Oracle® Retail Mobile Point-of-Service

Installation Guide

Release 12.0.11

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ORACLE®

Oracle Retail Mobile Point-of-Service Installation Guide, Release 12.0.11

Value-Added Reseller (VAR) Language

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(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.

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Oracle welcomes customers' comments and suggestions on the quality and usefulness of this document.

Your feedback is important, and helps us to best meet your needs as a user of our products. For example:

- Are the implementation steps correct and complete?
- Did you understand the context of the procedures?
- Did you find any errors in the information?
- Does the structure of the information help you with your tasks?
- Do you need different information or graphics? If so, where, and in what format?
- Are the examples correct? Do you need more examples?

If you find any errors or have any other suggestions for improvement, then please tell us your name, the name of the company who has licensed our products, the title and part number of the documentation and the chapter, section, and page number (if available).

> **Note:** Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the new Applications Release Online Documentation CD available on My Oracle Support and www.oracle.com. It contains the most current Documentation Library plus all documents revised or released recently.

Send your comments to us using the electronic mail address: retail-doc_us@oracle.com

Please give your name, address, electronic mail address, and telephone number (optional).

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If you require training or instruction in using Oracle software, then please contact your Oracle local office and inquire about our Oracle University offerings. A list of Oracle offices is available on our Web site at www.oracle.com.

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Preface

This Installation Guide describes the requirements and procedures to install this Oracle Retail Mobile Point-of-Service release.

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

- *Oracle Retail Mobile Point-of-Service Release Notes*

Customer Support

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

https://support.oracle.com

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, 12.0) or a later patch release (for example, 12.0.11). If you are installing the base release, additional patch, and bundled hot fix releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch and bundled hot fix releases can contain critical information related to the base release, as well as information about code changes since the base release.

Oracle Retail Documentation on the Oracle Technology Network

Documentation is packaged with each Oracle Retail product release. Oracle Retail product documentation is also available on the following Web site:

http://www.oracle.com/technology/documentation/oracle_retail.html

(Data Model documents are not available through Oracle Technology Network. These documents are packaged with released code, or you can obtain them through My Oracle Support.)

Documentation should be available on this Web site within a month after a product release.

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.

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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 - Credit Card Sale Decline

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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-12.0.11.zip` file from the Mobile Point-of-Service distribution.

