

Oracle® Retail Central Office

Installation Guide

Release 8.0

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Preface

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

Audience

This Installation Guide is written for the following audiences:

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

Related Documents

For more information, see the following documents in the Oracle Retail Central Office Release 8.0 documentation set, or in the Oracle Retail Strategic Store Solutions Release 8.0 documentation set, or in the Oracle Application Server 10g Release 3 documentation set:

- *Oracle Retail Central Office Release Notes*
- *Oracle Retail Central Office Operations Guide*
- *Oracle Retail Central Office User Guide*
- *Oracle Retail Strategic Store Solutions Configuration Guide*
- *Oracle Application Server 10g Administrator's 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

Conventions

The following text conventions are used in this document:

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

Pre-installation Tasks

This chapter describes the requirements that must be met before the application can be installed.

Check Database Server Requirements

General requirements for a database server running Central Office include:

- 64-bit Red Hat Enterprise Linux AS/ES 4
- Oracle RDBMS 10g Release 2 Enterprise Edition (minimum 10.2.0.2.0 patchset required)

Required Settings for Database Installation

The following settings must be made during database creation:

- The database must be set to UTF8.
- Make the following changes to the system settings:

```
ALTER SYSTEM SET NLS_NUMERIC_CHARACTERS = '.,-' SCOPE=SPFILE;  
ALTER SYSTEM SET NLS_DATE_FORMAT = 'YYYY-MM-DD' SCOPE=SPFILE;  
ALTER SYSTEM SET NLS_TIMESTAMP_FORMAT = 'YYYY-MM-DD HH24:MI:SS.FF'  
SCOPE=SPFILE;
```

Check Application Server Requirements

General requirements for an application server capable of running Central Office include:

- 64-bit Red Hat Enterprise Linux AS/ES 4
- Oracle Application Server 10g 10.1.3 (32-bit)

Note: This release of Central Office is only supported in a managed OC4J instance as part of OracleAS 10g. It is not supported on OC4J standalone.

Applying the Patch to Handle the 2007 Daylight Savings Time Change

After the Oracle Application Server is installed, the JDK that is included with it must be patched to handle the 2007 daylight savings time change.

To patch the JDK:

1. Download the tzupdater tool from the Sun website. For more information on the tool, see http://java.sun.com/javase/tzupdater_README.html.
2. Run the tool on the JDK found at *<Oracle Application Server Home>/jdk*.

Check Client PC and Web Browser Requirements

General requirements for the client system include:

- Adobe Acrobat Reader or another application capable of rendering Scalable Vector Graphics (SVG) and Portable Data Format (PDF) files.

General requirements for the web browser include:

- Microsoft Internet Explorer 6 or Mozilla Firefox 1

Installation

Before proceeding, you must install the database and application server software. For a list of supported versions, see [Chapter 1](#).

During installation, the Central Office database schema will be created and the Central Office application will be deployed to an OC4J instance within the OracleAS 10g installation. The Java JDK that is included with the Oracle Application Server (under `$ORACLE_HOME/jdk`) will be used to run the application.

Note: J2EE_HOME refers to the directory
`ORACLE_HOME/j2ee/<instancename>`

Create a New OC4J Instance for Central Office

You can skip this section if you are redeploying to an existing OC4J instance.

The Central Office application must be deployed to its own dedicated OC4J instance. For instructions on how to create a new OC4J instance, see [Adding and Deleting OC4J Instances](#) in the *Reconfiguring Application Server Instances* chapter of the *Oracle Application Server Administrator's Guide*.

To create a new OC4J instance:

1. Log onto the server, which is running your OracleAS 10g installation, as the user who owns the OracleAS 10g installation. Set your `ORACLE_HOME` environment variable to point to this installation.
2. Choose a name for the new OC4J instance. In the remainder of this installation guide, `<orco-inst>` is used for the name.
3. Create this OC4J instance as documented in the *Oracle Application Server Administrator's Guide*, for example:

```
$ORACLE_HOME/bin/createinstance -instanceName orco-inst
```

Note: When prompted for the `oc4jadmin` password, provide the same administrative password you gave for the OracleAS 10g installation. All OC4J instances running Oracle Retail applications must have the same `oc4jadmin` password.

