

IBM WebSphere Commerce Business Edition
IBM WebSphere Commerce Professional Edition



Installation Guide for Windows 2000

Version 5.5

Note:

Before using this information and the product it supports, be sure to read the general information under "Notices" on page 141.

First Edition, First Revision, February 2004

This edition applies to version 5.5 of the following products and to all subsequent releases and modifications until otherwise indicated in new editions:

- IBM WebSphere Commerce Business Edition for Windows 2000
- IBM WebSphere Commerce Professional Edition for Windows 2000

Ensure that you are using the correct edition for the level of the product.

Order publications through your IBM representative or the IBM branch office serving your locality.

IBM welcomes your comments. You can send your comments by using the online IBM WebSphere Commerce documentation feedback form, available at the following URL:

<http://www.ibm.com/software/webservers/commerce/rcf.html>

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About this book

Document description

This installation guide provides information on how to install and configure IBM® WebSphere® Commerce Business Edition and IBM WebSphere Commerce Professional Edition on Windows®. It is intended for system administrators or for anyone else responsible for performing installation and configuration tasks.

Updates to this book

To learn about last-minute changes to the product, refer to the README file in the root directory of WebSphere Commerce CD 1. In addition, 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/>

Conventions used in this book

This book uses the following highlighting conventions:

| | |
|----------------------|--|
| Boldface type | Indicates commands or graphical user interface (GUI) controls such as names of fields, icons, or menu choices. |
| Monospace type | Indicates examples of text you enter exactly as shown, file names, and directory paths and names. |
| <i>Italic type</i> | Used to emphasize words. Italics also indicate names for which you must substitute the appropriate values for your system. |







This icon marks a Tip - additional information that can help you complete a task.

Important

These sections highlight especially important information.

Attention

These sections highlight information intended to protect your data.

| | |
|---|--|
|  | Indicates information specific to WebSphere Commerce Business Edition |
|  | Indicates information specific to WebSphere Commerce Professional Edition. |
|  | Indicates information specific to DB2 Universal Database™ or using DB2 Universal Database with WebSphere Commerce. |
|  | Indicates information specific to Oracle9i Database or using Oracle9i Database with WebSphere Commerce. |

Terminology used in this book

This book uses the following terms:

cell Cells are arbitrary, logical groupings of one or more nodes in a WebSphere Application Server distributed network that are managed together. In this definition, a *node* is a single WebSphere Application Server instance. One or more cells managed by a single-occurrence of WebSphere Application Server deployment manager are called a *WebSphere Application Server deployment manager cell*.

cluster A group of occurrences of WebSphere Application Server running the same enterprise application. Clusters were known in previous releases as server groups or clones. The act of creating clusters is called *clustering*. Clustering was known as *cloning* in previous releases.

cluster member A single occurrence of WebSphere Application Server in a cluster.

federate To collect single occurrences of WebSphere Application Server into a cell to manage the occurrences together.

node Node has two different meanings in this book depending on the context in which it is used.

WebSphere Commerce installation

In the WebSphere Commerce installation instructions, a node is a single machine or machine partition with a unique IP host address on which you install one or more WebSphere Commerce components.

clustering

When discussing clustering, a node is a single occurrence of WebSphere Application Server and the applications that run inside the occurrence of WebSphere Application Server. A node in cell may or may not be running the same enterprise application as other nodes in the same cell.

Path variables

This guide uses the following variables to represent directory paths:

DB2_installdir

This is the installation directory for DB2 Universal Database. The default installation directory for DB2 Universal Database is C:\Program Files\WebSphere\SQLLIB.

HTTPServer_installdir

This is the installation directory for IBM HTTP Server. The default installation directory for IBM HTTP Server is C:\Program Files\WebSphere\IBMHttpServer.

Oracle_installdir

This is the installation directory for Oracle. The default installation directory for Oracle is C:\oracle\ora91.

SunONEweb_installdir

This is the installation directory for Sun ONE Web Server. The default installation directory for Sun ONE Web Server is C:\iPlanet\servers.

WAS_installdir

This is the installation directory for WebSphere Application Server. The default installation directory for WebSphere Application Server is C:\Program Files\WebSphere\AppServer.

WAS_ND_installdir

This is the installation directory for WebSphere Application Server Network Deployment. The default installation directory for WebSphere Application Server Network Deployment is C:\Program Files\WebSphere\NetworkDeployment.

WC_installdir

This is the installation directory for WebSphere Commerce. The default installation directory for WebSphere Commerce is C:\Program Files\WebSphere\CommerceServer55.

Knowledge requirements

This book should be read by system administrators or anyone else responsible for installing and configuring WebSphere Commerce.

People who are installing and configuring WebSphere Commerce should have knowledge in the following areas:

- Windows 2000 Server or Advanced Server
- Basic operating system commands
- DB2 Universal Database or Oracle9i Database
- IBM HTTP Server, Microsoft® Internet Information Services (IIS), or Sun ONE Web Server operation and maintenance
- Basic SQL commands
- The Internet

Refer to *WebSphere Commerce Administration Guide* and *WebSphere Commerce Security Guide* for more information on configuring and administering WebSphere Commerce.

To create and customize your store, you require knowledge of the following:

- WebSphere Application Server
- DB2 Universal Database or Oracle9i Database
- HTML and XML
- Structured Query Language (SQL)
- Java™ programming

Refer to *WebSphere Commerce Programming Guide and Tutorials* for more information on customizing your store or mall.

Oracle knowledge

This section lists some of the important Oracle concepts that you should know before using Oracle with WebSphere Commerce. You can find information on these items in the *Oracle9i Database Concepts* document provided with your Oracle system. *Before installing and setting up your Oracle system, it is highly recommended that you read and understand the Oracle documentation supplied with your purchase of Oracle, in particular, the Concepts, Administration, and Installation information.*

Some of the concepts that you need to understand before configuring your Oracle system to work with WebSphere Commerce include:

- An Oracle Instance
- Database structure and space management. This includes:
 - Logical database structure
 - Tablespaces
 - Schemas and schema Objects.
 - Data blocks, extents, and segments.
 - Physical database structure
 - Datafiles
 - Redo log files
 - Control files
- Structured Query Language (SQL)
- Memory structure and processes
 - System Global Area (SGA)
 - Program Global Area (PGA)
 - Oracle process architecture including server and background processes
- Communications Software and Net9
- The Program Interface
- Database Administrator user names
 - SYS
 - SYSTEM
- System Identifier (SID)
- Databases, tablespaces, and datafiles
 - The SYSTEM tablespace
 - Using multiple tablespaces
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 - Online and offline tablespaces
 - Temporary tablespaces
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Part 1. Getting ready to install WebSphere Commerce

Chapter 1. Welcome to WebSphere Commerce


This book describes how to install and configure WebSphere Commerce Version 5.5 for Windows 2000. It is intended for system administrators or for anyone else responsible for performing installation and configuration tasks.

If you have WebSphere Commerce Suite Version 5.1 or WebSphere Commerce Version 5.4 installed, follow the migration steps described in the *WebSphere Commerce Migration Guide* for Version 5.1 or the *WebSphere Commerce Migration Guide* for Version 5.4, as appropriate. The Migration Guides are available from the WebSphere Commerce technical library:

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

Products included with WebSphere Commerce

The following products are packaged with WebSphere Commerce:

- WebSphere Commerce:
 - WebSphere Commerce server, which includes:
 - LikeMinds client
 - Product Advisor
 - WebSphere Commerce Accelerator
 - WebSphere Commerce Administration Console
 - WebSphere Commerce Organization Administration Console
 - WebSphere Commerce Payments, which includes:
 - WebSphere Commerce Payments Cassette for VisaNet
 - WebSphere Commerce Payments Cassette for BankServACH
 - WebSphere Commerce Payments Cassette for Paymentech
 - WebSphere Commerce Payments CustomOffline Cassette
 - WebSphere Commerce Payments OfflineCard Cassette
 - Blaze Rules Server, version 4.5.5 and Blaze Innovator Runtime, Version 4.5.5
 - WebSphere Commerce Analyzer, Version 5.5
 - WebSphere Commerce 5.5 Recommendation Engine powered by LikeMinds
- IBM DB2 Universal Database Version 8.1.1 Enterprise Edition (DB2 Universal Database Version 8.1 Enterprise Edition with FixPak 1), which includes the following:
 - DB2 Universal Database Administration Clients
- IBM DB2[®] Text Extender 8.1
- IBM HTTP Server Version 1.3.26
- WebSphere Application Server Version 5.0
- IBM Directory Server 4.1.1
-  IBM Lotus[®] QuickPlace[®] 3.0
- IBM Lotus Sametime[®] 3.0

Important

All WebSphere Commerce components and the supporting software must run on the same operating system. The operating system must meet the requirements outlined in Chapter 2, "Preinstallation requirements," on page 9.

WebSphere Commerce does not support a heterogeneous operating environment — all nodes in a multiple node topology must run the same version and level of operating system as documented in Chapter 2, "Preinstallation requirements," on page 9.

Alternative Web servers

Although IBM HTTP Server is the Web server provided with WebSphere Commerce, Microsoft Internet Information Services (IIS) 5.0, and Sun ONE Web Server, Enterprise Edition 6.0 are also supported.

Alternative databases

Although IBM DB2 Universal Database Version 8.1.1 Enterprise Edition is the database provided with WebSphere Commerce, you can use Oracle 9i Database Release 2, Enterprise Edition or Standard Edition.

Components already installed

This section outlines tasks you must perform if you have already installed any of the IBM products that are included with WebSphere Commerce Version 5.5.

Non-IBM software used with WebSphere Commerce must be installed before installing WebSphere Commerce. Instructions for non-IBM software appear elsewhere in this book.

IBM DB2 Universal Database Version 8.1.1

If you are currently using IBM DB2 Universal Database Version 8.1 Workgroup Edition, you will be required to upgrade it to IBM DB2 Universal Database Version 8.1.1 Enterprise Edition.

Also, ensure that the DB2 Application Development Client is installed. WebSphere Commerce requires the DB2 Application Development Client to function correctly.

If you are currently using IBM DB2 Universal Database, Version 8.1 Enterprise Edition, you must apply DB2 Version 8.1, FixPak 1.

IBM HTTP Server Version 1.3.26

Preparing Secure Sockets Layer protocol for testing

If you have IBM HTTP Server already installed on your system, you must ensure that SSL is enabled. If SSL is enabled, you should be able to open the following URL in a Web browser:

```
https://host_name
```

where *host_name* is the fully qualified host name of the machine running IBM HTTP Server.

If you cannot open the URL above, you must enable SSL on the Web server. For instructions on enabling SSL, refer to the IBM HTTP Server documentation.

Before you open your store to shoppers, ensure you review *WebSphere Commerce Security Guide*.

IBM HTTP Server Version 1.3.26 and WebSphere Application Server Version 5.0

If you have IBM HTTP Server Version 1.3.26 and WebSphere Application Server Version 5.0 already installed, do the following:

1. Check for the existence of the WebSphere Application Server plug-in configuration file. The following is the full path for the plug-in configuration file:
`WAS_installdir/config/cells/plugin-cfg.xml`
2. Do one of the following, depending on the existence of the `plugin-cfg.xml` file:
 - If the `plugin-cfg.xml` file exists, ensure the plug-in has been applied to the `HTTPServer_installdir/conf/httpd.conf` file. The following four lines should exist in the file:

```
Alias /IBMWebAS/ WAS_installdir/web/  
Alias /WSsamples WAS_installdir/WSsamples/  
LoadModule ibm_app_server_http_module WAS_installdir/bin/  
mod_ibm_app_server_http.dll  
WebSpherePluginConfig WAS_installdir/config/cells/plugin-cfg.xml
```

These lines may not appear together — you may have perform a text search on the file to confirm the presence of these lines. If these lines are missing, add them to the end of the file and restart the Web server.

- If the `plugin-cfg.xml` file does not exist, ensure that the plug-in has *not* been applied to the `HTTPServer_installdir/conf/httpd.conf` file. The following four lines should not exist in the files. If any of the following four lines exist, remove them from the file:

```
Alias /IBMWebAS/ WAS_installdir/web/  
Alias /WSsamples WAS_installdir/WSsamples/  
LoadModule ibm_app_server_http_module WAS_installdir/bin/  
mod_ibm_app_server_http.dll  
WebSpherePluginConfig WAS_installdir/config/cells/plugin-cfg.xml
```

These lines may not appear together — you may have perform a text search on the file to confirm the presence of these lines. If any of these lines are present, remove them, save your changes, and restart the Web server.

Supported Web browsers

You can only access the WebSphere Commerce tools and online help using Microsoft Internet Explorer 6.0 from a machine running a Windows operating system on the same network as your WebSphere Commerce machine. You must use Internet Explorer full version 6.0 (also known as Internet Explorer 6.0 Service Pack 1 and Internet Tools) or later with the latest critical security updates from Microsoft — prior versions do not support full functionality of WebSphere Commerce tools.

Shoppers can access Web sites by using any of the following Web browsers, all of which have been tested with WebSphere Commerce:

- AOL 7 or above for Windows

- Microsoft Internet Explorer:
 - Version 5.5 or higher for Windows
 - Version 5 or higher for Macintosh
- Mozilla Version 1.0 or higher
- Netscape Version 6.0 or higher
- Netscape Navigator Version 4.6 or higher

Port numbers used by WebSphere Commerce

The following is a list of the default port numbers used by WebSphere Commerce or its component products. Ensure that you do not use these ports for non-WebSphere Commerce applications. If you have a firewall configured in your system, ensure that you can access these ports.

For instructions for learning which ports are in use, refer to your operating system documentation.

Important

This section only lists ports required by the software provided with WebSphere Commerce. For port numbers required by non-IBM software, refer to the documentation for the non-IBM software package.

| Port Number | Used By |
|--------------------|---|
| 21 | FTP port. This port is required when creating a WebSphere Commerce or WebSphere Commerce Payments instance that uses a remote Web server. |
| 80 | IBM HTTP Server. |
| 389 | Lightweight Directory Access Protocol (LDAP) Directory Server. |
| 443 | IBM HTTP Server – secure port. This secure port requires SSL. |
| 1099 | WebSphere Commerce Configuration Manager server. |
| 2809 | WebSphere Application Server Bootstrap address. |
| 5432 | WebSphere Commerce Payments non-secure server. |
| 5433 | WebSphere Commerce Payments secure server. This secure port requires SSL. |
| 5557 | WebSphere Application Server Internal Java Messaging Service server. |
| 5558 | WebSphere Application Server Java Messaging Service server queued address. |
| 5559 | WebSphere Application Server Java Messaging Service direct address. |
| 7873 | WebSphere Application Server DRS client address. |
| 8000 | WebSphere Commerce Tools. This secure port requires SSL. |
| 8002 | WebSphere Commerce Administration Console. This secure port requires SSL. |
| 8004 | WebSphere Commerce Organization Administration Console. This secure port requires SSL. |
| 8008 | IBM HTTP Server Administration port. |

- 8880 WebSphere Application Server SOAP Connector address.
 - 9043 WebSphere Application Server Administration Console Secure Port. This secure port requires SSL.
 - 9080 WebSphere Application Server HTTP Transport.
 - 9090 WebSphere Application Server Administration Console Port.
 - 9443 WebSphere Application Server HTTPS Transport Port.
 - 9501 WebSphere Application Server Secure Association Service.
 - 9502 WebSphere Application Server Common Secure Port.
 - 9503 WebSphere Application Server Common Secure Port.
 - 50000 DB2 server port.
- at least one port at 60000 or higher**
DB2 TCP/IP communications.

Chapter 2. Preinstallation requirements

This chapter describes the steps you need to perform before you install WebSphere Commerce.

Prerequisite hardware

You must ensure that you meet the following minimum hardware requirements before installing WebSphere Commerce Version 5.5:

You require a dedicated Intel® Pentium® III 733 MHz (1 GHz or higher recommended for a production environment) IBM-compatible personal computer with the following:

- A minimum of 1 GB of RAM per processor for the first WebSphere Commerce instance with optional WebSphere Commerce Payments instance. Each additional WebSphere Commerce instance with optional WebSphere Commerce Payments instance will require an additional 512 MB of RAM per processor.
- A minimum of 2 GB of free disk space on your target installation drive.
 - You also need an additional 300 MB on the C: drive. If your machine is formatted with FAT partitioning and the partition is over 1.024 GB, you will need twice as much free disk space. The installation will check for adequate free disk space and will warn you if there is not enough space.
 - If your machine is formatted with FAT partitioning and the partition is over 2.049 GB, you will need three times as much free disk space.
- The paging file size should be double the size of the RAM. For example, 512 MB RAM should have a 1024 MB paging file.

The paging file size is adjusted in the **Virtual Memory** window. Access the **Virtual Memory** window by doing the following:

1. Select **Start > Settings > Control Panel > System**.
 2. In **System Properties**, select the **Advanced** tab.
 3. Click **Performance Options**.
 4. In **Performance Options**, under **Virtual memory**, click **Change**.
- A CD-ROM drive.
 - A graphics-capable monitor with a color depth of at least 256 colors.
 - A mouse or other pointing device. (optional)
 - A local area network (LAN) adapter that is supported by the TCP/IP protocol.

Prerequisite software

You must ensure that you meet the following minimum software requirements before installing WebSphere Commerce:

- Windows 2000 Server or Advanced Server Edition with Service Pack 3 installed. You can obtain the service pack at the following URL:
<http://www.microsoft.com>
- Ensure that the system is DNS enabled so that there is a host name and domain present. Pure IP address environments are not supported by WebSphere Commerce.

- Ensure that you disable any virus scanning software active on the system. Virus scanning software often interferes with the installation causing the installation to fail when changing CDs during the installation.

You can reenable the virus scanning software immediately after completing the installation.

Network configuration requirements

In addition to the hardware and software requirements, ensure that the network configuration of the system meets the following requirements:

- The system must have a resolvable domain name.

The host name combined with the domain name is the fully qualified host name. For example, if the host name is *system1* and the domain is *ibm.com*[®], the fully qualified host name is *system1.ibm.com*.

Issuing the following command from a command prompt session should return the IP address of the system:

```
nslookup 'fully_qualified_host_name'
```

The desired result is a reply with the correct IP address of the system.

- The IP address on the system must resolve to a host name (including a domain). To determine if the IP address is mapped to a fully qualified host name, start a command prompt session and issue the following command:

```
nslookup 'IP_address'
```

The desired result is a reply with the correct fully qualified host name of the system.

- Ensure that all nodes in your configuration can be reached from other computers in the network by pinging the fully-qualified host name of each node in the configuration.

Reviewing the README file

Reviewing the README file is an important prerequisite for installing WebSphere Commerce. The README file contains information about last-minute changes to the product. Last-minute changes may include additional fixes that must be installed before using WebSphere Commerce.

Failure to install any last minute fixes listed in the README file will result in WebSphere Commerce not functioning correctly.

The README file can be found in the root directory of WebSphere Commerce CD 1. The README file name is:

```
readme_language_code.htm
```

where *language_code* is one of the following:

| Language | Language code |
|----------|---------------|
| German | de_DE |
| English | en_US |
| Spanish | es_ES |
| French | fr_FR |
| Italian | it_IT |

| Language | Language code |
|----------------------|---------------|
| Japanese | ja_JP |
| Korean | ko_KR |
| Brazilian Portuguese | pt_BR |
| Simplified Chinese | zh_CN |
| Traditional Chinese | zh_TW |

Other requirements

You must also do the following:

- Ensure that the Windows administration user ID has the following user rights:
 - Act as part of the operating system
 - Create a token object
 - Increase quotas
 - Log on as a service
 - Replace a process level token

To grant user rights to a user ID, do the following:

1. Select **Start > Settings > Control Panel > Administrative Tools > Local Security Settings**.
2. Expand **Local Policies** and select **User Rights Assignment**.
3. For each user right you want to grant a user ID, do the following:
 - a. Right-click the policy and select **Security**.
 - b. Click **Add**.

Additional dialogs may display to allow you to select the user ID from a list.

- c. After granting the user ID the user rights, click **OK**.
4. After granting the required user rights, reboot the system for the updated user rights to take effect.

After rebooting the system, confirm that the required user rights have taken effect by doing the following:

1. Select **Start > Settings > Control Panel > Administrative Tools > Local Security Settings**.
2. Expand **Local Policies** and select **User Rights Assignment**.

For each required right, the user ID should appear in both the **Local Setting** and **Effective Setting** columns.

If the user ID does not appear in the **Effective Setting** column, the user has not been granted the right. If the system is part of a Windows domain, the domain settings will override local settings.