2. Copy or upload `ORMPOS-12.0.11.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 Web site:

`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
```

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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-12.0.11.zip` file from the Mobile Point-of-Service distribution.

2. Copy or upload `ORMPOS-12.0.11.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 Web site:

   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

A

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
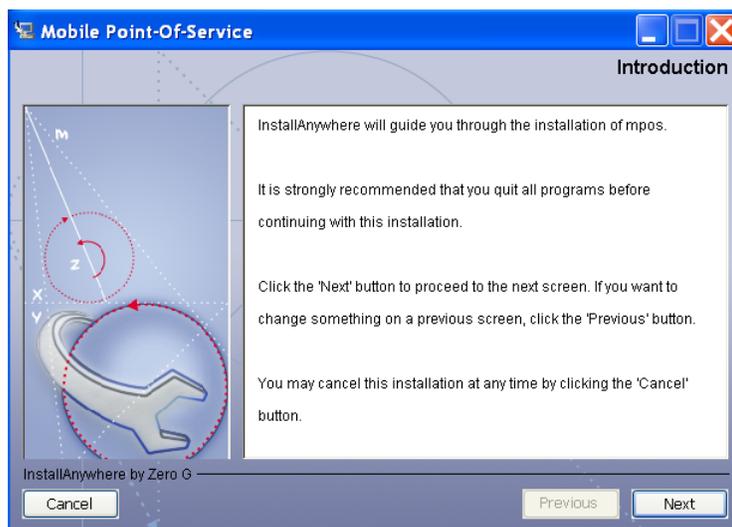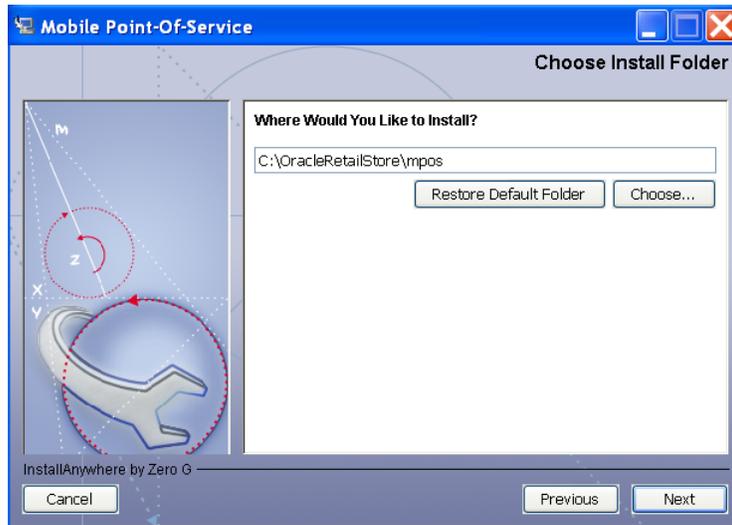