4. Increase memory for the new OC4J instance by modifying \$ORACLE_HOME/opmn/conf/opmn.xml. Locate the OC4J instance you just created. Add the text, shown in bold in the following example, to the start-parameters section.

```
<process-type id="<orco-inst>" module-id="OC4J" status="enabled">
  <module-data>
    <category id="start-parameters">
      <data id="java-options" value="-server -XX:PermSize=128m
-XX:MaxPermSize=256m -Djava.security.policy=$ORACLE_
HOME/j2ee/orco-inst/config/java2.policy -Djava.awt.headless=true
-Dhttp.webdir.enabled=false"/>
    </category>
```

5. Set the -userThreads OC4J option by modifying \$ORACLE_HOME/opmn/conf/opmn.xml similar to the previous step. Add the text shown in bold in the following example:

```
<process-type id="orco-inst" module-id="OC4J" status="enabled">
  <module-data>
    <category id="start-parameters">
      <data id="java-options" value="-server -XX:PermSize=128m
-XX:MaxPermSize=256m -Djava.security.policy=$ORACLE_
HOME/j2ee/orco-inst/config/java2.policy -Djava.awt.headless=true
-Dhttp.webdir.enabled=false"/>
      <data id="oc4j-options" value="-userThreads"/>
    </category>
```

6. Reload OPMN for this change to take effect.

```
$ORACLE_HOME/opmn/bin/opmnctl reload
```

7. Start the OC4J instance. You can do this through the Enterprise Manager web interface, or on the command line using the opmnctl utility:

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

8. 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. On the command line, verify that the instance has a status of "Alive".

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

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.

9. Increase the transaction timeout for this OC4J instance:

- a. Log into the Enterprise Manager application.

```
http://<myhost>:<portnumber>/em
```

- b. Click the OC4J instance that was just created.

```
<orco-inst>
```

- c. Click the Administration tab, and then the Transaction Manager (JTA) task.
- d. Click the Administration tab of the Transaction Manager page.
- e. Locate the Transaction Timeout field and increase it to at least 120 seconds.
- f. Click **Apply** and then restart the OC4J instance.

Expand the Central Office Distribution

To extract the Central Office files:

1. Extract the ORCO-8.00.zip file from the Central Office distribution ORCO-8.00_EPD.zip file.
2. Log into the UNIX server as the user who owns the OracleAS 10g installation. Create a new staging directory for the Central Office application distribution (ORCO-8.00.zip).

```
$ORACLE_HOME/j2ee/orco-inst/orco-staging
```

Note: There should be a minimum of 60 MB of disk space available for the application installation files.

The staging area (*INSTALL_DIR*) can exist anywhere on the system. It does not need to be under ORACLE_HOME.

The staging directory is referred to as *<INSTALL_DIR>* for the remainder of this chapter.

3. Copy or upload ORCO-8.00.zip to *<INSTALL_DIR>* and extract its contents. The following files and directories should be created under *<INSTALL_DIR>*:

```
ant-ext/
centraloffice/
installer-resources/
antinstall/
checkdeps.cmd
install.sh
antinstall-config.xml
checkdeps.sh
ant.install.properties.sample
external-lib/
build.xml
install.cmd
.preinstall.cmd
.preinstall.sh
prepare.xml
```

Create the Central Office Database Schema

The scripts that create the Central Office database schema can be run from the same staging directory as the application files. The database server can be on the same system as the application server or on a different system.

