access (BSA) credential configuration file (`bsa_cred.config`). The `bsa_cred.config` file contains single-line records that specify computer and database server access credentials and related connection information. It provides this information in a generic form that so it can be used by batch scripts that require machine and database access. The `bsa_cred.config` file is intended to be access-controlled so that only the process(es) which runs the RPAS and ONLINE AIP batch can read its contents.

This file is used by both the RPAS and ONLINE batch scripts. If this file is not available in the ONLINE environment because it resides on a separate server than RPAS, it should be copied to the ONLINE database server. Instructions for perform this task are provided in the AIP Online Configurations section in the *AIP Online Implementation Guide*.

15. Enter the following Batch Server Access information below and click **Next**:

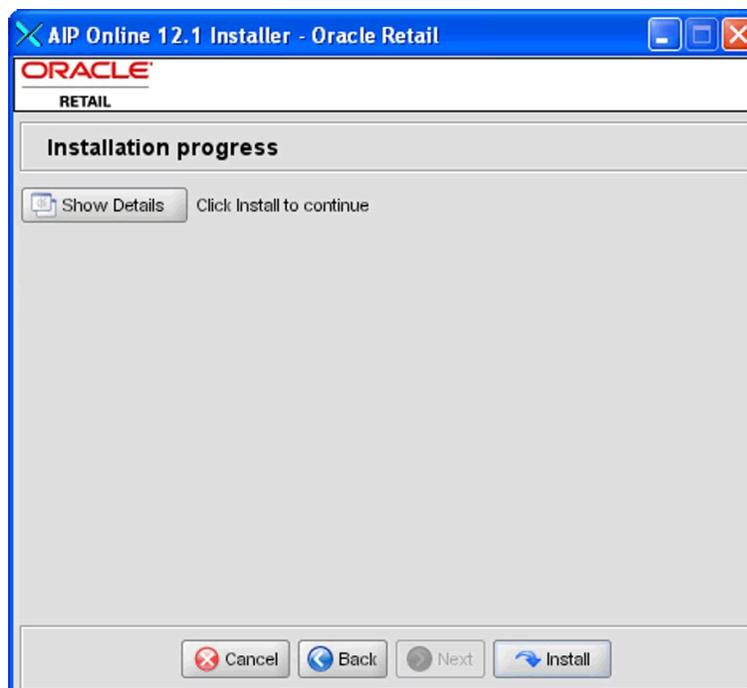
- **Batch Server** – Enter the server name used for batch processing.
- **Batch User** – Enter the user name credential for the batch processing. Enter “NA” if not required.
- **Batch Password** – Enter the password credential for the batch processing. Enter NA if a password is not required. Because password may contain spaces, must be entered with quotation marks (“ ”).
- **AIP-ONLINE Server** – Enter the AIP Online server name. Enter “NA” if not applicable for the given application.
- **AIP-ONLINE User** – Enter the AIP Online user name credential. Enter “NA” if not required.
- **AIP-ONLINE Password** – Enter the AIP Online password credential. Enter NA if a password is not required. Because password may contain spaces, must be entered with quotation marks (“ ”).
- **AIP-RPAS Server** – Enter the AIP-RPAS server name. Enter “NA” if not applicable for the given application.

- **AIP-RPAS User** – Enter the AIP-RPAS user name credential. Enter “NA” if not required.
- **AIP-RPAS Password** – Enter the AIP-RPAS password credential. Enter NA if a password is not required. Because password may contain spaces, must be entered with quotation marks (“ ”).
- **DATABASE SID** – Enter the database SID. Enter “NA” if not applicable for the given application.
- **DATABASE User** – Enter the database SID user name credential. Enter “NA” if not required.
- **DATABASE Password** – Enter the database SID password credential. Enter NA if a password is not required. Because password may contain spaces, must be entered with quotation marks (“ ”).
- **RMS Server** – Enter the RMS server name. Enter “NA” if not applicable.
- **RMS User** – Enter the RMS user name. Enter “NA” if not required.
- **RMS Password** – Enter the RMS password credential. Enter NA if a password is not required. Because password may contain spaces, must be entered with quotation marks (“ ”).

