



Using IBM WebSphere Commerce with Oracle9i Database

Version 5A



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Note:

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 9.

Second Edition, June 2003

This edition applies to IBM WebSphere Commerce Business and Professional Edition, Version 5.4 and to all subsequent releases and modifications until otherwise indicated in new editions. Make sure you are using the correct edition for the level of the product.

The first edition of this book was originally released as *Using IBM WebSphere Commerce with an Oracle9i database*.

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Chapter 1. Introduction

This document is designed to be used in conjunction with the WebSphere® Commerce Installation Guides in order to install a WebSphere Commerce system that uses Oracle9i Database. It does not provide detailed instructions on installing Oracle9i Database or migrating an existing WebSphere Commerce system using Oracle8i Database.

WebSphere Commerce and Oracle9i Database

You may use WebSphere Commerce 5.4 Business Edition or WebSphere Commerce 5.4 Professional Edition, with Oracle9i Database on the following operating systems:

- IBM® AIX®
- Microsoft® Windows® 2000
- Microsoft Windows NT®
- Sun Microsystems Solaris Operating Environment

Refer to the Oracle9i Database documentation for hardware and software prerequisites, and installation instructions.

IBM does not support use of Oracle9i Database with WebSphere Commerce Professional Entry Edition or on operating systems not explicitly mentioned in this document.

WebSphere Commerce Studio Version 5.4 and Oracle9i Database

The integrated development (IDE) provided with WebSphere Commerce Studio Version 5.4 is VisualAge® for Java™, which does not support Oracle9i Database.

Updates to this book

This book was previously released as *Using IBM WebSphere Commerce with an Oracle9i database*.

A copy of this book, and any updated versions of this book, are available as PDF files from the WebSphere Commerce technical library Web site:

<http://www.ibm.com/software/commerce/library/>

Updated versions of this book are also available from the WebSphere Commerce Zone at WebSphere Developer Domain:

<http://www.ibm.com/software/wsdd/zones/commerce/>

Support information is available from the WebSphere Commerce support Web site:

<http://www.ibm.com/software/commerce/support/>

Chapter 2. Installing WebSphere Commerce for use with Oracle9i Database




You must use this document in conjunction with the appropriate WebSphere Commerce Installation Guide for your platform. Follow the instructions outlined in the *WebSphere Commerce Installation Guide* except where modifications are required as described in this document. Modifications are listed by chapter.

Installing Oracle9i Database and creating tablespaces




Install Oracle9i Database using the instructions provided in the *Installation Guide* with the following changes:

- Install the following components on your Oracle9i Database server:
 - Net Services
 - Oracle9 Enterprise Server
 - Oracle UNIX[®] Installer
 - SQL*Plus
 - TCP/IP Protocol Adapter
 - JDBC[™] Thin Driver
 - JDBC/OCI Driver
- Install the following components on your Oracle9i Database client:
 - Net Services
 - Oracle9 Enterprise Client
 - SQL*Plus
 - JDBC Thin Driver
 - JDBC/OCI Driver
- The Compatible Parameter is not required by Oracle9i Database.
- When creating tablespace for the WebSphere Commerce, WebSphere Application Server, and Payment Manager, the following will be the default paths to the datafile:




WebSphere Commerce tablespace

 AIX	/oracle/oradata/wc_SID/wcs01.ora
 Solaris	/opt/oracle/oradata/wc_SID/wcs01.ora
 Windows	drive:\oracle\oradata\wc_SID\wcss01.ora

WebSphere Application Server tablespace

 AIX	/oracle/oradata/wc_SID/was.ora
 Solaris	/opt/oracle/oradata/wc_SID/was.ora
 Windows	drive:\oracle\oradata\wc_SID\was.ora

Payment Manager tablespace

	/oracle/oradata/wc_SID/wpm.ora
	/opt/oracle/oradata/wc_SID/wpm.ora
	drive:\oracle\oradata\wc_SID\wpm.ora

- When completing the steps in "Modifying the *initSID.ora* file," cursor sharing is no longer available in Oracle9i, and the `SORT_AREA_SIZE` parameter has been changed to `sort_area_size`.
- When completing the test of your Oracle installation and tablespace creation, the steps to start the Oracle instance have changed. The new steps are:

```
su - oracle
sqlplus/nolog
connect / as sysdba
startup
quit
```
- You may also need to restart the Oracle listener. Refer to the Oracle9i Database documentation for information.

Installing WebSphere Commerce

When installing WebSphere Commerce using the installation program, disregard the version levels listed for Oracle Database on the installation panels, and on the summary panel. Although it states a previous level of Oracle Database, the installation will successfully detect Oracle9i Database and install WebSphere Commerce properly.

After you have installed WebSphere Application Server and WebSphere Commerce you need to apply the WebSphere Commerce fix pack 5.4.0.3 or higher in order for Oracle9i Database to be supported.

To obtain the most recent WebSphere Commerce fix pack, go to the following Web site:

www.ibm.com/software/webservers/commerce/wc_be/downloads.html




Modifying the environment variables used by the WebSphere Commerce commands

After installing Oracle9i Database, your Web server, WebSphere Application Server, and WebSphere Commerce, you must complete the steps in this section. Ensure that you complete this section *before* creating a WebSphere Commerce instance.