If the system is part of a Windows domain, you can grant a user ID user rights by adding the user ID to groups that have been granted the required user rights. You can add a user ID to a group in the Computer Management console. To access the Computer Manager console, select **Start > Control Panel > Administrative Tools > Computer Management**.

If no groups have been granted the required user rights, contact your domain administrator for information on granting the necessary user rights to a user ID.

Important

The installation of WebSphere Commerce will fail if the user ID under which the installation is performed does not have the required user rights.

Also, the required user rights may not be assigned to an ID unless the system is rebooted.

- If you have any applications running, stop them. You will need to restart your machine during the installation process, which can cause running applications to lose data.
- Ensure that any Lotus Notes[®] server, Web servers, Java application servers, and any non-essential Java processes are stopped before installing WebSphere Commerce.
- Ensure that any other InstallShield MultiPlatform installers have completed or are stopped before installing WebSphere Commerce
- If you have a Web server on your machine that is currently using the following port, disable it: 80, 443, 5442, 5443, 8000, 8002, and 8004.
- If you plan to use IBM HTTP Server as your Web server, do the following:
 - Ensure that the host name of your Web server does not contain an underscore (_). IBM HTTP Server does not support machines with an underscore in their host name.
 - Uninstall IIS or stop the following services:
 - IIS Admin Service
 - World Wide Web Publishing Service
 - Simple Mail Transport Protocol (SMTP)

You should also set these services to disabled, rather than manual or automatic so that they do not start when you restart your system

Service settings are changed from the Services panel. To access the Services panel, select **Start > Settings > Control Panel > Administrative Tools > Services**.

Chapter 3. How to install WebSphere Commerce

This chapter provides an outline of the steps you must perform to successfully install WebSphere Commerce.

To complete a successful installation and configuration of WebSphere Commerce, do the following:

1. Plan your configuration of WebSphere Commerce.

In planning your configuration, you should determine the number of machines on which you will install the various components of WebSphere Commerce, including the database and the Web server.

Review the descriptions of the installation configurations supported by the WebSphere Commerce installation wizard available in “Choosing your installation type” on page 32 to help plan your configuration.

2. Ensure that all of the nodes in your planned configuration meet the prerequisites outlined in Chapter 2, “Preinstallation requirements,” on page 9.
3. Install and configure the database according to the information available in Part 2, “Installing a database,” on page 15.

Ensure that you review *all* of the chapters in the section before installing and configuring the database.

4. Install and configure the Web server according to the information available in Part 3, “Installing a Web server,” on page 23.

Ensure that you review *all* of the chapters in the section before installing and configuring the Web server.

5. Gather all of the IDs and other information required to complete the WebSphere Commerce installation wizard. This information is outlined in Chapter 10, “Quick reference to IDs required during installation,” on page 37.
6. Complete the pre-installation checklist provided in “Pre-installation checklist” on page 31 to ensure that you are ready to install WebSphere Commerce.
7. Install WebSphere Commerce according to your planned configuration and the information available in Part 4, “Installing WebSphere Commerce,” on page 29.

Ensure you review *all* of the chapters in the section before installing and configuring WebSphere Commerce.

8. Create a WebSphere Commerce instance and a WebSphere Commerce Payments instance according to the information available in Part 5, “Creating a WebSphere Commerce and a WebSphere Commerce Payments instance,” on page 59.

Important

When you create a WebSphere Commerce instance, you create a Site Administrator user ID and password. It is crucial that you remember this user ID and password as after instance creation, this is the only user ID that can access the WebSphere Commerce Administration Console, WebSphere Commerce Organization Administration Console, and WebSphere Commerce Accelerator.

If you forget the Site Administrator password, you can reset the password by following the instructions in “Resetting the Site Administrator password” on page 120.

If you forget the Site Administrator ID, you can recover the ID by following the instructions in “Recovering the Site Administrator ID” on page 121.

9. Complete the mandatory post-instance creation tasks outlined in Chapter 17, “Mandatory post-instance creation tasks,” on page 71.

After completing these steps, you are ready to perform any of the tasks outlined in Chapter 18, “Recommended post-instance creation tasks,” on page 75.

Part 2. Installing a database

WebSphere Commerce supports DB2 Universal Database and Oracle9i Database. The database can be installed on the same node as other WebSphere Commerce components, or it can be installed on a remote node.

If you plan to use a database running on the same node as WebSphere Commerce and WebSphere Commerce Payments, follow the instructions in Chapter 4, “Using a local database with WebSphere Commerce,” on page 17.

If you plan to use a database running on a different node from WebSphere Commerce or WebSphere Commerce Payments, follow the instructions in Chapter 5, “Using a remote database with WebSphere Commerce,” on page 19.

Chapter 4. Using a local database with WebSphere Commerce

In this configuration, WebSphere Commerce, WebSphere Commerce Payments and the database management system are installed on the same node.

Using DB2 Universal Database as the local WebSphere Commerce database

If you use DB2 Universal Database as the local WebSphere Commerce database, no additional steps are required. DB2 Universal Database is installed and the WebSphere Commerce database is created and configured as part of WebSphere Commerce instance creation.

To install DB2 Universal Database when using the custom installation option of the installation wizard, ensure that you select **DB2 Universal Database** from the list of installable components.

Proceed with your installation of WebSphere Commerce by following the instructions in Part 3, “Installing a Web server,” on page 23.

Using Oracle9i Database as the local WebSphere Commerce database

If you use Oracle9i Database as the WebSphere Commerce database, you must install and configure Oracle9i Database before installing WebSphere Commerce.

Ensure that you install the following Oracle9i Database components according to the instructions found in the Oracle9i Database documentation:

- Oracle9i Database
- Oracle Net Services
- Oracle Net Listener
- Oracle JDBC/OCI Interfaces

After installing Oracle9i Database, you must create and configure a database for use with WebSphere Commerce before installing WebSphere Commerce. Settings for the database are listed in Chapter 6, “Oracle9i Database settings for WebSphere Commerce,” on page 21.

The WebSphere Commerce Instance Creation wizard does the following when you select **Create a new database or tablespace** in the wizard:

- Creates an Oracle9i Database user ID for the WebSphere Commerce schema.
- Creates the tablespace for WebSphere Commerce.
- Populates the WebSphere Commerce tablespace.

The WebSphere Commerce Payments Instance Creation wizard does the following when you select **Create a new database or tablespace** in the wizard:

- Creates an Oracle9i Database user ID for WebSphere Commerce Payments.
- Creates the tablespace for WebSphere Commerce Payments.
- Populates the WebSphere Commerce Payments tablespace.

The next step

After completing the instructions in this chapter, proceed with your installation of WebSphere Commerce by following the instructions in Part 3, "Installing a Web server," on page 23.

Chapter 5. Using a remote database with WebSphere Commerce

In this configuration, WebSphere Commerce and the WebSphere Commerce database are installed on different nodes.

Using DB2 Universal Database as the remote WebSphere Commerce database

If you use DB2 Universal Database as the remote WebSphere Commerce database, no additional steps are required. The WebSphere Commerce installation wizard will install and configure DB2 Administration Client on the WebSphere Commerce node. The WebSphere Commerce installation wizard is also used to install DB2 Universal Database on the database server node.

Proceed with your installation of WebSphere Commerce by following the instructions in Part 3, “Installing a Web server,” on page 23.

Using Oracle9i Database as the remote WebSphere Commerce database

If you use Oracle 9i Database Release 2, Enterprise Edition or Standard Edition as the WebSphere Commerce database, you must install Oracle9i Database before installing WebSphere Commerce. To install Oracle9i Database as the WebSphere Commerce database, do the following:

1. Install the following Oracle9i Database components on the Oracle9i Database server node according to the instructions found in the Oracle9i Database documentation:
 - Oracle9i Database
 - Oracle Net Services
 - Oracle Net Listener
 - Oracle JDBC/OCI Interfaces

This step can be skipped if you plan to use an existing WebSphere Commerce Version 5.5 database on an Oracle9i Database server. You cannot use an existing WebSphere Commerce Version 5.4 (or lower) database with WebSphere Commerce Version 5.5 — the existing database must first be migrated to WebSphere Commerce Version 5.5. For instructions on migrating a database, refer to *WebSphere Commerce Migration Guide*.

2. Install the following Oracle9i Database components on the WebSphere Commerce (Oracle9i Database client) node according to the instructions found in the Oracle9i Database documentation:
 - Oracle9i Enterprise Client
 - SQL*Plus
 - Oracle JDBC/Thin Interfaces
 - Oracle JDBC/OCI Interfaces
 - Oracle Network Utilities

3. If you plan to have WebSphere Commerce Payments on a separate node from WebSphere Commerce and the Oracle9i Database server node, repeat step 2 on page 19 on the WebSphere Commerce Payments node.
4. Ensure that the Oracle9i Database client(s) and server are configured to communicate correctly according to instructions found in the Oracle9i Database documentation.

After installing the Oracle9i Database server and client, you must create and configure a database for WebSphere Commerce and WebSphere Commerce Payments to use before installing WebSphere Commerce. Settings for the database are listed in Chapter 6, "Oracle9i Database settings for WebSphere Commerce," on page 21. For instructions on creating and configuring an Oracle9i Database, refer to the Oracle9i Database documentation.

The WebSphere Commerce Instance Creation wizard does the following when you select **Create a new database or tablespace** in the wizard:

- Creates an Oracle9i Database user ID for the WebSphere Commerce schema.
- Creates the tablespace for WebSphere Commerce.
- Populates the WebSphere Commerce tablespace.

The WebSphere Commerce Payments Instance Creation wizard does the following when you select **Create a new database or tablespace** in the wizard:

- Creates an Oracle9i Database user ID for WebSphere Commerce Payments.
- Creates the tablespace for WebSphere Commerce Payments.
- Populates the WebSphere Commerce Payments tablespace.

The next step

After completing the instructions in this chapter, proceed with your installation of WebSphere Commerce by following the instructions in Part 3, "Installing a Web server," on page 23.

Chapter 6. Oracle9i Database settings for WebSphere Commerce

This section provides information about recommended settings for Oracle9i Database databases used with WebSphere Commerce.

Notes:

1. WebSphere Commerce only supports Oracle 9i Database Release 2, Enterprise Edition or Standard Edition.
2. You should have advanced knowledge of Oracle9i Database (at the DBA level) before changing the database settings as recommended in this chapter.
3. For more information about Oracle9i Database, go to <http://www.oracle.com>. You can obtain copies of the Oracle9i Database documentation and software from <http://otn.oracle.com>. The Oracle9i Database information in this chapter is provided only as a guideline.
4. For additional information on Oracle9i Database terminology and concepts, refer to the *Oracle 9i Concepts* document provided with your purchase of Oracle9i Database.

Important

This chapter assumes you have installed the correct Oracle9i Database components for the WebSphere Commerce configuration you are installing. If you have not yet installed Oracle9i Database, refer to the section appropriate for WebSphere Commerce configuration :

- “Using Oracle9i Database as the local WebSphere Commerce database” on page 17
- “Using Oracle9i Database as the remote WebSphere Commerce database” on page 19

Required Oracle9i Database settings for WebSphere Commerce

The following table lists required and strongly recommended database parameter settings to use when using Oracle9i Database with WebSphere Commerce:

Table 1. Required database parameter settings for Oracle9i Database

| Parameter | Value |
|------------------------|-------|
| Database character set | UTF-8 |
| National character set | UTF-8 |

Refer to the Oracle9i Database documentation for instructions on setting or changing database parameters.

Recommended Oracle9i Database settings for WebSphere Commerce

The following table lists recommended database parameter settings to use when using Oracle9i Database with WebSphere Commerce:

Table 2. Recommended database parameter settings for Oracle9i Database

| Parameter | Value |
|----------------------|--------|
| block_size | 4KB |
| db_cache_size | 120MB |
| open_cursors | 1000 |
| pga_aggregate_target | 50MB |
| shared_pool_size | 120MB |
| sort_area_size | 655350 |

Refer to the Oracle9i Database documentation for instructions on setting or changing database parameters.

Part 3. Installing a Web server

WebSphere Commerce supports either IBM HTTP Server, Microsoft Internet Information Services, or Sun ONE Web Server as its Web server. The Web server can be installed on the same machine as other WebSphere Commerce components, or it can be installed on a remote machine.

If you are installing IBM HTTP Server you can proceed to Part 4, “Installing WebSphere Commerce,” on page 29. IBM HTTP Server is installed by the WebSphere Commerce installation wizard.

If you are using Microsoft Internet Information Services or Sun ONE Web Server as your Web server, you must complete the appropriate chapter in this section before installing other WebSphere Commerce components. Install your Web server as described in the following chapter, and then continue to Part 4, “Installing WebSphere Commerce,” on page 29:

- Chapter 7, “Installing Microsoft Internet Information Services,” on page 25
- Chapter 8, “Installing Sun ONE Web Server,” on page 27

Chapter 7. Installing Microsoft Internet Information Services

Although WebSphere Commerce includes a copy of IBM HTTP Server Version 1.3.26, you can also use Microsoft Internet Information Services (IIS) 5.0 as your Web server. If you are using Microsoft Internet Information Services you *must* complete the steps in this chapter on your Web server machine before installing WebSphere Commerce

Important

If you install your Web server remotely from your WebSphere Commerce machine, ensure that both products are installed to the same drive letter. For example, if you install your Web server software to drive C: on your remote Web server machine, install WebSphere Commerce to drive C: on your WebSphere Commerce machine.

Installing Microsoft Internet Information Services for WebSphere Commerce

If you are using Microsoft Internet Information Services as your Web server, complete the following steps on your web server machine:

1. Install Microsoft Internet Information Services according to the instructions provided by Microsoft.
2. Update the IIS installation with all of the latest security patches available from Microsoft.
3. Enable Secure Sockets Layer (SSL) on IIS.
4. If you plan to use WebSphere Commerce Payments with WebSphere Commerce, add the following port to your Web server: 5432.
5. Add the following Secure Sockets Layer (SSL) ports to your Web server: 8000, 8002, and 8004.
6. If you plan to use WebSphere Commerce Payments with WebSphere Commerce, add the following Secure Sockets Layer (SSL) ports to your Web server: 5433.
7. Enable Basic Authentication on IIS.

For instructions on completing these tasks, refer to the Microsoft IIS documentation,

Important information for a remote IIS configuration

If you plan to have IIS on a node remote from the WebSphere Commerce node, ensure that you follow the instructions in Chapter 17, "Mandatory post-instance creation tasks," on page 71 after creating the WebSphere Commerce instance.

The section contains an important configuration step for IIS users when IIS runs on a node remote from WebSphere Commerce. Failure to complete the step will result in IIS being improperly configured to work with WebSphere Commerce and WebSphere Commerce Payments.

The next step

Now that you have installed and configured Microsoft Internet Information Services, you are ready to install WebSphere Commerce as described in Part 4, "Installing WebSphere Commerce," on page 29.

Chapter 8. Installing Sun ONE Web Server

Although WebSphere Commerce includes a copy of IBM HTTP Server Version 1.3.26, you can also use Sun ONE Web Server, Enterprise Edition 6.0 as your Web server. If you are using Sun ONE Web Server you *must* complete the appropriate steps in this chapter before installing the rest of WebSphere Commerce.

Installing and configuring Sun ONE Web Server

If you are using Sun ONE Web Server, Enterprise Edition 6.0 as your Web server, complete the following steps:

1. Install Sun ONE Web Server according to the instructions provided by Sun.

Ensure that you install the following components:

- Sun ONE Web Server, Enterprise Server
- Server Core
- Java Runtime Environment
- Java Support
- SSJS Support
- SSJS Database Support

Do *not* select **Use Custom JDK**.

2. Ensure that you create the following virtual servers following the instructions in the Sun ONE Web Server documentation:

- non-SSL communication on port 80
- SSL communication on port 443
- SSL communication on port 8000
- SSL communication on port 8002
- SSL communication on port 8004

If you plan to use WebSphere Commerce Payments with WebSphere Commerce, also create the following virtual servers:

- non-SSL communication on port 5432
- SSL communication on port 5433

Important: Ensure that you only create virtual servers for the required ports. Having a separate Web server for each required port will cause WebSphere Commerce to function incorrectly.

3. Install a secure certificate signed by a certifying authority, according to the Sun ONE Web Server documentation.
4. Test your installation and configuration of Sun ONE Web Server by opening a Web browser and going to the following URLs:

```
http://SunONEWebServer_hostname  
https://SunONEWebServer_hostname  
https://SunONEWebServer_hostname:8000  
https://SunONEWebServer_hostname:8002  
https://SunONEWebServer_hostname:8004
```

If you plan to use WebSphere Commerce Payments with WebSphere Commerce, also test the following URLs:

`http://SunONEWebServer_hostname:5432`
`https://SunONEWebServer_hostname:5433`

where *SunONEWebServer_hostname* is the fully-qualified domain name of the Sun ONE Web Server machine.

If you have successfully created the virtual servers earlier, the default Sun ONE Web Server page should display for each URL. If the page does not display or you receive other errors, Sun ONE Web Server is not configured correctly for use with WebSphere Commerce.

Do not continue with the installation of WebSphere Commerce until you can complete this step. If you continue to install WebSphere Commerce without completing this step successfully, the installation and configuration of WebSphere Commerce will fail.

Refer to the Sun ONE Web Server documentation for help correcting any problems.

Important

By default, outside users can access any file that can be served up by Sun ONE Web Server. For security reasons, you should restrict access to Web directories. See Sun ONE Web Server documentation for information on restricting file and directory access. In addition, you should open the `obj.conf` file and search for the `NameTrans` entries; ensure that the files in the targeted directories are protected.

The next step

Now that you have installed and configured Sun ONE Web Server, you are ready to install WebSphere Commerce as described in Part 4, "Installing WebSphere Commerce," on page 29.

Part 4. Installing WebSphere Commerce



Chapter 9. Before installing WebSphere Commerce

This section describes what must be completed before using the WebSphere Commerce installation wizard. Before using the WebSphere Commerce installation wizard, you must do the following:

1. Complete the pre-installation checklist to ensure the all pre-installation requirements have been met. The pre-installation checklist is provided in "Pre-installation checklist."
2. Choose an installation type based on the descriptions available in "Choosing your installation type" on page 32. The descriptions in the section will direct you to the appropriate instructions to complete the type of installation you choose.

Pre-installation checklist

Before installing WebSphere Commerce complete the following checklist to ensure that all of the pre-installation requirements have been met:

- All of the systems in the planned installation meet the hardware and software requirements outlined in Chapter 2, "Preinstallation requirements," on page 9.
- All of the ports required by WebSphere Commerce are available. The ports required by WebSphere Commerce are listed in "Port numbers used by WebSphere Commerce" on page 6.
- The user ID you are logged in as has Administrative authority and the additional advanced user rights outlined in "User IDs required to complete the installation wizard" on page 38.
- All the IDs, passwords, paths, and other information required to complete the WebSphere Commerce installation wizard have been gathered. The information required to complete the WebSphere Commerce installation wizard is listed in Chapter 10, "Quick reference to IDs required during installation," on page 37.
- Ensure that you disable any virus scanning software active on the system. Virus scanning software often interferes with the installation causing the installation to fail when changing CDs during the installation.
You can reenable the virus scanning software immediately after completing the installation.
-  Oracle If you are using Oracle as your database, it is already installed as described in Part 2, "Installing a database," on page 15.
-  Oracle If you plan to have a remote Oracle database, the Oracle database is installed on the database node and the Oracle client is installed and configured on the WebSphere Commerce node as described in "Using Oracle9i Database as the remote WebSphere Commerce database" on page 19. Ensure that SQL*Plus works on the WebSphere Commerce node.
- If you are using Sun ONE Web Server or Microsoft Internet Information Services, the Web server must already be installed as described in Part 3, "Installing a Web server," on page 23.
- If you are using Microsoft Internet Information Services, you must stop all Microsoft Internet Information Services web related services and applications including the IIS Admin Service, World Wide Web Publishing service, FTP

service, the Default Web Site, the Default FTP Site, and the Default SMTP Virtual Server. Depending the configuration of your Microsoft Internet Information Services server, you may not find all the services or servers on your Web server machine. See Microsoft Internet Information Services documentation for instructions on how to stop these services and servers.

- If you are not using Microsoft Internet Information Services, ensure that it is uninstalled.
- Any pre-installed Web servers are stopped. If a Web server is running on the machine during the WebSphere Commerce installation, the installation will not complete successfully.
- Any Java application servers, and any non-essential Java processes are stopped.
- Any other InstallShield MultiPlatform installers have completed or are stopped.