An example of a complete bsa_cred.config file appears below. This information entered in the Server Access Credential Configuration is used to create this file.

BATCH	mspdev03	NA	"NA"
AIP-ONLINE	mspdev03	onlineusr	"onlinepw"
AIP-RPAS	mspdev03	rpasusr	"rpasspw"
DATABASE	devrtk11	dbuser	"dbpw"

The Installation Progress screen appears.



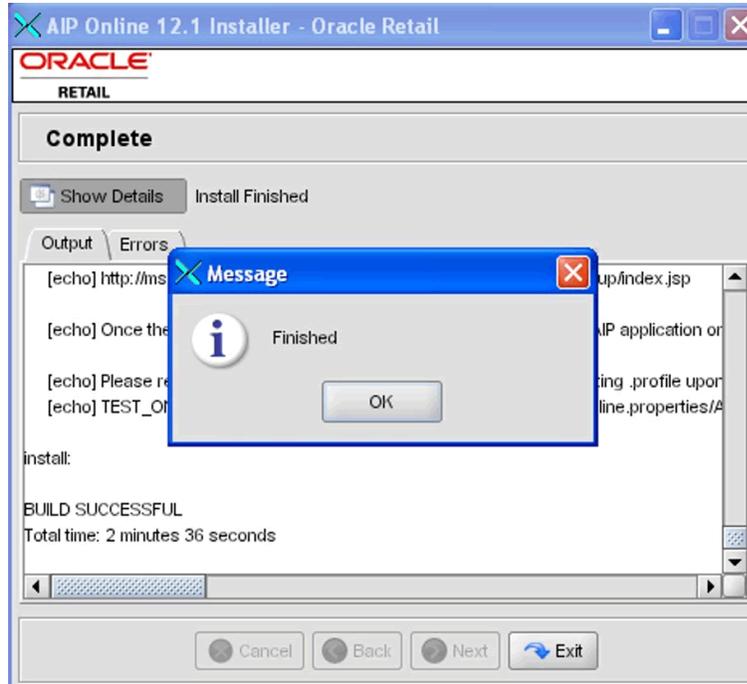
Installation Progress Screen

16. 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

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

18. 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 `aip121install-app.<timestamp>.log` where `<timestamp>` represents the date and time the installation was performed. This file is located in the `<INSTALL_DIR>/aip/application/logs` 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/AIPOnlineIntegration121 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>/aip/application/aip121/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>/aip/application/aip121/configured-output into your application server installation.

Note: bsa_cred.config WILL NOT be configured here; however, this does not affect the EAR file.

2. Deploy the AIPOnlineApp EAR file using the Enterprise Manager Web interface. The configured EAR file is located at <INSTALL_DIR>/aip/application/aip121/configured-output/AIPOnlineApp.ear. When deploying the EAR file, you should provide the same application name you entered in the Installer. This value is stored in the <INSTALL_DIR>/aip/application/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.

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/aip121/config`

Data Directory: `/u00/oas/aip121/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/aip121/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: aip121

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. Bounce 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. Check 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 on the left of AIP Online application is still select 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 Configuring the AIP Online Application) 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: aip121online

Retype New Password: aip121online

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: aip121online
 Retype New Password: aip121online
 Password Status: Normal

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

Installing the AIP Integration Components

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

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

Installing RETL 12.0.1

Refer to the *Retail Extract Transform and Load (RETL) 12.0.1 Programmer's Guide* for detailed installation instructions on this product. Following the successful installation of RETL 12.0.1, test the application to verify the environment was set up properly and the RETL binary was installed correctly.

Note: It is recommended that the AIP integration files be extracted on the database server where the RMS 11.0.13 or 10.1.20 schema exists if network traffic is limited.