Figure A–2   Previous MPOS Install
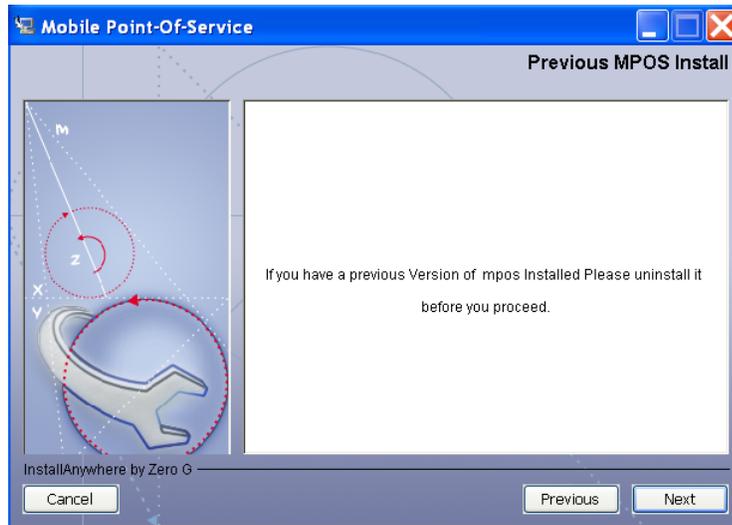
Figure A–3   License Agreement
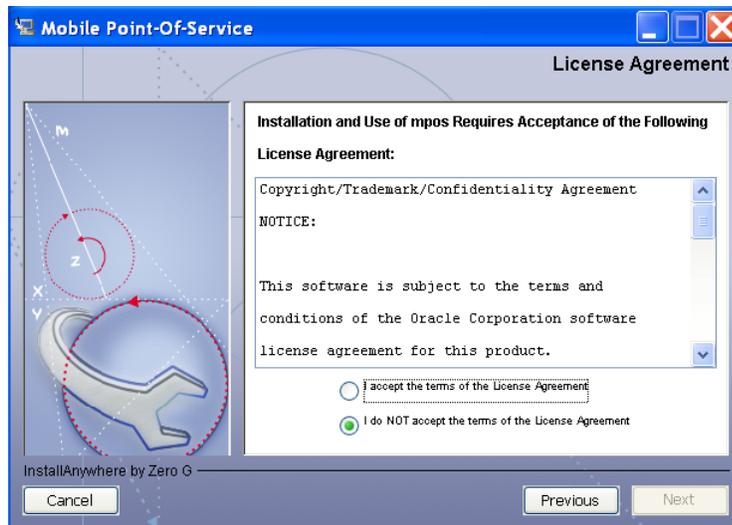
> **Note:**   You must choose to accept the terms of the license agreement in order for the installation to continue.
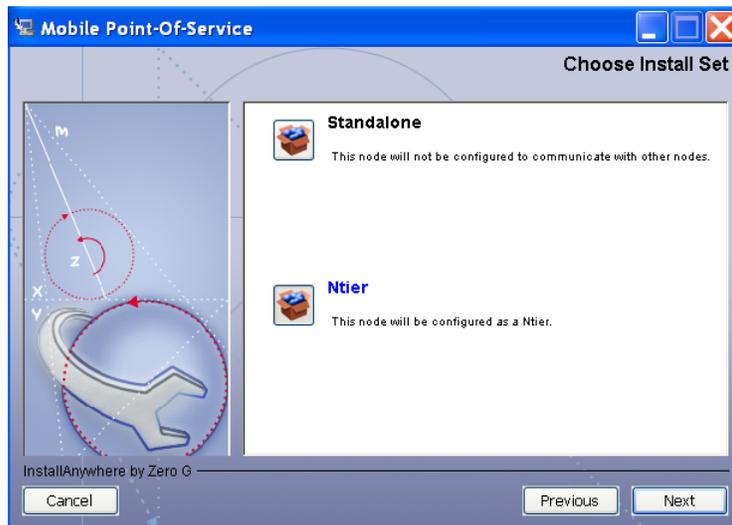
Figure A–4   Choose Install Folder

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

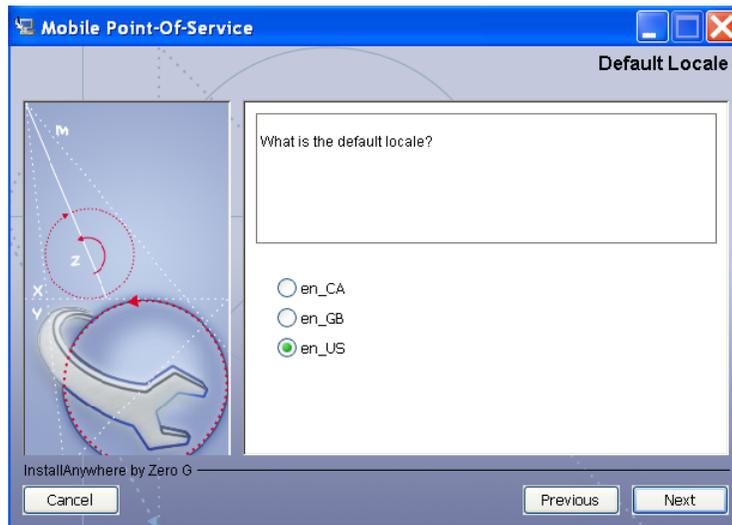| Field Title	Where Would You LIke to Install?
Field Description	The directory into which the Mobile Point-of-Service files are copied. The default for the first directory in the path is `OracleRetailStore`. This directory should be the same for all Oracle Retail Strategic Store Solutions products. In 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.

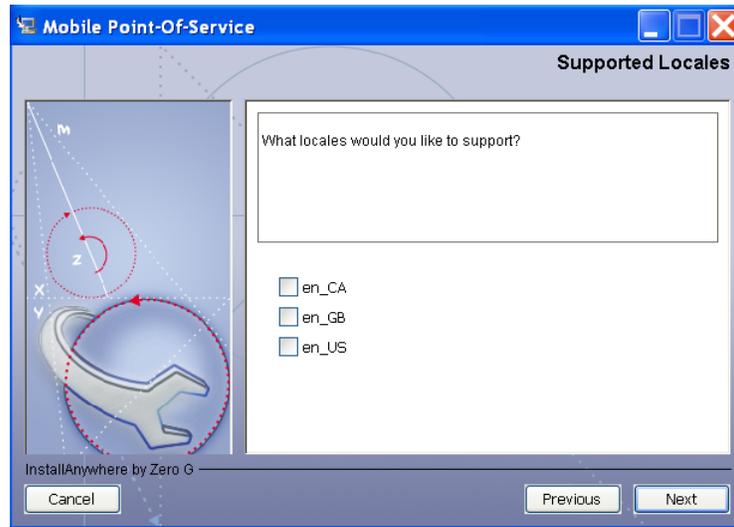| Field Title	Server Tier Type
Field Description	Choose the server tier type for this installation. ■ To run a standalone version, choose **Stand-alone**. ■ To run the N-tier version, choose **N-Tier**.
Example	N-Tier
Notes	

Figure A–6 Default Locale

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

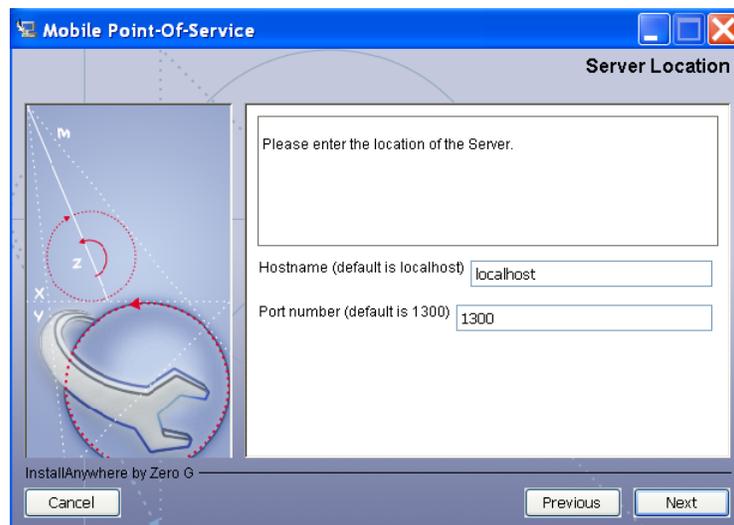| Field Title	What is the default locale?