Important

Failure to complete this checklist will result in a failed installation or unexpected behavior in WebSphere Commerce and its components. It is strongly recommended that the systems on which you install WebSphere Commerce and its components meet all the requirements outlined in this checklist.

Choosing your installation type

This section provides descriptions of the installation types available in the WebSphere Commerce installation wizard. Review the descriptions, choose your installation type, and go to the information referenced in each description for instructions on completing the installation type you choose.

The following installation types are available in the WebSphere Commerce installation wizard:

- “Quick installation”
- “Typical 1–node installation” on page 33
- “Typical 3–node installation” on page 33
- “Custom installation” on page 35

Quick installation

This installs the following components on a single node, provided that none of the components already exist on the node:

- IBM DB2 Universal Database Version 8.1.1
- IBM HTTP Server Version 1.3.26
- WebSphere Application Server base product, Version 5.0
- WebSphere Commerce Version 5.5 (including WebSphere Commerce Payments)

A quick installation also creates a WebSphere Commerce instance and a WebSphere Commerce Payments instance.

Non-IBM software is not supported by the quick installation.

Instructions for completing a quick installation are covered in *WebSphere Commerce Quick Beginnings*.

Typical 1–node installation

This will install all WebSphere Commerce software on a single node. This includes your database, Web server, WebSphere Application Server, WebSphere Commerce Payments, and the WebSphere Commerce server.

This installation is similar to a quick installation with the following differences:

- A pre-installed database is supported, as long as the database is a database supported by WebSphere Commerce and the database is at the required version level.
- A pre-installed Web server is supported, as long as the Web server is a Web server supported by WebSphere Commerce and the Web server is at the required version level.
- A pre-installed WebSphere Application Server is supported, as long as it is at the version level supported by WebSphere Commerce.
- Non-IBM software is supported by the typical 1–node installation.
- A WebSphere Commerce instance and a WebSphere Commerce Payments instance are *not* created as part of the installation process.

Completing a typical 1-node installation is described in Chapter 11, “Completing a typical installation,” on page 41.

Typical 3–node installation

This will install the WebSphere Commerce software across three nodes:

- 1st node: Database
- 2nd node: Web server
- 3rd node: WebSphere Application Server, WebSphere Commerce Payments, and the WebSphere Commerce server.

All nodes must be running the same operating system meeting the operating system requirements listed in Chapter 2, “Preinstallation requirements,” on page 9.

Completing a typical 3-node installation is described in Chapter 11, “Completing a typical installation,” on page 41.

Important: You must install the components in a typical 3–node installation in the order the components are listed above. Installation of some nodes will require information about previous nodes to complete the installation.

The diagram on the following page shows how the various WebSphere Commerce components are distributed in a typical 3–node installation.

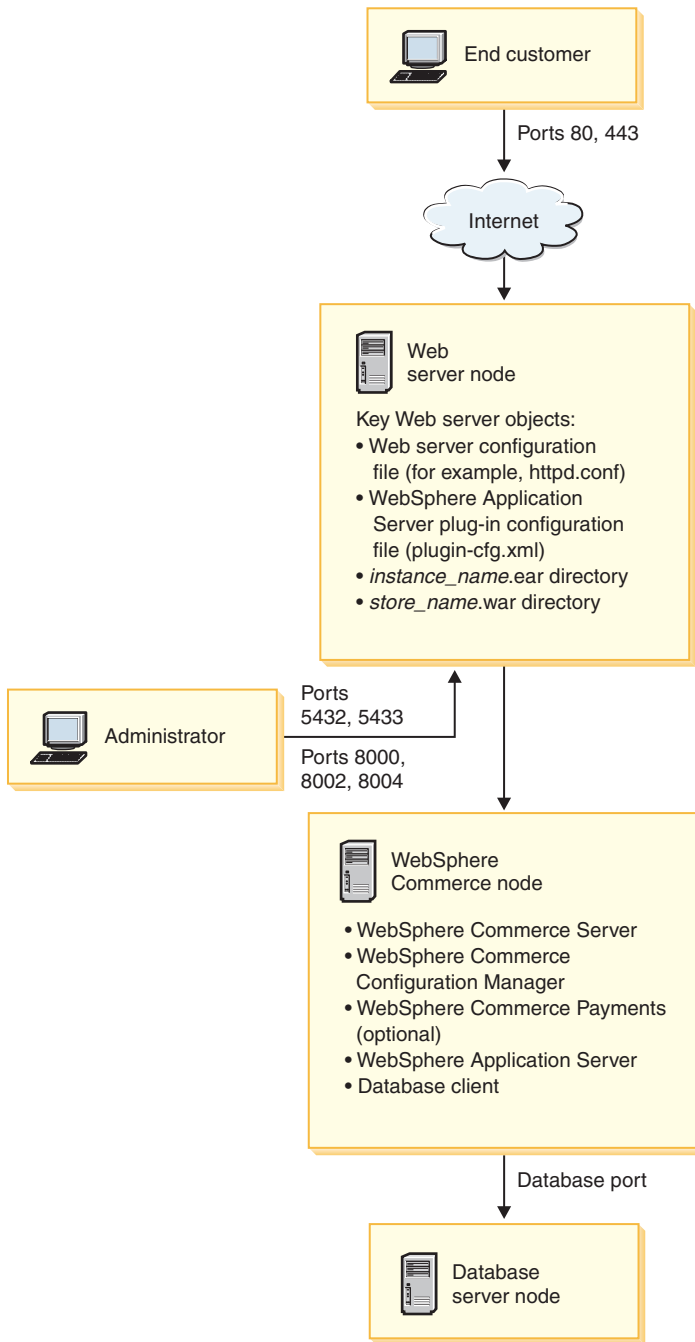


Figure 1. Typical 3-node installation

Custom installation

A custom installation can be used to install WebSphere Commerce components across several nodes. All nodes must be running the same operating system meeting the operating system requirements listed in Chapter 2, “Preinstallation requirements,” on page 9.

The following are some examples of scenarios in which you would perform a custom installation:

- You want WebSphere Commerce Payments to run remotely from WebSphere Commerce.
- You only want to install the WebSphere Commerce Configuration Manager client on a system.
- You want to install the WebSphere Application Server Web server plug-in for a remote, non-IBM Web server.
- You want to distribute WebSphere Commerce components over several machines, offering the following benefits:
 - Improved speed of transactions by dispersing CPU load
 - You can use existing databases, Web servers, and machines with limited space
 - Offers the ability to cluster for redundancy for mission critical WebSphere Commerce data
 - Improved scalability and load balancing abilities

This installation should only be attempted by users with advanced knowledge of WebSphere Commerce. Advanced knowledge includes:

- Advanced knowledge of WebSphere Application Server Version 5.0 configuration and operation in distributed environments, including cloning, clustering, and federation.
- Experience in the creation of WebSphere Commerce instances in distributed environments.
- Experience in the configuration and administration of remote databases.
- Experience in the configuration of Web servers to work with remote applications.

Completing a custom installation is described in Chapter 12, “Completing a custom installation,” on page 51.

As an example of how a custom installation could be used, the diagram on the following page shows how the various WebSphere Commerce components are distributed in a custom 5-node installation.

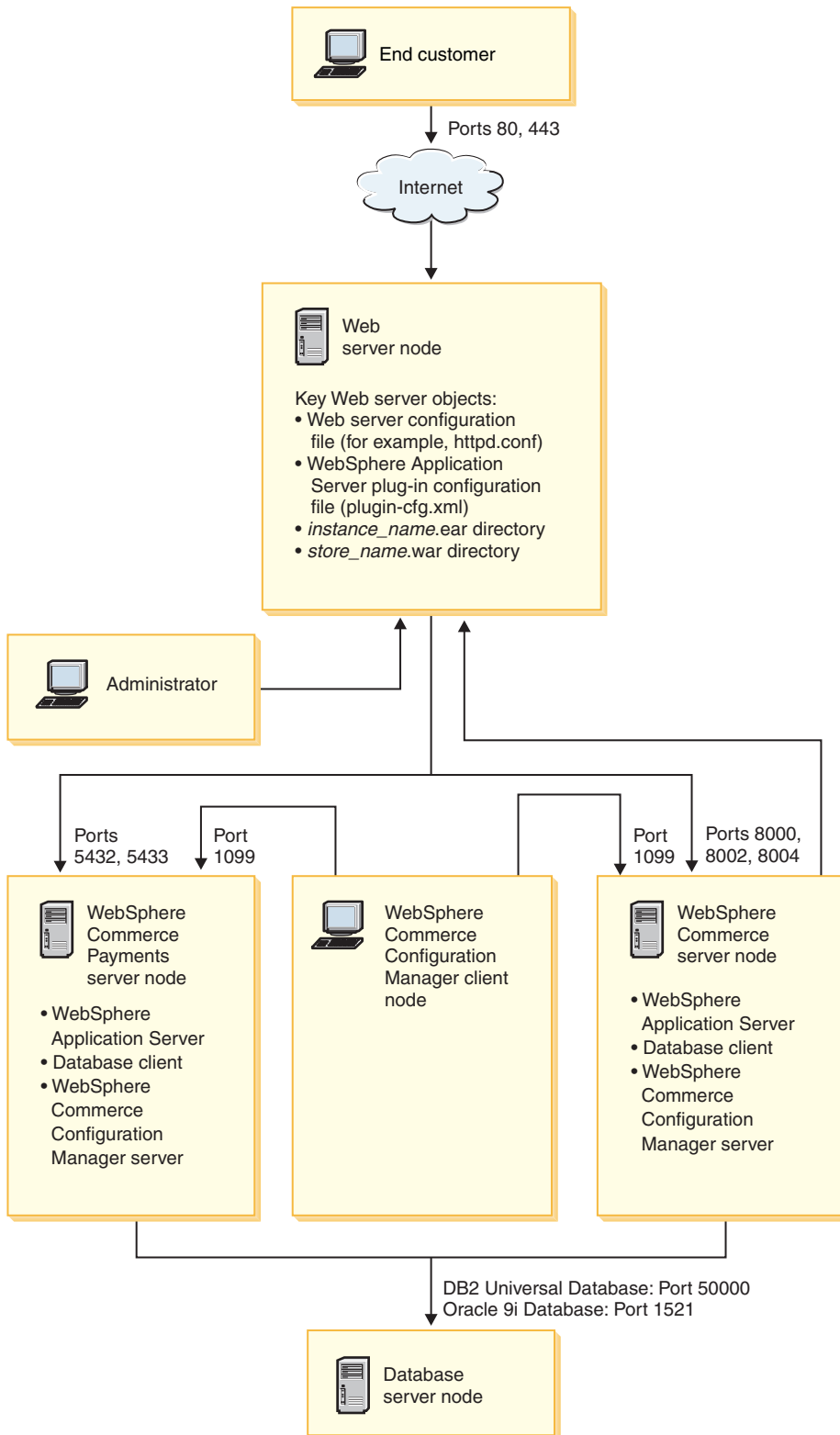


Figure 2. Custom 5-node installation

Chapter 10. Quick reference to IDs required during installation

The WebSphere Commerce installation wizard prompts you for a number of different user IDs and other information in order to complete the installation. Before starting your installation of WebSphere Commerce, fill in the following table so you will have the information handy when you complete the WebSphere Commerce installation wizard:

User ids

Review the descriptions in “User IDs required to complete the installation wizard” on page 38 then fill in this table:

| User ID description | User ID | Password |
|-----------------------|---------|----------|
| Local Windows user ID | | |

For information on creating user IDs and setting passwords, refer to your operating system documentation.

User IDs required to complete the installation wizard

To complete the installation of WebSphere Commerce, you will need the following IDs defined:

| User ID | Description |
|-----------------------|--|
| Local Windows user ID | <p>This ID is required to install WebSphere Commerce. This ID will also be assigned start the services for the following WebSphere Commerce components during the installation:</p> <ul style="list-style-type: none">• DB2 Universal Database (if installed by the WebSphere Commerce installation wizard)• IBM HTTP Server (if installed by the WebSphere Commerce installation wizard)• WebSphere Commerce Configuration Manager server• Any WebSphere Application Server services <p>To install WebSphere Commerce, the user ID must have Administrative authority and the following advanced user rights:</p> <ul style="list-style-type: none">• Act as part of the operating system• Create a token object• Increase quotas• Log on as a service• Replace a process level token <p>Refer to “Other requirements” on page 11 for more information on granting user rights.</p> <p>The machine must be rebooted after adding the advanced users rights for any new rights to take effect.</p> <p>If your Windows user ID does <i>not</i> have Administrator authority or is more than 20 characters in length, or is not defined on the local machine, you will be notified of the problem and will not be able to proceed with the installation.</p> <p>Notes:</p> <ol style="list-style-type: none">1. Windows IDs must be defined on the local machine. IDs defined on a Windows domain server are not supported by the WebSphere Commerce installation wizard.2. If you want to use DB2 Universal Database with WebSphere Commerce, this user ID must also meet the DB2 Universal Database user ID requirements outlined in “DB2 Universal Database user ID requirements.” |

DB2 Universal Database user ID requirements

DB2 requires that the user IDs and passwords for database administrators and database users adhere to the following rules:

- The user ID cannot be more than 20 characters in length.
- The password cannot be more than 14 characters in length.
- They can contain only the characters A to Z, a to z, 0 to 9
- They cannot begin with an underscore (_).
- The user ID cannot be any of the following, in upper, lower, or mixed case: USERS, ADMIN, GUESTS, PUBLIC, LOCAL.
- The user ID cannot begin with any of the following in upper, lower, or mixed case: IBM, SQL, SYS.

- The user ID cannot be the same as any Windows service name.
- The user ID must be defined on the local machine, and belong to the Local Administrator's group.
- The user ID must have the following advanced user rights:
 - Act as part of the operating system
 - Create a token object
 - Increase quotas
 - Log on as a service
 - Replace a process level token



You can perform the installation without the *Act as part of the operating system* advanced user right, however, the DB2 setup program will be unable to validate the database administrator ID. It is recommended that any user account used to install DB2 has this advanced user right.

Chapter 11. Completing a typical installation

This chapter covers how to complete the types of typical installations available in the WebSphere Commerce installation wizard.

Performing a typical one-node installation

To perform a typical one-node installation, do the following:

1. Ensure that the pre-installation checklist is completed. Failure to complete this checklist could result in a failed installation. For more information, refer to “Pre-installation checklist” on page 31.
2. Ensure that you are logged onto your system as a user with Administrative authority.

Also, ensure that this user has the required advanced user rights. The required user rights are listed in “User IDs required to complete the installation wizard” on page 38.

3. Insert WebSphere Commerce CD 1 into the CD-ROM drive of the node.
4. Run `setup.exe` or enter `setup -console` at a command prompt.

Using the `-console` parameter starts a text-based installation wizard. The steps in the text-based installation wizard and the GUI-based installation wizard are the same, but the methods of selection options and continuing in the installation wizard differ.

In this section, instructions for selecting options and continuing are provided only for the GUI-based installation wizard. To select options and continue when using the text-based installation wizard, follow the prompts provided by the text-based installation wizard.

Important

You cannot install WebSphere Commerce from a network mapped drive from a remote session on Windows 2000 Terminal Server edition.

5. Select the language you want to use during the install and click **OK**.

Important: The language selected here becomes the default language for the WebSphere Commerce instance. Attempting to create a WebSphere Commerce instance with a default language different from the language selected here will cause the WebSphere Commerce instance to be populated with invalid data.

After selecting the language you want to use during the install, a check is performed to ensure that the system meets the pre-installation requirements.

If your system meets the pre-installation requirements the Welcome panel displays.

If your system does not meet the pre-installation requirements, a dialog box will display detailing the requirements which have not been met. Click **Cancel** and then **Exit Setup** to exit the installation program. Take the appropriate steps to meet the pre-installation requirements which were listed and begin the installation again.

6. If your system meets the pre-installation requirements, click **Next** on the Welcome panel.
7. The Software License Agreement page displays. Review the terms of the license agreement in the Software License Agreement page.
If you accept the terms of the license agreement, select **I accept the terms in the license agreement** and click **Next** to accept the terms of the license agreement.
If you decline the terms of the license agreement, select **I do not accept the terms in the license agreement** and click **Next**. Declining the terms of the License agreement exits the install program.
8. If you accept the terms of the license agreement, the install type panel displays. Select **Typical Installation**. Click **Next** to continue.
9. When prompted for the topology, select **One-node installation**. Click **Next** to continue.
10. Select your database and Web server from the drop-down lists. Click **Next** to continue.
11. If you selected Oracle9i Database as the database, verify the version of Oracle9i Database installed. Click **Next** to continue.
12. Accept the default destination directories for the products being installed, or enter another directory. Click **Next** to continue.

Note: Do not specify destinations as UNC paths (For example, \\system1\destination). You may use mapped drive letters for any destination directory except the WebSphere Application Server destination directory.

13. Enter the Windows user ID and password to use as the database user ID and password. Ensure that the user ID and password meet the requirements outlined in Chapter 10, "Quick reference to IDs required during installation," on page 37.

Note: If the WebSphere Commerce installation wizard installs IBM HTTP Server or WebSphere Application Server for you, this Windows ID will be used to start IBM HTTP Server, the WebSphere Commerce application server, the WebSphere Commerce Payments application server, and the WebSphere Commerce Configuration Manager.

Click **Next** to continue.

14. Select the language of the documentation that you want installed. Click **Next** to continue.
15. Do one of the following:
 - If you selected Microsoft Internet Information Services as your Web server, go the next step.
 - If selected Sun ONE Web Server or IBM HTTP Server as your Web server and the Web server is already installed, enter the directory where the Web server configuration files are located. Click **Next** to continue.
 - If you do not have a Web server installed, click **Next** to continue. IBM HTTP Server will be installed.
In this case, the field displaying the path to the Web server configuration file cannot be edited. The contents of the field are for display purposes only.

The Summary panel displays.

16. Review the contents of the Summary panel, then click **Next** to continue.

17. Insert the CDs as prompted, and enter the location of the CDs.
As components are being installed, panels display showing the progress of the installation of the component.
18. The installation is complete when the summary panel displays. Click **Next** to continue.
19. The Installation Complete panel displays. From the Installation Complete panel, you can access more information about WebSphere Commerce or exit the installation wizard by clicking **Finish**.

After completing a typical one-node installation, follow the instructions in “The next step” on page 49.

Performing a typical three-node installation

To perform a typical three-node installation, do the following:

1. Install the database. For details, see “Installing the database in a typical three-node installation.”
2. Install the Web server. For details, see “Installing the Web server in a typical three-node installation” on page 45.
3. Install the remaining WebSphere Commerce components. For details, see “Installing the remaining WebSphere Commerce components in a typical three-node installation” on page 47.

Installing the database in a typical three-node installation

Oracle If you are using Oracle9i Database as your database, install it as described in “Using Oracle9i Database as the remote WebSphere Commerce database” on page 19. After installing Oracle9i Database, continue to “Installing the Web server in a typical three-node installation” on page 45.

DB2 If you are using DB2 Universal Database as your database, do the following on the database server node:

1. Ensure that you are logged onto your system as a user with Administrative authority.

Also, ensure that this user has the required advanced user rights. The required user rights are listed in “User IDs required to complete the installation wizard” on page 38.

2. Insert WebSphere Commerce CD 1 into the CD-ROM drive of the node.
3. Run `setup.exe` or enter `setup -console` at a command prompt.

Using the `-console` parameter starts a text-based installation wizard. The steps in the text-based installation wizard and the GUI-based installation wizard are the same, but the methods of selection options and continuing in the installation wizard differ.

In this section, instructions for selecting options and continuing are provided only for the GUI-based installation wizard. To select options and continue when using the text-based installation wizard, follow the prompts provided by the text-based installation wizard.

Important

You cannot install WebSphere Commerce from a network mapped drive from a remote session on Windows 2000 Terminal Server edition.

4. Select the language you want to use during the install and click **OK**.
 After selecting the language you want to use during the install, a check is performed to ensure that the system meets the pre-installation requirements. If your system meets the pre-installation requirements the Welcome panel displays.
 If your system does not meet the pre-installation requirements, a dialog box will display detailing the requirements which have not been met. Click **Cancel** and then **Exit Setup** to exit the installation program. Take the appropriate steps to meet the pre-installation requirements which were listed and begin the installation again.
5. If your system meets the pre-installation requirements, click **Next** on the Welcome panel.
6. The Software License Agreement page displays. Review the terms of the license agreement in the Software License Agreement page.
 If you accept the terms of the license agreement, select **I accept the terms in the license agreement** and click **Next** to accept the terms of the license agreement.
 If you decline the terms of the license agreement, select **I do not accept the terms in the license agreement** and click **Next**. Declining the terms of the License agreement exits the install program.
7. If you accept the terms of the license agreement, the install type panel displays. Select **Typical Installation**. Click **Next** to continue.
8. When prompted for the topology, select **Three-node installation**. Click **Next** to continue.
9. When prompted for the node on which you are installing, select **Database server node**. Click **Next** to continue.
10. Select your database from the drop-down list. Click **Next** to continue.
11. Accept the default destination directories for the products being installed, or enter another directory. Click **Next** to continue.