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_ret1`” script. This script runs a series of validation steps and displays a confirmation message if the environment is set up correctly. Upon confirmation, the RETL environment is now ready to be configured.

Example:

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

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

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

Note: The database parameter passed with the `verify_ret1` script varies depending on the type of database to which RETL is configured. Refer to the *RETL 12.0.1 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. The integration files must be extracted on the same server as RETL. It is recommended that RETL and the integration files reside on the database server.

RETL may save very large data extracts to the file system depending on the quantity of data in the database. 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). These batch shell scripts are contained in the AIP-12.1-online-dbserver.zip file, which should be copied to the same directory where the AIP integration files are extracted. You can use the `rfx` or `retek` UNIX user account to run the integration/database scripts.

The online integration files were configured and installed through the AIP Online Application Server Installer. Once configured by the Installer, if they need to be moved to another server, zip the contents of the directory specified during the Application Server Installer, and move to the desired server, then proceed to “Editing the .profile to Run `cron_export.sh` and `cron_import.sh` Scripts” section and perform the necessary tasks.

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 sqldr functions correctly).

Example:

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

```
export RFX_HOME=<path from root>/rfx/rfx-12.0.1
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
```

Using the AIP Installer

The AIP Installer

The AIP Installer 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.

Before You Begin

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

- RPAS 12.1.1.7, which includes RPAS Server and RPAS Configuration Tools. Refer to the RPAS documentation contained in the RPAS-12.1.1.7.zip file for information on installing and administering RPAS.
- Java 1.4.2 or later
- Unzip utility

Running the AIP Installer

Perform the following procedure to run the AIP Installer:

1. Locate and extract AIP-12.1-rpas-installer.zip into a newly created staging directory, which is referred to as <AIP_Installer>.
2. Begin the Installer by changing to the root of the <AIP_Installer> directory and by running the following command:

```
./install.sh
```

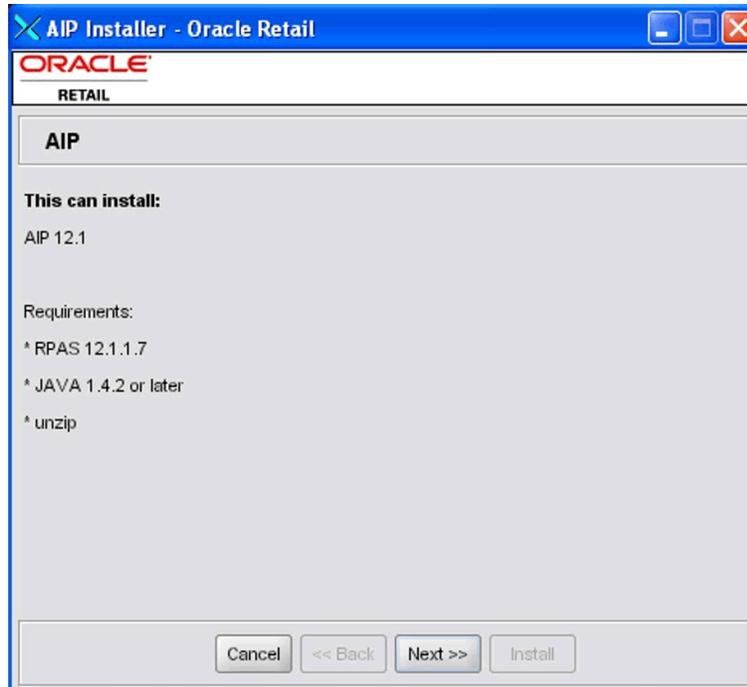
Note: The command must be executed with the preceding period and forward slash (. /).

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".

