**Oracle® Retail Mobile Point-of-Service**

Installation Guide

Release 12.0.2

March 2008

ORACLE®

Oracle Retail Mobile Point-of-Service Installation Guide,  Release 12.0.2

**Value-Added Reseller (VAR) Language**

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

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

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

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

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

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

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

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

(ix) the software component known as **i-net Crystal-Clear™** developed and licensed by I-NET Software Inc. of Berlin, Germany, to Oracle and imbedded in the Oracle Retail Central Office and Oracle Retail Back Office applications.

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

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

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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 Mobile Point-of-Service documentation set or in the Oracle Retail Point-of-Service documentation set:

- *Oracle Retail Mobile Point-of-Service Release Notes*
- *Oracle Retail Mobile Point-of-Service Operations Guide*
- *Oracle Retail Mobile Point-of-Service User Guide*

## Customer Support

- https://metalink.oracle.com

When contacting Customer Support, please provide:

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

## Review Patch Documentation

For a base release (".0" release, such as 12.0), Oracle Retail strongly recommends that you read all patch documentation before you begin installation procedures. Patch documentation can contain critical information related to the base release, based on new information and code changes that have been made since the base release.

## Oracle Retail Documentation on the Oracle Technology Network

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

http://www.oracle.com/technology/documentation/oracle_
retail.html

Documentation should be available on this Web site within a month after a product release. Note that documentation is always available with the packaged code on the release date.

## Conventions

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. |

# 1

# Pre-Installation Tasks

Mobile Point-of-Service is a subset of Point-of-Service. It provides wireless access to Point-of-Service functions through the use of a handheld device.

Mobile Point-of-Service runs as a process on the store server. The server process passes Point-of-Service information to the wireless devices. The wireless devices run a web browser interface and connect to a specific URL to talk to the server process. The server process does not have a user interface.

Mobile Point-of-Service transactions propagate the same way as Point-of-Service transactions. They are stored in a POSlog and can be sent to Oracle Retail Central Office in an xml file or by queue.

> **Note:** The Oracle stack and IBM stack are the configurations that were tested for this release. The components required for each stack are listed in this chapter. For each component, the product and the version that were used for testing are included. While Mobile Point-of-Service may work in other configurations, these are the configurations that are supported for this release.

## Check Hardware and Software Requirements

Table 1–1 and Table 1–2 list the general requirements for hardware and software and the versions tested for this release:

*Table 1–1    Mobile Point-of-Service Server Requirements*

| Component | Oracle Stack | IBM Stack |
|---|---|---|
| Hardware | x86-32 bit | x86-32 bit |
| Operating System | Windows 2003 Server | IBM IRES v2.1.4 |
| Database | Oracle 10g R2 (10.2.0.2.0) | DB2 Express v9.1 |
| J2EE Application Server | Oracle 10g AS/R3 (10.1.3) | IBM WebSphere 6.1 |
| J2EE Application Server JVM | Sun 1.4.2.x | (included in WRS) |
| JDK | Sun build 1.4.2_13-b06 | IBM build cxia32142-20060421 (SR5) |
| System Management Agents | Oracle Enterprise Manager 10g version 10.2 | Oracle Enterprise Manager 10g version 10.2 |

*Table 1–2    Mobile Point-of-Service Handheld Requirements*

| Component | Oracle Stack and IBM Stack |
|---|---|
| Handheld wireless device | Symbol 8146 |
| Printer | Zebra Cameo II Printer/MSR with Zebra Active X control version 1.8 preinstalled |
| Operating System | Microsoft Windows Mobile 2003 version 4.20 using Pocket IE packaged with Pocket PC |

> **Note:**   All testing was completed with 128-bit encryption turned on.

## ISD Authorization Transaction Testing

ISD authorization transaction testing was done with Web Sentry version 249. The capture method used was terminal capture. The following applications were tested:

- ISD Host Switch version 6.2.1.0015
- ISD Store and Forward module version 6.2.1.001

> **Note:**   Host capture is not supported.

Table 1–3 shows the transaction types and messages that were tested.

*Table 1–3    ISD Authorization Transaction Set Tested*

| Transaction Type | Transaction Type Message Sent from ISD to Mobile Point-of-Service |
|---|---|
| Credit Card Tender | ■ Credit Card Sale Approval<br>■ Credit Card Sale Decline |

# 2

# Installation on the Oracle Stack using Windows

This chapter provides information about the installation procedures for Oracle Retail Mobile Point-of-Service on the Oracle stack using Windows.

## Expanding the Mobile Point-of-Service Distribution

To extract the Mobile Point-of-Service files:

1. Extract the `ORMPOS-12.02.zip` file from the Mobile Point-of-Service distribution.

2. Copy or upload `ORMPOS-12.02.zip` to the installation directory and extract its contents. In this installation guide, `<INSTALL_DIR>` is used for that directory.

## Obtaining Third-Party Library Files Required by Mobile Point-of-Service

The Mobile Point -of-Service application uses JBoss specific files. You can download the jboss application server to get access to the required files. You can get the download at the website:

`http://sourceforge.net/project/showfiles.php?group_id=22866&package_id=16942&release_id=312621`

Extract the following files:

- `jboss-4.0.2\lib\jboss-common.jar`

- `jboss-4.0.2\client\jboss-j2ee.jar`

- `jboss-4.0.2\client\jbossmq-client.jar`

## Running the Mobile Point-of-Service Application Installer

This installer will configure and deploy the Mobile Point-of-Service 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. It should point to your jdk.

3. Run the `MPOS.exe` script. This will launch the installer. After installation is complete, a detailed installation log file is created at
   *<mpos_install_directory>*`\mpos\logs\installer_log.txt`

## Resolving Errors Encountered During Application Installation

If the application installer encounters any errors, you can read them in the above mentioned log file.

For a list of common installation errors, see Appendix B.

## Fixing the Security in your JRE

To set up the security for the Mobile Point-of-Service application, do the following:

- Copy *<mpos_install_directory>*`\jre\lib\security\java.security` to `$JAVA_HOME$\jre\lib\security\java.security`.

- Copy *<mpos_install_directory>*`\jre\lib\security\java.policy` to `$JAVA_HOME$\jre\lib\security\java.policy`.