Note: Do not specify destinations as UNC paths (For example, \\system1\destination). You may use mapped drive letters for any destination directory except the WebSphere Application Server destination directory.
12. Complete the panel by entering the appropriate information in each field. Ensure that any user IDs and passwords entered meet the requirements outlined in Chapter 10, "Quick reference to IDs required during installation," on page 37.
 Click **Next** to continue.
13. On the confirmation page, review the components being installed and their location. To make any changes, use the **Back** button to return to the panel where you want to make changes.
 To begin installing the components listed on the confirmation page, click **Next**.
14. Insert the CDs as prompted, and enter the location of the CDs.
 As components are being installed, panels display showing the progress of the installation of the component. Follow any additional prompts that may display at this time.
15. The installation of DB2 Universal Database is complete when the summary panel displays. Click **Next** to continue.

16. The Installation Complete panel displays. From the Installation Complete panel, you can access more information about WebSphere Commerce or exit the installation wizard by clicking **Finish**.

Continue the typical three-node installation by following the instructions in “Installing the Web server in a typical three-node installation.”

Installing the Web server in a typical three-node installation

If you are using Sun ONE Web Server, or Microsoft Internet Information Services, install your Web server as described in Part 3, “Installing a Web server,” on page 23 before following the instructions in this section. Following the instructions in this section will install additional components required for the Web server to work correctly with WebSphere Commerce.

To complete an installation on the Web server node, do the following on the Web server node:

1. Ensure that you are logged onto your system as a user with Administrative authority.
Also, ensure that this user has the required advanced user rights. The required user rights are listed in “User IDs required to complete the installation wizard” on page 38.
2. Insert WebSphere Commerce CD 1 into the CD-ROM drive of the node.
3. Run `setup.exe` or enter `setup -console` at a command prompt.

Using the `-console` parameter starts a text-based installation wizard. The steps in the text-based installation wizard and the GUI-based installation wizard are the same, but the methods of selection options and continuing in the installation wizard differ.

In this section, instructions for selecting options and continuing are provided only for the GUI-based installation wizard. To select options and continue when using the text-based installation wizard, follow the prompts provided by the text-based installation wizard.

Important

You cannot install WebSphere Commerce from a network mapped drive from a remote session on Windows 2000 Terminal Server edition.

4. Select the language you want to use during the install and click **OK**.
After selecting the language you want to use during the install, a check is performed to ensure that the system meets the pre-installation requirements. If your system meets the pre-installation requirements the Welcome panel displays.
If your system does not meet the pre-installation requirements, a dialog box will display detailing the requirements which have not been met. Click **Cancel** and then **Exit Setup** to exit the installation program. Take the appropriate steps to meet the pre-installation requirements which were listed and begin the installation again.
5. If your system meets the pre-installation requirements, click **Next** on the Welcome panel.
6. The Software License Agreement page displays. Review the terms of the license agreement in the Software License Agreement page.

If you accept the terms of the license agreement, select **I accept the terms in the license agreement** and click **Next** to accept the terms of the license agreement.

If you decline the terms of the license agreement, select **I do not accept the terms in the license agreement** and click **Next**. Declining the terms of the License agreement exits the install program.

7. If you accept the terms of the license agreement, the install type panel displays. Select **Typical Installation**. Click **Next** to continue.
8. When prompted for the topology, select **Three-node installation**. Click **Next** to continue.
9. When prompted for the node on which you are installing, select **Web server node**. Click **Next** to continue.
10. Select your Web server from the drop-down list. Click **Next** to continue.
11. Accept the default destination directories for the products being installed, or enter another directory. Click **Next** to continue.

Note: Do not specify destinations as UNC paths (For example, \\system1\destination). You may use mapped drive letters for any destination directory except the WebSphere Application Server destination directory.

12. If you selected IBM HTTP Server as the Web server, you will be prompted to enter the Windows user ID and password to use to start the Web server service. Ensure that the user ID and password meet the requirements outlined in Chapter 10, "Quick reference to IDs required during installation," on page 37.

Click **Next** to continue

13. Select the language of the documentation that you want installed. Click **Next** to continue.
14. Do one of the following:
 - If you selected Microsoft Internet Information Services as your Web server, go the next step.
 - If selected Sun ONE Web Server or IBM HTTP Server as your Web server and the Web server is already installed, enter the directory where the Web server configuration files are located. Click **Next** to continue.
 - If you do not have a Web server installed, click **Next** to continue. IBM HTTP Server will be installed.

In this case, the field displaying the path to the Web server configuration file cannot be edited. The contents of the field are for display purposes only.

The Summary panel displays.

15. On the Summary panel, review the components being installed and their location. To make any changes, use the **Back** button to return to the panel where you want to make changes.


To begin installing the components listed on the confirmation page, click **Next**.
16. Insert the CDs as prompted, and enter the location of the CDs.

As components are being installed, panels display showing the progress of the installation of the component. Follow any additional prompts that may display at this time.
17. The installation of the Web server is complete when the summary panel displays. Click **Next** to continue.

18. The Installation Complete panel displays. From the Installation Complete panel, you can access more information about WebSphere Commerce or exit the installation wizard by clicking **Finish**.

Continue the typical three-node installation by following the instructions in “Installing the remaining WebSphere Commerce components in a typical three-node installation.”

Installing the remaining WebSphere Commerce components in a typical three-node installation

 Ensure that the Oracle9i Database client components are installed on this node before proceeding with the installation. Guidelines for installing Oracle9i Database can be found in Part 2, “Installing a database,” on page 15.

To install the remaining WebSphere Commerce components, do the following on the WebSphere Commerce node:

1. Ensure that you are logged onto your system as a user with Administrative authority.

Also, ensure that this user has the required advanced user rights. The required user rights are listed in “User IDs required to complete the installation wizard” on page 38.

2. Insert WebSphere Commerce CD 1 into the CD-ROM drive of the node.
3. Run `setup.exe` or enter `setup -console` at a command prompt.

Using the `-console` parameter starts a text-based installation wizard. The steps in the text-based installation wizard and the GUI-based installation wizard are the same, but the methods of selection options and continuing in the installation wizard differ.

In this section, instructions for selecting options and continuing are provided only for the GUI-based installation wizard. To select options and continue when using the text-based installation wizard, follow the prompts provided by the text-based installation wizard.

Important

You cannot install WebSphere Commerce from a network mapped drive from a remote session on Windows 2000 Terminal Server edition.

4. Select the language you want to use during the install and click **OK**.

Important: The language selected here becomes the default language for the WebSphere Commerce instance. Attempting to create a WebSphere Commerce instance with a default language different from the language selected here will cause the WebSphere Commerce instance to be populated with invalid data.

After selecting the language you want to use during the install, a check is performed to ensure that the system meets the pre-installation requirements.

If your system meets the pre-installation requirements the Welcome panel displays.

If your system does not meet the pre-installation requirements, a dialog box will display detailing the requirements which have not been met. Click **Cancel**

and then **Exit Setup** to exit the installation program. Take the appropriate steps to meet the pre-installation requirements which were listed and begin the installation again.

5. If your system meets the pre-installation requirements, click **Next** on the Welcome panel.
6. The Software License Agreement page displays. Review the terms of the license agreement in the Software License Agreement page.
If you accept the terms of the license agreement, select **I accept the terms in the license agreement** and click **Next** to accept the terms of the license agreement.
If you decline the terms of the license agreement, select **I do not accept the terms in the license agreement** and click **Next**. Declining the terms of the License agreement exits the install program.
7. If you accept the terms of the license agreement, the install type panel displays. Select **Typical Installation**. Click **Next** to continue.
8. When prompted for the topology, select **Three-node installation**. Click **Next** to continue.
9. When prompted for the node on which you are installing, select **WebSphere Commerce Server node**. Click **Next** to continue.
10. Select the database management system installed on the database node from the drop-down list. Click **Next** to continue.
11. If you selected Oracle9i Database as the database, verify the version of Oracle9i Database installed. Click **Next** to continue.
12. Accept the default destination directories for the products being installed, or enter another directory. Click **Next** to continue.

Note: Do not specify destinations as UNC paths (For example, \\system1\destination). You may use mapped drive letters for any destination directory except the WebSphere Application Server destination directory.

13. Complete the panel by entering the appropriate information in each field. Click **Next** to continue. Ensure that any user IDs and passwords entered meet the requirements outlined in Chapter 10, "Quick reference to IDs required during installation," on page 37.

Note: The Windows ID specified during this step will be used to start the DB2 Universal Database (if you chose to use DB2 Universal Database) and the WebSphere Commerce Configuration Manager services on this node.

14. Select the language of the documentation that you want installed. Click **Next** to continue.
15. On the confirmation page, review the components being installed and their location. To make any changes, use the **Back** button to return to the panel where you want to make changes.
To begin installing the components listed on the confirmation page, click **Next**.
16. Insert the CDs as prompted, and enter the location of the CDs. As components are being installed, panels display showing the progress of the installation of the component. Follow any additional prompts that may display at this time.
17. The installation is complete when the summary panel displays. Click **Next** to continue.

18. The Installation Complete panel displays. From the Installation Complete panel, you can access more information about WebSphere Commerce or exit the installation wizard by clicking **Finish**.

The next step

After completing a typical installation, do the following:

1. If you have not yet done so, review the README file and install any additional fixes mentioned in the README file. For more information about the README file, refer to “Reviewing the README file” on page 10.
2. Verify your installation by following the instructions in Chapter 13, “Verifying your installation,” on page 57.

Chapter 12. Completing a custom installation

A custom installation should only be attempted by users with advanced knowledge of WebSphere Commerce including:

- Advanced knowledge of WebSphere Application Server Version 5.0 configuration and operation in distributed environments.
- Experience in the creation of WebSphere Commerce instances in distributed environments.
- Experience in the configuration and administration of remote databases.
- Experience in the configuration of Web servers to work with remote applications.

When you perform a custom installation, each of the following components can be installed on a separate node:

WebSphere Commerce components


WebSphere Commerce Server

This component provides all of the function of WebSphere Commerce except for WebSphere Commerce Payments.

Selecting this component installs the following on the node:

- WebSphere Commerce server
- WebSphere Commerce Configuration Manager server
- WebSphere Commerce Configuration Manager client
- WebSphere Commerce online help
- WebSphere Commerce sample stores
- WebSphere Application Server base product
- DB2 Universal Database application development client (if required)

Important: You must have a Web server and a database installed before installing this component as information about the Web server and the database are required to complete in the installation wizard for this component.

 If you plan to use a local DB2 Universal Database with the WebSphere Commerce server component and DB2 Universal Database is not yet installed, ensure that you also select the **DB2 Universal Database** component when you select the WebSphere Commerce server component in the installation wizard.

If you plan to use a remote DB2 Universal Database with the WebSphere Commerce Server component, no extra steps are required when installing the WebSphere Commerce server component.



If you plan to use a local Oracle9i Database database with the WebSphere Commerce server component, ensure that you have Oracle9i Database installed and configured on the node before installing the WebSphere Commerce server component. For more information, refer to Part 2, “Installing a database,” on page 15.

If you plan to use a remote Oracle9i Database with the WebSphere Commerce server component, ensure that you have the Oracle9i Database client software installed and configured on the node before installing the WebSphere Commerce Server component. For more information, refer to Part 2, “Installing a database,” on page 15.

WebSphere Commerce example files

This component provides various sample files, including those for Product Advisor, Web Services and Payments.

This component does not include the WebSphere Commerce sample stores.

WebSphere Commerce online help

This component installs the online help files for WebSphere Commerce (including WebSphere Commerce Payments). Installing this component copies the online help files to a location you select in the installation wizard, but it does not install a Web server to view the files over HTTP — the files can only be viewed by opening the files from the node’s file system.

If you are using a multiple node topology, install this component on the Web server node.

WebSphere Commerce Payments

This component installs all of the function of WebSphere Commerce Payments.

Selecting this component installs the following on the node:

- WebSphere Commerce Payments
- WebSphere Commerce Configuration Manager server
- WebSphere Commerce Configuration Manager client
- WebSphere Commerce online help
- WebSphere Application Server base product
- DB2 Universal Database application development client (if required)

Important: You must have a Web server and a database installed before installing this component as information about the Web server and the database are required to complete in the installation wizard for this component.

DB2

If you plan to use a local DB2 Universal Database with the WebSphere Commerce Payments component and DB2 Universal Database is not yet installed, ensure that you also select the **DB2 Universal Database** component when you select the WebSphere Commerce Payments component in the installation wizard.

If you plan to use a remote DB2 Universal Database with the WebSphere Commerce Payments component, no extra steps are required when installing the WebSphere Commerce Payments component.

Oracle

If you plan to use a local Oracle9i Database with the WebSphere Commerce Payments component, ensure that you have Oracle9i Database installed and configured on the node before installing the WebSphere Commerce Payments component. For more information, refer to Part 2, "Installing a database," on page 15.

If you plan to use a remote Oracle9i Database with the WebSphere Commerce Payments component, ensure that you have the Oracle9i Database client software installed and configured on the node before installing the WebSphere Commerce Payments component. For more information, refer to Part 2, "Installing a database," on page 15.

Remote WebSphere Commerce Configuration Manager client

This component allows you to create instances and configure WebSphere Commerce and WebSphere Commerce Payments from a node remote from both the WebSphere Commerce and WebSphere Commerce Payments nodes.

Supporting software

DB2 Universal Database

Selecting this component installs and configures IBM DB2 Universal Database Version 8.1.1, Enterprise Server Edition . Selecting this component will not install the DB2 Administration Client on a node.

IBM HTTP Server

Selecting this component installs and configures IBM HTTP Server. It also installs the WebSphere Application Server plug-in for IBM HTTP Server.

WebSphere Application Server Web server plug-in

This option is only available if IBM HTTP Server is detected on the system.

Selecting this component installs the WebSphere Application Server Web server plug-in for a Web server you select in the installation wizard.

Performing a custom installation

In order to install all of the WebSphere Commerce components in a custom configuration, repeat the steps in this section on each node in your configuration.

To perform a custom installation on a node, do the following:

1. Ensure that you are logged onto your system as a user with Administrative authority.
2. Insert WebSphere Commerce CD 1 into the CD-ROM drive of the node.
3. Run setup or enter the following command at a command prompt:
`setup -console`

Using the `-console` parameter starts a text-based installation wizard. The steps in the text-based installation wizard and the GUI-based installation wizard are the same, but the methods of selection options and continuing in the installation wizard differ.

In this section, instructions for selecting options and continuing are provided only for the GUI-based installation wizard. To select options and continue when using the text-based installation wizard, follow the prompts provided by the text-based installation wizard.

Important

You cannot install WebSphere Commerce from a network mapped drive from a remote session on Windows 2000 Terminal Server edition.

4. Select the language and click **OK**.

Important: The language selected here become the default language for the WebSphere Commerce instance. Attempting to create a WebSphere Commerce instance with a default language different from the language selected here will cause the WebSphere Commerce instance to be populated with invalid data.

5. On the Welcome panel, click **Next**.
6. The Software License Agreement page displays. Review the terms of the license agreement in the Software License Agreement page.
If you accept the terms of the license agreement, select **I accept the terms in the license agreement** and click **Next** to accept the terms of the license agreement.
If you decline the terms of the license agreement, select **I do not accept the terms in the license agreement** and click **Next**. Declining the terms of the License agreement exits the install program.
7. If you accept the terms of the license agreement, the install type panel displays. Select **Custom Installation**. Click **Next** to continue.
8. Select the components you want to install on the node. Click **Next** to continue. Descriptions of each component are provided at the beginning of this chapter.
9. Depending on the components you selected, the remaining panels of the installation wizard will prompt you for various information. Complete the information in the fields on each panel, clicking **Next** to move to the next panel.

Descriptions of the values required to complete the installation wizard are provided in Chapter 10, "Quick reference to IDs required during installation," on page 37.

After you have completed the panels requesting information, the confirmation page displays.

10. On the confirmation page, review the components being installed and their location. To make any changes, use the **Back** button to return to the panel where you want to make changes.

To begin installing the components listed on the confirmation page, click **Next**.

Notes:

- a. If you are using the custom installation to add WebSphere Commerce Payments to WebSphere Commerce - Express, ensure that you select **No to all** when the installation wizard asks if you want to overwrite existing files.
 - b. Do not specify destination directories as UNC paths (For example, \\system1\destination). You may use mapped drive letters.
11. Insert the CDs as prompted, and enter the location of the CDs.
As components are being installed, panels display showing the progress of the installation of the component. Follow any additional prompts that may display at this time.
Notes:
 - a. Do not specify locations of the CD or CD image as UNC paths (For example, \\system1\destination). You may use mapped drive letters.
 - b. The WebSphere Application Server CD must be available in the local CD-ROM drive or as an image on the local hard drive. Specifying a network location for the WebSphere Application Server CD will cause the installation to fail.
 12. The installation of the selected components is complete when the summary panel displays. Click **Next** to continue.
 13. The Installation Complete panel displays. From the Installation Complete panel, you can access more information about WebSphere Commerce or exit the installation wizard by clicking **Finish**.
 14. Reenable any virus checking software that was disabled before starting the installation wizard.

The next step

After completing a custom installation, do the following:

1. If you have not yet done so, review the README file and install any additional fixes mentioned in the README file. For more information about the read me file, refer to “Reviewing the README file” on page 10.
2. Verify your installation by following the instructions in Chapter 13, “Verifying your installation,” on page 57.

Chapter 13. Verifying your installation

During the installation of WebSphere Commerce and its components, log files are generated. Examine the following log files to ensure that your installation was successful:

- “DB2 Universal Database installation log”
Only check this log file if you installed DB2 Universal Database using the WebSphere Commerce installation wizard.
- “WebSphere Application Server installation log”
- “WebSphere Commerce installation log” on page 58

To confirm the installation of any non-IBM software, refer to the documentation provided with the non-IBM software package.

DB2 Universal Database installation log

In a distributed installation of WebSphere Commerce, the DB2 Universal Database installation log appears on the database node.

This log contains messages generated during the installation of DB2 Universal Database. The default location for this log file is:

```
WC_installdir\logs\db2wi.log
```

Default values for *WC_installdir* are listed in “Path variables” on page iv.

If the log file cannot be located in the default directory, check the following directory for the log file:

```
drive:\Documents and Settings\user_id\Local Settings\Temp
```

This directory is hidden by default. You may have to change the folder options in order view this directory

If you cannot find the log file in either location, use the Windows search facility to find the file.

If the last line in the log file contains the following text, DB2 Universal Database installed successfully:

```
Product: DB2 Enterprise Server Edition --  
Installation operation completed successfully.
```

The message has been formatted to fit the page. This message should appear on a single line in the log file.

WebSphere Application Server installation log

In a distributed installation of WebSphere Commerce, the WebSphere Application Server installation log appears on the Web server node, the WebSphere Commerce node and the WebSphere Commerce Payments node.

This log contains messages generated during the installation of WebSphere Application Server. The default location for this log file is:

```
WAS_installdir\logs\log.txt
```

Default values for *WAS_installdir* are listed in “Path variables” on page iv.

The WebSphere Application Server installation is complete if the following message appears in the log file:

```
INSTFIN: The WebSphere 5.0 install is complete.
```

WebSphere Commerce installation log

In a distributed installation of WebSphere Commerce, the WebSphere Commerce installation log appears on the WebSphere Commerce node, WebSphere Commerce Payments node, and the WebSphere Commerce Configuration Manager client node.

This log contains messages generated by the WebSphere Commerce installation wizard. The default location for this log file is:

```
WC_installdir\logs\install_date_time.log
```

Default values for *WC_installdir* are listed in “Path variables” on page iv.

Review this log to ensure that all components of WebSphere Commerce installed successfully.

If this log file cannot be found in its default location, look for the log file in the following directory:

```
drive:\Documents and Settings\user_ID
```

The WebSphere Commerce installation is complete if the following message appears in the log file:

```
WebSphere Commerce installation Complete.
```

The next step

After verifying your installation, continue by creating a WebSphere Commerce and WebSphere Commerce Payments instance by following the instructions in Part 5, “Creating a WebSphere Commerce and a WebSphere Commerce Payments instance,” on page 59.