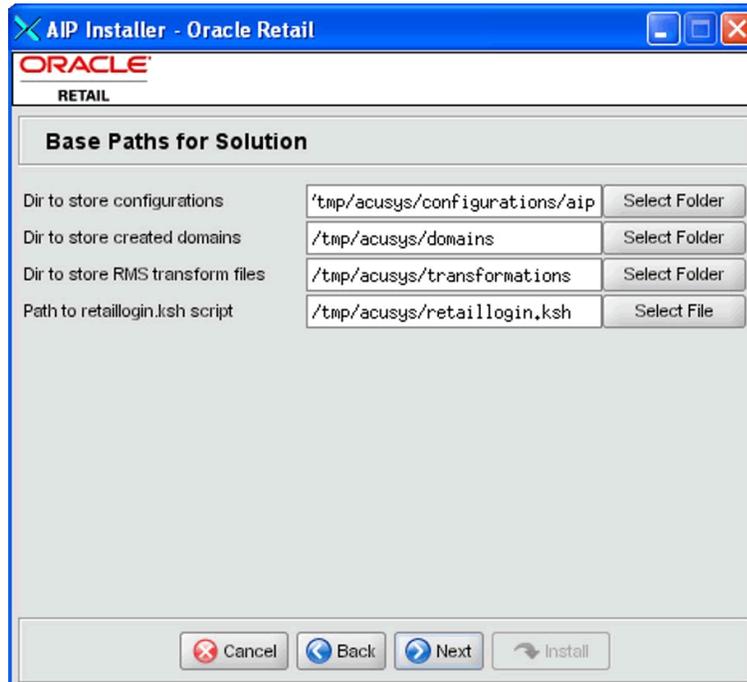
Note: In text mode, the default value will appear in square brackets. To use the default value and continue, press the **Enter** key. If you want to use a different value, enter the new value. When prompted to create a directory, respond with "y" or "yes" and press the **Enter** key.

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

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

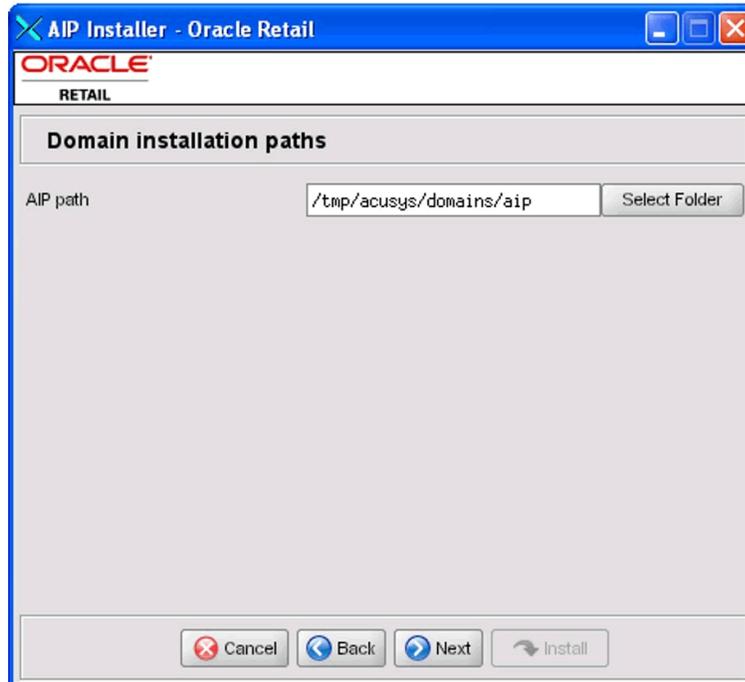


Base Paths for Solution Screen

4. Enter the following path information and click **Next**:
- **Dir to store configurations** – Enter the target directory for your configurations.
 - **Dir to store created domains** – Enter the target directory for the domains that will be created by the AIP Installer.

