Oracle® Retail Back Office

Installation Guide, Volume 1 - Oracle Stack Release 13.4.9 **E71403-01**

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Oracle Retail Back Office Installation Guide, Volume 1 - Oracle Stack, Release 13.4.9

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Preface

This Installation Guide describes the requirements and procedures to install this Oracle Retail Back Office release.

Audience

This Installation Guide is for the following audiences:

- System administrators and operations personnel
- Database administrators
- System analysts and programmers
- Integrators and implementation staff personnel

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Related Documents

For more information, see the following documents in the Oracle Retail Back Office Release 13.4.9 documentation set:

- Oracle Retail Back Office Installation Guide, Volume 2 IBM Stack
- Oracle Retail Back Office Release Notes
- Oracle Retail POS Suite Data Model Data Dictionary

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

When contacting Customer Support, please provide the following:

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

Review Patch Documentation

When you install the application for the first time, you install either a base release (for example, 13.4) or a later patch release (for example, 13.4.9). If you are installing the base release or additional patch releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch releases can contain critical information related to the base release, as well as information about code changes since the base release.

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http://www.oracle.com/technetwork/documentation/oracle-retail-100266.ht
ml

An updated version of the applicable Oracle Retail document is indicated by Oracle part number, as well as print date (month and year). An updated version uses the same part number, with a higher-numbered suffix. For example, part number E123456-02 is an updated version of a document with part number E123456-01.

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http://www.oracle.com/technetwork/documentation/oracle-retail-100266.ht ml

(Data Model documents are not available through Oracle Technology Network. You can obtain them through My Oracle Support.)

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.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Preinstallation Tasks

This chapter describes the requirements for the Oracle stack that must be met before Oracle Retail Back Office can be installed.

> **Note:** This is the Oracle stack configuration that was tested for this release. While Back Office may work in other configurations, this configuration was tested.

If you are installing multiple Oracle Retail applications, see Appendix F for a guideline for the order in which the applications should be installed.

Requesting Infrastructure Software

If you are unable to find the necessary version of the required Oracle infrastructure software (database server, application server, WebLogic, and so on) on the Oracle Software Delivery Cloud, you should file a non-technical 'Contact Us' Service Request (SR) and request access to the media. For instructions on filing a non-technical SR, see My Oracle Support Note 1071023.1 - Requesting Physical Shipment or Download URL for Software Media.

Check Supported Database Server Requirements

Table 1-1 lists the general requirements for a database server running Oracle Retail Back Office and the versions supported for this release.

Table 1-1 Database Server Requirements

Supported on	Versions Supported	
Operating System	Microsoft Windows 2012 Server R2 Standard Edition (64-bit)	
Database	Oracle Database 12c Standard Edition 12.1.0.2 (64-bit)	
	■ Oracle Database 11gR2 Standard Edition 11.2.0.4 (64-bit)	
	Note: Oracle Retail Back Office is not certified with Real Application Clusters (RAC).	

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=SPETLE:
```

Check Supported Application Server Requirements

Table 1–2 lists the general requirements for an application server capable of running Back Office and the versions supported for this release.

Table 1–2 Application Server Requirements

Supported on	Versions Supported
Operating System	Microsoft Windows 2012 Server R2 Standard Edition (64-bit)
J2EE Application Server	Oracle WebLogic 10.3.6.0 Standard Edition (32-bit)
J2EE Application Server JVM	Oracle Java 7 or later within the Java 7 code line
Messaging Provider	included in Oracle WebLogic
System Management Agents	OEM Agents

Note: Back Office does not support a clustered environment.

Check for SSL Certificate

Oracle Retail Back Office is accessed through a secure HTTP connection. The installation of an SSL Certificate is required on your application server. If the certificate is not installed, warnings are displayed when trying to access Oracle Retail Back Office.

For information on installing the SSL Certificate, refer to your application server documentation.

Check that the Fonts Needed for Reports are Installed

To correctly export reports from Oracle Retail Back Office to a PDF file, any fonts used in the PDF must exist in the application server JVM. To install fonts to the application server:

- Stop the application server.
- Copy any needed fonts to the library folder of the JRE used by the application server. The following is an example of the path name to the folder:

```
<JDK Install Directory>\jre\lib\fonts
```

3. Start the application server.

Check Oracle Retail Software Dependencies

Table 1–3 lists the Oracle Retail products that Oracle Retail Back Office is integrated with and the required versions.

Table 1–3 Supported Oracle Retail Products

Integrates with	Version
Oracle Retail Central Office	13.4.9
Oracle Retail Merchandising System	13.2.9
Oracle Retail Point-of-Service	13.4.9
Oracle Retail Price Management	13.2.9
Oracle Retail Returns Management	2.4.9

Check Additional Oracle Technologies

Table 1-4 lists the Oracle technologies used by Oracle Retail Back Office and the required versions.

Table 1–4 Additional Oracle Technologies

Integrates with	Version
Oracle Business Intelligence Publisher for Retail Back Office	11.1.1.6 Note: This software is included in the Back Office
	distribution.

Check Supported Client PC and Web Browser Requirements

The general requirements for the client system include Adobe Acrobat Reader or another application capable of rendering Portable Data Format (PDF) files.

The following Web browsers are supported on Microsoft Windows 7:

- Microsoft Internet Explorer 9 and 11
- Mozilla Firefox 31+

Hardware Requirements

Specific hardware requirements for the machines running Oracle Retail Back Office depend on variables including the number of users and other applications running on the same machine.

Please note the following about the hardware requirements:

- The CPU requirement depends on variables including the operating system and middleware selected.
- Memory requirements and performance depend on variables including the number of active promotions and best deal calculations when Back Office is installed on the same machine as the Point-of-Service server.
- Disk size can vary based on the operating system and middleware requirements as well as the amount of data storage needed. Data storage depends on variables including the number of items and promotions defined, data retention period, and so on.

You need to determine your hardware requirements, based on the variables mentioned here, as well as any additional variables specific to your environment.

Implementation Guidelines for Security

Note: A demonstration trust store is bundled with Oracle WebLogic. It is recommended that the demonstration trust store is replaced with a secure trust store.

It is also recommended that the passwords for key stores and trust stores are changed from the values set by default. If this is not done, the system could be vulnerable to access by any unauthorized user with knowledge of the default passwords.

For information on implementing security, see the Oracle Retail POS Suite Security Guide. This guide describes specific security features and implementation guidelines for the POS Suite products.

Secure Configuration

This chapter serves as a guide for administrators and anyone installing the product to securely configure Oracle Retail Back Office. To see a broader spectrum of suggested security-related practices for this application, see the Oracle Retail POS Suite Security Guide.

Note: All the Oracle Retail POS Suite applications should follow the same practices for configuring a secure environment.

This chapter is intended for security administrators and anyone installing the products who will deploy and configure the Oracle Retail POS Suite applications. These users perform the following tasks:

- Install and deploy the applications
- Configure the applications
- Apply patches to the applications

It is assumed that the readers of this chapter have a general knowledge of administering the underlying technologies and the Back Office application.

This chapter begins with the operating system and moves through the supporting middleware to the Back Office application, and its connections with other resources.

Note: The options set by default for the installer are the most secure selection. If you choose to not use any of the default selections, you need to consider the implications of that change on the security of your installed product.

Any references to Payment Card Industry Data Security Standard (PCI-DSS) requirements are from PCI-DSS version 2.0.

Operating System

To see the operating systems and browsers supported for this release of Back Office, see Chapter 1.

The Release 13.4.9 Oracle Retail POS Suite applications do not rely on insecure services or protocols. If the retailer or systems integrator customizes or extends the applications, these extensions must not rely on insecure services or protocols.

When using Microsoft Windows 7, the system restore point must be disabled. This restore point may possibly contain sensitive data (test or real) in previous versions of the operating system. To disable the system restore point:

- **1.** Open the Control Panel.
- Select **System** and then the **System Restore** tab.
- Check the **Turn off System Restore** box and click **OK**.

For more information about securing services and protocols, see the *Oracle Retail POS* Suite Security Guide.

Additional Resource

The Center for Internet Security has published benchmarks for securing your systems at the operating system level. You can find the benchmark for Microsoft Windows 2008 at the following link:

http://benchmarks.cisecurity.org/en-us/?route=downloads.browse.category .benchmarks.os.windows.2008

Infrastructure/Middleware

To see the database and application server supported for this release of Back Office, see Chapter 1.

Database

For recommendations on securing the database as well as JDBC communications between the POS Suite applications and the database, see the Oracle Retail POS Suite Security Guide.

Do not store sensitive data on Internet-accessible systems. For example, your Web server and database server must not be on the same physical server. Oracle Retail POS Suite applications do not require the database server and Web server to be hosted on the same physical server machine.

For information about secure configuration of Oracle Database, see the Oracle Database 2 Day + Security Guide. The guide is available at the following links on the Oracle Technology Network Web site:

12.1.0.2:

http://docs.oracle.com/database/121/TDPSG/toc.htm

11.2.0.4:

http://download.oracle.com/docs/cd/E11882_01/server.112/e10575.pdf

Application Server

For information about secure configuration of Oracle WebLogic Application Server, see the following documentation available at the following links on the Oracle Technology Network Web site:

Security for Oracle WebLogic Server 10g Release 3:

http://download.oracle.com/docs/cd/E12840_ 01/wls/docs103/security.html

Oracle Fusion Middleware Securing a Production Environment for Oracle WebLogic

http://download.oracle.com/docs/cd/E17904_01/web.1111/e13705.pdf

Messaging

Secure JMS messaging configuration is specific to the application server. For information about securing the JMS messaging on Oracle WebLogic, see the Oracle Retail POS Suite Security Guide.

The Release 13.4.9 Oracle Retail POS Suite applications do not permit a user to send unencrypted sensitive data by end-user messaging technologies, such as e-mail. If you customize an application to permit sending sensitive data, by end-user messaging technologies, you must use a solution that renders the sensitive data unreadable or implements strong cryptography.

Back Office can send notifications of the results of a scheduled job to a designated e-mail address. The e-mail contains the job name entered by the end user. Therefore, the user must take care that the scheduled job name does not contain sensitive data.

Network Considerations

For recommendations on securing the network and other enterprise security considerations, see the Oracle Retail POS Suite Security Guide.

Oracle Retail POS Suite Application Configuration

This section covers secure configuration that is recommended for all Oracle Retail POS Suite applications.

Technology Considerations

These technologies should be considered.

Wireless Technology

Oracle Retail POS Suite applications are not designed as wireless applications. If wireless technology is used, you must adhere to PCI-DSS compliant wireless settings, per PCI-DSS Requirements 1.2.3, 2.1.1, and 4.1.1.

Application Specific Settings

The Release 13.4.9 Oracle Retail POS Suite applications enable out-of-the-box audit logging by default. These logs should not be disabled.

Application log files are configurable. If you modify the settings, you must ensure they are compliant with PCI-DSS requirements 10.2 and 10.3.

The POS Suite applications implement automated audit trails for all system components to reconstruct the following events:

- All actions taken by any individual with administrative privileges as assigned in the application
- Access to application audit trails managed by or within the application
- Invalid logical access attempts
- Use of application's identification and authentication mechanisms

- Initialization of the application audit logs
- Creation and deletion of system-level objects within or by the application

The Release 13.4.9 Oracle Retail POS Suite applications implement an automated audit trail logging of various events happening on the system. The audit trail logging is configured in the log4j configuration file maintained for each application. The various events that need to be logged and the file where the audit logging information will be captured are configured in the log4j configuration file.

Caution: Do not comment out any of the entries or prevent the logging from occurring.

For each event, the Oracle Retail Audit log service logs the point of Origination of the event. In addition, the audit log framework logs the Initialization of the Audit log itself.

The log files are created with the following names and in following locations:

File Name: BackOffice_audit.log

Location when Back Office is deployed to an admin server or managed server:

<WEBLOGIC_INSTALL_DIR>\user_projects\domains\<Domain Name>\servers\<Server</pre> Name>\logs

The following events should be captured at the system level:

- Login or logoff
- Start or stop a process
- Use of user rights
- Account administration
- Change the security policy
- Restart and shut down the system
- USB events and Mount and Unmount events
- Access a file or directory (create a file, remove a file, read a file, or change file descriptors)

Various tools are available to collect audit trail information. Audit trails should be maintained for the applications and for external system events.

Application Runtime Settings

After installation, these settings should be used.

Application Parameters

Set these application parameters before running Back Office.

Temporary Password Length The Temporary Password Length parameter is used to determine the length of system generated temporary passwords. This parameter resides in the application XML parameter file.

Caution: This parameter can be set to generate passwords to have a length between 7 and 12 characters. In order to comply with PCI-DSS section 8.5.10, the Oracle Retail POS Suite applications must not be modified to allow fewer than 7 characters.

Database Configuration Password policy settings are configured through the database. By default, the password policy is compliant with PCI-DSS section 8.5.

> **Caution:** If you change the password policy, ensure the modified settings comply with the PCI-DSS.

Integration with Other Applications

The Oracle Retail POS Suite applications integrate through the use of Web services and Java RMI. For information about securing these interface protocols, see the Oracle Retail POS Suite Security Guide.

Scripts and Command Line Utilities

This section covers scripts and utilities used after installation.

Purge Scripts

The Release 13.4.9 Oracle Retail POS Suite applications come with stored procedures and scripts that permit a DBA to purge the databases of data that the retailer determines are no longer necessary to store. Access to these scripts should be restricted. For more information about the purge scripts, see the Oracle Retail POS Suite *Security Guide.*

Oracle Retail	POS	Suite	Application	Configuration

Installation of the Oracle Stack on Windows

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

During installation, the Back Office database schema will be created and the Back Office application will be deployed to an Oracle WebLogic domain. When the domain was created, the JDK was selected. This is the JDK that is used to run the Back Office application. For the remainder of this chapter, the JDK installation directory is referred to as <JDK_INSTALL_DIR>.

Create a New WebLogic Domain for Back Office

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

The Back Office application must be deployed to its own dedicated domain. For information on how to perform the following steps, consult your Oracle WebLogic documentation.

Note: Back Office, Central Office, and Returns Management must have all unique domain names and server names in order to integrate successfully.

To create a new domain:

- Log on to the server, which is running your WebLogic installation, as the user who owns the WebLogic installation.
- 2. Choose a name for the new domain. In the remainder of this installation guide, <orbo-domain> is used for the name.
- **3.** Create this domain. If you are using a managed server, add the managed server as part of creating the domain.
 - Oracle Retail Back Office is accessed through a secure HTTP connection. You need to enable SSL when creating the domain.
 - Set the listen port and SSL listen port numbers so that the numbers are unique for each domain in your configuration.

Note: All domains running Oracle Retail applications must have the same domain credentials.

- **4.** If using a managed server, start the managed server. Start the administration
- 5. Verify that the administration domain and the managed server are started and are in running mode.
- **6.** When a domain is created with a managed server using Oracle (Sun) JDK, the default WebLogic settings may leave the server without enough memory to configure and stop the running managed server. A careful inspection of the log files may indicate an out-of-memory exception.

To avoid the out-of-memory exceptions, increase the PermSize space:

- On the WebLogic Administration console, under Environments, select **Servers**.
- **b.** In Summary of Servers, select <managedServerName>.
- **c.** In Settings, select the **Server Start** tab.
- **d.** In the Arguments text box, add the following if it does not already exist:

```
-Xms512m -Xmx512m -XX:PermSize=512m -XX:MaxPermSize=512m
```

- e. Select Save.
- 7. When the Weblogic Admin server startup mode is set to production mode after domain creation, create the following directories:
 - **a.** Create a security directory:

```
<WEBLOGIC_INSTALL_DIR>\user_
projects\domains\<orbo-domain>\servers\<AdminServerName>\security
```

b. If using a managed server, create a directory for the persistent store:

```
<WEBLOGIC_INSTALL_DIR>\user_
projects\domains\<orbo-domain>\servers\<ManagedServerName>\data\store\orbo-
persistent-store
```

Deploying to a Managed Server

If you are deploying Back Office to a managed server, note the following.

If any of the servers are remote from the admin server, copy the contents of the domain/lib directory to the corresponding directory on the remote systems. Also, a directory for the persistent store needs to be created on the remote systems. It should be located in the following location:

```
<WEBLOGIC_INSTALL_DIR>\user_
projects\domains\<orbo-domain>\servers\<serverName>\data\store\orbo-persistent-sto
```

Create the Database Schema Owner and Data Source Connection Users

The following recommendations should be considered for schema owners:

- Database administrators should create an individual schema owner for each application, unless the applications share the same data. In the case of Oracle Retail Back Office and Point-of-Service, the database schema owner is the same because these applications share a database.
- The schema owners should only have enough privileges to install the database.

For information on the best practices for passwords, see the Oracle Retail POS Suite Security Guide.

Note: Do not delete the database schema owner after installation. When using Data Import (DIMP), the schema owner privileges are needed for DIMP processing which includes creating and dropping tables. For information on DIMP, see "Enable Data Import".

To create the database schema owner and data source connection users:

- Log in using the database administrator user ID.
- **2.** Create a role in the database to be used for the schema owner.

```
CREATE ROLE <schema_owner_role>;
```

Grant the privileges, shown in the following example, to the role.

```
GRANT CREATE TABLE, CREATE VIEW, CREATE SEQUENCE, CREATE PROCEDURE, ALTER
SESSION, CONNECT, SELECT_CATALOG_ROLE TO <schema_owner_role>;
```

4. Create a role in the database to be used for the data source user.

```
CREATE ROLE <data_source_role>;
```

5. Grant the privileges, shown in the following example, to the role.

```
GRANT CONNECT, CREATE SYNONYM, SELECT_CATALOG_ROLE TO
<data_source_role>;
```

6. Create the schema owner user in the database.

```
CREATE USER <schema_username>
IDENTIFIED BY <schema_password>
DEFAULT TABLESPACE users
TEMPORARY TABLESPACE TEMP
QUOTA UNLIMITED ON users;
```

7. Grant the schema owner role to the user.

```
GRANT <schema_owner_role> TO <schema_username>;
```

8. Create the data source user.

```
CREATE USER <data_source_username>
IDENTIFIED BY <data_source_password>
DEFAULT TABLESPACE users
TEMPORARY TABLESPACE TEMP
QUOTA UNLIMITED ON users;
```

9. Grant the data source role to the user.