1. Create a user in the database:

```
create role APP_ROLE;
```

```
grant CREATE TABLE, CREATE VIEW, CREATE SEQUENCE, CREATE SYNONYM, CREATE
CLUSTER, CREATE DATABASE LINK, ALTER SESSION to APP_ROLE;
```

```
grant CONNECT, RESOURCE, APP_ROLE, SELECT_CATALOG_ROLE to <db_user>;
```

2. Change to the *<INSTALL_DIR>/centraloffice/db* directory.

3. Set the `JAVA_HOME` and `ANT_HOME` environment variables. You can use the JDK and Ant that are installed with the Oracle Application Server.

```
JAVA_HOME=$ORACLE_HOME/jdk; ANT_HOME=$ORACLE_HOME/ant; export JAVA_HOME ANT_HOME
```

4. Add `$JAVA_HOME/bin` and `$ANT_HOME/bin` to the front of the `PATH` environment variable.

```
PATH=$JAVA_HOME/bin:$ANT_HOME/bin:$PATH; export PATH
```

5. Expand the `centralofficeDBInstall.jar` file.

```
jar xvf centralofficeDBInstall.jar
```

6. Modify `db.properties`.

- a. Verify that the following properties are set correctly:

```
db.product=oracle
```

```
db.app.server.product=oracleAS
```

- b. Uncomment the Oracle properties and comment out properties for the other vendors such as DB2 and MS-SqlServer.

- c. Provide your database settings in the following properties:

```
db_user: database user under which tables will be created
```

```
db_password: password for db_user
```

```
db.jdbc-url: JDBC URL for your database
```

- d. Set the `ora.home.dir` property to point to your OracleAS 10g installation.

- e. Set the host name and port number for the `parameter.apphost` property to point to your Central Office installation.

- f. In the `parameters.classpath` property, replace the semicolons used as separators with colons. This is needed to run with UNIX systems.

7. Uncomment the following properties in `jndi.properties`.

```
java.naming.factory.initial=com.evermind.server.rmi.RMIInitialContextFactory
```

```
java.naming.security.principal=pos
```

```
java.naming.security.credentials=pos
```

8. Run one of the available Ant targets to create the database schema and load data:

- `load_sql`: creates tables and other objects; calls `seed_data` and `test_data`
- `seed_data`: loads seed data
- `test_data`: loads test data

For example, `ant load_sql`

Obtain Third-Party Library Files Required by Central Office

The Central Office application uses the Pager Tag Library from JSPTags. You must download the `pager-taglib.jar` file from the JSPTags website before running the Central Office application installer.

1. Download the `pager-taglib-2.0.war` file from the JSPTags website:
<http://jsptags.com/tags/navigation/pager/download.jsp>

2. Extract the `pager-taglib.jar` file from the `WEB-INF/lib` subdirectory in the `pager-taglib-2.0.war` file. Copy `pager-taglib.jar` into `<INSTALL_DIR>/external-lib/`.

Run the Central Office Application Installer

Once you have an OC4J instance that is configured and started, you can run the Central Office application installer. This installer will configure and deploy the Central Office application.

Note: To see details on every screen and field in the application installer, see [Appendix A](#).

1. Change to the `<INSTALL_DIR>` directory.
2. Set the `ORACLE_HOME` and `JAVA_HOME` environment variables. `ORACLE_HOME` should point to your OracleAS 10g installation. `JAVA_HOME` should point to `$ORACLE_HOME/jdk`.

Note: The installer is not compatible with versions of Java earlier than 1.4.2.

3. If you are using an X server such as Exceed, set the `DISPLAY` environment variable so that you can run the installer in GUI mode (recommended). If you are not using an X server, or the GUI is too slow over your network, unset `DISPLAY` for text mode.

Caution: Password fields are masked in GUI mode, but in text mode your input is shown in plain text in the console window.

4. Log into the UNIX server as the user who owns the OracleAS 10g installation. Run the `install.sh` script. This will launch the installer. After installation is complete, a detailed installation log file is created: `orco-install-app.<timestamp>.log`.