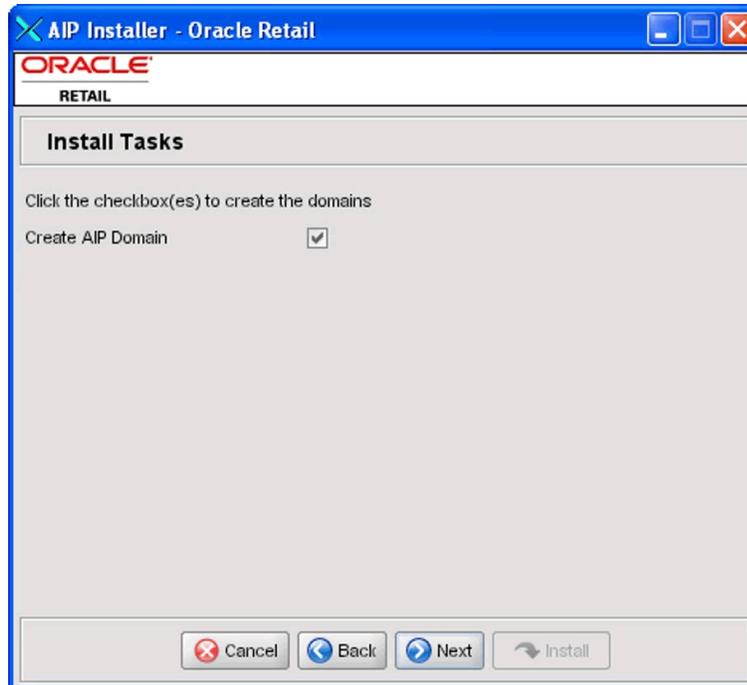
- **Dir to store RMS transform files** – Enter the target directory for the RMS transformation files used by AIP.
- **Path to retaillogin.ksh script** – Enter the target path where the retaillogin.hsh file resides on your system or use click the **Select File** button to navigate to and select the retaillogin.ksh file. The retaillogin.ksh script was created during RPAS installation

The Domain installation paths screen appears.



Domain Installation Paths Screen

5. Enter the path where your AIP domain will be installed and click **Next**. The Install Tasks screen appears.

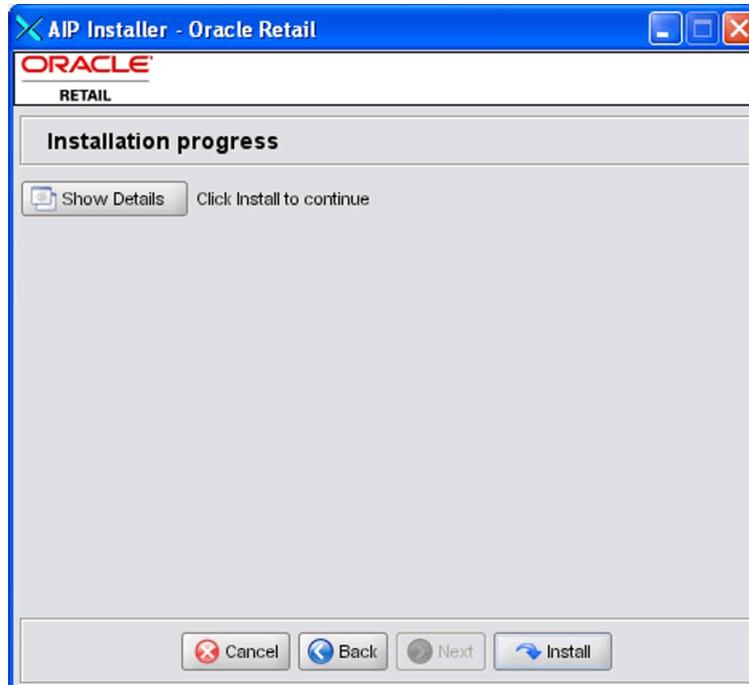


Install Tasks Screen

6. 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.