```
GRANT <data_source_role> TO <data_source_username>;
```

The installer grants the data source connection user access to the application database objects. If you choose No on the Manual Deployment Option screen, you need to grant the access after the installer completes. For more information, see "Manual Deployment of the Back Office Application".

Expand the Back Office Distribution

To extract the Back Office files:

- **1.** Extract the Back Office 13.4.8 distribution zip file.
- Create a new staging directory for the Back Office application distribution (ORBO-13.4.8.zip) file, for example,

```
C:\tmp\j2ee\<orbo-domain>\orbo-staging.
```

Note: The staging area (<staging_directory>) can exist anywhere on the system. It does not need to be under tmp.

3. Copy or upload ORBO-13.4.8.zip to <staging_directory> and extract its contents. The following files and directories should be created under <staging_ directory>\ORBO-13.4.8:

```
ant\
ant.-ext.\
antinstall\
backoffice\
connectors\
external-lib\
installer-resources\
ocm-integration\
retail-public-security-api\
.postinstall.cmd
.postinstall.sh
.preinstall.cmd
.preinstall.sh
.preinstall-oas.cmd
.preinstall-oas.sh
.preinstall-was.cmd
.preinstall-was.sh
.preinstall-wl.cmd
.preinstall-wl.sh
antinstall-config.xml
build.xml
build-common.xml
build-common-backoffice.xml
build-common-easpi.xml
build-common-oas.xml
build-common-retailinv.xml
build-common-was.xml
build-common-webapps.xml
build-common-wl.xml
build-test.cmd
checkdeps.cmd
checkdeps.sh
install.cmd
install.sh
prepare.xml
retail-OCM-stores.zip
wallet.xml
```

For the remainder of this chapter, <staging_directory>\ORBO-13.4.8 is referred to as <INSTALL_DIR>.

Set Up for Integration with Central Office and Returns Management

On the Integrate Applications screen, you select the applications that Oracle Retail Back Office is integrated with. See Figure A-8. If Central Office or Returns Management is selected on the screen, that application must be running in order for the Back Office files to be installed correctly.

Enable Data Import

Data Import (DIMP) is used by external systems to send data bundles to Back Office for routine data loading of certain types of data. To use DIMP, you need to create a directory for the incoming bundles and a directory where the bundles are archived after being processed.

On the Enable DIMP installer screen, you select whether DIMP will be used. See Figure A-13. If Yes is selected on the screen, you then provide the paths to the directories on the DIMP Configuration installer screen. See Figure A–14.

For detailed information on DIMP, see the Oracle Retail POS Suite/Merchandising Products Implementation Guide.

Oracle Configuration Manager

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

The following document is available through My Oracle Support. Access My Oracle Support at the following URL:

https://support.oracle.com

Oracle Retail Oracle Configuration Manager (OCM) Installer Guide (Doc ID: 1071030.1)

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

Installation Options

During installation, there are options that enable you to select whether the installer completes parts of the installation or if you want to complete those parts manually. For information on the available options, see the following sections:

- "Install Database Options"
- "Manual Deployment of the Back Office Application"
- "Install Parameters"

Install Database Options

The database schema must be created and populated before configuring the application server. On the Install Database Option screen, you select whether the installer creates and populates the database schema or if you want to do this manually. See Figure A–15.

If you choose **Create schema with sample dataset**, the installer creates and populates the database schema with sample data, such as item data. This is the default selection on the screen. The sample dataset includes the minimum dataset and report configuration data. If you want data available to use for demonstrating Back Office functionality after installation, you can select this option.

To use this option, you must provide the location of the zip file containing the sample dataset on the Sample Dataset installer screen. See Figure A-16. You can obtain the sample-dataset-13.4.1.zip file from the Oracle Software Delivery Cloud at the following web site:

https://edelivery.oracle.com/

- If you choose Create schema with minimum dataset, the installer creates and populates the database schema with the minimum amount of data needed to launch and run Back Office. The minimum dataset includes report configuration data. If you want to load your own data after installation, you can select this option.
- If you choose Skip schema creation and data loading, the installer does not create and populate the database schema. You choose this option if you want to create and populate the database schema manually. For information on manually creating and populating the database schema, see "Manually Create the Database Schema".

Note: If Back Office is being installed for the first time and a clean schema is being used, do not select the Skip schema creation and data loading option. The installer will fail at some point if there is no data available in the database. You must populate the database schema before running the installer by selecting one of the other options.

If the schema is already populated and you want to manually restore or update the data, select the Skip schema creation and data loading option.

Manually Create the Database Schema

To manually create and populate the database schema:

- 1. Change to the <INSTALL_DIR>\backoffice\db directory.
- **2.** Set the JAVA_HOME and ANT_HOME environment variables.

```
SET JAVA_HOME=<JDK_INSTALL_DIR>\jre
SET ANT_HOME=<INSTALL_DIR>\ant
```

3. Add %JAVA_HOME%\bin and %ANT_HOME%\bin to the front of the PATH environment variable.

```
SET PATH=%JAVA_HOME%\bin;%ANT_HOME%\bin;%PATH%
```

4. Expand the backofficeDBInstall.jar file.

```
jar -xvf backofficeDBInstall.jar
```

- Modify db.properties.
 - **a.** Uncomment the Oracle properties and comment out the properties for the other vendors.
 - **b.** In the Oracle properties, update the db.product setting to the following: db.product=jdbc

c. Set the following properties with your database settings. The values to be set are shown in bold in the examples.

Set the hash algorithm, for example, to SHA-256.

```
# Hash Algorithm
inst.hash.algorithm=HASH_ALGORITHM
```

Enter the values for the users shown in bold in the following example:

```
inst.app.admin.user=my-bo-admin-user
inst.app.admin.password-encrypted=my-encrypted-bo-admin-password
db.user=DB USER ID
db.password-encrypted=DB_PASSWORD_ENCRYPTED
db.owner.user=DB_OWNER_USER_ID
db.owner.password-encrypted=DB_OWNER_PASSWORD_ENCRYPTED
```

The ant target will prompt for the passwords. Run the following ant target to encrypt the passwords:

```
ant -f db.xml encrypt-webapp-passwords
```

Enter the values for the URL used by the Back Office application to access the database schema. See Appendix D for the expected syntax:

```
db.jdbc-url=jdbc:oracle:thin:@DB_HOST_NAME:1521:DB_NAME
```

Enter the value for the store ID shown in the following example:

```
configured.store.id=04241
```

Enter the value for the supported locales shown in the following example:

```
gen.locales=fr,zh
```

d. Set the host name and rmi port number for the parameters.apphost property to point to your Back Office installation.

```
parameters.apphost=t3://<hostname>:<port_number>
```

- **e.** In the parameters.classpath property, replace the semicolons used as separators with colons. This is needed to run with Linux systems.
- To enable VAT functionality, uncomment the tax.enableTaxInclusive property in the tax properties section.
- If loading sample data, replace FILE_DATASET_SAMPLE with the full path and file name for the sample dataset zip file.

```
dataset.sample.zip=FILE_DATASET_SAMPLE
```

- Run one of the available Ant targets to create the database schema and load data.
 - load_sample: creates the database schema containing the sample dataset. The sample dataset includes the minimum dataset and report configuration data.

To use this option, you must provide the location of the zip file containing the sample dataset. You can obtain the sample-dataset-13.4.1.zip file from the Oracle Software Delivery Cloud at the following Web site:

```
https://edelivery.oracle.com/
```

- load_minimum: creates the database schema containing the minimum dataset. The minimum dataset includes report configuration data.
- load_reports: loads report configuration data.

```
For example: ant load_sample
```

To specifically load the report configuration data, use the following command: ant -f db.xml load_reports

Secure the JDBC for the Oracle 11g Database

On the Enable Secure IDBC screen, you select whether secure IDBC will be used for communication with the database. See Figure A-11.

- If **Yes** is selected, the installer sets up the secure JDBC.
- If No is selected and you want to manually set up the secure JDBC after the installer completes, see the Oracle Retail POS Suite Security Guide.

Install the Java Cryptography Extension (JCE)

You must update the security for your JRE. You need to obtain version 7.0 of the Java Cryptography Extension (JCE) Unlimited Strength Jurisdiction Policy Files.

1. Make a backup copy of local_policy.jar and US_export_policy.jar.

```
cd <WEBLOGIC_INSTALL_DIR>/<jdk>/jre/lib/security
mv local_policy.jar local_policy.jar.bak
mv US_export_policy.jar US_export_policy.jar.bak
```

- **2.** Download version 7 of the ICE.
 - **a.** Go to the following web site:

```
http://www.oracle.com/technetwork/java/javase/downloads/index.ht
```

- b. Under Additional Resources, find Java Cryptography Extension (JCE) **Unlimited Strength Jurisdiction Policy Files 7.**
- c. Click Download.
- **d.** Follow the instructions to download the JCE.
- 3. Copy the local_policy.jar and US_export_policy.jar files into the JRE security directory. The files are bundled as UnlimitedJCEPolicyJDK7.zip.

Run the Back Office Application Installer

A WebLogic domain must be configured and started before you can run the Back Office application installer. This installer will configure and deploy the Back 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 JAVA_HOME environment variable. JAVA_HOME should point to *<JDK*_ INSTALL DIR>.

Note: The installer is not compatible with versions of Java earlier than Java 7.

- 3. Set the account of the user running the installer to run as an administrator. Set the account using Microsoft Windows 2008 Server.
- Run the install.cmd script. This will launch the installer. After installation is complete, a detailed installation log file is created:

```
orbo-install-app.<timestamp>.log.
```

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

```
install.cmd [text | silent weblogic]
```

The installer leaves behind the

ant.install.properties and cwallet.sso files for repeat installations.

Resolve 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 E.

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

Disabled Non-SSL Port

You can choose to disable the non-SSL port on the Turn Off the Application Server's Non-SSL Port screen. See Figure A-42. If you select Yes on the screen, you must delete the transaction log files.

To delete the files:

- Stop the application server.
- Delete the transaction log files:

```
<orbo-domain>/server/<serverName>/data/store/default/WLS*.dat
<orbo-domain>/server/<serverName>/data/store/or*-persistent-store/*.dat
```

- **3.** Start the application server:
 - If Back Office is deployed to an admin server, start the application server for the admin server.
 - If Back Office is deployed to a managed server, start the application server for the managed server.

For more information, see the following Web site. Refer to the *Moving a Server* section.