## Setting Register Accountability

The register accountability setting for each wireless device must be updated to enable register-authorized mode as opposed to cashier-authorized mode. Each device is treated as a register with a register number equal to the last three digits of its IP address.

> **Note:** An example of a register IP address is 172.16.33.4. The actual IP address is 172.016.033.004, where 004 are the last three digits.

Execute the following SQL statement once for each device. In this example, 001 are the last three digits of the actual IP address of the device and 04241 is the store ID.

```
update as_ws set cd_act='0' where id_ws='001' and id_str_rt='04241'
```

## Performing the Manual Integration

There following steps need to be completed manually to enable Mobile Point-of-Service to communicate with Back Office and Central Office. These steps enable Mobile Point-of-Service to receive parameter updates and to send EJournal data up to Central Office.

## Setting the Class Path Entries

Add the following class path entries to the *<mpos_install_directory>*`\mpos\bin\ulenv.bat` file:

```
SET CLASSPATH=%CLASSPATH%;%_360COMMON_PATH%\common\build\oc4j-internal.jar
SET CLASSPATH=%CLASSPATH%;%_360COMMON_PATH%\common\build\javax77.jar
SET CLASSPATH=%CLASSPATH%;%_360COMMON_PATH%\common\build\jms.jar
SET CLASSPATH=%CLASSPATH%;%_360COMMON_PATH%\common\build\optic.jar
```

## Setting Up Files

To set up the `.properties` files:

1.  If Back Office is installed, set up the file for Back Office. In the "ORACLE" section of the `<mpos_install_directory>`\mpos\lib\config\ `backoffice.jndi.properties` file, uncomment the following commands:

    ```
    java.naming.provider.url=ormi://localhost:12401
    java.naming.factory.initial=
        com.evermind.server.rmi.RMIInitialContextFactory
    java.naming.security.prinicipal=oc4jadmin
    java.naming.security.credentials=oc4jadmin
    ```

    > **Note:** If Oracle Retail Back Office is installed on a different host or Back Office does not use the default RMI port of 12401, change the URL to the correct value.
    >
    > If Oracle Application Server does not use the default user ID and password, change the values for `principal` and `credentials` to the correct user ID and password.

2.  In the "ORACLE" section of the `<mpos_install_directory>`\mpos\bin\ `jndi.properties` file, uncomment the following commands:

    ```
    java.naming.provider.url=ormi://localhost:12401
    java.naming.factory.initial=
        com.evermind.server.rmi.RMIInitialContextFactory
    java.naming.security.prinicipal=oc4jadmin
    java.naming.security.credentials=oc4jadmin
    ```

    > **Note:** If Oracle Retail Back Office is installed on a different host or Back Office does not use the default RMI port of 12401, change the URL to the correct value.
    >
    > If Oracle Application Server does not use the default user ID and password, change the values for `principal` and `credentials` to the correct user ID and password.

3.  Set up the `<mpos_install_directory>`\mpos\bin\comm.properties file. In the "ORACLE" section, uncomment the following commands:

    ```
    comm.jms.topicConnectionFactory.name=jms/ApplicationTCF
    comm.jms.queueConnectionFactory.name=jms/ApplicationQCF
    comm.jms.topicConnectionFactory.name.backoffice=
        jms/ApplicationTCF
    com.jms.queueConnectionFactory.name.backoffice=
        jms/ApplicationQCF
    ```

    > **Note:** If there are additional `comm.properties` files under `<mpos_install_directory>`\mpos directory, delete the files.

## Enabling Parameter Updates

You can apply parameters to multiple registers by creating parameter sets in Back Office and then distributing the parameter sets. Parameter updates are sent to a specific Mobile Point-of-Service register. The updates are then shared by all Mobile Point-of-Service registers.

To distribute updated parameters from Back Office to Mobile Point-of-Service:

1. Specify a Mobile Point-of-Service register number.

   To define the register number, set the WorkstationID parameter in the `<mpos_install_directory>\mpos\lib\config\applications.properties` file. Any valid Mobile Point-of-Service register can be used.

2. Edit the `<mpos_install_directory>\mpos\lib\com\extendyourstore\unleashed\services\main\ntierdispatcher.xml` file.

   The ParameterTechnician section should look like the following example:

   ```
   <TECHNICIAN name="ParameterTechnician" class = "ParameterTechnician"
        package = "com.extendyourstore.foundation.manager.parameter" export = "Y" >
   <PROPERTY propname="paramScript" propvalue=
        "classpath://config/manager/PosParameterTechnician.xml"/>
   <PROPERTY propname="JmsProviderTopicName" propvalue="jms/parameters"/>
   <PROPERTY propname="listenForUpdates" propvalue="Y"/>
   <PROPERTY propname="clientID" propvalue="reg001"/>
   <PROPERTY propname="jmsID" propvalue="oc4jadmin"/>
   <PROPERTY propname="jmsPassword" propvalue="oc4jadmin"/>
   </TECHNICIAN>
   ```

   If Oracle Application Server is not using the default user ID and password, change `jmsID` and `jmsPassword` shown in the previous example to the user ID and password being used.

   > **Note:** The value of `clientID` must match the `WorkstationID` specified in the `application.properties` file.
   >
   > If Oracle Application Server does not use the default user ID and password, change the values for `principal` and `credentials` to the correct user ID and password.

## Enabling Writing to the EJournal

Define whether Mobile Point-of-Service writes to the EJournal through the queue or the database or both.

To define how Mobile Point-of-Service writes to the EJournal:

1. Edit the `<mpos_install_directory>\mpos\lib\com\extendyourstore\unleashed\services\main\ntierdispatcher.xml` file in one of the following ways:

   - To write to the EJournal through the queue, uncomment the QueuedJournalManager section.

   - To write to the EJournal through the database, uncomment the DBJournalTech section.

- To write to the EJournal through both the queue and the database, uncomment both the QueuedJournalManager and DBJournalTech sections.

2. Edit the *<mpos_install_directory>*\mpos\lib\config\manager\ PosJournalManager.xml file. To write to the EJournal through the queue, uncomment the JMSJournalTech section.

## Results of the Installation

The default root directory for the application is `c:\OracleRetailStore`. In this guide, these directories are referred to as *<mpos_install_directory>*. The subdirectories listed in Table 2–1 are created.