The commands provided in WebSphere Commerce call on other commands that contain environment variable settings. The commands that contain environment variable settings must be update to reflect the values required by Oracle9i database.

The following commands must be updated:




config_env

	<code>/usr/WebSphere/CommerceServer/bin/config_env.sh</code>
	<code>/opt/WebSphere/CommerceServer/bin/config_env.sh</code>
	<code>drive:\WebSphere\CommerceServer\bin\config_env.bat</code>


setenv

	<code>/usr/WebSphere/CommerceServer/bin/setenv.sh</code>
	<code>/opt/WebSphere/CommerceServer/bin/setenv.sh</code>
	<code>drive:\WebSphere\CommerceServer\bin\setenv.bat</code>

setdbenv.oracle

	<code>/usr/WebSphere/CommerceServer/bin/setdbenv.oracle.sh</code>
	<code>/opt/WebSphere/CommerceServer/bin/setdbenv.oracle.sh</code>
	<code>drive:\WebSphere\CommerceServer\bin\setdbenv.oracle.bat</code>

setupCmdLine

	<code>/usr/WebSphere/AppServer/bin/setupCmdLine.sh</code>
	<code>/opt/WebSphere/AppServer/bin/setupCmdLine.sh</code>
	<code>drive:\WebSphere\AppServer\bin\setupCmdLine.sh</code>

Modifying WebSphere Commerce commands on AIX

To modify the commands on AIX, do the following:

1. Open a command file in a text editor.
2. Search the file for the following text entries:
`export LIBPATH`
`export LD_LIBRARY_PATH`
3. Ensure that they match the following:
`export LIBPATH=$ORACLE_HOME/lib:$ORACLE_HOME/lib32:$LIBPATH`
`export LD_LIBRARY_PATH=$ORACLE_HOME/lib:$ORACLE_HOME/lib32:$LD_LIBRARY_PATH`
4. Save any changes and exit the text editor.

Modifying WebSphere Commerce commands on Solaris Operating Environment

Check the commands listed and ensure that any environment variables listed include the correct information for your Oracle9i Database installation.

Modifying WebSphere Commerce commands on Windows

On a Windows operating system, you may need to change the values for one or more of the following paths in the commands:

- JAVA_HOME
- ORACLE_HOME
- ORACLE_DRIVER
- ORACLE_CLASSPATH

For example, you may need to update three variables in the environment-setting files to point to the Oracle9i Database drivers. For the Windows operating system, the new lines would look something like this:

```
SET ORACLE_CLASSPATH=C:\oracle9\ora9\jdbc\lib\classes12.zip;  
SET ORACLE_DRIVER=C:\oracle9\ora9\jdbc\lib\classes12.zip;  
SET ORACLE_HOME=C:\oracle9\ora9;
```

Installing WebSphere Payment Manager

When installing Payment Manager, complete the steps outlined in the Installation Guide with the following exceptions:

- **Windows** When running the Payment Manager installation program, you will be prompted for the JDBC information for your database. Replace the information in the Installation Guide with the following:
 - JDBC Driver Class name: `oracle.jdbc.driver.OracleDriver`
 - JDBC Class location: `Oracle_install_directory\jdbc\lib\classes12.zip`
 - JDBC Driver shared library path: `Oracle_install_directory\bin\`
- **AIX** **Solaris** When running the Payment Manager installation program, you will be prompted for the JDBC information for your database. Replace the information in the Installation Guide with the following:
 - The Oracle JDBC Driver Classname. The default is `oracle.jdbc.driver.OracleDriver`
 - The location of the JDBC classes. The default location for the JDBC classes is `Oracle_home/jdbc/lib/classes12.zip`
 - The location of the JDBC shared library path. The default location for the JDBC shared library path is `Oracle_home/jdbc/lib`where `Oracle_home` is your Oracle home directory.

Pre-configuration steps

Windows In the Pre-configuration steps chapter, the "Configure Oracle on a remote machine — Verify your remote Oracle installation" section requires the following changes:

1. From a command prompt, change to the JDBC demonstration directory:
`cd drive:\oracle\jdbc\demo`
2. Unzip the file `demo.zip` to the same directory. This creates the `samples` subdirectory.
3. Change to the following directory:
`cd drive:\oracle\jdbc\demo\samples\thin\basic`
4. Make a back up copy of the `Employee.java` file.
`copy Employee.java Employee.java.bak`

5. Edit the Employee.java file and change the following line:

```
String url = "jdbc:oracle:thin:@d1sun511:1721:dbms733";  
String userName = "scott";  
String password = "tiger";
```

to:

```
String url = "jdbc:oracle:thin:@database_hostname:1521:oracle_SID";  
String userName = "db_userid";  
String password = "password";
```
6. In addition, change the following line in Employee.java:

```
ResultSet rset = stmt.executeQuery ("select ENAME from EMP");
```

to:

```
ResultSet rset = stmt.executeQuery ("select sysdate from dual");
```
7. Ensure that *drive:\oracle\jdbc\lib\classes12.zip* exists in the classpath before compiling Employee.java.
8. Complete all other steps as listed in the Installation Guide.

Creating a store from a sample store archive

Windows When creating a sample store, under the section "Creating a store archive," replace the list of Oracle services that need to be running with the following:

- Oracleora901HomeAgent
- Oracleora901HomeTNSListener
- OracleServiceSID

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