```
http://download.oracle.com/docs/cd/E12839_
01/web.1111/e13731/trxman.htm#i1053371
```

Manual Deployment of the Back Office Application

Skip this section if you chose the default option of allowing the installer to complete installation to the application server on the Manual Deployment Option screen. See Figure A-37.

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>\backoffice\configured-output\.

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

- To deploy using the ant target:
 - 1. Update the following property in the ant.install.properties file.

```
input.install.to.appserver = true
```

2. Run the following ant target:

install.cmd ant init app-ear-deploy -propertyfile ant.install.properties

- To deploy from the application server console:
 - **1.** Run the following target:

```
install.cmd ant init-app-ear-deploy
```

2. Deploy the ear file from the following location:

```
<INSTALL_DIR>\backoffice\backoffice.ear
```

Note: When deploying the ear file, 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.

Install Parameters

The application parameters must be installed before the Back Office application is fully operational. On the Install Parameters screen, you select whether the installer completes installation of the parameters.

- If you chose Yes, you do not need to perform any further steps to install the parameters. This is the default selection on the screen.
- If you chose No, the installer did not install the parameters. For information on installing the parameters, see "Import Initial Parameters".

Import Initial Parameters

Note: If you did not choose to have the installer set the initial parameters, you must import an initial set of parameters before you can use Oracle Retail Back Office. For more information on parameters, see the Oracle Retail POS Suite 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 Back Office user interface or by using an ant target after the installation is complete. 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 Back Office User Guide.

Import Parameters Through the User Interface

To import the initial parameters through the user interface:

Open the Oracle Retail Back Office application in a Web browser. The address is provided at the end of the installer output and in the log file.

```
https:\\<host name>:<port number>\<context root>
```

- Log in to the application with a user ID that has full administrative rights.
- Click the **Admin** tab and then the **Job Manager** subtab. Click the **Available Imports** left navigation link. The Available Imports screen appears.
- 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>\backoffice\configured-output\db folder.
- To import the initial set of Oracle Retail Back Office application parameters, click the File link in the Import BackOffice Parameters row. Follow the instructions to import backoffice.xml from the < INSTALL_ DIR>\backoffice\configured-output\db folder.

Import Parameters by using an Ant Target

To import parameters using an ant target:

- Change to the <INSTALL_DIR>\backoffice\configured-output\db directory.
- **2.** In db. properties, set the host name and port number for the parameters.apphost property to point to your Back Office installation.

```
parameters.apphost=t3://<host name>:<port number>
```

3. Set the JAVA_HOME and ANT_HOME environment variables.

```
JAVA_HOME=<JDK_INSTALL_HOME>; ANT_HOME=<INSTALL_DIR>/ant;
export JAVA_HOME ANT_HOME
```

4. Run the following command:

```
ant load_parameters
```

Load Optional Purge Procedures

For information on the procedures provided for purging aged data, see the Oracle *Retail POS Suite Operations Guide.*

To load the purge procedures:

1. Run the available Ant target to load the procedures.

```
ant load_purge_procedures
```

2. Log in as the database schema owner, <schema_owner_user>.

3. Create a user for running the purge procedures. This user should only have the privileges required to run the purge procedures.

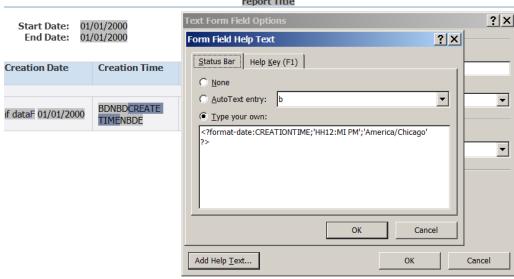
Update Local Time Zone for Bank Deposit Summary Report

The default local time zone for the Bank Deposit Summary Report is America/Chicago. If this is not your local time zone for Back Office, the correct time zone needs to be set for the report. To change the local time zone:

- **1.** In the *<INSTALL*_ DIR>\backoffice\configured-output\db\reports\financial folder, open the BO_BankDepositSummaryReport.rtf file.
- **2.** Update the create time in the file:
 - a. Double-click CREATE TIME under Creation Time. The Text Form Field Options window appears.

Note: Double-click only CREATE TIME and not the other two values which are also in the same area. The value is highlighted when selected. Figure 3–1 shows the CREATE TIME value selected.

Figure 3–1 Update Local Time Zone for Report Example



- **b.** Click **Add Help Text.** The Form Field Help Text window appears.
- **c.** Under the Status Bar tab, select **Type your own**. The date format appears.
- **d.** Change America/Chicago to your local time zone. Figure 3–1 shows the America/Chicago value that you change.
- **e.** Save the change.
- **3.** Reload the reports:
 - Change to the <INSTALL_DIR>\backoffice\configured-output\db directory.
 - **2.** Run the following command:

```
ant -f db.xml load_reports
```

Using the Back Office Application

Note: When you are done installing Back Office, log out and close the browser window. This ensures that your session information is cleared and prevents another user from accessing Back Office with your login information.

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

https:\\<servername>:<portnumber>\<context root>

For example, https:\\myhost:7002\backoffice

Appendix: Installer Screens for the Oracle Stack

You need specific details about your environment for the installer to successfully deploy the Back Office application on the Oracle Stack. 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.

Figure A-1 Introduction

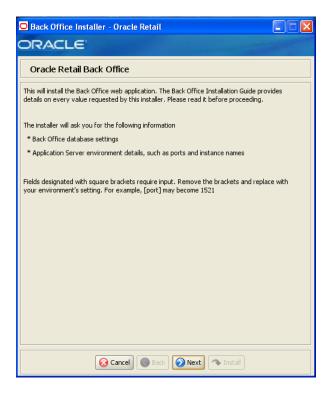
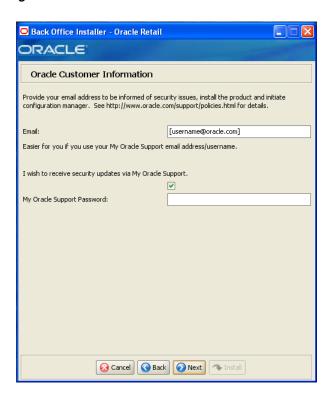


Figure A-2 Oracle Customer Information



This screen sets up the information needed for Oracle Configuration Manager (OCM). The OCM collector must be registered with your My Oracle Support account so that the uploaded configuration information can be stored properly and be readily available during the resolution of a service request.

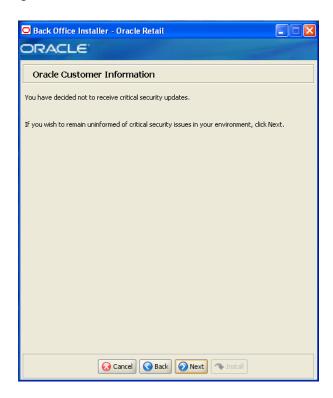
After the Central Office installer completes, the OCM installer runs if OCM is not already installed. For information on OCM, see "Oracle Configuration Manager" in Chapter 3.

Details	Content
Field Title	Email
Field Description	Email address to use for OCM installation.

Details	Content
Field Title	I wish to receive security updates via My Oracle Support.
Field Description	To receive security updates, check the box.

Details	Content
Field Title	My Oracle Support Password
Field Description	Password for the My Oracle Support user to receive security updates.

Figure A-3 Oracle Customer Information



This screen is only displayed if No is selected on the previous Oracle Customer Information screen.

Figure A-4 Requirements

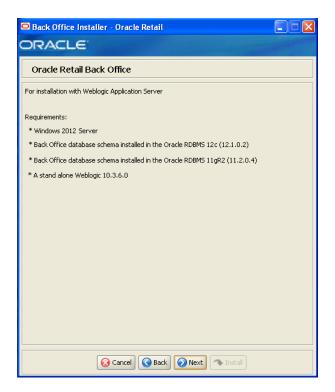
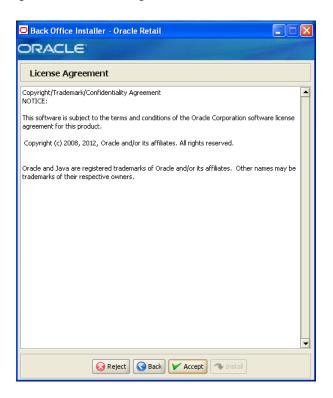
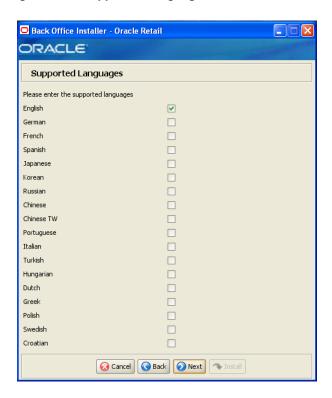


Figure A-5 License Agreement



 $\textbf{Note:} \quad \text{You must choose to accept the terms of the license agreement}$ in order for the installation to continue.

Figure A-6 Supported Languages



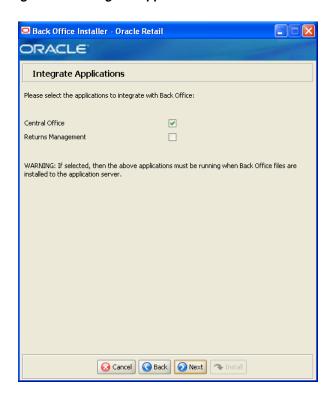
Details	Content
Field Title	Please enter the supported languages
Field Description	Select the languages that will be available for the Back Office application.
	The languages selected on this screen determine the available choices on the Enter Default Locale screen.
Example	English

Figure A-7 Enter Default Locale



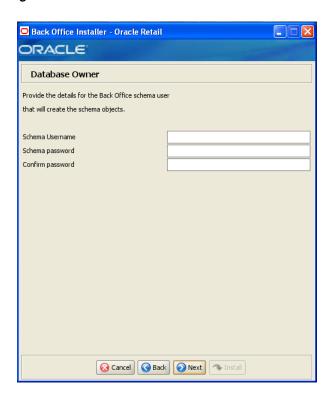
Details	Content
Field Title	Enter Default Locale
Field Description	Locale support in Back Office enables the date, time, currency, calendar, address, and phone number to be displayed in the format for the selected default locale.
	The choices for default locale are dependent on the selections made on the Supported Languages screen. For each selected language, the default locale for that language is displayed on the Enter Default Locale screen. For example, if English and French are selected on the Supported Languages screen, en_US and fr_FR are the available choices for the default locale.
Example	en_US

Figure A-8 Integrate Applications



Details	Content
Field Title	Please select the applications to integrate with Back Office
Field Description	Select the applications to integrate with Back Office.
	 Central Office
	 Returns Management
	Note: The selected applications must be running when Back Office is installed to the application server.
Example	Central Office

Figure A-9 Database Owner

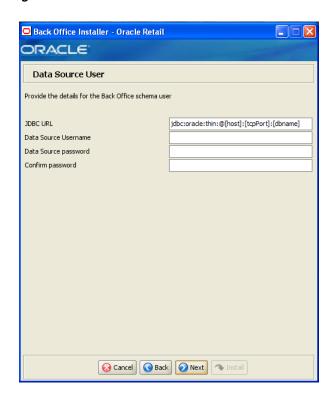


Details	Content
Field Title	Schema Username
Field Description	Schema user name that manages the objects in the schema. This user has Create, Drop, and Alter privileges in the schema, that is, Data Definition Language (DDL) execution privileges. For information on creating this user, see "Create the Database Schema Owner and Data Source Connection Users" in Chapter 3.
	Note: This user creates the database objects used by Back Office.

Details	Content
Field Title	Schema Password
Field Description	Password for the database owner.

Details	Content
Field Title	Confirm Password
Field Description	Reentered Schema Password used to confirm the password.
	Note: The passwords in the Schema Password and Confirm Password fields must match.

Figure A-10 Data Source User



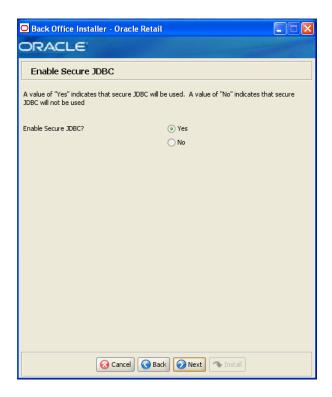
Details	Content
Field Title	JDBC URL
Field Description	URL used by the Back Office application to access the database schema. See Appendix D for the expected syntax.
Example	jdbc:oracle:thin:@myhost:1525:mydatabase

Details	Content
Field Title	Data Source Username
Field Description	Database user name that can access and manipulate the data in the schema. This user can have Select, Insert, Update, Delete, and Execute privileges on objects in the schema, that is, Data Manipulation Language (DML) execution privileges. For information on creating this user, see "Create the Database Schema Owner and Data Source Connection Users" in Chapter 3.
	Note: This schema user is used by Back Office to access the database.

Details	Content
Field Title	Data Source Password
Field Description	Password for the data source user.

Details	Content
Field Title	Confirm Password
Field Description	Reentered Data Source Password used to confirm the password.
	Note: The passwords in the Data Source Password and Confirm Password fields must match.

Figure A-11 Enable Secure JDBC



Details	Content
Field Title	Enable Secure JDBC?
Field Description	Select whether secure JDBC is to be used for communication with the database.
Example	Yes

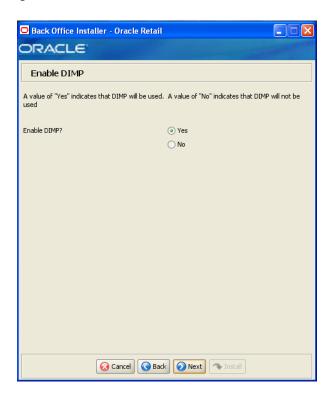
Figure A-12 Data Source SSL Configuration



This screen is only displayed if **Yes** is selected on the Enable Secure JDBC screen. The field on this screen is described in the following table.

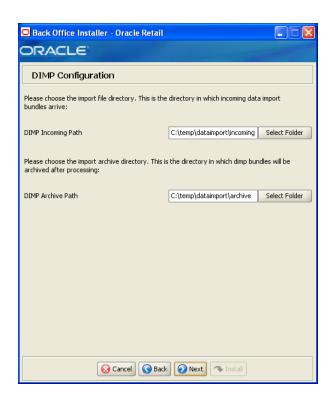
Details	Content
Field Title	Data Source SSL Port
Field Description	SSL port used to access the database.
Example	2484

Figure A-13 Enable DIMP



Details	Content
Field Title	Enable DIMP?
Field Description	Select whether DIMP will be used. For information on DIMP, see "Enable Data Import" in Chapter 3.
Example	Yes

Figure A-14 DIMP Configuration

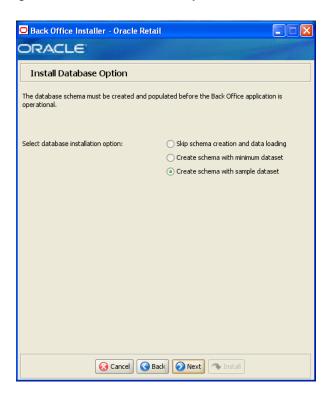


This screen is only displayed if **Yes** is selected on the Enable DIMP screen.

Details	Content
Field Title	DIMP Incoming Path
Field Description	Directory where the incoming data import bundles arrive.
Example	<pre>C:\temp\dataimport\incoming</pre>

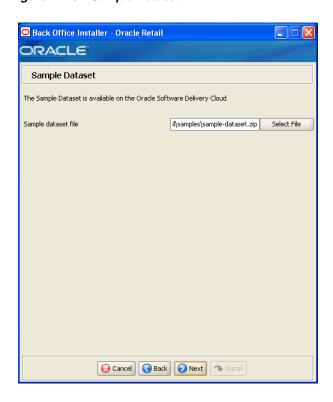
Details	Content
Field Title	DIMP Archive Path
Field Description	Directory where the incoming data import bundles are archived after processing.
Example	C:\temp\dataimport\archive

Figure A-15 Install Database Option



Details	Content
Field Title	Select database installation option
Field Description	The database schema must be created and populated before starting Back Office. This screen gives you the option to have the installer create and populate the database schema or leave the database schema unmodified.
	■ To have the installer leave the database schema unchanged, select Skip schema creation and data loading .
	■ To have the installer create and populate the database schema with the minimum dataset, select Create schema with minimum dataset.
	■ To have the installer create and populate the database schema with the sample dataset, select Create schema with sample dataset .
	For more information, see "Install Database Options" in Chapter 3.
Example	Create schema with sample dataset

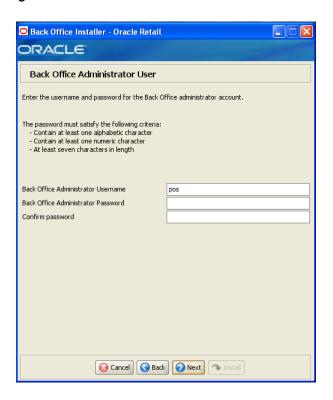