Field Description	Limited locale support in Mobile Point-of-Service enables the date, time, and currency to be displayed in the format for the selected default locale. ■ To select the locale for Canada, choose en_CA. ■ To select the locale for Great Britain, 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–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	

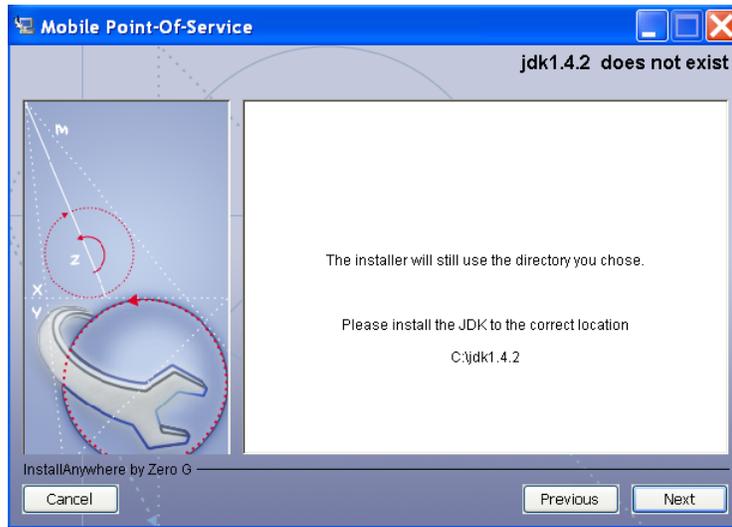| Field Title	Port
Field Description	Port number of the store server used for the communication between the store server and the host computer.
Example	1300
Notes	

Figure A–9 Where is jdk1.4.2 located?
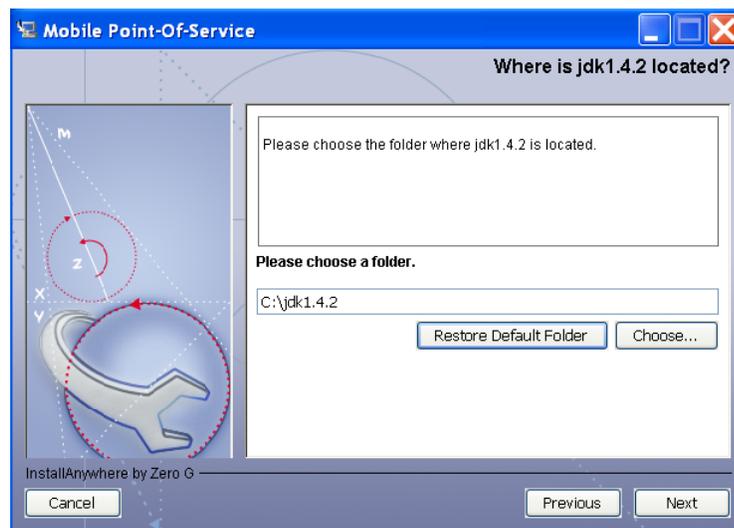