Note: The usage details for `install.sh` are shown below. The typical usage for GUI mode does not use arguments.

```
install.sh [text | silent]
```

5. The installer leaves behind the `ant.install.properties` file for future reference and repeat installations. This file contains all the inputs you provided, including passwords. As a security precaution, make sure that the file has restrictive permissions.

```
chmod 600 ant.install.properties
```

6. Verify that the installer was able to delete the `$ORACLE_HOME/jdk/jre/lib/ext/security-360-ora.jar` file. This is a file that is temporarily created by the installer. If the installer was unable to delete the file, you must shut down all OC4J instances, delete the file manually, and start the OC4J instances back up again.

Note: If the installer is unable to delete this file, it prints a warning that instructs you to delete it manually. This warning also shows up at the end of the installer log file.

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 do not have to reenter the settings for your environment. For instructions on silent mode, see [Appendix B](#).

For a list of common installation errors, see [Appendix D](#).

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

Additional Configuration Steps Required for Parameter Export

When a store is added to the enterprise store hierarchy or the default store number is not used, the `J2EE_HOME/config/jms.xml` file must be updated with the correct queue definitions. The queues used to export parameters to each store must reflect the current store hierarchy for the enterprise.

The installation is preconfigured to support the default store number 04241. The following example shows the queue definition for the default store.

```
default:
  <queue name="store_04241" location="jms/store_04241">
    <description/>
  </queue>
```

For example, if you have three stores numbered 10000, 10001, and 10002, the queue definitions for these stores should look like the following definitions.

```
<queue name="store_10000" location="jms/store_10000">
  <description/>
</queue>
<queue name="store_10001" location="jms/store_10001">
  <description/>
</queue>
<queue name="store_10002" location="jms/store_10002">
  <description/>
</queue>
```

Manual Deployment Option

Skip this section if you chose the default option of allowing the installer to complete installation to the application server.

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>/centraloffice/configured-output/`.

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

1. Make sure there have not been any application server configuration changes since the installer was run. You can do this by comparing the backup files created by the installer in the staging area to the same files in the application server.

```
diff ./centraloffice/configured-output/appserver/ORACLE_
HOME/j2ee/myinstance/config/jms.xml.<date and time> $ORACLE_
HOME/j2ee/myinstance/config/jms.xml
```

If there are changes to the application server's configuration file, they should be merged into the local copy under configured-output before proceeding to the next step.

2. Inspect the contents of the `<INSTALL_
DIR>/centraloffice/configured-output/appserver/ORACLE_HOME` directory, and then overlay the files in the application server's `ORACLE_HOME` directory, using the same directory structure. This will install library files required by the application and required application server configuration changes.

3. Set `JAVA_HOME` and `PATH` environment variables to use the JDK located at `$ORACLE_HOME/jdk`.

```
JAVA_HOME=$ORACLE_HOME/jdk; PATH=$JAVA_HOME/bin:$PATH; export PATH JAVA_HOME
```

4. Copy the `<INSTALL_
DIR>/centraloffice/lib/oracle/security-360-ora.jar` file to the `$ORACLE_HOME/jdk/jre/lib/ext/` directory.

5. Create the required JAAS configuration for Central Office:

- a. Set `JAVA_HOME` and `PATH` environment variables to use the JDK located at `$ORACLE_HOME/jdk`.

```
JAVA_HOME=$ORACLE_HOME/jdk; PATH=$JAVA_HOME/bin:$PATH; export PATH JAVA_
HOME
```

- b. Grant RMI access permissions for the Central Office application.

```
java -jar ../home/jazn.jar -grantperm com._
360commerce.commerceservice.security.oracle.CustomPrincipal oracle_rmi_
access com.evermind.server.rmi.RMIPermission login
```

6. Delete `$ORACLE_HOME/jdk/jre/lib/ext/security-360-ora.jar`. You may need to shut down all OC4J instances to successfully delete this file.

7. Restart the OC4J instance where Central Office will be deployed.

```
$ORACLE_HOME/opmn/bin/opmnctl restartproc process-type=orco-inst
```

8. Deploy the Central Office ear file using the Enterprise Manager web interface. The configured ear file is located at `<INSTALL_
DIR>/centraloffice/configured-output/centraloffice.ear`. When deploying the ear file, you should provide the same application name and context root you gave to the installer. These values were stored in the `<INSTALL_
DIR>/ant.install.properties` file by the installer for later reference.