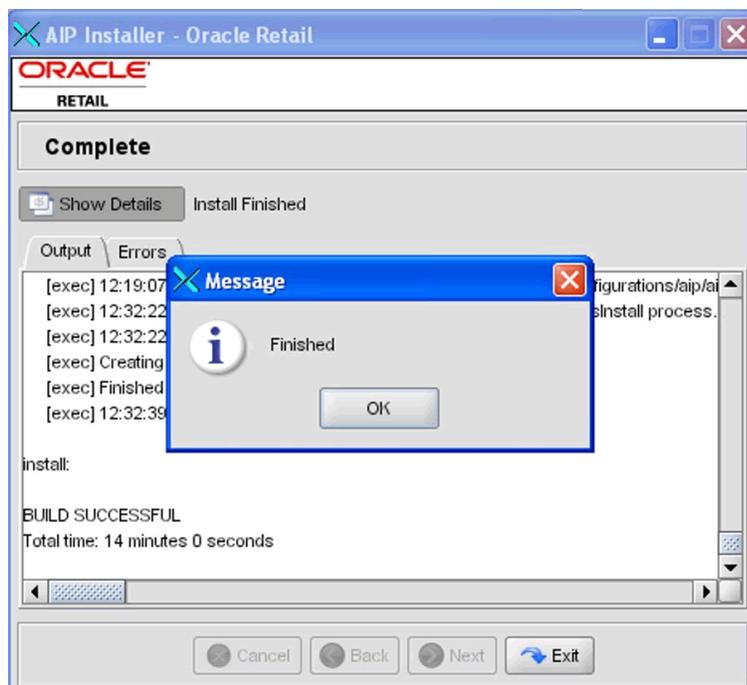
Note: The domain install process also includes post-install data loading scripts specific to the AIP configuration. These scripts may also be modified.



Installation Progress Screen

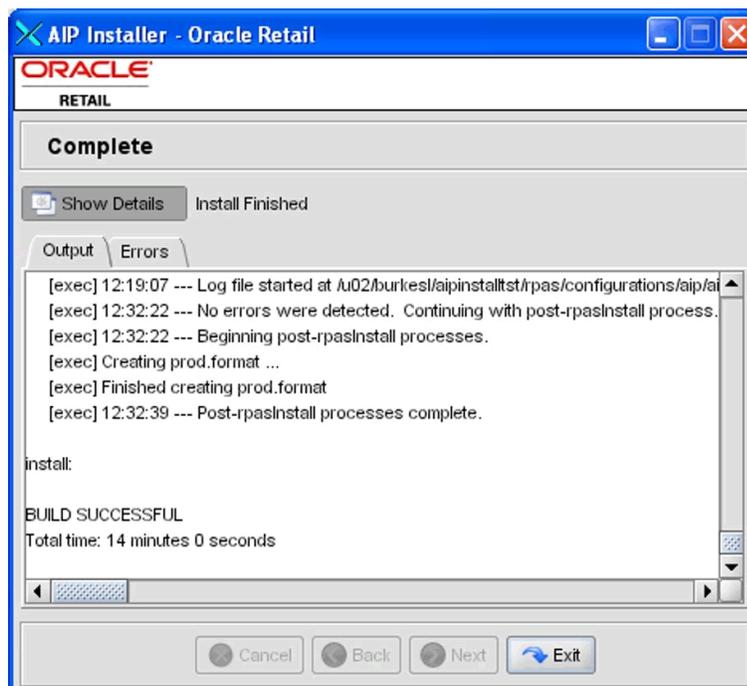
7. To display the progress of the components and tasks being performed by the AIP Installer, select **Show Details**. Click **Install** to start the installation process. When the installation process is complete, the Completed screen appears with Message dialog box.

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



Complete Screen

8. Click OK to close the dialog box.



Complete Screen without Message Dialog

9. 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.

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

11. Run the transform scripts.

The RMS-AIP transform interface installation process is complete. What follows are brief instructions for how to run the RMS-AIP transform scripts. This step does not have to be performed during this installation process; rather, it is typically scheduled to run prior to the AIP RPAS daily batch process.