Part 5. Creating a WebSphere Commerce and a WebSphere Commerce Payments instance

Once you have installed all the required software, you can create a WebSphere Commerce instance and a WebSphere Commerce Payments instance. These instances can be created through the Configuration Manager.

This section contains the following chapters:

- Chapter 14, “Before you create or modify an instance with Configuration Manager,” on page 61
- Chapter 15, “Creating a WebSphere Commerce instance,” on page 63
- Chapter 16, “Creating a WebSphere Commerce Payments instance,” on page 65

Chapter 14. Before you create or modify an instance with Configuration Manager

Before you start the Configuration Manager server or before you create or modify an instance with Configuration Manager, do the following:

1. Ensure that you have installed any fixes mentioned in the README file. For more information about the README file, refer to “Reviewing the README file” on page 10.
2. Ensure that you meet the prerequisites for starting Configuration Manager. The prerequisites are listed in “Configuration Manager prerequisites.”
3. Start the Configuration Manager by following the instructions in “Starting the Configuration Manager.”

Important

You should only modify the following Web server properties, as well as any Commerce-related properties, through the Configuration Manager GUI (and not through the Web server GUI nor the WebSphere Application Server Administrative Console):

- SSL (enabling or disabling)
- Web server instance name or port number
- SSL port number
- System IP address (Payments server host)

This will ensure that all configuration files, not just the Web server configuration files, are updated properly with the correct information.

+ Configuration Manager prerequisites

- + Before starting the WebSphere Commerce Configuration Manager, complete the following checklist to ensure that you meet all the prerequisites:
- + The database server is running.

Starting the Configuration Manager

To start WebSphere Commerce Configuration Manager on Windows, do the following:

1. Ensure that the IBM WC Configuration Manager server process is running by selecting **Start** → **Settings** → **Control Panel** → **Administrative Tools** → **Services** and check that the IBM WC Configuration Manager service has a status of Started.

If the IBM WC Configuration Manager service has a status of Stopped, right-click the service name and select **Start** from the pop-up menu.

Important

Leaving the IBM WC Configuration Manager server service running could potentially pose a security problem. Stop the WC Configuration Manager server service when you are not using the Configuration Manager.

To prevent potential security problems, you should also ensure that the IBM WC Configuration Manager server is set for manual startup, not automatic.

When you start the Configuration Manager server as a service, it listens on port 1099 for a connection. To have the Configuration Manager server listen on a different port, do the following:

- a. Ensure that the IBM WC Configuration Manager service is stopped.
- b. Start a command prompt session and issue the following command:

```
WC_installdir/bin/config_server -port port_number
```

where *port_number* is the port on which the Configuration Manager server will listen for a connection.

Closing the command prompt session will shut down the Configuration Manager server.

2. Do one of the following:

For a local WebSphere Commerce Configuration Manager client:

Select **Start** → **Programs** → **IBM WebSphere Commerce** → **Configuration**.

For a remote WebSphere Commerce Configuration Manager client:

On the Configuration Manager client machine, enter the following command from a command prompt session:

```
WC_installdir/bin/configClient -hostname cm_hostname [-port cm_port]
```

where the variables are defined as follows:

cm_hostname

The fully qualified host name of the Configuration Manager server machine.

cm_port

The port specified when starting the Configuration Manager server.

The `-port` parameter is optional. If you do not specify the `-port` parameter, the Configuration Manager client attempts to connect to the Configuration Manager server using port 1099.

3. Log in to Configuration Manager. The initial ID is **webadmin** and the initial password is **webibm**. If this is the first time you are logging in to Configuration Manager, you will be asked to change the password.

The next step

After completing the steps in this section, continue with the following sections:

- Chapter 15, “Creating a WebSphere Commerce instance,” on page 63.
- Chapter 16, “Creating a WebSphere Commerce Payments instance,” on page 65.

Chapter 15. Creating a WebSphere Commerce instance

This chapter describes how to create a WebSphere Commerce instance. For information on modifying a WebSphere Commerce instance, refer to “Modifying a WebSphere Commerce or WebSphere Commerce Payments instance” on page 106.



Creating a new WebSphere Commerce instance

To create a new WebSphere Commerce instance, do the following:

1. Start the WebSphere Commerce Configuration Manager. For details, refer to “Starting the Configuration Manager” on page 61.
2. Under **WebSphere Commerce**, expand your *hostname*.
3. Expand **Commerce**.
4. Right-click on **Instance List**.
5. From the resulting pop-up menu, select **Create Instance**. The Instance Creation wizard starts.
6. Complete the Instance Creation wizard.



For help on completing the panels and fields in the instance creation wizard, click **Help** on the Instance creation wizard. A **Help** button is available on each panel of the wizard. The help panels apply to all supported WebSphere Commerce platforms.

7. When you have completed the necessary information in the panels, the **Finish** button is enabled. Click **Finish** to create the WebSphere Commerce instance.
8.  **Oracle** You are asked if you want to populate the Oracle database. Select **Yes** if you want your database to be populated, or **No** if you do not want your database to be populated.
9.  **DB2** If you chose to use an existing DB2 Universal Database database, you are asked if you want to populate the database. Select **Yes** if you want your database to be populated, or **No** if you do not want your database to be populated.

The time required to create an instance depends on the speed of your system. The progress bar that displays when you start creating the instance will indicate when the process has finished.

10. When instance creation is complete, a dialog box appears containing a summary. Click **OK** to close the dialog box.
11. Other dialog boxes may display containing additional instructions, ensure that you review the contents of the dialog boxes before dismissing them.
12. Exit Configuration Manager by clicking on **Console** and **Exit**.

You can now verify the creation of the WebSphere Commerce instance by following the instructions in “Verifying the instance creation.”

Verifying the instance creation




The configuration information for the new WebSphere Commerce instance is stored in the following file:

```
WC_installdir/instances/instance_name/xml/instance_name.xml
```

where default values for *WC_installdir* are listed in “Path variables” on page iv and *instance_name* is the name of WebSphere Commerce instance.

Confirm that this file exists before checking the log files produced during instance creation.

Creating a WebSphere Commerce instance produces the following log files:

- auction.log
- createdb.log
-  createdb.db2.log
- createdb.production.log
- GenPluginCfg.log
- populatedb.err.log
- populatedb.log
- populatedb2.err.log
- populatedb2.log
- populatedbnl.err.log
- populatedbnl.log
-  reorgdb2.log
-  reorgdb2.err.log
- trace.txt
- WASConfig.log
- WASConfig.err.log

The files are located in the following directory:

WC_installdir/instances/instance_name/logs

where default values for *WC_installdir* are listed in “Path variables” on page iv and *instance_name* is the name of WebSphere Commerce instance.

The database population part of instance creation is successful if the following logs are empty:

- populatedb.err.log
- populatedb2.err.log
- populatedbnl.err.log
- reorgdb2.err.log
- WASConfig.err.log

Also, review the contents of the following logs to confirm they do not contain any errors:

- createdb.log
-  createdb.db2.log

The next step

After you have configured your WebSphere Commerce instance, you should continue by creating a WebSphere Commerce Payments instance. Instructions for creating a WebSphere Commerce Payments are provided in Chapter 16, “Creating a WebSphere Commerce Payments instance,” on page 65.

Chapter 16. Creating a WebSphere Commerce Payments instance

This chapter describes how to create a WebSphere Commerce Payments instance. For information on modifying a WebSphere Commerce Payments instance, refer to “Modifying a WebSphere Commerce or WebSphere Commerce Payments instance” on page 106.

Refer to the WebSphere Commerce Payments cassette supplements for more information about using a particular WebSphere Commerce Payments cassette. To use a WebSphere Commerce Payments cassette with a WebSphere Commerce sample store, refer to *WebSphere Commerce Store Development Guide*.

Note: You should only change WebSphere Commerce Payments ports through the WebSphere Commerce Configuration Manager, as stated in Chapter 14, “Before you create or modify an instance with Configuration Manager,” on page 61 and not through the WebSphere Application Server Administrative Console. This ensures that all properties and files are updated with the same information.

Creating a new WebSphere Commerce Payments instance

To create a new WebSphere Commerce Payments instance, do the following:

1. Start the WebSphere Commerce Configuration Manager. For details, see “Starting the Configuration Manager” on page 61.

In cases where WebSphere Commerce Payments is on a separate node from WebSphere Commerce, ensure that the Configuration Manager server on the WebSphere Commerce Payments node is started.

2. Expand **WebSphere Commerce**.
3. Expand your host name.
4. Expand **Payments**.
5. Right-click on **Instance List**.
6. From the resulting pop-up menu, select **Create Payments Instance**. The Payments Instance Creation wizard starts.
7. Complete the Payments instance creation wizard information.





For help on completing the panels and fields in the Payments instance creation wizard, click **Help** on the instance creation wizard. A **Help** button is available on each panel of the wizard. The Help panels apply to all supported WebSphere Commerce platforms.

Each WebSphere Commerce Payments instance must have a unique instance name and database name.

Important: When completing the WebSphere Commerce Payments instance creation wizard, ensure that the value you enter in the **Site Admin ID** field is the WebSphere Commerce Site Administrator ID. The WebSphere Commerce Site Administrator ID was created when you created the WebSphere Commerce instance and it was the

value entered in the **Site Admin ID** field of the WebSphere Commerce instance creation wizard.

8. When you have completed all the necessary information in all the panels, the **Finish** button is enabled. Click **Finish** to create the WebSphere Commerce Payments instance.
9.  You are asked if you want to populate the Oracle database. Select **Yes** if you want your database to be populated, or **No** if you do not want your database to be populated.
10.  If you chose to use an existing DB2 database, you are asked if you want to populate the database. Select **Yes** if you want your database to be populated, or **No** if you do not want your database to be populated.

The time required to create an instance depends on the speed of your system. The progress bar that displays when you start creating the instance will indicate when the process has finished.

11. When instance creation is complete, a dialog appears containing a summary. Click **OK** to close the dialog window.
Ensure that you review contents of the dialog. It may contain additional instructions you must perform before using the instance.
12. Exit Configuration Manager by clicking on **Console** and **Exit**.

You can now verify the creation of the WebSphere Commerce Payments instance by following the instructions in “Verifying the instance creation.”

Verifying the instance creation

The configuration information for the new WebSphere Commerce Payments instance is stored in the following file:

```
WC_installdir/instances/instance_name/xml/instance_name.xml
```

where default values for *WC_installdir* are listed in “Path variables” on page iv and *instance_name* is the name of WebSphere Commerce Payments instance.

Confirm that this file exists before checking the log files produced during instance creation.

Creating a WebSphere Commerce Payments instance produces the following log files:

- createdb.log
- createdb.err.log

The files are located in the following directory:

```
WC_installdir/instances/instance_name/logs
```

where default values for *WC_installdir* are listed in “Path variables” on page iv and *instance_name* is the name of WebSphere Commerce Payments instance.

Check the createdb.err.log file for any errors.

Also, review the contents of the createdb.log log file to confirm that it does not contain any errors.

The next step

After you have configured your WebSphere Commerce Payments instance, you can continue by following the instructions in Part 6, “Last steps,” on page 69.

If you are using a remote Web server, you must follow the instructions in Chapter 17, “Mandatory post-instance creation tasks,” on page 71.

Part 6. Last steps

This section outlines the mandatory tasks you must perform after creating a WebSphere Commerce and WebSphere Commerce Payments instance. This section also provides information about additional recommended tasks to perform.

Chapter 17. Mandatory post-instance creation tasks

Depending on your WebSphere Commerce topography, perform the tasks in one of the following sections after creating WebSphere Commerce and WebSphere Commerce Payments instances:

- “Local Web server post-instance creation tasks”
- “Remote Web server post-instance creation tasks”

Local Web server post-instance creation tasks

If the Web server is installed on the same node as WebSphere Commerce and WebSphere Commerce Payments you must stop and restart the Web server after creating WebSphere Commerce and WebSphere Commerce Payments instances.

Note: If you are using Microsoft Internet Information Services, you must stop and restart all web related services and applications including the IIS Admin Service, World Wide Web Publishing service, FTP service, the Default Web Site, the Default FTP Site, and the Default SMTP Virtual Server. Depending on the configuration of your Microsoft Internet Information Services server, you may not find all the services or servers on your Web server machine. See Microsoft Internet Information Services documentation for instructions on how to stop these services and servers.

Remote Web server post-instance creation tasks

If the Web server is installed on a different node from WebSphere Commerce and WebSphere Commerce Payments, do the following after creating a WebSphere Commerce or a WebSphere Commerce Payments instance:

1. Copy the `plugin-cfg.xml` from the WebSphere Commerce node to the Web server node. For instructions, refer to “Copying the `plugin-cfg.xml` file to Web server” on page 115.
2. If WebSphere Commerce and WebSphere Commerce Payments are installed on different nodes, merge the contents of the `plugin-cfg.xml` file on the WebSphere Commerce Payments node with the `plugin-cfg.xml` on the Web server node. For instructions, refer to “Merging the WebSphere Commerce Payments `plugin-cfg.xml` file” on page 116.
3. If it does not exist, create a directory on the Web server node that matches the `WAS_installdir` directory on the WebSphere Commerce node.
4. Copy the following directories from the WebSphere Commerce node to the Web server node:

```
WAS_installdir/installedApps/cell_name/WC_instance_name.ear
WC_installdir/web/doc/locale
```

where the variables are defined as follows:

`WAS_installdir`

Default values for this variables are listed in “Path variables” on page iv

`WC_installdir`

Default values for this variables are listed in “Path variables” on page iv

cell_name

This is the short host name of the machine on which WebSphere Commerce and WebSphere Commerce Payments are installed.

Commerce_instance_name

This is the name of the WebSphere Commerce instance.

locale

This is locale code for the National Language of the files contained in the directory. For example, Japanese files will be contained in the ja_JP directory.

Ensure that the full paths on the Web server node and the WebSphere Commerce node are the same. You may need to create the directories that make up this path on the Web server node.

Important

It is recommended that you remove any JSP and JAR files from the *WC_instance_name.ear* directory on the Web server. Only static-content files should be in the *WC_instance_name.ear* directory on the Web server.

5. For IBM HTTP Server users, ensure that the path for the WebSphere Application Server plug-in is shown correctly in the `httpd.conf` file on the Web server node.

To check the path, open the `httpd.conf` file in a text editor and search for the following:

```
WebSpherePluginConfig
```

This entry should contain the full path to the `plugin-cfg.xml` file on the Web server node. If the path is incorrect, change the path, save the `httpd.conf` file, and restart the Web server.

6. For Microsoft Internet Information Services (IIS) users, do the following:
 - a. Copy the following file on the WebSphere Commerce node to any directory on the remote IIS node:

```
WC_installdir/bin/IISAddAliasInstance.js
```

Default values for *WC_installdir* are listed in "Path variables" on page iv.

- b. On the remote IIS node, start a command prompt session, switch to the directory into which the files were copied, then issue the following command:

```
cscript IISAddAliasInstance.js
```

This command will add all the necessary aliases to the Microsoft Internet Information Services Web server configuration for WebSphere Commerce and WebSphere Commerce Payments.

7. Stop and restart the Web server.

Note: If you are using Microsoft Internet Information Services, you must stop and restart all web related services and applications including the IIS Admin Service, World Wide Web Publishing service, FTP service, the Default Web Site, the Default FTP Site, and the Default SMTP Virtual Server. Depending on the configuration of your Microsoft Internet Information Services server, you may not find all the services or servers

| on your Web server machine. See Microsoft Internet Information Services
| documentation for instructions on how to stop these services and
| servers.

Chapter 18. Recommended post-instance creation tasks

After completing any mandatory post-instance creation tasks, you can continue your installation and configuration of WebSphere Commerce by performing the following tasks:

Review the security of the WebSphere Commerce installation

Security is a crucial component of a production WebSphere Commerce site. Refer to the *WebSphere Commerce Security Guide* for instructions on enabling Secure Sockets Layer (SSL), WebSphere Application Server security, configuring single sign-on and other security options for your installation. This book is available from the WebSphere Commerce technical library. Refer to “WebSphere Commerce technical library” on page 137 for more information.

Publish a WebSphere Commerce sample store

WebSphere Commerce provides a number of sample stores demonstrating various functions in WebSphere Commerce. A WebSphere Commerce sample store can be used to familiarize yourself with WebSphere Commerce and as a base for developing a customized store.

For information on publishing a WebSphere Commerce sample store, refer to the “Publishing a store archive” topic in the WebSphere Commerce online help.

For information on developing a store in WebSphere Commerce, refer to the *WebSphere Commerce Store Development Guide*. This book is available from the WebSphere Commerce technical library. Refer to “WebSphere Commerce technical library” on page 137 for more information.

Note: In WebSphere Commerce Version 5.5, publishing some of the sample stores is done through the WebSphere Commerce Administration Console.

Install additional software provided with WebSphere Commerce

WebSphere Commerce provides a number of additional software packages that enhance WebSphere Commerce and provide additional function. For more information on the additional software provided with WebSphere Commerce, refer to *WebSphere Commerce Additional Software Guide*. This book is available from the WebSphere Commerce technical library. Refer to “WebSphere Commerce technical library” on page 137 for more information.

Perform advanced configuration tasks

Advanced configurations for WebSphere Commerce include federation, clustering, and multiple instances. Advanced configurations are covered in Part 7, “Advanced configuration options,” on page 77.

Part 7. Advanced configuration options

This section contains instructions for the following optional, advanced configurations for WebSphere Commerce:

- Chapter 19, “Creating multiple WebSphere Commerce and WebSphere Commerce Payments instances,” on page 79
- Chapter 20, “Federating WebSphere Commerce and WebSphere Commerce Payments,” on page 85
- Chapter 21, “Clustering WebSphere Commerce,” on page 91

Chapter 19. Creating multiple WebSphere Commerce and WebSphere Commerce Payments instances

WebSphere Commerce supports the creation of multiple WebSphere Commerce instances. That is, with WebSphere Commerce, you can run two or more instances of WebSphere Commerce concurrently by using a different host name for each WebSphere Commerce instance. In this case, a customer can access *host1.domain* and *host2.domain*. This method involves the use of *virtual host names*.

If you are using WebSphere Commerce Payments to process payments in WebSphere Commerce, each instance of WebSphere Commerce requires its own instance of WebSphere Commerce Payments. For every new WebSphere Commerce instance you create, you must also create a new WebSphere Commerce Payments instance.

Multiple instances, as described in this chapter, are used mainly to have different occurrences of WebSphere Commerce that do not share information. Each instance will be unique. To have multiple cloned occurrences of the same WebSphere Commerce instance, refer to Chapter 21, "Clustering WebSphere Commerce," on page 91.

While it is possible to create multiple instance in any configuration of WebSphere Commerce components, the information in this chapter will assume that a WebSphere Commerce instance and its associated WebSphere Commerce Payments instance exist on the same node. Multiple WebSphere Commerce instances using remote WebSphere Commerce Payments instances will not be covered. The instructions in this chapter also assume that the Web server exists on the same node as WebSphere Commerce and WebSphere Commerce Payments.

The information in this chapter will also assume that you have an existing WebSphere Commerce instance and an existing WebSphere Commerce Payments instance. The instructions in this chapter will focus on creating an additional WebSphere Commerce instance and an additional WebSphere Commerce Payments instance.

In this chapter, the following variables will be used when discussing the creation of multiple WebSphere Commerce and WebSphere Commerce Payments instances using virtual host names:

| | Original instance | New instance |
|---|----------------------------|----------------------------|
| WebSphere Commerce instance name | <i>WC_instance_1</i> | <i>WC_instance_2</i> |
| WebSphere Commerce Payments instance name | <i>Payments_instance_1</i> | <i>Payments_instance_2</i> |
| IP address | <i>xxx.xxx.xxx.xxx</i> | <i>yyy.yyy.yyy.yyy</i> |
| Host name | <i>host1</i> | <i>host2</i> |
| Domain name | <i>domain</i> | <i>domain</i> |
| Fully qualified host name | <i>host1.domain</i> | <i>host2.domain</i> |

| | | Original instance | New instance |
|--------|---|---------------------------|---------------------------|
| DB2 | WebSphere Commerce database name | WC_db1 | WC_db2 |
| Oracle | WebSphere Commerce datafile name | Oracle_datafile1 | Oracle_datafile2 |
| Oracle | WebSphere Commerce database user ID | Oracle_user1 | Oracle_user2 |
| Oracle | WebSphere Commerce tablespace name | WC_instance_1TBLSPC | WC_instance_2TBLSPC |
| DB2 | WebSphere Commerce Payments database name | Payments_db1 | Payments_db2 |
| Oracle | WebSphere Commerce Payments tablespace name | Payments_instance_1TBLSPC | Payments_instance_2TBLSPC |

These variables represent the parameter values for your first and second instance are intended to show where values are unique or common between instances.