Backups Created by Installer

The Central Office application installer will back up modified application server files and directories by renaming them with a timestamp. This is done to prevent the removal of any custom changes you might have. These backup files and directories can be safely removed without affecting the current installation. For example, the file could be named `jms.xml.200605011726`.

Import Initial Parameters

Note: You must import an initial set of parameters before you can use Oracle Retail Central Office. For more information on parameters, see the Oracle Retail Strategic Store Solutions Configuration Guide.

This section provides an overview of the procedures for importing an initial set of parameters. You can import the parameters through the Oracle Retail Central Office user interface or by using an ant target. You only need to use one of the procedures. The procedure for importing parameters through the application user interface is described in more detail in the Oracle Retail Central Office User Guide.

These instructions assume you have already expanded the `centralofficeDBInstall.jar` file under the `<INSTALL_DIR>` directory as part of the database schema installation earlier in this chapter.

Importing Parameters Through the User Interface

To import the initial parameters through the user interface:

1. Open the Oracle Retail Central Office application in a web browser. The address is provided at the end of the installer output and in the log file.
`http://<your host name>:8080/centraloffice`
2. Log in to the application as user ID **pos** and password **pos**, or any other user ID that has full administrative rights.
3. Click the **Data Management** tab. The Available Imports screen appears.
4. To import the master parameter set, click the **File** link in the Import Parameters for Distribution row. Follow the instructions to import `parameterset.xml` from the `<INSTALL_DIR>/centraloffice/db` folder.
5. To import the initial set of Oracle Retail Central Office application parameters, click the **File** link in the Import Application Parameters row. Follow the instructions to import `centraloffice.xml` from the `<INSTALL_DIR>/centraloffice/db` folder.

Importing Parameters By Using an Ant Target

To import parameters using an ant target:

1. Change to the `<INSTALL_DIR>/centraloffice/db` directory.
2. Edit the `db.properties` file. Update the following properties in the "Properties for Parameter Loading" section.
 - a. Change `ora.home.dir` to your installation directory.

```
ora.home.dir=C:/Oracle/10.1.3/OracleAS_1
```
 - b. Change `ORA_HOST_NAME` to your host name. Change 12401 to your port number.

```
parameters.apphost=ormi://ORA_HOST_NAME:12401/CentralOffice
```
3. Set the `JAVA_HOME`, `ANT_HOME`, and `PATH` environment variables. See ["Create the Central Office Database Schema"](#) for the settings to be used.
4. Execute the following command:

```
ant load_parameters
```

Using the Central Office Application

After the application installer completes and you have run the initial parameter load, you should have a working Central Office application installation. To launch the application, open a web browser and go to

```
http://<servername>:<portname>/centraloffice
```

Configuration for Firefox Browser

When Central Office is viewed from the Firefox browser, displayed graphs may not be updated correctly when you change users. To avoid this problem, disable image caching.

To disable image caching:

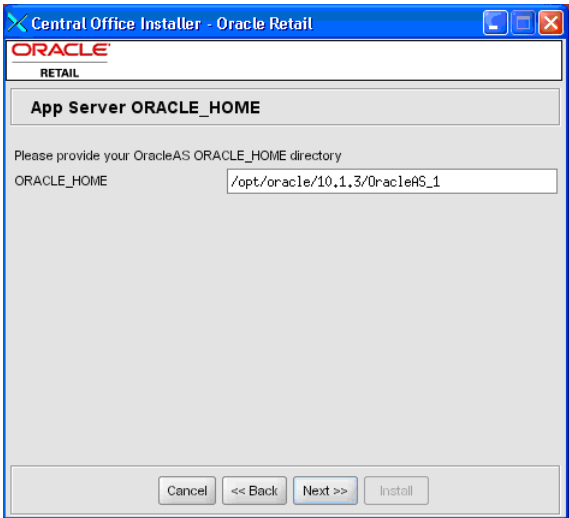
1. In the browser's address bar, enter **about:config**.
2. Scroll to the entry `browser.cache.memory.enable` and double-click it. A dialog box appears.
3. Change the value in the dialog box to **false**.
4. Click **OK**.
5. Restart the browser.