*Table 2–1   <mpos_install_directory> Subdirectories*

| Name | Contents |
| --- | --- |
| 360common | Files shared by multiple Oracle Retail Strategic Store Solutions applications including 360Platform, Domain, and third party jar files |
| jre | Java runtime environment security files |
| logs | Log files |
| mpos | Mobile Point-of-Service files |
| Uninstaller Data | Files for uninstalling Mobile Point-of-Service |

Important subdirectories of the \mpos directory are shown in Table 2–2.

*Table 2–2   <mpos_install_directory\mpos Subdirectories*

| Name | Description |
| --- | --- |
| bin | Startup batch files and shell scripts |
| lib | Mobile Point-of-Service application and resource .jar files |
| lib\config | XML configuration files, .properties files and .dat files |
| 3rd party | Third party source .jar files |
| logs | Log files (additional log files are in the bin directory) |

## Running Mobile Point-of-Service

Run the Mobile Point-of-Service system by executing batch files, found in your installation bin directory.

Before running Mobile Point-of-Service, the store server must be running. Also, the store must be open before transactions can be completed with Mobile Point-of-Service. If the store server is not running, use the following script:

*<pos_install_directory>*\pos\bin\StoreServerConduit.bat

To run Mobile Point-of-Service:

1. Start the Mobile Point-of-Service server. If it is not running, use the following script. This script also starts the Apache Tomcat web server.

   *<mpos_install_directory>*\mpos\bin\ulremote.bat

**2.** Open a browser. Enter the following for the URL, where
*<mpos-server-hostname>* is the hostname or IP address of the machine
running the store server and the Mobile Point-of-Service process:

```
http:\\<mpos-server-hostname>\unleashed\WebServerCRFServlet
```

# 3

# Installation on the IBM Stack using Linux

This chapter provides information about the installation procedures for Oracle Retail Mobile Point-of-Service on the IBM stack using Linux.

## Expanding the Mobile Point-of-Service Distribution

To extract the Mobile Point-of-Service files:

1. Extract the `ORMPOS-12.02.zip` file from the Mobile Point-of-Service distribution.

2. Copy or upload `ORMPOS-12.02.zip` to the installation directory and extract its contents. In this installation guide, `<INSTALL_DIR>` is used for that directory.

## Obtaining Third-Party Library Files Required by Mobile Point-of-Service

The Mobile Point-of-Service application uses specific files from JBoss and WebSphere. To obtain the necessary files:

1. To get the required JBoss files, download the jboss application server. You can get the download at the website:

   http://sourceforge.net/project/showfiles.php?group_
   id=22866&package_id=16942&release_id=312621

   Extract the following files:

   - `jboss-4.0.2/lib/jboss-common.jar`

   - `jboss-4.0.2/client/jboss-j2ee.jar`

   - `jboss-4.0.2/client/jbossmq-client.jar`

2. Some WebSphere specific files are needed to make use of JMS. Extract the required files from the following locations:

   - `<WAS_INSTALL_DIR>/AppServer/plugins/
     com.ibm.ws.runtime_6.1.0.jar`

   - `<WAS_INSTALL_DIR>/AppServer/runtimes/
     com.ibm.ws.admin.client_6.1.0.jar`

   - `<MQ_INSTALL_DIR>/java/lib/jms.jar`

   - `<WAS_INSTALL_DIR>/AppServer/lib/WMQ/java/lib/
     com.ibm.mqjms.jar`

   - `<WAS_INSTALL_DIR>/AppServer/lib/WMQ/java/lib/
     com.ibm.mq.jar`

- `<WAS_INSTALL_DIR>`/AppServer/lib/WMQ/java/lib/
  dhbcore.jar

## Running the Mobile Point-of-Service Application Installer

This installer will configure and deploy the Mobile Point-of-Service 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. It should point to your jdk.

3. Change the mode of `MPOS.bin` to executable.

4. Run the `MPOS.bin` script. This will launch the installer. After installation is complete, a detailed installation log file is created at `<mpos_install_directory>`/mpos/logs/installer_log.txt

## Resolving Errors Encountered During Application Installation

If the application installer encounters any errors, you can read them in the above mentioned log file.

For a list of common installation errors, see Appendix B.

## Fixing the Security in your JRE

To set up the security for the Mobile Point-of-Service application, do the following:

- Copy `<POS_install_directory>`/
  360common/jre_adjustments/lib/security/java.security.ibm to
  $JAVA_HOME$/jre/lib/security/java.security.

- Copy `<POS_install_directory>`/
  360common/jre_adjustments/lib/security/java.policy to
  $JAVA_HOME$/jre/lib/security/java.policy.

## Setting Register Accountability

The register accountability setting for each wireless device must be updated to enable register-authorized mode as opposed to cashier-authorized mode. Each device is treated as a register with a register number equal to the last three digits of its IP address.

> **Note:** An example of a register IP address is 172.16.33.4. The actual IP address is 172.016.033.004, where 004 are the last three digits.

Execute the following SQL statement once for each device. In this example, 001 are the last three digits of the actual IP address of the device and 04241 is the store ID.

```
update as_ws set cd_act='0' where id_ws='001' and id_str_rt='04241'
```

# Performing the Manual Integration

There following steps need to be completed manually to enable Mobile Point-of-Service to communicate with Back Office and Central Office. These steps enable Mobile Point-of-Service to receive parameter updates and to send EJournal data to Central Office.

## Configuring Files

To set up the `.properties` files:

1. Update the `/etc/hosts` file with the host names of the Back Office and Central Office servers and the IP address and host name where Point-of-Service is installed. This step is required for JMS messaging to work properly.