Normally, you will have operational pre-existing WebSphere Commerce and WebSphere Commerce Payments instances and you want to create an additional instance or instances. If you have a pre-existing instance, you do not have to modify any of the parameter values for that instance in order to add an additional instance. You may want to modify some parameters of your original instance in order to better organize your multi-instance environment.

Prerequisites

On each node where you want to create multiple instances of WebSphere Commerce or WebSphere Commerce Payments using virtual host names, ensure that the node meets the following requirements:

- Each WebSphere Commerce instance must have its own host name. This host name will also be used by the associated WebSphere Commerce Payments instance.
- Each host name for each instance requires its own IP address. The IP address must be valid on the network, with associated host names in the DNS server. The IP address must also be on the same VLAN as the IP address of the original instance.



- You may also use the IP address and host name of the node for one of the instances. In this case, you need just two IP addresses for two instances.
- Each set of WebSphere Commerce and WebSphere Commerce Payments instances requires its own host name.


Note: IBM HTTP Server does not allow underscore characters (_) in a host name.

For instructions on adding another IP address to a machine, refer to your operating system documentation.

- The host name for each instance must resolve fully to separate IP addresses. For example, to verify that you can run WebSphere Commerce Configuration Manager and create multiple instances, run the `nslookup` command on both the host name and IP address for each instance. The host name should resolve to its correct IP address, and the IP address should resolve to its correct host name:

```
nslookup 'host1.domain'
nslookup 'xxx.xxx.xxx.xxx'
```

```
nslookup 'host2.domain'
nslookup 'yyy.yyy.yyy.yyy'
```

- For each additional WebSphere Commerce instance and its associated WebSphere Commerce Payments instance on a system, increase the system's memory by 512MB.
- For each additional WebSphere Commerce instance and its associated WebSphere Commerce Payments instance on a system, increase the system's virtual memory by 1GB.
-  If you are using Oracle9i Database with WebSphere Commerce, each additional WebSphere Commerce instance and its associated WebSphere Commerce Payments instance will require its own datafile. The tablespaces and Oracle9i Database IDs required by WebSphere Commerce and WebSphere Commerce Payments can be created for you when you created the instances.

Web server prerequisites

If you are using Microsoft Internet Information Services or Sun ONE Web Server, you must do the following:

1. Create a new Web server associated with the new virtual host name and new IP address. Refer to the Web server documentation for instructions.
2. Configure the Web server according the instructions found Part 3, "Installing a Web server," on page 23.

Before continuing, ensure that the following URLs work:





| Original instance | New instance |
|--|--|
| • <code>http://host1.domain</code> | • <code>http://host2.domain</code> |
| • <code>http://host1.domain:5432</code> | • <code>http://host2.domain:5432</code> |
| • <code>https://host1.domain</code> | • <code>https://host2.domain</code> |
| • <code>https://host1.domain:5433</code> | • <code>https://host2.domain:5433</code> |
| • <code>https://host1.domain:8000</code> | • <code>https://host2.domain:8000</code> |
| • <code>https://host1.domain:8002</code> | • <code>https://host2.domain:8002</code> |
| • <code>https://host1.domain:8004</code> | • <code>https://host2.domain:8004</code> |

Creating multiple WebSphere Commerce instances

Assuming you have already created your first WebSphere Commerce instance, you can create each additional instance that you require by following the instructions in Chapter 15, "Creating a WebSphere Commerce instance," on page 63. In the following table, the existing instance is represented by **Original instance** and the new instance is represented by **New instance**. You do not have to modify the values for an existing instance.

You can create multiple WebSphere Commerce instances in the same WebSphere Commerce Configuration Manager session.

The following table lists the modified default values for the new instance. Replace these values with the actual values that you want to use for your instance.

| Field in Configuration Manager | Original instance | New instance |
|---|---|---|
| Instance - Instance name | <i>WC_instance_1</i> | <i>WC_instance_2</i> |
| Instance - Instance root path | <i>WC_installdir/ instances/ WC_instance_1</i> | <i>WC_installdir/instances/ WC_instance_2</i> |
|  Database - Database name | <i>WC_db1</i> | <i>WC_db2</i> |
|  Database - Datafile name | <i>Oracle_datafile1</i> | <i>Oracle_datafile2</i> |
|  Database - Database user ID | <i>Oracle_user1</i> | <i>Oracle_user2</i> |
|  Database - Tablespace name | <i>WC_instance_1TBLSPC</i> | <i>WC_instance_2TBLSPC</i> |
| Web server - hostname | <i>host1.domain</i> | <i>host2.domain</i> |
| Web server - Primary Document Root (IBM HTTP Server) | <i>HTTP_installdir/htdocs1</i> | <i>HTTP_installdir/htdocs2</i> |
| Web server - Primary Document Root (Sun ONE Web Server) | <i>SunONEweb_installdir/docs1</i> | <i>SunONEweb_installdir/docs2</i> |
| Web server - Primary Document Root (Microsoft Internet Information Services) | <i>C:\WINNT\System32\inetrv\ iisadmin\htmldocs1</i> | <i>C:\WINNT\System32\inetrv\ iisadmin\htmldocs2</i> |
| WebSphere Commerce Payments - hostname | <i>host1.domain</i> | <i>host2.domain</i> |

Default values for *WC_installdir*, *SunONEweb_installdir*, and *IBM HTTP Server* are listed in “Path variables” on page iv.

Ensure that you verify the instance creation by following the instructions in “Verifying the instance creation” on page 63.

If you are using WebSphere Commerce Payments to process payments in WebSphere Commerce, you must create a WebSphere Commerce Payments instance for each additional WebSphere Commerce instance.





Creating multiple WebSphere Commerce Payments instances

Assuming you have already created your first WebSphere Commerce Payments instance, you can create each additional instance that you require by following the instructions in Chapter 16, “Creating a WebSphere Commerce Payments instance,” on page 65. In the following table, the existing instance is represented by **Original**

instance and the new instance is represented by **New instance**. You do not have to modify the values for an existing instance.

You can create multiple WebSphere Commerce Payments instances in the same WebSphere Commerce Configuration Manager session.

The following table lists the modified default values for the new instance. Replace these values with the actual values that you want to use for your instance.

| Field in Configuration Manager | Original instance | New instance |
|---|---|---|
| Instance - Instance name | <i>Payments_instance_1</i> | <i>Payments_instance_2</i> |
|  Database - Database name | <i>Payments_db1</i> | <i>Payments_db2</i> |
|  Database - Datafile name | <i>Oracle_datafile1</i> | <i>Oracle_datafile2</i> |
|  Database - Database user ID | <i>Oracle_user1</i> | <i>Oracle_user2</i> |
|  Database - Tablespace name | <i>Payments_instance_1TBLSPC</i> | <i>Payments_instance_2TBLSPC</i> |
| Web server - hostname | <i>host1.domain</i> | <i>host2.domain</i> |
| WebSphere Commerce - hostname | <i>host1.domain</i> | <i>host2.domain</i> |
| Web server - Primary Document Root (IBM HTTP Server) | <i>HTTP_installdir/htdocs1</i> | <i>HTTP_installdir/htdocs2</i> |
| Web server - Primary Document Root (Sun ONE Web Server) | <i>SunONEweb_installdir/docs1</i> | <i>SunONEweb_installdir/docs2</i> |
| Web server - Primary Document Root (Microsoft Internet Information Services) | <i>C:\WINNT\System32\inetsrv\iisadmin\htmldocs1</i> | <i>C:\WINNT\System32\inetsrv\iisadmin\htmldocs2</i> |

Ensure that you verify the instance creation by following the instructions in “Verifying the instance creation” on page 66.

After verifying the additional WebSphere Commerce Payments instances, test the instances.

Testing multiple instances

To test the original and new instances, do the following:

1. Start all WebSphere Commerce instances. For instructions, refer to “Starting or stopping a WebSphere Commerce instance” on page 105.
2. Start all WebSphere Commerce Payments instances. For instructions, refer to “Starting or stopping a WebSphere Commerce Payments instance” on page 105.

3. Test the following URLs:

| Original instance | New instance |
|---|---|
| <ul style="list-style-type: none"> • http://host1.domain • http://host1.domain:5432/webapp/PaymentManager • https://host1.domain • https://host1.domain:5433/webapp/PaymentManager • https://host1.domain:8000/accelerator • https://host1.domain:8002/adminconsole • https://host1.domain:8004/orgadminconsole | <ul style="list-style-type: none"> • http://host2.domain • http://host2.domain:5432/webapp/PaymentManager • https://host2.domain • https://host2.domain:5433/webapp/PaymentManager • https://host2.domain:8000/accelerator • https://host2.domain:8002/adminconsole • https://host2.domain:8004/orgadminconsole |

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+ Chapter 20. Federating WebSphere Commerce and WebSphere Commerce Payments

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WebSphere Commerce and WebSphere Commerce Payments are installed with the WebSphere Application Server base product. Both WebSphere Commerce and WebSphere Commerce Payments can be considered base WebSphere Application Server nodes.

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WebSphere Application Server Network Deployment provides a mechanism which allows you to start the application servers from the WebSphere Application Server Administrative Console. This mechanism is called *federating the application server nodes*. Application server nodes are federated into a *cell* and all of the application servers in a cell are administered by a *deployment manager*. The deployment manager is also an application server. Cells can also be referred to as *deployment manager cells*.

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By federating the WebSphere Commerce node and the WebSphere Commerce Payments node into a single deployment manager cell, you can start, stop, and administer both application servers from a WebSphere Application Server Administrative Console. The WebSphere Application Server Administrative Console is a browser-based application, so it can be accessed from any machine on the same network as the cell that has a Web browser. For Web browser requirements for the WebSphere Application Server Administrative Console, refer to the WebSphere Application Server documentation.

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Important

Before federating WebSphere Commerce, it is strongly recommended that you backup the WebSphere Application Server administrative configuration. Backing up the administrative configuration will allow you to restore the original configuration if federation fails during the federation process. For more information, refer to the "Backing up and restoring administrative configurations" topic in the WebSphere Application Server InfoCenter available through the following URL:

<http://www.ibm.com/software/webservers/appserv/infocenter.html>

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+ Federating WebSphere Commerce

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To federate WebSphere Commerce into a deployment manager cell, do the following:

1. Install the WebSphere Application Server Network Deployment product on a separate machine from the machines on which you installed WebSphere Commerce, WebSphere Commerce Payments, the database, and the Web server. This machine now hosts the deployment manager.

Only one system hosts the deployment manager. As it federates application servers, it expands the cell that it manages. Although you can install other application servers on the same machine as the deployment manager, it is not generally done unless you have a machine with the capacity to host both products. The deployment manager is the central administrative manager.

Instructions for installing WebSphere Application Server Network Deployment are available in *IBM WebSphere Application Server Network Deployment Getting*

started. This book is available as a PDF file in the docs directory of the WebSphere Application Server Network Deployment CD.

Important: Ensure that you apply any WebSphere Application Server fixes documented in the WebSphere Commerce README file to the WebSphere Application Server Network Deployment installation. For more information about the README file, refer to “Reviewing the README file” on page 10.

Failure to apply these fixes will result in WebSphere Commerce functioning incorrectly after federation.

2. On the WebSphere Application Server Network Deployment machine, start the deployment manager. Refer to “Starting and stopping the WebSphere Application Server Network Deployment deployment manager” on page 111 for instructions.
3. Federate the WebSphere Commerce application server into the deployment manager cell by issuing the following command:

```
WAS_installdir/bin/addNode  
    deployment_manager_machine_name deployment_manager_port [-includeapps]
```

The command is shown on multiple lines for display purposes only, enter the command on one line.

The variables and parameters in the command are defined as follows:

WAS_installdir

Default values for *WAS_installdir* are listed in “Path variables” on page iv.

deployment_manager_machine_name

This is the fully-qualified domain name of the deployment manager machine.

deployment_manager_port

This is the port on which the deployment manager listens. The default deployment manager port is 8879.

-includeapps

This parameter is optional.

Specify this parameter if one or more of the following conditions apply:

- You have non-WebSphere Commerce applications on the WebSphere Commerce node that you want to include in the deployment manager cell.
- A WebSphere Commerce instance exists on the WebSphere Commerce node. If you have not created a WebSphere Commerce instance, this parameter is not required.

4. If you have federated a WebSphere Commerce node that contains WebSphere Commerce instances and these WebSphere Commerce instances are being federated into the deployment manager cell, create the virtual hosts required by the WebSphere Commerce application server by issuing the following command on the WebSphere Commerce machine for each WebSphere Commerce instance on the node:

```
WC_installdir/bin/createVirtualHosts instance_name
```

where *instance_name* is the name of the WebSphere Commerce instance.

Default values for *WC_installdir* are listed in “Path variables” on page iv.

Note: This step should only be performed if WebSphere Commerce instances exist on the node being federated — only one node being federated into the cell should have an instance.

This step is not required when adding additional WebSphere Commerce application servers to a deployment manager cell nor is it required if you have not created a WebSphere Commerce instance on the node.

Once you have federated the WebSphere Commerce application server nodes into a deployment manager cell, you can start and stop WebSphere Commerce by following the instructions in “Starting or stopping an application server under WebSphere Application Server Network Deployment” on page 113

Federating WebSphere Commerce Payments

To federate WebSphere Commerce Payments into a deployment manager cell, do the following:

1. If you have not already installed the WebSphere Application Server Network Deployment product on a separate machine from the machines on which you installed WebSphere Commerce, WebSphere Commerce Payments, the database, and the Web server, do so now.

Only one system hosts the deployment manager. As it federates application servers, it expands the cell that it manages. Although you can install other application servers on the same machine as the deployment manager, it is not generally done unless you have a machine with the capacity to host both products. The deployment manager is the central administrative manager.

Instructions for installing WebSphere Application Server Network Deployment are available in *IBM WebSphere Application Server Network Deployment Getting started*. This book is available as a PDF file in the docs directory of the WebSphere Application Server Network Deployment CD.

Important: Ensure that you apply any WebSphere Application Server fixes documented in the WebSphere Commerce README file to the WebSphere Application Server Network Deployment installation. For more information about the README file, refer to “Reviewing the README file” on page 10.

Failure to apply these fixes will result in WebSphere Commerce Payments functioning incorrectly after federation.

2. On the WebSphere Application Server Network Deployment node, start the deployment manager application server. Refer to “Starting and stopping the WebSphere Application Server Network Deployment deployment manager” on page 111 for instructions.
3. Federate the WebSphere Commerce Payments application server into the deployment manager cell by issuing the following command:

```
WAS_installdir/bin/addNode  
  deployment_manager_machine_name deployment_manager_port [-includeapps]
```

The command is shown on multiple lines for display purposes only, enter the command on one line.

The variables and parameters in the command are defined as follows:

+ *WAS_installdir*
 + Default values for *WAS_installdir* are listed in “Path variables” on page
 + iv.

+ *deployment_manager_machine_name*
 + This is the fully-qualified domain name of the deployment manager
 + machine.

+ *deployment_manager_port*
 + This is the port on which the deployment manager listens. The default
 + deployment manager port is 8879.

+ *-includeapps*
 + This parameter is optional.

+ Specify this parameter if one or more of the following conditions apply:
 + • You have non-WebSphere Commerce applications on the WebSphere
 + Commerce Payments node that you want to include in the
 + deployment manager cell.
 + • A WebSphere Commerce Payments instance exists on the WebSphere
 + Commerce Payments node. If you have not created a WebSphere
 + Commerce Payments instance, this parameter is not required.

+ 4. If you have federated a WebSphere Commerce Payments node that contains a
 + WebSphere Commerce Payments instance, create the virtual hosts required by
 + the WebSphere Commerce Payments application server by issuing the following
 + command on the WebSphere Commerce Payments machine:
 + *WC_installdir/payments/bin/createPaymentsVirtualHost instance_name*

+ where *instance_name* is the name of the WebSphere Commerce Payments
 + instance. The default name for the WebSphere Commerce Payments instance is
 + wpm.

+ Default values for *WC_installdir* are listed in “Path variables” on page iv.

+ This step is not required if you have not created a WebSphere Commerce
 + Payments instance on the node.

+ Once you have federated the WebSphere Commerce Payments application server
 + node into a deployment manager cell, you can start and stop WebSphere
 + Commerce Payments by following the instructions in “Starting or stopping an
 + application server under WebSphere Application Server Network Deployment” on
 + page 113

+ **Removing an application server node from a cell**

+ If the application server node is a member of a cluster, you must remove the
 + application server node from the cluster before removing the application server
 + node from the deployment manager cell.

+ If you want to remove an application server node from the deployment manager
 + cell, do the following:

- + 1. On each node in the cell, start the node the agent. Refer to “Starting and
 + stopping the WebSphere Application Server node agent” on page 112 for
 + instructions.

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2. On the WebSphere Application Server Network Deployment machine, start the deployment manager. Refer to “Starting and stopping the WebSphere Application Server Network Deployment deployment manager” on page 111 for instructions.

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3. On the application server node machine, issue the following command:
`WAS_installdir/bin/removeNode`

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Default values for `WAS_installdir` are listed in “Path variables” on page iv.

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The `removeNode` command only removes the node specific configuration from the cell. It does not uninstall any applications that were installed as the result of executing an `addNode` command, because such applications may subsequently be deployed on additional servers in the network deployment cell.

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For more information on the `removeNode` command, refer to the WebSphere Application Server documentation.

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+ Chapter 21. Clustering WebSphere Commerce

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This chapter shows you how to use the WebSphere Application Server Network Deployment clustering mechanism.

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WebSphere Commerce installs the base WebSphere Application Server product on each node where you choose to install WebSphere Commerce Server. The WebSphere Application Server Network Deployment product must be installed on a separate machine after installing WebSphere Commerce.

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This chapter covers the following types of clustering for WebSphere Commerce:

- “Clustering with horizontal cluster members” on page 93
- “Clustering with vertical cluster members” on page 93

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When clustering WebSphere Commerce, each WebSphere Commerce node in the cluster must use the same WebSphere Commerce Payments instance as WebSphere Commerce Payments does not support clustering. However, to manage WebSphere Commerce Payments with the WebSphere Commerce cluster, you can federate the WebSphere Commerce Payments application server into the same deployment manager cell as the WebSphere Commerce cluster by following the instructions in “Federating WebSphere Commerce Payments” on page 87.

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For more information on clustering, refer to the WebSphere Application Server Network Deployment documentation.