Appendix: Central Office Application Installer Screens

You need the following details about your environment for the installer to successfully deploy the Central Office application. Depending on the options you select, you may not see some screens or fields.

For each field on a screen, a table is included in this appendix that describes the field. If you want to document any specific information about your environment for any field, a Notes row is provided in each table for saving that information.

Figure A–1 App Server ORACLE_HOME



The field on this screen is described in the following table.

| Field Title | ORACLE_HOME |
|-------------------|---|
| Field Description | ORACLE_HOME directory for the Oracle Application Server installation. |
| Example | C:\Oracle\10.1.3\OracleAS_1 |
| Notes | |

Figure A–2 Data Source Details

CentralOffice Installer - Oracle Retail

ORACLE
RETAIL

Data Source Details

Provide the details for the CentralOffice data source

JDBC URL

Schema

Schema password

Cancel << Back Next >> Install

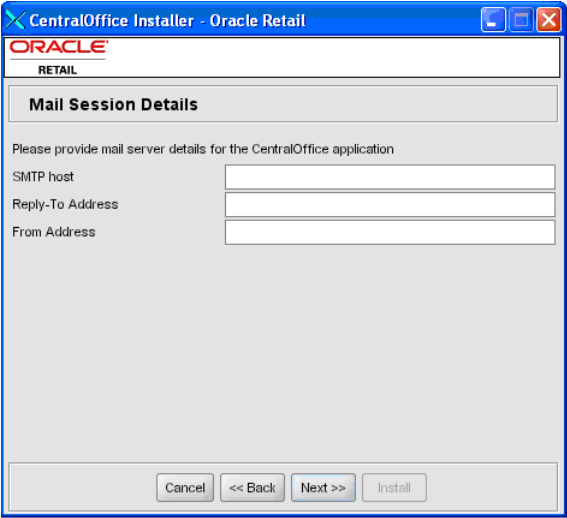
The fields on this screen are described in the following tables.

| Field Title | JDBC URL |
|-------------------|---|
| Field Description | URL used by the Central Office application to access the database schema. See Appendix C for the expected syntax. |
| Destination | <code>\$ORACLE_HOME/j2ee/<instance>/config/data-sources.xml</code> |
| Example | <code>jdbc:oracle:thin:@myhost:1525:mydatabase</code> |
| Notes | |

| Field Title | Schema |
|-------------------|--|
| Field Description | Database schema user used by the Central Office application. |
| Destination | <code>\$ORACLE_HOME/j2ee/<instance>/config/data-sources.xml</code> |
| Example | <code>DBUSER</code> |
| Notes | |

| Field Title | Schema password |
|-------------------|--|
| Field Description | Password for the Central Office schema user. |
| Destination | <code>\$ORACLE_HOME/j2ee/<instance>/config/data-sources.xml</code> |
| Notes | |

Figure A-3 Mail Session Details



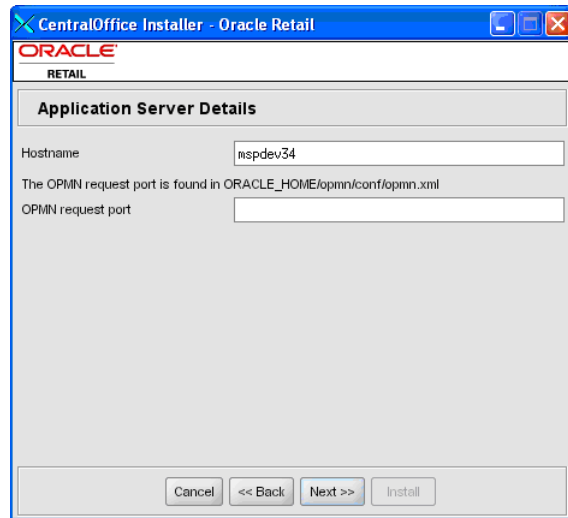
The fields on this screen are described in the following tables.