Figure A-16 Sample Dataset



This screen is only displayed when Create schema with sample dataset is selected on the Install Database Option screen.

Details	Content
Field Title	Sample dataset file
Field Description	Enter the path to the sample dataset to be loaded into the database schema.
	You can obtain the sample-dataset-13.4.1.zip file from the Oracle Software Delivery Cloud at the following Web site:
	https://edelivery.oracle.com/
	For more information on the sample dataset, see "Install Database Options" in Chapter 3.
Example	C:\oracle\retail\samples\sample-dataset.zip

Figure A-17 Back Office Administrator User



Details	Content
Field Title	Back Office Administator Username
Field Description	Administrator user for the Back Office application.
Example	pos

Details	Content
Field Title	Back Office Administrator Password
Field Description	Password for the administrator user.

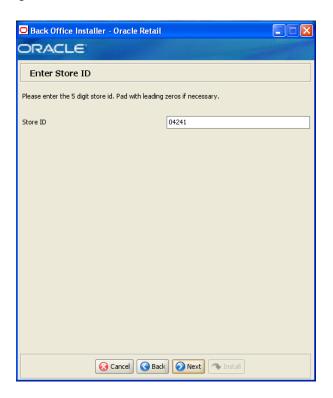
Details	Content
Field Title	Confirm Password
Field Description	Reentered Back Office Administrator Password used to confirm the password.
	Note: The passwords in the Back Office Administrator Password and Confirm Password fields must match.

Figure A–18 Cryptology Settings



Details	Content
Field Title	Hash Algorithm
Field Description	Enter the name of the algorithm used to hash passwords.
Example	SHA-256

Figure A-19 Enter Store ID



Details	Content
Field Title	Store ID
Field Description	ID for this store.
	Note: The store ID must be five digits. It can be padded with leading zeroes if necessary. The store ID can only contain the numeric characters 0 through 9.
Example	04241

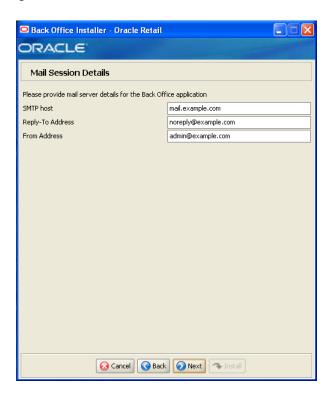
Figure A-20 App Server WL_HOME



Details	Content
Field Title	WL_HOME
Field Description	Home directory for the Oracle WebLogic installation.
Example	D:\Oracle\Middleware\wlserver_10.3

Details	Content
Field Title	BEA_HOME
Field Description	Home directory for the Oracle BEA installation.
Example	D:\Oracle\Middleware

Figure A-21 Mail Session Details

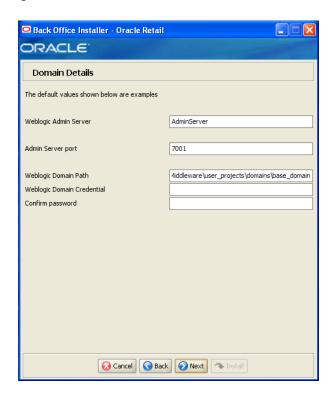


Details	Content
Field Title	SMTP host
Field Description	Host where the SMTP server is running.
Example	mail.example.com

Details	Content
Field Title	Reply-To Address
Field Description	Reply-to address in e-mails generated by Back Office.
Example	notreply@example.com

Details	Content
Field Title	From Address
Field Description	From address in e-mails generated by Back Office.
Example	admin@example.com

Figure A-22 Domain Details



Details	Content
Field Title	Weblogic Admin Server
Field Description	Name of the admin server to which the Back Office application is being deployed.
Example	AdminServer

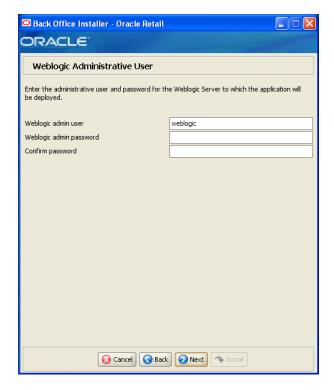
Details	Content
Field Title	Admin Server port
Field Description	Port used by the administration server. This port was selected when the administration domain was created.
Example	7001

Details	Content
Field Title	Weblogic Domain Path
Field Description	Path to the domain to which the Back Office application is being deployed.
Example	<pre>D:\Oracle\Middleware\user_projects\domains\base_ domain</pre>

Details	Content
Field Title	Weblogic Domain Credential
Field Description	Password shared between domains in order to establish a trust relationship.
	Note: Use the same password for all Oracle Retail applications in the trust relationship in your configuration.

Details	Content
Field Title	Confirm Password
Field Description	Reentered Weblogic Domain Credential used to confirm the password.
	Note: The passwords in the Weblogic Domain Credential and Confirm Password fields must match.

Figure A-23 Weblogic Administrative User

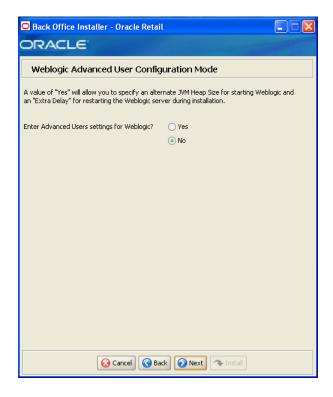


Details	Content
Field Title	Weblogic admin user
Field Description	User name of the administrative user for the WebLogic server to which the Back Office application is being deployed.
Example	weblogic

Details	Content
Field Title	Weblogic admin password
Field Description	Password for the WebLogic administrative user. You chose this password when you created the WebLogic server.

Details	Content
Field Title	Confirm password
Field Description	Reentered Weblogic Admin Password used to confirm the password.
	Note: The passwords in the Weblogic Admin Password and Confirm Password fields must match.

Figure A-24 Weblogic Advanced User Configuration Mode



Details	Content
Field Title	Enter Advanced User settings for Weblogic?
Field Description	Sets whether you want to specify the JVM heap size and delay time for starting the WebLogic server.
	■ To enter the advanced settings, choose Yes.
	■ To not enter the advanced settings, choose No.
Example	No

Figure A-25 Weblogic Advanced User Settings



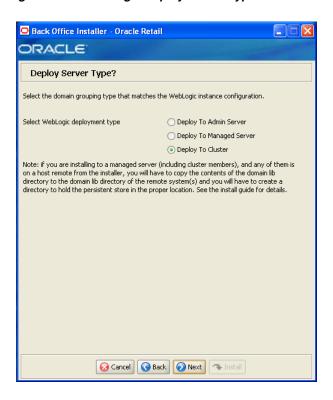
This screen is only displayed if Yes is selected on the Weblogic Advanced User Configuration Mode screen.

Details	Content
Field Title	Xms value (static heap size) in megabytes
Field Description	Enter the static JVM heap size in megabytes.
Example	512

Details	Content
Field Title	Xmx value (maximum heap size) in megabytes
Field Description	Enter the maximum JVM heap size in megabytes.
Example	2048

Details	Content
Field Title	Restart delay in seconds
Field Description	Enter extra delay in seconds for restarting WebLogic during product installation.
Example	10

Figure A-26 Weblogic Deploy Server Type



Details	Content
Field Title	Select WebLogic deployment type
Field Description	Select how the Back Office application is deployed.
	■ Deploy to Admin Server
	The next screen is Figure A–32.
	 Deploy to Managed Server
	The next screen is Figure A–27.
	 Deploy to Cluster
	The next screen is Figure A–28.
	For more information, see "Deploying to a Managed Server" in Chapter 3.
Example	Deploy to Cluster

Figure A-27 Managed Server Details

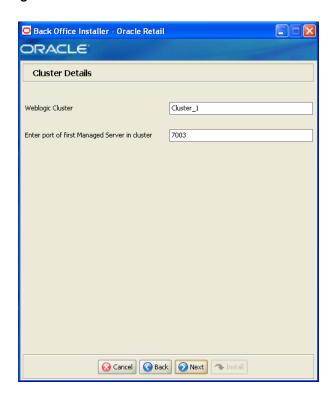


This screen is only displayed if **Deploy to Managed Server** is selected on the Weblogic Deploy Server Type screen.

Details	Content
Field Title	Weblogic Managed Server
Field Description	Name of the managed server.
Example	ManagedServer_1

Details	Content
Field Title	Enter the Managed Server port
Field Description	Port number used to access the managed server.
Example	7003

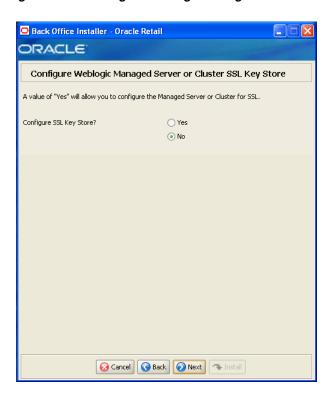
Figure A-28 Cluster Details



Details	Content
Field Title	Weblogic Cluster
Field Description	Name of the cluster.
Example	Cluster_1

Details	Content
Field Title	Enter port of first Managed Server in cluster
Field Description	Port number used to load parameters.
Example	7003

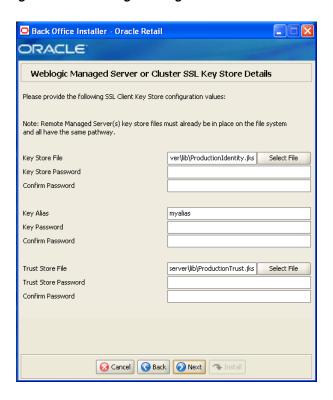
Figure A-29 Configure Weblogic Managed Server or Cluster SSL Key Store



This screen is only displayed if **Deploy to Managed Server** or **Deploy to Cluster** is selected on the Weblogic Deploy Server Type screen.

Details	Content
Field Title	Configure SSL Key Store?
Field Description	Select whether the Managed Server or Cluster will be configured for SSL:
	■ To configure the Managed Server or Cluster for SSL, select Yes .
	■ To not configure the Managed Server or Cluster for SSL, select No .

Figure A-30 Weblogic Managed Server or Cluster SSL Key Store Details



This screen is only displayed if Yes is selected on the Configure Weblogic Managed Server or Cluster SSL Key Store screen.

Details	Content
Field Title	Key Store File
Field Description	Path to the Key Store file.
Example	D:\Oracle\Middleware\wlserver_ 10.3\server\lib\ProductionIdentity.jks

Details	Content
Field Title	Key Store Password
Field Description	Enter the password used to access the client Key Store.

Details	Content
Field Title	Confirm Password
Field Description	Reentered Key Store Password used to confirm the password.
	Note: The passwords in the Key Store Password and Confirm Password fields must match.