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Important

Before clustering WebSphere Commerce, it is strongly recommended that you backup the WebSphere Application Server administrative configuration. Backing up the administrative configuration will allow you to restore the original configuration if clustering fails during the clustering process. For more information, refer to the “Backing up and restoring administrative configurations” topic in the WebSphere Application Server InfoCenter:
<http://www.ibm.com/software/webservers/appserv/infocenter.html>

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The diagram on the following page shows clustering in a custom 5-node installation of WebSphere Commerce:

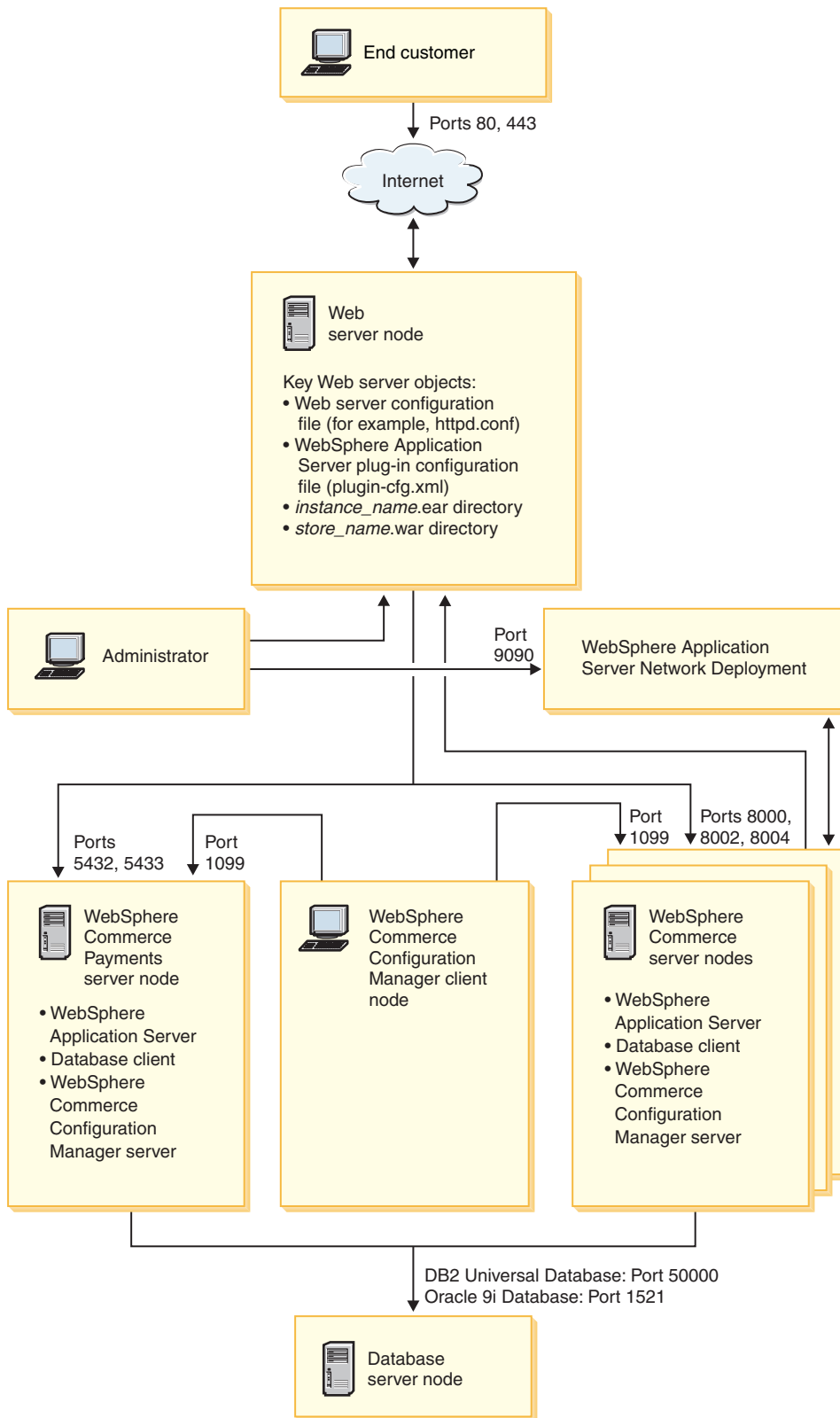


Figure 3. Custom 5-node installation with clustering

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Clustering with horizontal cluster members

Clustering with horizontal cluster members refers to the traditional practice of defining cluster members of an application server on multiple physical machines, thereby allowing a single application to span several machines while presenting a single system image. Clustering with horizontal cluster members can provide increased throughput and high availability.

For clustering with horizontal cluster members, it is recommended that you use both a remote Web server and a remote database.

To create a cluster with horizontal cluster members, do the following:

1. Complete the installation of a WebSphere Commerce node. For instructions, refer to Part 4, “Installing WebSphere Commerce,” on page 29.
2. Create a WebSphere Commerce instance. For instructions, refer to Part 5, “Creating a WebSphere Commerce and a WebSphere Commerce Payments instance,” on page 59.
3. Federate the WebSphere Commerce node into a deployment manager cell. For instructions refer to “Federating WebSphere Commerce” on page 85.
4. Prepare additional nodes for each node you want to add to the cluster. For instructions, refer to “Preparing additional nodes” on page 94.
5. Create the WebSphere Commerce cluster. For instructions, refer to “Creating the WebSphere Commerce cluster” on page 95.
6. Verify the JDBC provider path for each cluster member. For instructions, refer to “Verifying the JDBC provider path” on page 96.
7. Regenerate the Web server plug-in. For instructions, refer to “Regenerating the Web server plug-in under WebSphere Application Server Network Deployment” on page 97.
8. Copy WebSphere Commerce instance information from the original WebSphere Commerce node to each horizontal cluster member. For instructions, refer to “Copying instance information” on page 98.
9. Copy WebSphere Commerce application and store information from the original WebSphere Commerce node to each horizontal cluster member. For instructions, refer to “Copying WebSphere Commerce application and store information” on page 98.

Important

Before publishing a store in a cluster with horizontal cluster members, review “Publishing a store in a WebSphere Commerce cluster” on page 101.

Clustering with vertical cluster members

Clustering with vertical cluster members refers to the practice of defining cluster members of an application server on the same physical machine. Experience has shown that a single application server, which is implemented by a single Java Virtual Machine (JVM) process, cannot always fully utilize the CPU power of a large multiprocessor machine. Clustering with vertical cluster members provides a straightforward mechanism to create multiple JVM processes, that together can fully use all the processing power available.

To create a cluster with vertical cluster members, do the following:

1. Complete the installation of a WebSphere Commerce node. For instructions, refer to Part 4, “Installing WebSphere Commerce,” on page 29.
2. Create a WebSphere Commerce instance. For instructions, refer to Part 5, “Creating a WebSphere Commerce and a WebSphere Commerce Payments instance,” on page 59.
3. Federate the WebSphere Commerce node into a deployment manager cell. For instructions refer to “Federating WebSphere Commerce” on page 85.
4. Create the WebSphere Commerce cluster. For instructions, refer to “Creating the WebSphere Commerce cluster” on page 95.
5. Regenerate the Web server plug-in. For instructions, refer to “Regenerating the Web server plug-in under WebSphere Application Server Network Deployment” on page 97.

Preparing additional nodes

This section applies only to clustering with horizontal cluster members.

As part of clustering with horizontal cluster members, you must install the WebSphere Commerce server component of WebSphere Commerce on each machine that will be part of the cluster containing the horizontal cluster members.

To prepare a new node as a horizontal cluster member, do the following:

1. Install the WebSphere Commerce server component of WebSphere Commerce on the machine hosting the horizontal cluster member. Use the custom installation option of the WebSphere Commerce installation wizard to do this. Instructions on completing a custom installation are provided in Chapter 12, “Completing a custom installation,” on page 51.

DB2 If you want to use DB2 as the database when performing a custom install, the installation wizard installs the DB2 Administration Client on the machine as well as the WebSphere Commerce server component.

Oracle If you want to use Oracle as the database when performing a custom install, you must install the Oracle components for an Oracle client machine as outlined in step 2 on page 19 of “Using Oracle9i Database as the remote WebSphere Commerce database” on page 19 before starting the WebSphere Commerce installation wizard.

2. Ensure that you can access the WebSphere Commerce database from the new WebSphere Commerce node.

DB2 You may need to catalog the remote WebSphere Commerce database node and the remote WebSphere Commerce database. For instructions, refer to “Cataloging a Remote DB2 Universal Database Database” on page 123.

Oracle For help in ensuring access to the remote WebSphere Commerce database, refer to your Oracle9i Database documentation.

3. Federate the WebSphere Commerce node into a deployment manager cell. For instructions refer to “Federating WebSphere Commerce” on page 85.

Important: Do *not* create a WebSphere Commerce instance on the new WebSphere Commerce node.

Creating the WebSphere Commerce cluster

The instructions in this section create a new cluster that contains the original WebSphere Commerce application server. After creating this cluster, you may create additional cluster members, either on the same node or any other node in the deployment manager cell.

To create the new WebSphere Commerce cluster, do the following:

1. If it is not started, start the deployment manager. Refer to “Starting and stopping the WebSphere Application Server Network Deployment deployment manager” on page 111 for instructions.
2. If they are not started, start the node agent on each node you want to add to a cluster. For instructions, refer to “Starting and stopping the WebSphere Application Server node agent” on page 112.
3. Open the WebSphere Application Server Administrative Console. For instructions, refer to “Starting the WebSphere Application Server Administrative Console” on page 112.
4. In the Navigation area, expand **Servers** and click **Clusters**. The Server Cluster page displays.
5. On the Server Cluster page, click **New**. The Create New Cluster page displays.
6. In the **Cluster Name** field, enter a name for the cluster.
7. In the **Existing server** field, select **Select an existing application server to add to this cluster** and from the list of existing servers, select the WebSphere Commerce application server from the pull-down list. The WebSphere Commerce application server name in the list will appear in the following form:

cell_name/machine_name/WC_instance_name

where

cell_name

is the name of the cell to which the WebSphere Commerce application server belongs.

machine_name

is the short host name of the WebSphere Commerce machine.

instance_name

is the name of the WebSphere Commerce instance.

8. Click **Next**. The Create New Clustered Servers page displays.
9. In the **Name** field, enter the name of the new cluster member to create.
10. From the **Select Node** field, select the name of the machine on which you want to create the new cluster member.
For horizontal clustering, the machine name would be a different name from the name of the machine on which you originally installed WebSphere Commerce.
For vertical clustering, the machine name would be the same name as the name of the machine on which you originally installed WebSphere Commerce.
11. In the **Http Ports** field, ensure that **Generate Unique Http Ports** is selected.
For information about other parameters you can set when creating a new cluster member, refer to the WebSphere Application Server Network Deployment documentation.
12. Click **Apply**.

- + 13. If you want to add more cluster members, repeat steps 9 on page 95 through
- + 12 on page 95 for each cluster member you want to add.
- + 14. When you have finished adding cluster members, click **Next**.
- + 15. Click **Finish**.
- + 16. Click **Save** in the Administrative Console task bar.
- + 17. On the Save page, select **Synchronize changes with node**.
- + 18. On the Save page, click **Save**.
- + 19. Exit the WebSphere Application Server Administrative Console.

+ Verifying the JDBC provider path

+ For each cluster member, you should verify that the JDBC provider path is set
+ correctly. Failure to do so may result in the cluster not functioning correctly.

+ To verify the JDBC provider path for a cluster member, do the following:

- + 1. If they are not started, start the node agent on each system managed by
+ WebSphere Application Server Network Deployment. For instructions, refer to
+ "Starting and stopping the WebSphere Application Server node agent" on
+ page 112.
- + 2. If it is not started, start the deployment manager. Refer to "Starting and
+ stopping the WebSphere Application Server Network Deployment deployment
+ manager" on page 111 for instructions.
- + 3. Open the WebSphere Application Server Administrative Console. For
+ instructions, refer to "Starting the WebSphere Application Server
+ Administrative Console" on page 112.
- + 4. In the Navigation area, expand **Resources** and click **JDBC Providers**. The
+ JDBC Providers page displays.
- + 5. In the **Node** field, enter the name of the machine on which the cluster
+ member exists. This is usually the same name as the machine name on which
+ the application server runs.
+ For a list of available nodes, click **Browse**.
- + 6. In the **Server** field, enter the name of the application server for which you
+ want to check the JDBC provider path. This is the member name of the cluster
+ member.
+ For a list of available application servers, click **Browse**.
- + 7. Click **Apply**. The list of JDBC providers refreshes.
- + 8. Click on the following JDBC provider:
+ *instance_name* - WebSphere Commerce JDBC Provider

+ where *instance_name* is the name of the WebSphere Commerce instance.
- + 9. Confirm that the path shown in the **Classpath** field is the full path to the
+ JDBC driver on the machine on which the cluster member exists.
+ If the path shown is correct, click **Cancel**.
+ If the path shown is incorrect, do the following:
 - + a. Enter the correct path to the JDBC driver in the **Classpath** field.
 - + b. Click **OK**.
 - + c. Click **Save** in the Administrative Console task bar.
 - + d. On the Save page, select **Synchronize changes with node**.
 - + e. On the Save page, click **Save**.

10. Exit the WebSphere Application Server Administrative Console.

Regenerating the Web server plug-in under WebSphere Application Server Network Deployment

To regenerate the Web server plug-in, do the following:

1. If it is not started, start the deployment manager. Refer to “Starting and stopping the WebSphere Application Server Network Deployment deployment manager” on page 111 for instructions.
2. If they are not started, start the node agent on each system managed by WebSphere Application Server Network Deployment. For instructions, refer to “Starting and stopping the WebSphere Application Server node agent” on page 112.
3. Regenerate the plug-in in one of the following ways:

- **[Recommended]** Using the WebSphere Application Server GenPluginCfg utility.

For more information on the GenPluginCfg utility, refer to the *Regenerating Web server plug-in configurations* page in the WebSphere Application Server Network Deployment information center:

http://publib.boulder.ibm.com/infocenter/wasinfo/index.jsp?topic=/com.ibm.websphere.nd.doc/info/ae/ae/trun_app_regen.html

If the deployment manager is installed on a remote machine, pay special attention to the **Note** section of the *Regenerating Web server plug-in configurations* page.

- Using the WebSphere Application Server Administrative Console:
 - a. Open the WebSphere Application Server Administrative Console. For instructions, refer to “Starting the WebSphere Application Server Administrative Console” on page 112.
 - b. In the Navigation area, expand **Environment** and click **Update Web Server Plugin**.
 - c. Click **OK** to generate a new plugin-cfg.xml file.
 - d. Exit the WebSphere Application Server Administrative Console.
 - e. Open the plugin-cfg.xml file in a text editor. The plugin-cfg.xml file is in the following directory:

`WAS_installdir/config/cells`

Review any full-path information in the plugin-cfg.xml file. All full path information should match the full path for WebSphere Application Server information on the WebSphere Commerce node.

For example, if the newly generated plugin-cfg.xml file contains `C:\WebSphere\DeploymentManager` in some of the elements, but WebSphere Application Server is installed in `D:\WebSphere\AppServer` on the WebSphere Commerce node, change all occurrences of `C:\WebSphere\DeploymentManager` in the plugin-cfg.xml file to `D:\WebSphere\AppServer`.

Save any changes and exit the text editor.

4. Copy the regenerated plugin-cfg.xml file from the WebSphere Application Server Network Deployment machine to the Web server. For instructions, refer to “Copying the plugin-cfg.xml file to Web server” on page 115.

- + 5. If WebSphere Commerce Payments is not federated into the same deployment
+ manager cell as the WebSphere Commerce cluster, merge the contents of the
+ WebSphere Commerce Payments plugin-cfg.xml file with the new
+ plugin-cfg.xml file on the Web server. For instructions, refer to “Merging the
+ WebSphere Commerce Payments plugin-cfg.xml file” on page 116.

+ **Note:** Skip this step if WebSphere Commerce Payments and the original
+ WebSphere Commerce node are on separate machines.

- + 6. Restart the Web server according to the documentation provided with the Web
+ server.

+ Copying instance information

+ For each WebSphere Commerce node in a horizontal cluster, you must copy the
+ WebSphere Commerce instance store information from the original WebSphere
+ Commerce node to the other nodes.

+ The steps in this section must be also be performed after you create a new
+ WebSphere Commerce instance in the cluster.

+ To copy the instance information to a horizontal cluster member, do the following:

- + 1. If the cluster is running, stop the cluster. For instructions, refer to “Starting or
+ stopping a WebSphere Commerce cluster” on page 100.
- + 2. Stop the Web server according the documentation provided with the Web
+ server.
- + 3. Copy the contents of the following directory on the original WebSphere
+ Commerce node to the same directory on the other machines:

+ *WC_installdir/instances/instance_name*

+ where *instance_name* is the name of the WebSphere Commerce instance.

+ Default values for *WC_installdir* are listed in “Path variables” on page iv.

- + 4. Start the Web server according to the documentation provided with the Web
+ server.
- + 5. Start the cluster. For instructions, refer to “Starting or stopping a WebSphere
+ Commerce cluster” on page 100.

+ Copying WebSphere Commerce application and store information

+ For each WebSphere Commerce node in a horizontal cluster, you must copy the
+ WebSphere Commerce application and store information from the original
+ WebSphere Commerce node to the node.

+ The steps in this section must also be performed each time after you publish a
+ store in the cluster.

+ To copy the application and store information to a horizontal cluster member, do
+ the following:

- + 1. If the cluster is running, stop the cluster. For instructions, refer to “Starting or
+ stopping a WebSphere Commerce cluster” on page 100.
- + 2. Stop the Web server according the documentation provided with the Web
+ server.

3. Copy the contents of the following directory on the original WebSphere Commerce node to the same directory on the node:

WAS_installdir/installedApps/cell_name/WC_instance_name.ear

This directory should have been created automatically when the cluster member was added.

The variables are defined as follows:

WAS_installdir

Default values for *WAS_installdir* are listed in “Path variables” on page iv.

cell_name

This is the name of the original WebSphere Commerce node.

instance_name

This is the name of the WebSphere Commerce instance.

4. Start the Web server according to the documentation provided with the Web server.
5. Start the cluster. For instructions, refer to “Starting or stopping a WebSphere Commerce cluster” on page 100.

Adding additional cluster members

The instructions in this section describe how to add more members to the cluster you created in “Creating the WebSphere Commerce cluster” on page 95.

To add additional cluster members, do the following:

1. If they are not started, start the node agent on each node you want to add to the cluster. For instructions, refer to “Starting and stopping the WebSphere Application Server node agent” on page 112.
2. If you want to add a horizontal cluster member to the cluster, complete the tasks in “Preparing additional nodes” on page 94.
3. If it is not started, start the deployment manager. Refer to “Starting and stopping the WebSphere Application Server Network Deployment deployment manager” on page 111 for instructions.
4. Open the WebSphere Application Server Administrative Console. For instructions, refer to “Starting the WebSphere Application Server Administrative Console” on page 112.
5. In the Navigation area, expand **Servers** and click **Clusters**. The Server Cluster page displays.
6. Ensure that the cluster is stopped. If the cluster is not stopped, select the cluster name and click **Stop**.
7. Click the cluster name.
8. In the Additional Properties table, click **Cluster Members**.
9. On the Cluster Members page, click **New**.
10. In the **Name** field, enter the name of the new cluster member to create.
11. From the **Select Node** field, select the name of the machine on which you want to create the new cluster member.

For horizontal clustering, the machine name is different name from the name of the machine on which you originally installed WebSphere Commerce.

- For vertical clustering, the machine name is the same name as the name of the machine on which you originally installed WebSphere Commerce.
12. In the **Http Ports** field, ensure that **Generate Unique Http Ports** is selected.
For information about other parameters you can set when creating a new cluster member, refer to the WebSphere Application Server Network Deployment documentation.
 13. Click **Apply**.
 14. To create additional cluster members in the cluster, enter a new name for the node in the **Member name** field and click **Apply**.
Repeat this step until you have created all the cluster members you want to have in this cluster.
 15. Click **Next**.
 16. Click **Finish**.
 17. Click **Save** in the menu along the top of the Administrative Console. The Save page displays.
 18. On the Save page, select **Synchronize changes with node**.
 19. On the Save page, click **Save**.
 20. Exit the WebSphere Application Server Administrative Console.
 21. Regenerate the web server plug-in configuration file. For instructions, refer to “Regenerating the Web server plug-in under WebSphere Application Server Network Deployment” on page 97.
 22. Copy the regenerated plugin-cfg.xml file from the WebSphere Application Server Network Deployment machine to the Web server. For instructions, refer to “Copying the plugin-cfg.xml file to Web server” on page 115.
 23. If you are adding additional new horizontal cluster members to the cluster, do the following:
 - a. Copy WebSphere Commerce instance information from the original WebSphere Commerce node to each new horizontal cluster member. For instructions, refer to “Copying instance information” on page 98.
 - b. Copy WebSphere Commerce application and store information from the original WebSphere Commerce node to each new horizontal cluster member. For instructions, refer to “Copying WebSphere Commerce application and store information” on page 98.

Starting or stopping a WebSphere Commerce cluster

To start or stop a WebSphere Commerce cluster, do the following:

1. If they are not started, start the node agent on each node in the cluster. For instructions, refer to “Starting and stopping the WebSphere Application Server node agent” on page 112.
2. If it is not started, start the deployment manager. Refer to “Starting and stopping the WebSphere Application Server Network Deployment deployment manager” on page 111 for instructions.
3. Start the WebSphere Application Server Administrative Console and log on to the console. For instructions on starting the WebSphere Application Server Administrative Console, refer to “Starting the WebSphere Application Server Administrative Console” on page 112.
4. In the Navigation area, expand **Servers** and click **Clusters**. The Server Cluster page displays.
5. Select the check box next to the cluster you want to start or stop and click **Start** or **Stop**.

Removing a cluster member

To remove a cluster member from a cluster, do the following:

1. If they are not started, start the node agent on each node in the cluster. For instructions, refer to “Starting and stopping the WebSphere Application Server node agent” on page 112.
2. If it is not started, start the deployment manager. Refer to “Starting and stopping the WebSphere Application Server Network Deployment deployment manager” on page 111 for instructions.
3. Open the WebSphere Application Server Administrative Console. For instructions, refer to “Starting the WebSphere Application Server Administrative Console” on page 112.
4. In the Navigation area, expand **Servers** and click **Clusters**. The Server Cluster page displays.
5. From the list of clusters, click the cluster for which you want to change the membership. The cluster properties page displays.
6. In the Additional Properties table, click **Cluster members**. The Cluster members page displays.
7. Select the cluster members you want to remove from the cluster and click **Delete**.
8. Click **Save** in the Administrative Console task bar.
9. On the Save page, select **Synchronize changes with node**.
10. On the Save page, click **Save**.
11. Exit the WebSphere Application Server Administrative Console.
12. Regenerate the web server plug-in and copy the plug-in to the Web server. For instructions, refer to “Regenerating the Web server plug-in under WebSphere Application Server Network Deployment” on page 97.