| Field Title | SMTP host |
|-------------------|--|
| Field Description | Host where the SMTP server is running. |
| Destination | J2EE_HOME/config/application.xml |
| Example | mail.mycompany.com |
| Notes | |

| Field Title | Reply-To Address |
|-------------------|---|
| Field Description | Reply-to address in emails generated by Central Office. |
| Destination | J2EE_HOME/config/application.xml |
| Example | donotreply@mycompany.com |
| Notes | |

| Field Title | From Address |
|-------------------|---|
| Field Description | From address in emails generated by Central Office. |
| Destination | J2EE_HOME/config/application.xml |
| Example | donotreply@mycompany.com |
| Notes | |

Figure A–4 Application Server Details

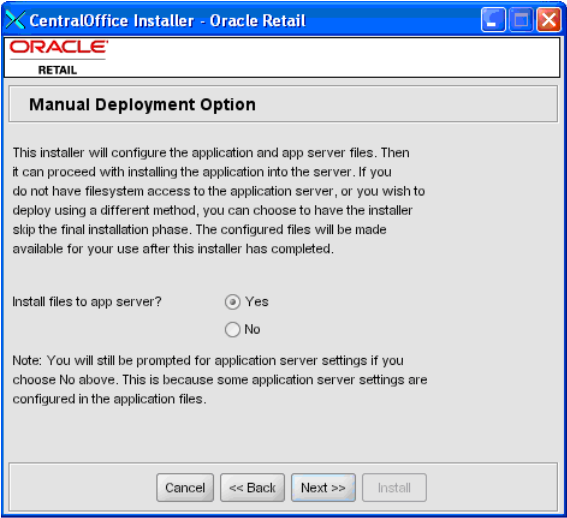


The fields on this screen are described in the following tables.

| Field Title | Hostname |
|-------------------|-------------------------------------|
| Field Description | Hostname of the application server. |
| Example | myhost |
| Notes | |

| Field Title | OPMN request port |
|-------------------|--|
| Field Description | Port on which OPMN listens for requests to forward on to OC4J instances. This port can be found in the ORACLE_HOME/opmn/conf/opmn.xml file: <port local="6100" remote="6200" request="6003"/> |
| Example | 6003 |
| Notes | |

Figure A-5 Manual Deployment Option Screen



The field on this screen is described in the following table.

| Field Title | Install files to app server? |
|-------------------|---|
| Field Description | <p>By default, the installer will deploy the ear file and copy files under the application server ORACLE_HOME. This screen gives you the option to leave ORACLE_HOME unmodified and configure the application in the staging area for use in a manual installation at a later time. This option can be used in situations where modifications to files under ORACLE_HOME must be reviewed by another party before being applied.</p> <p>If you choose No, see "Manual Deployment Option" in Chapter 2 for the manual steps you need to perform after the installer completes.</p> |
| Example | Yes |
| Notes | |

Figure A–6 Application Deployment Details

The screenshot shows a window titled "CentralOffice Installer - Oracle Retail". Inside, there's a section titled "Application Deployment Details". Below this, it says "The default values shown below are examples". There are three input fields: "App Deployment Name" with the value "CentralOffice", "Context Root" with the value "centraloffice", and "OC4J instance" with the value "orco-inst". At the bottom, there are buttons for "Cancel", "<< Back", "Next >>", and "Install".