2. Add the following class path entries to the `<mpos_install_directory>`/mpos/bin/ulenv.sh file.

   ```
   CP=$CP:<WAS_INSTALL_DIR>/AppServer/plugins/com.ibm.ws.runtime_6.1.0.jar
   CP=$CP:<WAS_INSTALL_DIR>/AppServer/runtimes/com.ibm.ws.admin.client_6.1.0.jar
   CP=$CP:<MQ_INSTALL_DIR>/java/lib/jms.jar
   CP=$CP:<WAS_INSTALL_DIR>/AppServer/lib/WMQ/java/lib/com.ibm.mqjms.jar
   CP=$CP:<WAS_INSTALL_DIR>/AppServer/lib/WMQ/java/lib/com.ibm.mq.jar
   CP=$CP:<WAS_INSTALL_DIR>/AppServer/lib/WMQ/java/lib/dhbcore.jar
   ```

3. If Back Office is installed, set up the file for Back Office. In the "WebSphere" section of the `<mpos_install_directory>`/mpos/lib/config/backoffice.jndi.properties file, uncomment the following commands:

   ```
   java.naming.provider.url=corbaloc:iiop:<Back Office host name>:<Back Office port number>
   ```

4. In the `<mpos_install_directory>`/mpos/bin/jndi.properties file, uncomment the following commands:

   ```
   java.naming.provider.url=corbaloc:iiop:<Back Office host name>:<Back Office port number>
   ```

5. Set up the `<mpos_install_directory>`/mpos/bin/comm.properties file. Uncomment the following commands:

   ```
   comm.jms.topicConnectionFactory.name=jms/ApplicationTCF
   comm.jms.queueConnectionFactory.name=jms/ApplicationQCF
   comm.jms.topicConnectionFactory.name.backoffice=
       jms/ApplicationTCF
   comm.jms.queueConnectionFactory.name.backoffice=
       jms/ApplicationQCF
   ```

   **Note:** If there are additional `comm.properties` files under `<mpos_install_directory>`/mpos directory, delete the files.

## Enabling Parameter Updates

You can apply parameters to multiple registers by creating parameter sets in Back Office and then distributing the parameter sets. Parameter updates are sent to a specific Mobile Point-of-Service register. The updates are then shared by all Mobile Point-of-Service registers.

To distribute updated parameters from Back Office to Mobile Point-of-Service:

1.  Specify a Mobile Point-of-Service register number.

    To define the register number, set the WorkstationID parameter in the `<mpos_install_directory>`/mpos/lib/config/ applications.properties file. Any valid Mobile Point-of-Service register can be used.

2.  Edit the `<mpos_install_directory>`/mpos/lib/com/ extendyourstore/unleashed/services/main/ntierdispatcher.xml file.

    Update the ParameterTechnician section. Comment out the entries in the "Oracle" section and uncomment the entries in the "WebSphere" section.

    The ParameterTechnician section should look like the following example:

    ```
    <TECHNICIAN name="ParameterTechnician" class = "ParameterTechnician"
        package = "com.extendyourstore.foundation.manager.parameter" export = "Y" >
    <PROPERTY propname="paramScript" propvalue=
        "classpath://config/manager/PosParameterTechnician.xml"/>
    <PROPERTY propname="JmsProviderTopicName" propvalue="jms/parameters"/>
    <PROPERTY propname="listenForUpdates" propvalue="Y"/>
    <PROPERTY propname="clientID" propvalue="reg001"/>
    <PROPERTY propname="jmsID" propvalue="<UNIX user>"/>
    <PROPERTY propname="jmsPassword" propvalue="<password>"/>
    </TECHNICIAN>
    ```

    > **Note:** The value of `clientID` must match the `WorkstationID` specified in the `application.properties` file.

    > **Note:** You must create a UNIX user on the host where Back Office is installed and add that user to the `mqm` group. The values for `jmsID` and `jmsPassword` specified in the Password Technician definition must match the values for the UNIX user and password.

## Enabling Writing to the EJournal

Define whether Mobile Point-of-Service writes to the EJournal through the queue or the database or both.

To define how Mobile Point-of-Service writes to the EJournal:

1.  Edit the `<mpos_install_directory>`/mpos/lib/com/ extendyourstore/unleashed/services/main/ntierdispatcher.xml file in one of the following ways:

    ■   To write to the EJournal through the queue, uncomment the QueuedJournalManager section.

    ■   To write to the EJournal through the database, uncomment the DBJournalTech section.

    ■   To write to the EJournal through both the queue and the database, uncomment both the QueuedJournalManager and DBJournalTech sections.

2. Edit the `<mpos_install_directory>`/mpos/lib/config/manager/
PosJournalManager.xml file. To write to the EJournal through the queue,
uncomment the JMSJournalTech section.

## Results of the Installation

The default root directory for the application is /opt/OracleRetailStore. In this
guide, these directories are referred to as `<mpos_install_directory>`. The
subdirectories listed in Table 3–1 are created.

*Table 3–1    <mpos_install_directory> Subdirectories*

| Name | Contents |
| --- | --- |
| 360common | Files shared by multiple Oracle Retail Strategic Store Solutions applications including 360Platform, Domain, and third party jar files |
| jre | Java runtime environment security files |
| logs | Log files |
| mpos | Mobile Point-of-Service files |
| Uninstaller Data | Files for uninstalling Mobile Point-of-Service |

Important subdirectories of the /mpos directory are shown in Table 3–2.

*Table 3–2    <mpos_install_directory>/mpos Subdirectories*

| Name | Description |
| --- | --- |
| bin | Startup batch files and shell scripts |
| lib | Mobile Point-of-Service application and resource .jar files |
| lib/config | XML configuration files, .properties files and .dat files |
| 3rd party | Third party source .jar files |
| logs | Log files (additional log files are in the bin directory) |

## Running Mobile Point-of-Service

Run the Mobile Point-of-Service system by executing shell scripts, found in your
installation bin directory.

Before running Mobile Point-of-Service, the store server must be running. Also, the
store must be open before transactions can be completed with Mobile Point-of-Service.
If the store server is not running, use the following script.

`<pos_install_directory>`/pos/bin/StoreServerConduit.sh

To run Mobile Point-of-Service:

1. Start the Mobile Point-of-Service server. If it is not running, use the following
script. This script also starts the Apache Tomcat web server.