Details	Content
Field Title	Key Alias

Details	Content
Field Description	Alias used to access the Key Store file.
Example	myalias

Details	Content
Field Title	Key Password
Field Description	Enter the password used to access the client Key Store.

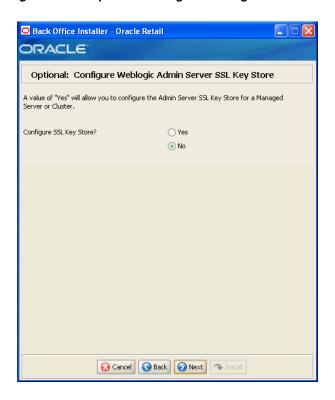
Details	Content
Field Title	Confirm Password
Field Description	Reentered Key Password used to confirm the password.
	Note: The passwords in the Key Password and Confirm Password fields must match.

Details	Content
Field Title	Trust Store File
Field Description	Path to the Trust Store file.
Example	D:\Oracle\Middleware\wlserver_ 10.3\server\lib\ProductionTrust.jks

Details	Content
Field Title	Trust Store Password
Field Description	Enter the password used to access the Trust Store.

Details	Content
Field Title	Confirm Password
Field Description	Reentered Trust Store Password used to confirm the password.
	Note: The passwords in the Trust Store Password and Confirm Password fields must match.

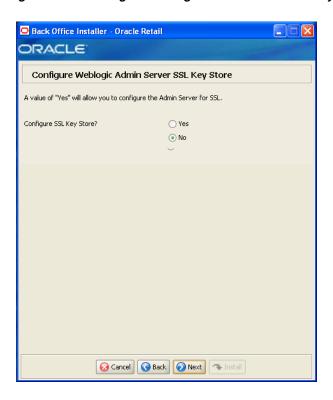
Figure A-31 Optional: Configure Weblogic Admin Server SSL Key Store



This screen is only displayed if **Deploy to Managed Server** or **Deploy to Cluster** is selected on the Weblogic Deploy Server Type screen.

Details	Content
Field Title	Configure SSL Key Store?
Field Description	Select whether the Admin Server will be configured for SSL:
	■ To configure the Admin Server for SSL, select Yes .
	■ To not configure the Admin Server for SSL, select No .

Figure A-32 Configure Weblogic Admin Server SSL Key Store



This screen is only displayed if **Deploy to Admin Server** is selected on the Weblogic Deploy Server Type screen.

Details	Content
Field Title	Configure SSL Key Store?
Field Description	Select whether the Admin Server will be configured for SSL:
	■ To configure the Admin Server for SSL, select Yes .
	■ To not configure the Admin Server for SSL, select No .

Figure A-33 Weblogic Admin Server SSL Key Store Details



This screen is only displayed if \boldsymbol{Yes} is selected on the Configure Weblogic Admin Server SSL Key Store screen.

Details	Content
Field Title	Key Store File
Field Description	Path to the Key Store file.
Example	D:\Oracle\Middleware\wlserver_ 10.3\server\lib\ProductionIdentity.jks

Details	Content
Field Title	Key Store Password
Field Description	Enter the password used to access the client Key Store.

Details	Content
Field Title	Confirm Password
Field Description	Reentered Key Store Password used to confirm the password.
	Note: The passwords in the Key Store Password and Confirm Password fields must match.

Details	Content	
Field Title	Key Alias	

Details	Content
Field Description	Alias used to access the Key Store file.
Example	myalias

Details	Content
Field Title	Key Password
Field Description	Enter the password used to access the client Key Store.

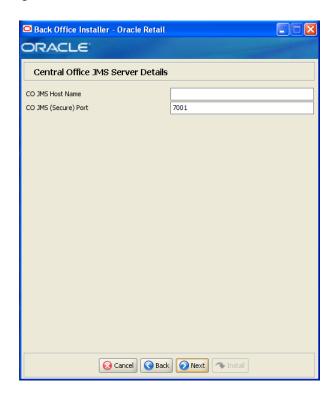
Details	Content
Field Title	Confirm Password
Field Description	Reentered Key Password used to confirm the password.
	Note: The passwords in the Key Password and Confirm Password fields must match.

Details	Content
Field Title	Trust Store File
Field Description	Path to the Trust Store file.
Example	D:\Oracle\Middleware\wlserver_ 10.3\server\lib\ProductionTrust.jks

Details	Content
Field Title	Trust Store Password
Field Description	Enter the password used to access the Trust Store.

Details	Content
Field Title	Confirm Password
Field Description	Reentered Trust Store Password used to confirm the password.
	Note: The passwords in the Trust Store Password and Confirm Password fields must match.

Figure A-34 Central Office JMS Server Details

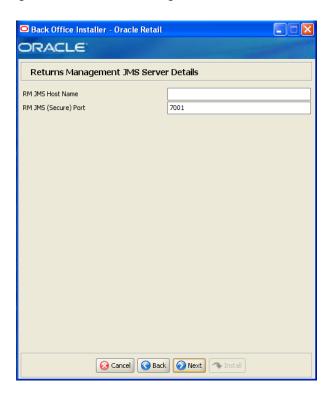


This screen is only displayed if **Central Office** is selected on the Integrate Applications

Details	Content
Field Title	CO JMS Host Name
Field Description	Name of the Central Office JMS server.
	Note: Always use the actual host name and not the IP address or "localhost". There may be problems integrating with Point-of-Service if the actual host name is not used.

Details	Content
Field Title	CO JMS (Secure) Port
Field Description	Port number used by the Central Office JMS server.
Example	7001

Figure A-35 Returns Management JMS Server Details

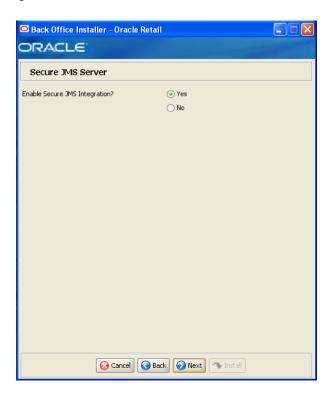


This screen is only displayed if Returns Management is selected on the Integrate Applications screen.

Details	Content	
Field Title	RM JMS Host Name	
Field Description	Name of the Returns Management JMS server.	
	Note: Always use the actual host name and not the IP address or "localhost". There may be problems integrating with Point-of-Service if the actual host name is not used.	

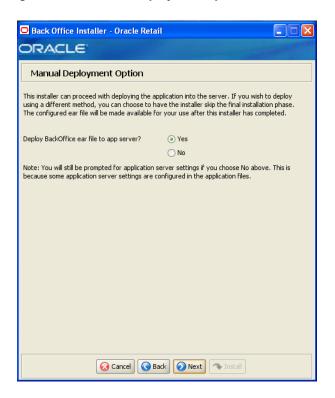
Details	Content
Field Title	RM JMS (Secure) Port
Field Description	Port number used by the Returns Management JMS server.
Example	7001

Figure A-36 Secure JMS Server



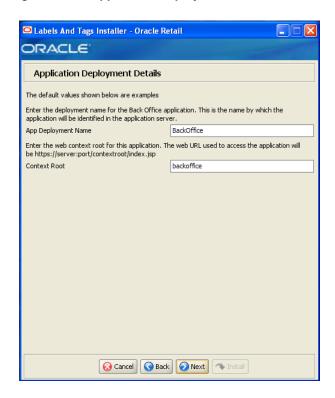
Details	Content
Field Title	Enable Secure JMS Integration?
Field Description This screen gives you the option to use secure integration with server.	
Example	Yes

Figure A-37 Manual Deployment Option



Details	Content	
Field Title	Deploy BackOffice ear file to app server?	
Field Description	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.	
	If you choose No, see "Manual Deployment of the Back Office Application" in Chapter 3 for the manual steps you need to perform after the installer completes.	
Example	Yes	

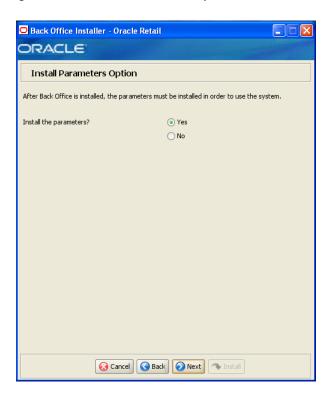
Figure A-38 Application Deployment Details



Details	Content
Field Title	App Deployment Name
Field Description	Name by which the Back Office application will be identified in the application server.
Example	BackOffice

Details	Content
Field Title	Context Root
Field Description	Path under the HTTPS URL that will be used to access the Back Office application. For example, a context root of backoffice will result in the application being accessed at <pre>https://host:port/backoffice/index.jsp.</pre>
Example	backoffice

Figure A-39 Install Parameters Options



Details	Content
Field Title	Install the parameters?
Field Description	The application parameters must be set up before Back Office can be used. This screen gives you the option to set up the parameters manually. If you choose No, see "Install Parameters" in Chapter 3 for the manual steps you need to perform after the installer completes.
Example	Yes

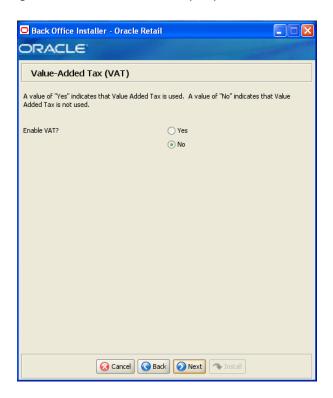
Figure A-40 Sample Template Data



This screen is only displayed if Yes is selected on the Load Templates Option screen. The field on this screen is described in the following table.

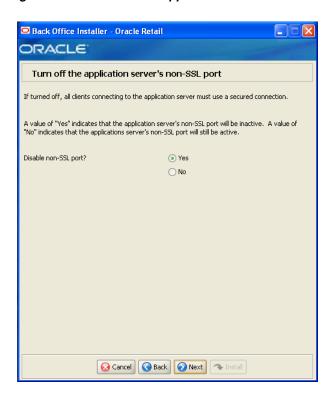
Details	Content	
Field Title	Sample template data file	
Field Description	Enter the path to the sample templates to be loaded into the database schema.	
	You can obtain the sample-template-13.4.5.zip file from the Oracle Software Delivery Cloud at the following Web site:	
	https://edelivery.oracle.com/	
Example	<pre>C:\oracle\retail\samples\sample-template.zip</pre>	

Figure A-41 Value-Added Tax (VAT)



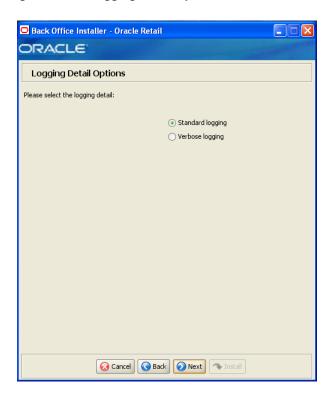
Details	Content	
Field Title	Enable VAT?	
Field Description	Sets whether Value-Added Tax is used in Back Office.	
	■ To enable Back Office to use VAT, choose Yes .	
	■ To not use VAT, choose No .	
Example	No	

Figure A-42 Turn Off the Application Server's Non-SSL Port



Details	Content		
Field Title	Disable non-SSL port?		
Field Description	eld Description Sets whether connecting to the application server requires a secured connection.		
	Note: It is recommended that you disable the non-SSL port in order to increase the security of your environment.		
	■ To disable the use of a non-SSL port, choose Yes .		