Note: This document does not provide instructions on how to create the raw RMS data files extracted from RMS by the RMS RETL scripts.

After the raw RMS data files have been extracted from RMS, using the schema files from the RMS package in \$RMS_AIP_TRANSFORM/rms_schema_dir, the data files should be placed in the directory RAW_RMS_DATA_DIR. Once the data files are available in this directory, execute aip_t_master.ksh. This script executes the RMS-AIP transform interface scripts. When the aip_t_master.ksh is finished, the AIP loads/feeds have been created and are moved to \$AIPDOMAIN/interface/config/rms, which is a location defined by \$AIPRMS in the file \$RPAS_HOME/bin/aip_constants_rpas.sh.

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.

Installation Questions, Reinstallation, and Troubleshooting

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

Installation Questions

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

About Installation URLs

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

JDBC URL for a Database

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

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

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

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

Deployer URI

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

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

Managed OC4J

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

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

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

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

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

Example: `deployer:oc4j:myhost:23791`

Reinstallation

Reinstalling in Silent Mode

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

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

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

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

Troubleshooting

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

Database Installer Hangs on Startup

Symptom:

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

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

Solution:

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

Unreadable Buttons in the Installer

If you are unable to read the text within the installer buttons, it probably means that your `JAVA_HOME` is pointed to a pre-1.4.2 JDK. Set `JAVA_HOME` to a Java development kit of version 1.4.2 or later and run the installer again.

“Unable to get a deployment manager” Message

Symptom:

The application installer quits with the following error message:

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

Solution:

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

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

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

Unresponsive Fields when Running Installer in GUI Mode

Symptom:

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

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

Solution:

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

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

“Could not create system preferences directory” Warning

Symptom:

The following text appears in the installer Errors tab:

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

Solution:

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

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

“Couldn't find X Input Context” Warnings

Symptom:

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

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

Solution:

This message is harmless and can be ignored.

ConcurrentModificationException in Installer GUI

Symptom:

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

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

Solution:

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

Appendix: 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_ols 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_ols 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 synonym 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 = 999999999

```

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
;

```

Appendix: RMS-AIP Transform Directory Contents

Transform Interface Scripts

Location: \$RMS_AIP_TRAMFORM/k_shell_scripts

AIP uses the following RMS data transformation scripts:

- aip_t_master.sh
- aipt_item.ksh
- aipt_orghier.ksh
- aipt_sub_item.ksh
- aipt_str_prd_life.ksh
- aipt_future_delivery.ksh
- aipt_rename.ksh

These scripts are unpacked from AIP-12.0.rms-transformations.zip and moved to \$RPAS_HOME/bin, as detailed in Chapter 8 of this *Installation Guide*.

Input Schema Files

Location: \$RMS_AIP_TRAMFORM/rms_schema_dir

Input Schema files are the schema files which are required by the transform interface scripts to read the RETL extracts from RMS.

The \$RMS_AIP_TRAMFORM/rms_schema_dir directory must contain following input schema files, copied from the RMS package:

- rmse_aip_item_master.schema
- rmse_aip_item_retail.schema
- rmse_aip_item_supp_country.schema
- rmse_aip_merchhier.schema
- rmse_aip_purged_item.schema
- rmse_aip_dmx_bndprdasc.schema
- rmse_aip_store.schema
- rmse_aip_orghier.schema
- rmse_aip_substitute_items.schema
- rmse_aip_item_loc_traits.schema
- rmse_aip_future_delivery_order.schema
- rmse_aip_future_delivery_tsf.schema
- rmse_aip_tsf_in_well.schema
- rmse_aip_future_delivery_alloc.schema
- rmse_aip_alloc_in_well.schema
- rmse_aip_wh_dat.schema
- rmse_aip_wh.schema

Output Schema Files

Location: \$RMS_AIP_TRANSFORM/aip_schema_dir

Output Schema files are the schema files which are required by the transform interface scripts to write the AIP loads/feeds.