   `<mpos_install_directory>`/mpos/bin/ulremote.sh

2. Open a browser. Enter the following for the URL, where
`<mpos-server-hostname>` is the hostname or IP address of the machine
running the store server and the Mobile Point-of-Service process:

   http://<mpos-server-hostname>/unleashed/WebServerCRFServlet

# Appendix: Mobile Point-of-Service Application Installer Screens

You need the following details about your environment for the installer to successfully install the Mobile Point-of-Service 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   Introduction*
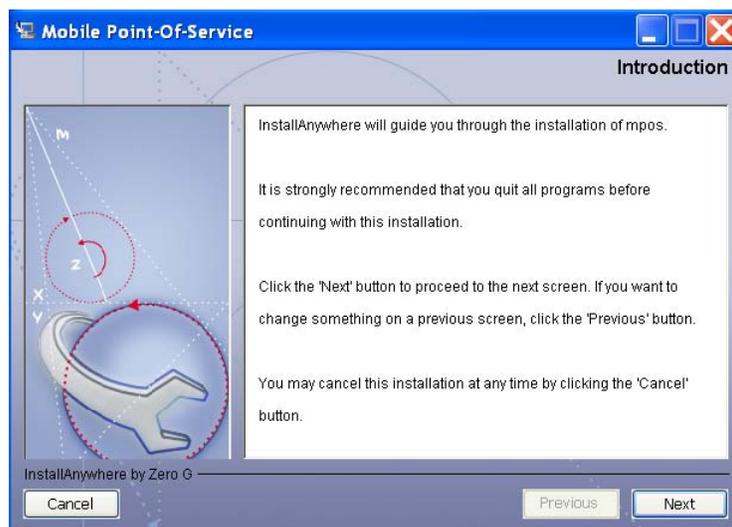
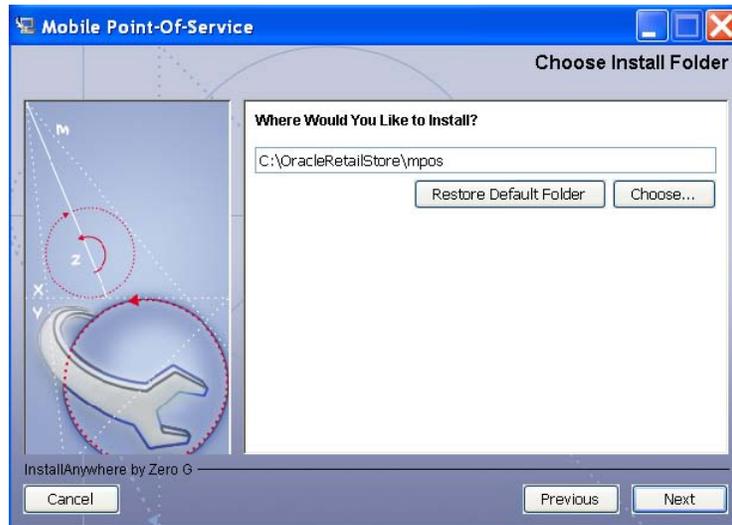*Figure A–2   Previous MPOS Install*
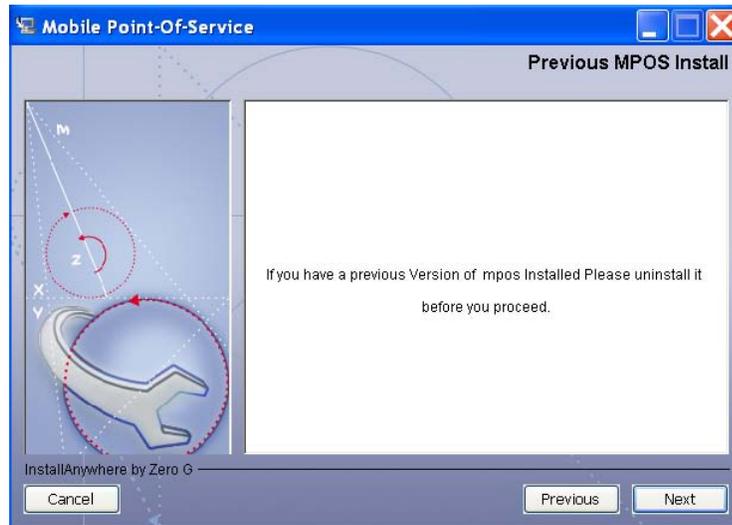


*Figure A–3   License Agreement*
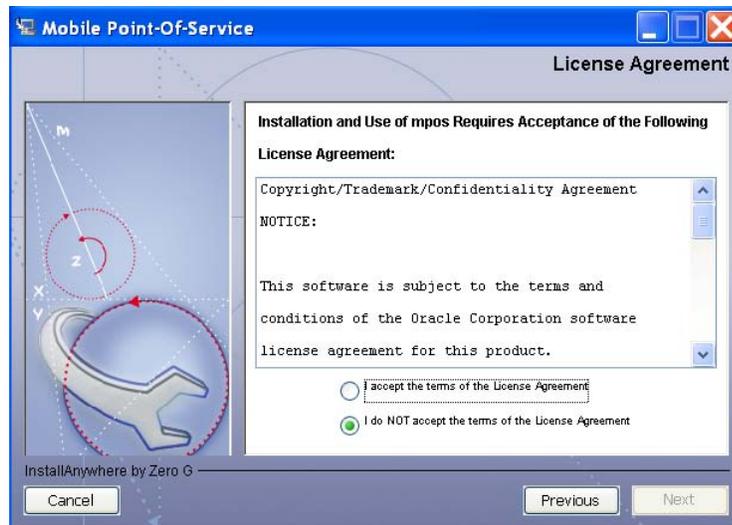


> **Note:**   You must choose to accept the terms of the license agreement in order for the installation to continue.
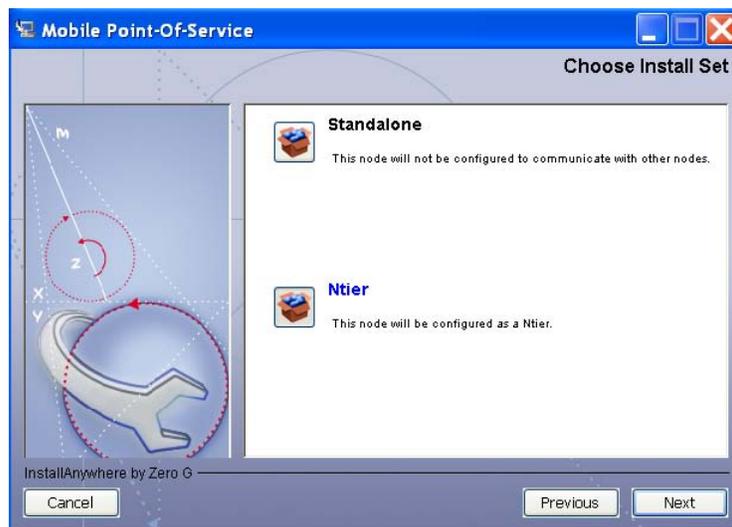
*Figure A–4   Choose Install Folder*