The fields on this screen are described in the following tables.

| Field Title | App Deployment Name |
|-------------------|---|
| Field Description | Name by which this Central Office application will be identified in the application server. |
| Example | CentralOffice |
| Notes | |

| Field Title | Context Root |
|-------------------|---|
| Field Description | Path under the HTTP URL that will be used to access the Central Office application. For example, a context root of 'centraloffice' will result in the application being accessed at <code>http://host:port/centraloffice/index.jsp</code> . |
| Example | centraloffice |
| Notes | |

| Field Title | OC4J Instance |
|-------------------|---|
| Field Description | Name of the OC4J instance that was created for this Central Office application. |
| Example | orco-inst |
| Notes | |

Figure A-7 OC4J Administrative User Screen

The screenshot shows a window titled "CentralOffice Installer - Oracle Retail". Inside the window, there is an "ORACLE" logo and the word "RETAIL" below it. The main heading is "OC4J Administrative User". Below this heading, a message reads: "Enter the administrative user and password for the OC4J instance to which the application will be deployed." There are two input fields: "OC4J admin user" with the text "oc4jadmin" entered, and "OC4J admin password" which is empty. At the bottom of the window, there are four buttons: "Cancel", "<< Back", "Next >>", and "Install".

The fields on this screen are described in the following tables.

| Field Title | OC4J admin user |
|-------------------|---|
| Field Description | Username of the admin user for OC4J instance to which the Central Office application is being deployed. |
| Example | oc4jadmin |
| Notes | |

| Field Title | OC4J admin password |
|-------------------|---|
| Field Description | Password for the OC4J admin user. You chose this password when you created the OC4J instance. |
| Notes | |

Appendix: Installer Silent Mode

In addition to the GUI and text interfaces of the Central Office installer, there is a silent mode that can be run. This mode is useful if you wish to run a repeat installation without reentering the settings you provided in the previous installation. It is also useful if you encounter errors in the middle of an installation and wish to continue after resolving them.

The installer runs in two distinct phases. The first phase involves gathering settings from the user. At the end of the first phase, a properties file named `ant.install.properties` is created with the settings that were provided. In the second phase, this properties file is used to provide your settings for the installation.

To skip the first phase and re-use the `ant.install.properties` file from a previous run, follow these instructions:

1. Edit the `ant.install.properties` file and correct any invalid settings that may have caused the installer to fail in its previous run.
2. Run the installer again with the silent argument.

```
install.sh silent
```

Appendix: URL Reference

Both the database schema and application installers for the Central Office product will ask for several different URLs. These include the following.

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

For example, `jdbc:oracle:thin:@myhost:1525:mysid`

JNDI Provider URL for an Application

Used for server-to-server calls between applications.

Syntax: `opmn:ormi://<host>:<port>:<instance>/<app>`

- `<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 running the application
- `<app>`: deployment name for the application

For example, `opmn:ormi://myhost:6003:rpm-oc4j-instance/rpm12`

Note: The JNDI provider URL can have a different format depending on your cluster topology. Consult the Oracle Application Server documentation for further details.

Deployer URI

Used by the Oracle Ant 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.

Syntax (managed OC4J): `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

For example, `deployer:cluster:opmn://myhost:6003/orco-inst`

Syntax (standalone OC4J): `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.

For example, `deployer:oc4j:myhost:23791`

Appendix: Common Installation Errors

This appendix describes some common errors encountered during installation of Central Office.

Unreadable Buttons in the Installer

If you are unable to read the text within the installer buttons, it probably means that your `JAVA_HOME` points 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.

Oracle Application Server Forceful Shutdown

If an error occurs during installation, Oracle Application Server may not shutdown gracefully but will instead do a forceful shutdown. This is a known problem with Oracle Application Server.

You can use `opmnctl status` to check if the application server has stopped appropriately.

"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, password, or both
- 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` (see [Appendix C](#)), `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 (see [Appendix B](#)).

"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.

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

Installation Hangs at "Compiling EJB generated code"

Symptom:

The installer freezes for 10 minutes or more showing this as the last message:

```
[[myinstance.name] 06/11/17 16:51:57 Notification ==>Compiling EJB generated code
```

Solution:

Before cancelling the installation, check the OC4J log file. This file is usually located under `$ORACLE_HOME/opmn/logs` and is named after the OC4J instance. This could be a memory problem if you did not follow the steps to set the PermSize space. See ["Create a New OC4J Instance for Central Office"](#) in [Chapter 2](#).