The \$RMS_AIP_TRANSFORM/aip_schema_dir directory must contain following output schema files:

- aipt_item.schema
- dmx_dscdt_.schema
- aipt_loc.schema
- aipt_dm0_pmsstasrc.schema
- aipt_dm0_pmsendsrc.schema
- aipt_dmx_vadprdasc.schema
- aipt_str_prd_life.schema
- aipt_sr0_it_.schema
- aipt_sr0_oo_.schema
- aipt_wr1_it_.schema
- aipt_wr1_oo_.schema
- aipt_wr1_ow_.schema

RETL Extracts (Data Files from RMS)

Location: \$RMS_AIP_TRANSFORM/raw_rms_data

RETL extracts from RMS are used as AIP loads/feeds. There are two kinds of RETL extracts: extracts that require transformations before being fed into AIP and extracts that do not require any transformations.

The \$RMS_AIP_TRANSFORM/raw_rms_data directory holds both types of RETL extracts. These extracts will be moved from RMS server to the \$RMS_AIP_TRANSFORM/raw_rms_data directory using a batch scheduler, which the user needs to configure. The batch scheduler is not part of the AIP application suite.

The following RETL extracts are used by the RMS-AIP transform interface scripts to generate a new set of AIP loads/feeds:

- rmse_aip_item_master.dat
- rmse_aip_item_retail.dat
- rmse_aip_item_supp_country.dat
- rmse_aip_merchhier.dat
- rmse_aip_purged_item.dat
- dmx_bndprdasc.txt
- rmse_aip_store.dat
- rmse_aip_orghier.dat
- rmse_aip_substitute_items.dat
- rmse_aip_item_loc_traits.dat
- rmse_aip_future_delivery_order.dat
- rmse_aip_future_delivery_tsf.dat
- rmse_aip_tsf_in_well.dat
- rmse_aip_future_delivery_alloc.dat

- rmse_aip_alloc_in_well.dat
- rmse_aip_wh.dat
- rmse_aip_wh.txt

In addition, the following RETL extracts, which do not need to be transformed, are found in this location. These files make up **Group 1** of the data that must be imported into the AIP RPAS domain:

- splr.txt
- dmx_dirspl.txt
- dmx_prdspllks.txt
- closed_order.txt
- received_qty.txt
- rmse_aip_wh_type.txt
- sr0_curinv.txt
- sr0_curinv_*.txt
- wr1_curinv.txt
- wr1_curinv_*.txt
- dm0_onseffdt.txt
- dm0_ofseffdt.txt

Note: sr0_curinv and wr1_curinv data feeds may be partitioned, e.g. sr0_curinv_1.txt, sr0_curinv_2.txt, etc.

Post Execution Transform Interface Scripts

Executing the aip_t_master.ksh script runs the RMS-AIP transform interface scripts. Once this script has successfully completed, the following new AIP loads/feeds are created. These files represent **Group 2** of the data that must be imported into the AIP RPAS domain:

- item.txt
- dmx_dscdt.txt
- loc.txt
- dm0_pmsstasrc.txt
- dm0_pmsendsrc.txt
- dmx_vadprdasc.txt
- sr0_prdlfe.txt
- sr0_it.txt
- sr0_oo.txt
- wr1_it.txt
- wr1_oo.txt
- wr1_ow.txt

The following file, which is used by the transform scripts, is also a direct AIP feed. It constitutes **Group 3** of the data that must be imported into the AIP RPAS domain:

- dmx_bndprdasc.txt

The three Groups of data feeds mentioned above must be moved to `$AIPDOMAIN/interface/config/rms`, which is a location defined by `$AIPRMS` in `$RPAS_HOME/bin/aip_constants.sh` file, using a batch scheduler, which the user needs to configure. The batch scheduler is not part of the AIP application suite.