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

| Field Title | Where Would You LIke to Install? |
| --- | --- |
| Field Description | The directory into which the Mobile Point-of-Service files are copied. The default for the first directory in the path is `OracleRetailStore`. This directory should be the same for all Oracle Retail Strategic Store Solutions products. |
| | In this guide, `<mpos_install_directory>` refers to the selected installation directory. |
| | Files specific to Mobile Point-of-Service are copied to the `/mpos` subdirectory of `<mpos_install_directory>`. |
| Example | `C:\OracleRetailStore` |
| Notes | |

*Figure A–5   Choose Install Set*

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

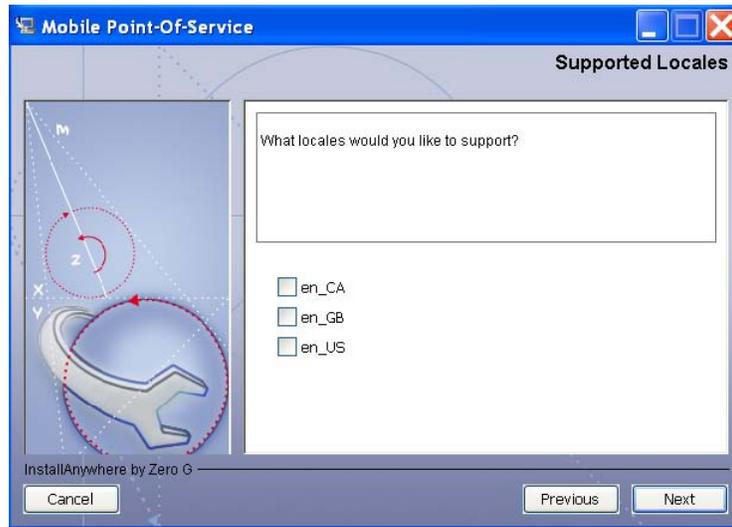| Field Title | Server Tier Type |
|---|---|
| Field Description | Choose the server tier type for this installation.<br><br>■ To run a standalone version, choose **Stand-alone**.<br><br>■ To run the N-tier version, choose **N-Tier**. |
| Example | N-Tier |
| Notes | |

*Figure A–6   Default Locale*
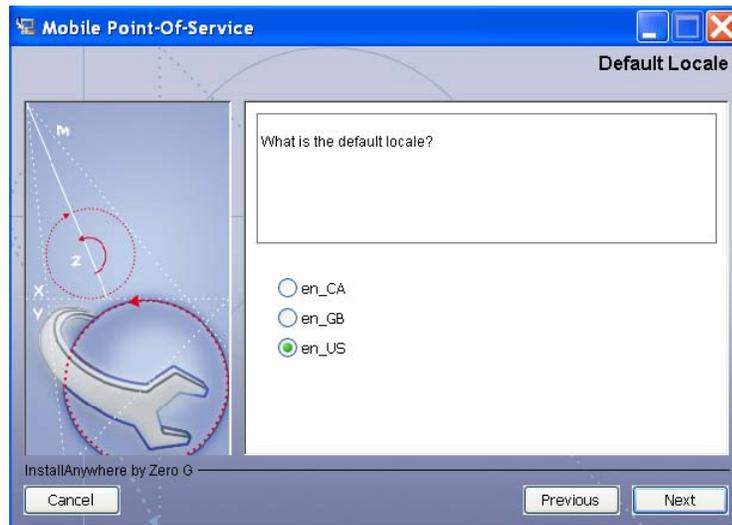


The field on this screen is described in the following table.

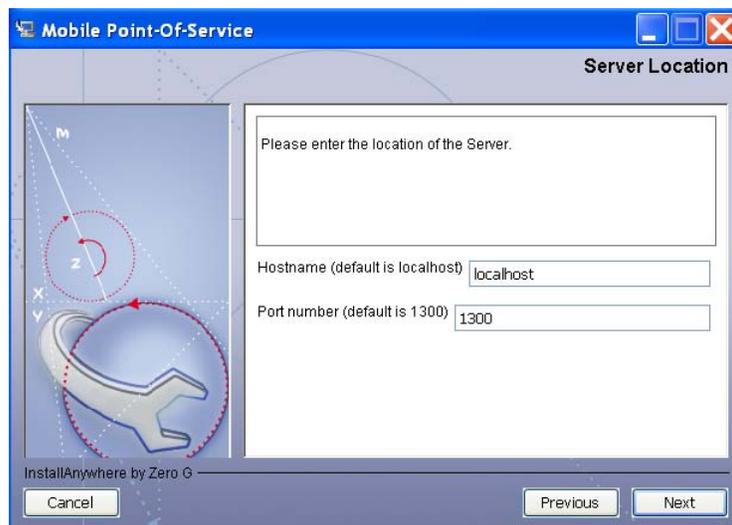| Field Title | What is the default locale? |
|---|---|
| Field Description | Limited locale support in Mobile Point-of-Service enables the date, time, and currency to be displayed in the format for the selected default locale.<br><br>■ To select the locale for Canada, choose en_CA.<br><br>■ To select the locale for Great Britain, choose en_GB.<br><br>■ To select the local for the United States, choose en_US.<br><br>**Note:** The only language currently supported is United States English. |
| Example | en_US |
| Notes | |

*Figure A–7   Supported Locales*



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

| Field Title | What locales would you like to support? |
| --- | --- |
| Field Description | In addition to the default locale, additional locales can be supported. Limited locale support in Mobile Point-of-Service enables the date, time, and currency to be displayed in the format for the selected locale. |
| | ■  To select the locale for Canada, choose en_CA. |
| | ■  To select the locale for Great Britain, choose en_GB. |
| | ■  To select the local for the United States, choose en_US. |
| | **Note:** The only language currently supported is United States English. |
| Example | en_US |
| Notes | |

*Figure A–8   Server Location*

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

| Field Title | Hostname |
| --- | --- |
| Field Description | Host name of the store server. |
| Example | localhost |
| Notes | |