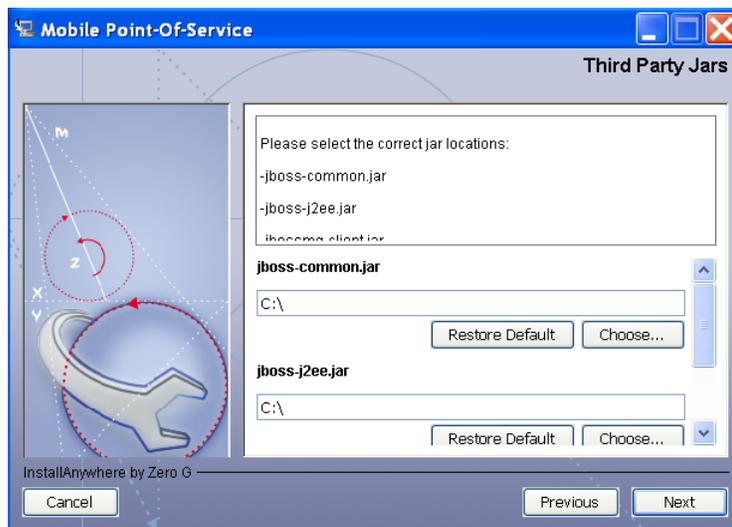

The field on this screen is described in the following table.

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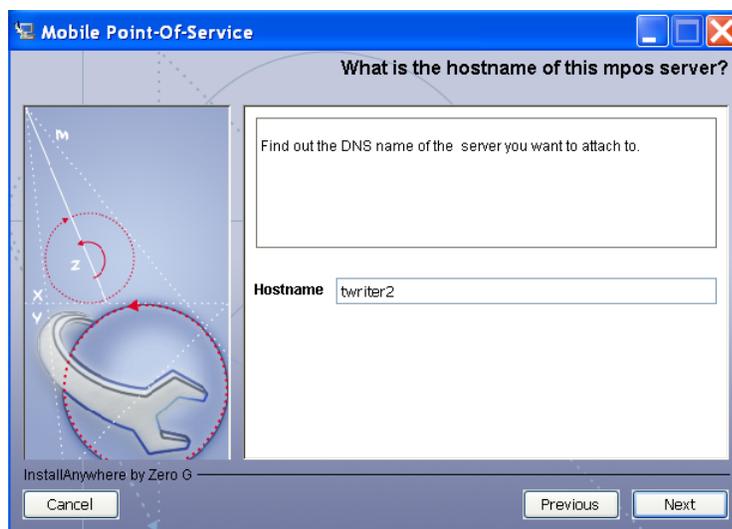
The field on this screen is described in the following table.

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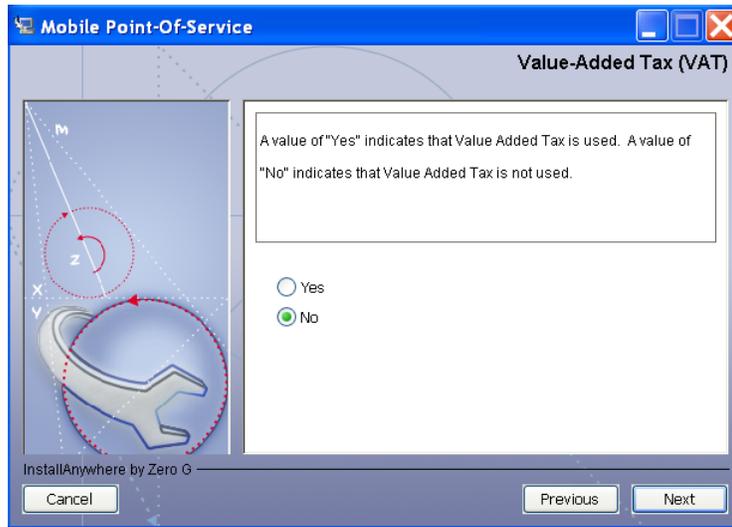
The field on this screen is described in the following table.

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

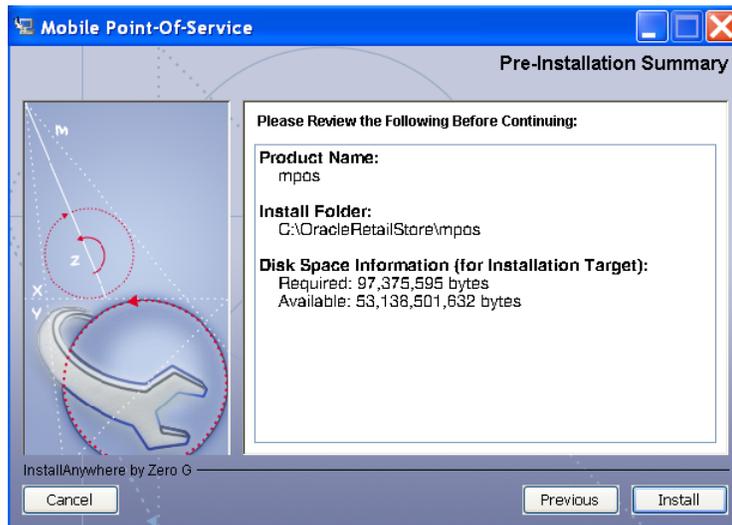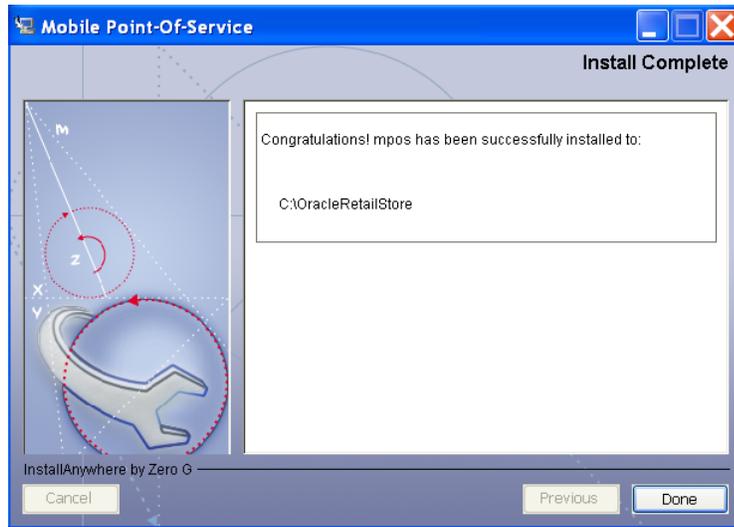*Figure A–14   Pre-Installation Summary*

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.