	■ To enable using a non-SSL port, choose No .		
	If you select Yes, see "Disabled Non-SSL Port" in Chapter 3.		
Example	Yes		

Figure A-43 Logging Detail Options



Details	Content		
Field Title	Please select the logging detail		
Field Description	Choose the level of logging.		
	■ To only log some of the messages, choose Standard Logging .		
	■ To log all of the messages, choose Verbose Logging .		
Example	Standard logging		

Figure A-44 Installation Progress

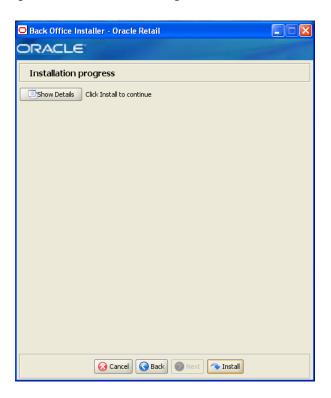
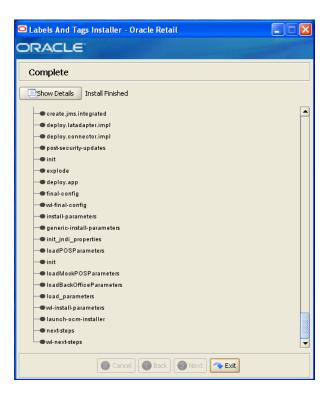


Figure A-45 Installation Complete



After the installer completes, the Oracle Configuration Manager (OCM) installer runs if OCM is not already installed. For information on OCM, see "Oracle Configuration Manager" in Chapter 3.

Α	-4	6

Appendix: Installer Silent Mode

In addition to the GUI and text interfaces of the Back Office installer, there is a silent mode that can be run. This mode is useful if you wish to run a new installation and use the settings you provided in a previous installation. It is also useful if you encounter errors during 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 and the cwallet.sso file is created. 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 and cwallet.sso files from a previous run, follow these instructions:

- Edit the ant.install.properties file and correct any invalid settings that may have caused the installer to fail in its previous run.
- 2. If the previous install was successful, the cwallet.sso file is found in the installation directory for that install. Copy the cwallet.sso file to <INSTALL_DIR> for this silent install.
- **3.** Run the installer again with the silent argument.

install.cmd silent weblogic

Appendix: Reinstalling Back Office

Back Office does not provide the capability to uninstall and reinstall the application. If you need to run the Back Office installer again, perform the following steps.

Reinstalling Back Office on the Oracle Stack

To reinstall:

- If you are using a managed server, stop the managed server. Stop the WebLogic
- **2.** Delete the domain.
- Recreate the Back Office domain. If you are using a managed server, add the managed server as part of recreating the domain.
- If you are using a managed server, start the managed server. Start the administration domain.
- Run the Back Office installer. For more information, see "Run the Back Office Application Installer" in Chapter 3.

Appendix: URL Reference

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

JDBC URL for an Oracle 12c Database

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

Syntax: jdbc:oracle:thin:@<host>:<port>:<service>

- <host>: host name of the database server
- <port>: database listener port
- <service>: system name for the database

For example, jdbc:oracle:thin:@myhost:1525:myservice

Add the following entry to the listener.ora:

USE_SID_AS_SERVICE_listener=on

JDBC URL for an Oracle 11g Database

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

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

- <host>: host name 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: t3://<host>:<port>

- <host>: host name selected when the WebLogic domain was created
- <port>: port number selected when the WebLogic domain was created

For example, t3://adminserver:7001

Deployer URI

Used by the Oracle Ant tasks to deploy an application to a WebLogic. 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.

Syntax: input.deployer.uri = t3://<host>:<port>

- <host>: host name selected when the WebLogic domain was created
- <port>: port number selected when the WebLogic domain was created

For example, input.deployer.uri = t3://localhost:7003

Appendix: Common Installation Errors

This appendix describes some common errors encountered during installation of Back 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 needs to be set to a version 6 JDK. Set JAVA_HOME to a Java development kit of version 6 or later and run the installer again.

WebLogic Domain Does Not Exist

Symptom:

The application installer quits with the following error message:

BUILD FAILED

C:\tmp\j2ee\orbo\staging\ORBO-trunk\build.xml:941: The following error occurred while executing this line:

C:\tmp\j2ee\orbo\staging\ORBO-trunk\build-common-wl.xml:83: startWebLogic.sh under C:/Oracle/Middleware/user_projects/domains/base_domain is missing. Installation cannot continue.

Solution:

This error occurs because the WebLogic domain provided does not exist.

Make sure that the domain exists, and then check the ant.install.properties file for entry mistakes. Pay close attention to the input.deployer.uri (see Appendix D), 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).

WebLogic Domain Server is Not Started

Symptom:

The application installer quits with the following error message:

BUILD FAILED

C:\tmp\j2ee\orbo\staging\ORBO-trunk\build.xml:1022: The following error occurred w hile executing this line:

C:\tmp\j2ee\orbo\staging\ORBO-trunk\build-common-wl.xml:152: url http://localhost: 7001/console is not available. Installation cannot continue.

Solution:

This error occurs because the WebLogic domain server provided is not running.

Make sure that the WebLogic domain server is running, and then check the ant.install.properties file for entry mistakes. Pay close attention to the input.deployer.uri (see Appendix D), input.wl.domain.path, 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).

Appendix: Installation Order

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

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

Enterprise Installation Order

1. Oracle Retail Merchandising System (RMS), Oracle Retail Trade Management (RTM), Oracle Retail Sales Audit (ReSA), Optional: Oracle Retail Fiscal Management (ORFM)

> **Note:** ORFM is an optional application for RMS if you are implementing Brazil localization.

- Oracle Retail Service Layer (RSL)
- Oracle Retail Extract, Transform, Load (RETL)
- Oracle Retail Active Retail Intelligence (ARI)
- Oracle Retail Warehouse Management System (RWMS)
- Oracle Retail Invoice Matching (ReIM)
- Oracle Retail Price Management (RPM)

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

- Oracle Retail Allocation
- Oracle Retail Central Office (ORCO)
- **10.** Oracle Retail Returns Management (ORRM)
- 11. Oracle Retail Back Office (ORBO)
- **12.** Oracle Retail Store Inventory Management (SIM)

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

- **13.** Oracle Retail Predictive Application Server (RPAS)
- **14.** Oracle Retail Demand Forecasting (RDF)
- **15.** Oracle Retail Category Management (CM)
- **16.** Oracle Retail Replenishment Optimization (RO)
- 17. Oracle Retail Analytic Parameter Calculator Replenishment Optimization (APC RO)
- **18.** Oracle Retail Regular Price Optimzation (RPO)
- **19.** Oracle Retail Merchandise Financial Planning (MFP)
- **20.** Oracle Retail Size Profile Optimization (SPO)
- **21.** Oracle Retail Assortment Planning (AP)
- 22. Oracle Retail Item Planning (IP)
- 23. Oracle Retail Item Planning Configured for COE (IP COE)
- **24.** Oracle Retail Advanced Inventory Planning (AIP)
- **25.** Oracle Retail Integration Bus (RIB)
- **26.** Oracle Retail Point-of-Service (ORPOS)
- **27.** Oracle Retail Markdown Optimization (MDO)
- **28.** Oracle Retail Clearance Optimization Engine (COE)
- 29. Oracle Retail Analytic Parameter Calculator for Markdown Optimization (APC-MDO)
- **30.** Oracle Retail Analytic Parameter Calculator for Regular Price Optimization (APC-RPO)
- **31.** Oracle Retail Promotion Intelligence and Promotion Planning and Optimization (PI-PPO)
- **32.** Oracle Retail Analytics
- **33.** Oracle Retail Workspace (ORW)