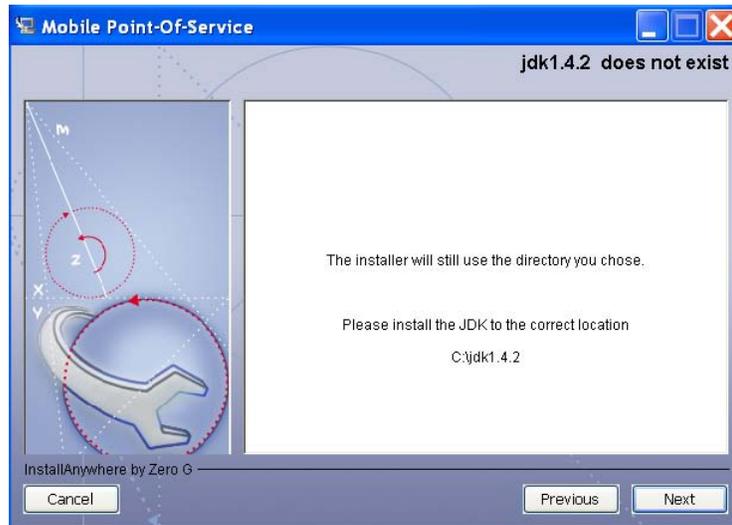| Field Title | Port |
| --- | --- |
| Field Description | Port number of the store server used for the communication between the store server and the host computer. |
| Example | 1300 |
| Notes | |

*Figure A–9  Where is jdk1.4.2 located?*
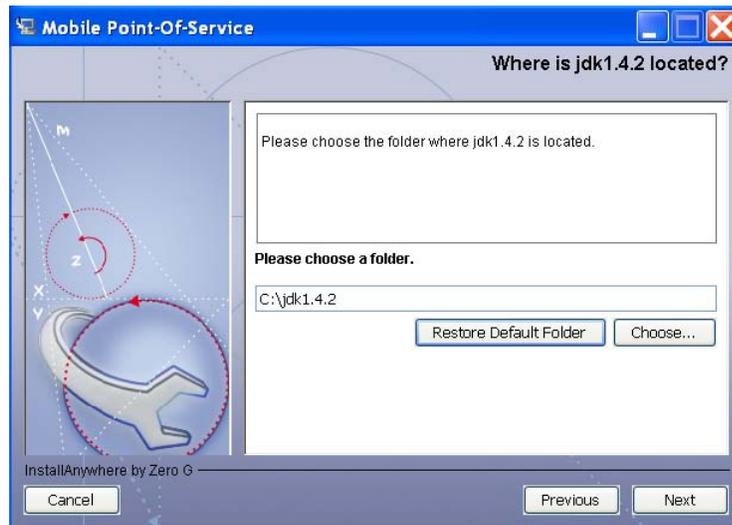
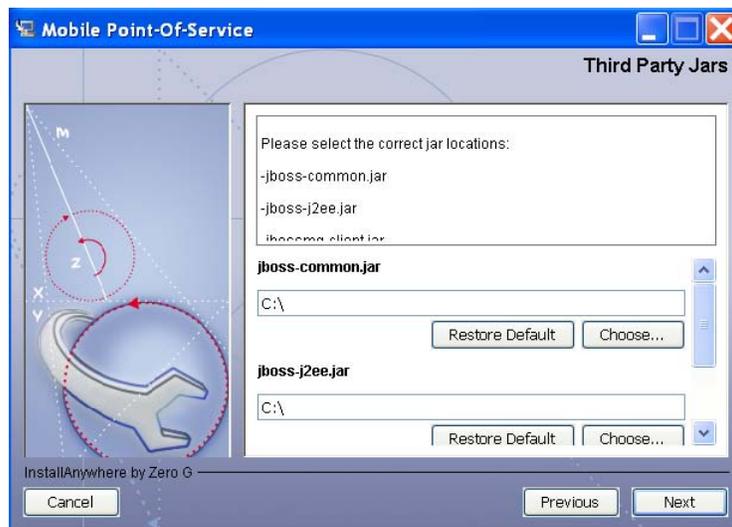

The field on this screen is described in the following table.

| Field Title | Folder |
| --- | --- |
| Field Description | Choose the location of JDK 1.4.2. |
| Example | `C:\j2sdk1.4.2_13` |
| Notes | |

*Figure A–10   jdk1.4.2 does not exist*



Installation of jdk1.4.2 is required.

*Figure A–11   Third Party Jars*



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

| Field Title | jboss-common.jar |
| --- | --- |
| Field Description | Choose the location of the `jboss-common.jar` file. |
| Example | `C:\jboss-4.0.2\lib\jboss-common.jar` |
| Notes | |

| Field Title | **jboss-j2ee.jar** |
| --- | --- |
| Field Description | Choose the location of the `jboss-j2ee.jar` file. |
| Example | `C:\jboss-4.0.2\lib\jboss-j2ee.jar` |
| Notes | |

| Field Title | **jbossmq-client.jar** |
| --- | --- |
| Field Description | Choose the location of the `jbossmq-client.jar` file. |
| Example | `C:\jboss-4.0.2\lib\jbossmq-client.jar` |
| Notes | |

*Figure A–12   What is the hostname of this mpos server?*
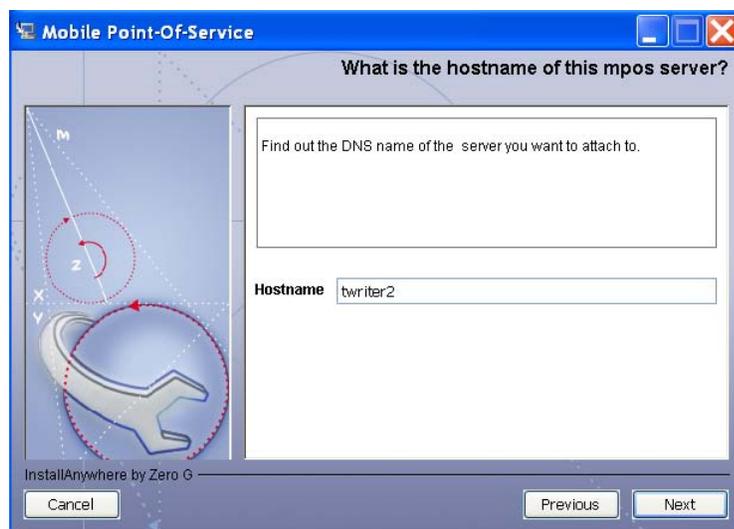


The field on this screen is described in the following table.

| Field Title | **Corporate Server Name** |
| --- | --- |
| Field Description | Enter the host name for the Mobile Point-of-Service server. |
| Example | twriter2 |
| Notes | |

*Figure A–13   Value-Added Tax (VAT)*
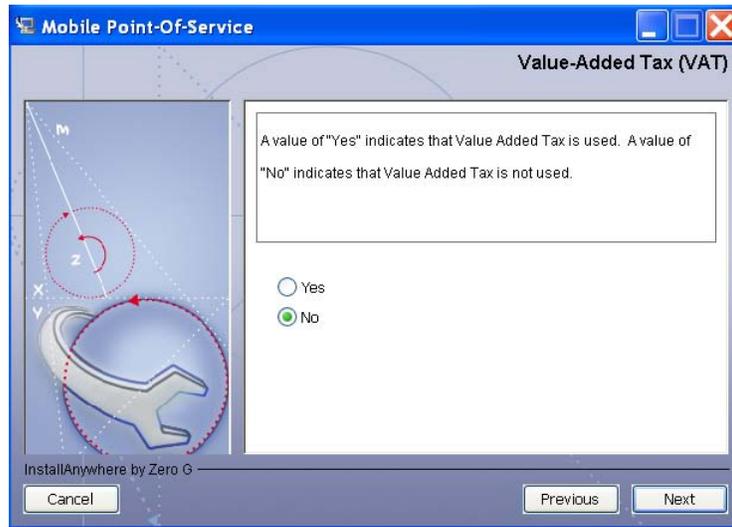


The field on this screen is described in the following table.

| Field Title | Value-Added Tax |
| --- | --- |
| Field Description | Choose whether Value Added Tax is used. |
| Example | No |
| Notes | |

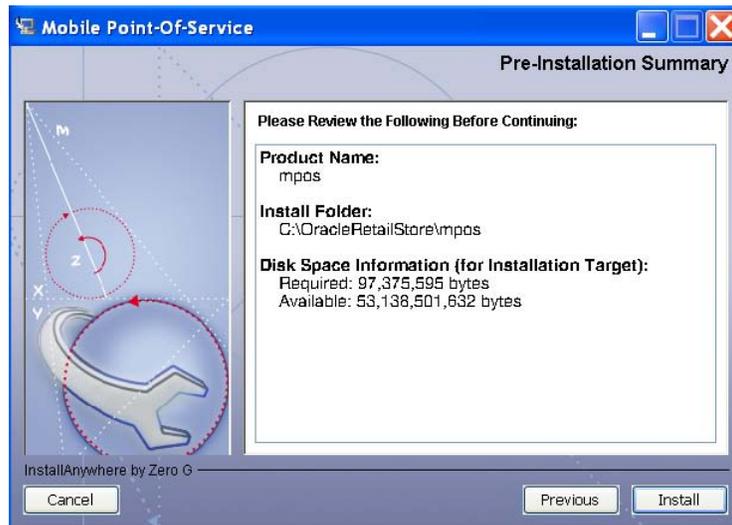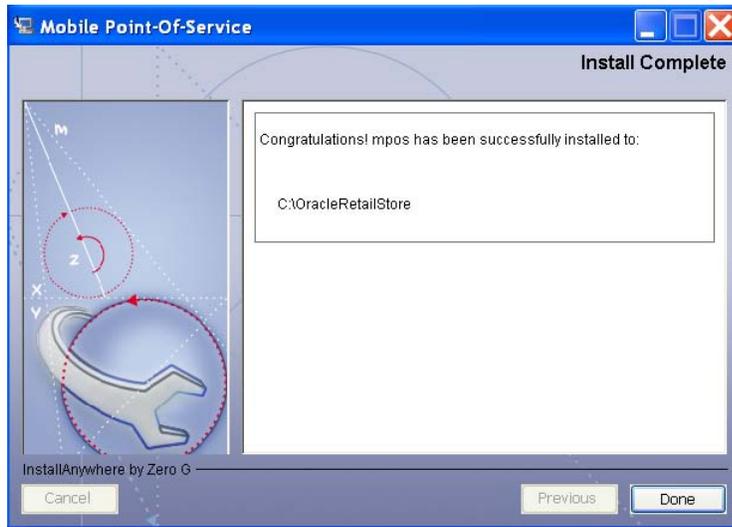*Figure A–14   Pre-Installation Summary*

*Figure A–15   Install Complete*

# B

# Appendix: Common Installation Errors

This appendix describes some common errors encountered during installation of
Mobile Point-of-Service.

## "Mpos installer finished with errors"

If you see this error message, there could be some settings incorrectly set or problems
with the installer itself. For more information, check the
`OracleRetailStore/mpos/logs/installer_log.txt` file.

## "Dispatcher.main, Exception: java.security.AccessControlException: access denied (java.util.PropertyPermission * read,write)"

**Symptom:**

The application dies when starting up:

```
 [java] Dispatcher.main, Exception: java.security.AccessControlException: access
denied (java.util.PropertyPermission * read,write)
    [java] java.security.AccessControlException: access denied
(java.util.PropertyPermission * read,write)
    [java]     at java.security.AccessControlContext.checkPermission(Unknown
Source)
    [java]     at java.security.AccessController.checkPermission(Unknown Source)
    [java]     at java.lang.SecurityManager.checkPermission(Unknown Source)
    [java]     at java.lang.SecurityManager.checkPropertiesAccess(Unknown Source)
    [java]     at java.lang.System.getProperties(Unknown Source)
    [java]     at
com.extendyourstore.foundation.tour.conduit.Dispatcher.<init>(Dispatcher.java:461)
    [java]     at
com.extendyourstore.foundation.tour.conduit.Dispatcher.getDispatcher(Dispatcher.ja
va:1301)
    [java]     at
com.extendyourstore.foundation.tour.conduit.Dispatcher.main(Dispatcher.java:2439)
    [java]     at
com.extendyourstore.foundation.config.TierLoader.main(TierLoader.java:359)
```

**Solution:**

This error usually occurs because the JRE that you are pointing to does not contain the
`updated java.security` and `java.policy` files.