Publishing a store in a WebSphere Commerce cluster

Publishing a store in a cluster with horizontal cluster members

To publish a store in a cluster with horizontal cluster members, do the following: In these steps *original WebSphere Commerce node* refers to the node containing all the information for the store you want to publish, including SAR files.

1. Copy WebSphere Commerce instance information from the original WebSphere Commerce node to each horizontal cluster member. For instructions, refer to “Copying instance information” on page 98.
2. Copy WebSphere Commerce application and store information from the original WebSphere Commerce node to each horizontal cluster member. For instructions, refer to “Copying WebSphere Commerce application and store information” on page 98.
3. Publish your store.

For information on publishing a WebSphere Commerce sample store, refer to the “Publishing a store archive” topic in the WebSphere Commerce online help.

For information on developing a store in WebSphere Commerce, refer to *WebSphere Commerce Store Development Guide*. This book is available from the WebSphere Commerce technical library. Refer to “WebSphere Commerce technical library” on page 137 for more information.

Publishing a store in a cluster with vertical cluster members

When publishing a store in a cluster with vertical cluster members, no additional steps are required.

For information on publishing a WebSphere Commerce sample store, refer to the "Publishing a store archive" topic in the WebSphere Commerce online help.

For information on developing a store in WebSphere Commerce, refer to *WebSphere Commerce Store Development Guide*. This book is available from the WebSphere Commerce technical library. Refer to "WebSphere Commerce technical library" on page 137 for more information.

Part 8. Installation and administration tasks

This sections contains instructions for various tasks you must perform during the installation and administration of WebSphere Commerce.

Chapter 22. WebSphere Commerce tasks

This section provides instructions for WebSphere Commerce tasks you may need to complete while installing and administering WebSphere Commerce.

Starting or stopping a WebSphere Commerce instance

To start or stop a WebSphere Commerce instance, do the following:

1. Ensure that the database management system is started.
2. Ensure that the Web server is started.
3. Start, stop, or restart the application server for the WebSphere Commerce instance you want to start. Instructions for starting and stopping an application server are provided in “Starting or stopping an application server” on page 111.

A WebSphere Commerce instance can also be started and stopped from the Services panel by starting or stopping the following service:

IBM WebSphere Application Server V5 - WC_ *instance_name*

where *instance_name* is the name of the WebSphere Commerce instance.

Note: The first time you start an instance, it will take a long time to start. This delay results from the caching of information about Java programs. While the delay can be lengthy, it improves the start-up time in subsequent attempts.

Starting or stopping a WebSphere Commerce Payments instance

To start or stop a WebSphere Commerce Payments instance, do the following:

1. Ensure that the database management system is started.
2. Ensure that the Web server is started.
3. Start Configuration Manager. For instructions on starting Configuration Manager, refer to “Starting the Configuration Manager” on page 61.
4. In Configuration Manager, under **WebSphere Commerce**, expand *hostname* → **Payments** → **Instance List**.
5. Right-click the name of the WebSphere Commerce Payments instance you want to start or stop and do one of the following:
 - To start the WebSphere Commerce Payments instance, select **Start Payments Instance** from the pop-up menu. After receiving the Instance started successfully dialog, click **OK** to dismiss the dialog.
 - To stop the WebSphere Commerce Payments instance, select **Stop Payments Instance** from the pop-up menu.

Note: The first time you start an instance, it will take a long time to start. This delay results from the caching of information about Java programs. While the delay can be lengthy, it improves the start-up time in subsequent attempts.

Modifying a WebSphere Commerce or WebSphere Commerce Payments instance

If you want to change any of the configuration settings for your WebSphere Commerce instance, you can do so from the Configuration Manager.

To update a WebSphere Commerce instance using the Configuration Manager, do the following:

1. Ensure the database management system is started.
2. Start Configuration Manager. For instructions on starting Configuration Manager, refer to “Starting the Configuration Manager” on page 61.
3. From the list of instances, select the instance you want to configure and select the node for which you want to alter the settings. Refer to the online help for the Configuration Manager for information about the various fields and panels of Configuration Manager.
4. After you update your instance, click **Apply** to apply your changes.
5. When the changes have been successfully applied, exit the Configuration Manager client. This also terminates the Configuration Manager server.
6. Restart the instance you have modified.

Deleting a WebSphere Commerce instance

To delete a WebSphere Commerce instance, do the following:

1. Ensure that WebSphere Commerce is stopped. For instructions on stopping WebSphere Commerce, refer to “Starting or stopping a WebSphere Commerce instance” on page 105.
2. If you are deleting a WebSphere Commerce instance from a deployment manager cell, remove the WebSphere Commerce instance from the deployment manager cell. For instructions, refer to “Removing an application server node from a cell” on page 88.

3. Backup any critical or customized files found in the following directories:

```
WC_installdir/instances/instance_name
WAS_installdir/logs/WC_instance_name
WAS_installdir/installedApps/hostname/WC_instance_name.ear
```

where *instance_name* is the name of the WebSphere Commerce instance you want to delete.

4. Delete the WebSphere Commerce instance from Configuration Manager by doing the following:
 - a. Start Configuration Manager. For instructions on starting Configuration Manager, refer to “Starting the Configuration Manager” on page 61.
 - b. In Configuration Manager, under **WebSphere Commerce**, expand *hostname* → **Commerce** → **Instance List**.
 - c. Right-click the instance you want to delete and select **Delete instance**.
 - d. Exit Configuration Manager when the process completes.
5. Do one of the following:

If WebSphere Commerce is running in a standalone (non-federated) environment:
Delete the WebSphere Commerce application server by issuing the following command from a command prompt:

```
WC_installdir/bin/rmCommerceServer instance_name
```

where *instance_name* is the name of the WebSphere Commerce instance you want to delete.

Default values for *WC_installdir* are listed in “Path variables” on page iv.

Important

Ensure that you enter the name of the WebSphere Commerce instance and *not* the name of the WebSphere Commerce application server.

When the name of the WebSphere Commerce instance is *instance_name*, the name of the WebSphere Commerce application server is **WC_instance_name**.

If you use *WC_instance_name*, you will receive an error message.

If WebSphere Commerce is running in a federated environment:

Delete the WebSphere Commerce application server using the WebSphere Application Server Network Deployment Administration Console.

For instructions on starting the WebSphere Application Server Network Deployment Administration Console, refer to “Starting the WebSphere Application Server Administrative Console” on page 112.

For instructions on deleting an application server in the WebSphere Application Server Network Deployment Administration Console, refer to the WebSphere Application Server Network Deployment documentation.

6. Do one of the following, depending on the database you are using for WebSphere Commerce:

DB2

Drop the WebSphere Commerce database associated with the WebSphere Commerce instance you want to delete.

If the WebSphere Commerce database associated with the WebSphere Commerce instance you want to delete is a remote database, issue the following command from a DB2 command session:

```
db2 attach to remote_db_node_name
```

To drop the WebSphere Commerce database, issue the following command from a DB2 command session:

```
db2 drop db db_name
```

where *db_name* is the name of the WebSphere Commerce database.

Oracle

Drop the WebSphere Commerce tablespace and delete the Oracle user associated with the WebSphere Commerce instance you want to delete. For instructions on dropping a tablespace and deleting an Oracle user, refer to the Oracle documentation.

7. If any of the following directories exist, delete them:

```
WC_installdir/instances/instance_name  
WAS_installdir/logs/WC_instance_name
```

where *instance_name* is the name of the WebSphere Commerce instance you deleted.

8. (Optional) If you plan to later create a new WebSphere Commerce with the same name as the instance you are deleting, delete the following directory if it still exists:

WAS_installdir/installedApps/hostname/WC_instance_name.ear

9. Do the following, depending on your Web server:

| Web server | Actions |
|---|--|
| IBM HTTP Server | <ol style="list-style-type: none"> 1. Open <code>httpd.conf</code> in a text editor. 2. Remove all sections delimited by the following text: IBM WebSphere Commerce (Do not edit this section) End of IBM WebSphere Commerce (Do not edit this section) There will be multiple sections in the file delimited by the text. 3. Save the changes and exit the text editor. 4. If the IBM HTTP Server node is remote from the WebSphere Commerce node, delete the following directory on the IBM HTTP Server node: <i>WAS_installdir/installedApps/hostname/WC_instance_name.ear</i> where <i>instance_name</i> is the name of the WebSphere Commerce instance you are deleting. 5. Restart the Web server. |
| Microsoft Internet Information Services | <ol style="list-style-type: none"> 1. Remove the following WebSphere Commerce aliases from the IIS configuration: <ul style="list-style-type: none"> • accelerator • adminconsole • orgadminconsole • wcadmin • wchelp • wcorgadmin • wcs • wcsdoc • wcsstore 2. If the Microsoft Internet Information Services node is remote from the WebSphere Commerce node, delete the following directory on the Microsoft Internet Information Services node: <i>WAS_installdir/installedApps/hostname/WC_instance_name.ear</i> where <i>instance_name</i> is the name of the WebSphere Commerce instance you are deleting. 3. Restart the Web server. |

| Web server | Actions |
|--------------------|---|
| Sun ONE Web Server | <ol style="list-style-type: none"> From the Sun ONE Web Server configuration files (for each WebSphere Commerce port), remove any sections delimited by the following text: IBM WebSphere Commerce (Do not edit this section) End of IBM WebSphere Commerce (Do not edit this section) If the Sun ONE Web Server node is remote from the WebSphere Commerce node, delete the following directory on the Sun ONE Web Server node: <code>WAS_installdir/installedApps/hostname/ WC_instance_name.ear</code> where <i>instance_name</i> is the name of the WebSphere Commerce instance you are deleting. Restart the Web server. |

- If you plan to use other WebSphere Application Server application servers after deleting the WebSphere Commerce instance, you must regenerate the WebSphere Application Server plug-in configuration file. For information on regenerating the WebSphere Application Server plug-in configuration file, refer to “Regenerating the WebSphere Application Server Web server plug-in configuration file” on page 114.

Deleting a WebSphere Commerce Payments instance

To delete a WebSphere Commerce Payments instance, do the following:

- Ensure that WebSphere Commerce Payments is stopped. For instructions, refer to “Starting or stopping a WebSphere Commerce Payments instance” on page 105.
- Delete the WebSphere Commerce Payments instance from Configuration Manager by doing the following:
 - Start Configuration Manager. For instructions on starting Configuration Manager, refer to “Starting the Configuration Manager” on page 61.
 - In Configuration Manager, under **WebSphere Commerce** expand *hostname* → **Payments** → **Instance List**.
 - Right-click the instance you want to delete and select **Delete Payments Instance**.
 - Exit Configuration Manager when the process completes.

This step also deletes the WebSphere Commerce Payments application server.

- Do one of the following, depending on the database you are using for WebSphere Commerce Payments:

DB2

Drop the WebSphere Commerce Payments database associated with the WebSphere Commerce Payments instance you want to delete.

If the WebSphere Commerce Payments database associated with the WebSphere Commerce Payments instance you want to delete is a remote database, issue the following command from a DB2 command session:

```
db2 attach to remote_db_node_name
```

To drop the WebSphere Commerce database, issue the following command from a DB2 command window:

```
db2 drop db db_name
```

where *db_name* is the name of the WebSphere Commerce Payments database.

Oracle

Drop the WebSphere Commerce Payments tablespace and delete the Oracle user associated with the WebSphere Commerce Payments instance you want to delete. For instructions on dropping a tablespace and deleting an Oracle user, refer to the Oracle documentation.

- 4. Delete the following directories if they exist:

```
WC_installdir/instances/instance_name
WC_installdir/payments/instances/instance_name
WAS_installdir/logs/instance_name_Commerce_Payments_Server
WAS_installdir/installedApps/hostname/instance_name_Commerce_Payments_App.ear
```

where *instance_name* is the name of the WebSphere Commerce Payments instance you want to delete.

- 5. Do the following on the Web server node, depending on your Web server:

| Web server | Actions |
|---|--|
| IBM HTTP Server | <ol style="list-style-type: none"> 1. Open httpd.conf in a text editor. 2. Remove all sections delimited by the following text: IBM WebSphere Payments (Do not edit this section) End of IBM WebSphere Payments (Do not edit this section) There will be multiple sections in the file delimited by the text. 3. Save the changes and exit the text editor. |
| Microsoft Internet Information Services | No additional step need to be performed when using Microsoft Internet Information Services. |
| Sun ONE Web Server | No additional steps need to be performed when using Sun ONE Web Server. |

- 6. If you plan to use other WebSphere Application Server application servers after deleting the WebSphere Commerce Payments instance, you must regenerate the WebSphere Application Server plug-in configuration file. For information on regenerating the WebSphere Application Server plug-in configuration file, refer to "Regenerating the WebSphere Application Server Web server plug-in configuration file" on page 114.

Chapter 23. WebSphere Application Server tasks

This section provides instructions for WebSphere Application Server tasks you may need to complete while installing and administering WebSphere Commerce.

Starting or stopping an application server

To start or stop an application server, do the following:

1. Log on using Windows user ID with Administrator authority.
2. Start a command prompt session.
3. Issue the following command:

```
cd WAS_installdir\bin
```

where *WAS_installdir* is the installation directory for WebSphere Application Server or WebSphere Application Server Network Deployment. Default values for *WAS_installdir* are listed in “Path variables” on page iv.

4. Do one of the following:
 - To start an application server, enter the following command:
`startServer application_server_name`
 - To stop an application server, enter the following command:
`stopServer application_server_name`

where:

application_server_name

is the name of the application server you want to start.

| Application server name | Description |
|-------------------------|---|
| <i>WC_instance_name</i> | WebSphere Commerce application server |
| server1 | Default WebSphere Application Server application server |

where *instance_name* is the name of the WebSphere Commerce instance.

Note: If the WebSphere Commerce node is federated into a WebSphere Application Server Network Deployment cell, you cannot start WebSphere Commerce using this command. For instructions on starting WebSphere Commerce when it is federated into a WebSphere Application Server Network Deployment cell, refer to “Starting or stopping an application server under WebSphere Application Server Network Deployment” on page 113.

Starting and stopping the WebSphere Application Server Network Deployment deployment manager

To start or stop the WebSphere Application Server Network Deployment deployment manager, do the following:

1. Log on using Windows user ID with Administrator authority.
2. Start a command prompt session.

3. Issue the following command:

```
cd WAS_ND_installdir\bin
```

where *WAS_ND_installdir* is the installation directory for WebSphere Application Server Network Deployment. Default values for *WAS_ND_installdir* are listed in “Path variables” on page iv.

4. Do one of the following:
 - To start the deployment manager, enter the following command:
startManager
 - To stop an deployment manager, enter the following command:
stopManager

Starting and stopping the WebSphere Application Server node agent

To start or stop the WebSphere Application Server node agent, do the following:

1. Log on using Windows user ID with Administrator authority.
2. Start a command prompt session.
3. Issue the following command:

```
cd WAS_installdir\bin
```

where *WAS_installdir* is the installation directory for WebSphere Application Server or WebSphere Application Server Network Deployment. Default values for *WAS_installdir* are listed in “Path variables” on page iv.

4. Do one of the following:
 - To start the node agent, enter the following command:
startNode
 - To stop the node agent, enter the following command:
stopNode

Starting the WebSphere Application Server Administrative Console

You can start the WebSphere Application Server Administrative Console under the following conditions:

Federated application servers

Before starting the WebSphere Application Server Administrative Console, you must start the following:

- The WebSphere Application Server node agent on each federated node. For instructions, refer to “Starting and stopping the WebSphere Application Server node agent.”
- The WebSphere Application Server Network Deployment deployment manager. For instructions, refer to “Starting and stopping the WebSphere Application Server Network Deployment deployment manager” on page 111.

A standalone (unfederated) application server

Before starting the WebSphere Application Server Administrative Console, you must start the default WebSphere Application Server application server (server1). For instructions, refer to “Starting or stopping an application server” on page 111.

Open the WebSphere Application Server Administrative Console by opening a web browser and entering the following URL:

`http://hostname:port/admin`

or

`https://hostname:port/admin`

where *hostname* is the fully qualified TCP/IP name of the machine running WebSphere Application Server and *port* is the TCP/IP port for the WebSphere Application Server Administrative Console.

The default port for the WebSphere Application Server Administrative Console depends on the protocol specified in the URL. For the http protocol, the default port is 9090. For the https protocol, the default port is 9043.

Starting or stopping an application server under WebSphere Application Server Network Deployment

The instructions in this section only apply to application servers that have been federated into a cell. For more information on federating application server nodes into cells, refer to the WebSphere Application Server Network Deployment documentation.

The instructions in this section do not apply when starting or stopping a cluster of application servers. For instructions on starting or stopping a cluster of application servers, refer to “Starting or stopping a WebSphere Commerce cluster” on page 100.

For information on federating the WebSphere Commerce application server and the WebSphere Commerce Payments application server into a deployment manager cell, refer to Chapter 20, “Federating WebSphere Commerce and WebSphere Commerce Payments,” on page 85.

To start an application server under WebSphere Application Server Network Deployment, do the following on the WebSphere Application Server Network Deployment machine:

1. If they are not started, start the node agent on each system managed by WebSphere Application Server Network Deployment.
2. If it is not started, start the deployment manager. Refer to “Starting and stopping the WebSphere Application Server Network Deployment deployment manager” on page 111 for instructions.
3. Start the WebSphere Application Server Administrative Console and log on to the console. For instructions on starting the WebSphere Application Server Administrative Console, refer to “Starting the WebSphere Application Server Administrative Console” on page 112.
4. In the Navigation area, expand **Servers** and click **Application Servers**. The Application Servers page displays.
5. Select the check box next to the application server you want to start or stop and click **Start** or **Stop**. The following table lists the WebSphere Commerce application servers that may be available:

| Application server name | Description |
|----------------------------------|---------------------------------------|
| <i>WC_commerce_instance_name</i> | WebSphere Commerce application server |

| Application server name | Description |
|--|--|
| <i>payments_instance_name_Commerce_Payments_Server</i> | WebSphere Commerce Payments application server |

Regenerating the WebSphere Application Server Web server plug-in configuration file

The instructions in this section do not apply when operating WebSphere Commerce or WebSphere Commerce Payments in a federated or clustered environment under WebSphere Application Server Network Deployment. For information on generating the Web server plug-in in those environments, refer to “Regenerating the Web server plug-in under WebSphere Application Server Network Deployment” on page 97.

To regenerate the Web server plug-in, do the following on the WebSphere Commerce node:

1. If it is not started, start the default application server — `server1`. Refer to “Starting or stopping an application server” on page 111 for instructions.
2. Open the WebSphere Application Server Administrative Console. For instructions, refer to “Starting the WebSphere Application Server Administrative Console” on page 112.
3. In the Navigation area, expand **Environment** and click **Update Web Server Plugin**.
4. Click **OK** to generate a new `plugin-cfg.xml` file.
5. Exit the WebSphere Application Server Administrative Console.
6. If WebSphere Commerce Payments is on a separate node, repeat all of these steps on the WebSphere Commerce Payments node.

If the Web server node is remote from the WebSphere Commerce node or the WebSphere Commerce Payments node, you will need to do the following:

1. Copy the plug-in from the WebSphere Commerce node to the Web server node. For details, refer to “Copying the `plugin-cfg.xml` file to Web server” on page 115.
2. If WebSphere Commerce and WebSphere Commerce Payments are on separate nodes, merge the WebSphere Commerce Payments plug-in with the WebSphere Commerce plug-in. For details, refer to “Merging the WebSphere Commerce Payments `plugin-cfg.xml` file” on page 116.
3. Restart the Web server according to the documentation provided with the Web server.

Chapter 24. Remote Web server tasks

This sections describes tasks that must be performed if you use a Web server running on a different node than WebSphere Commerce.

Copying the plugin-cfg.xml file to Web server

To copy the plugin-cfg.xml file to the remote Web server, do the following:

1. Stop the Web server according the documentation provided with the Web server.
2. Copy the following file on the WebSphere Commerce node to the same location on the Web Server node, depending on your configuration:

| | |
|--|--|
| WebSphere Commerce in a clustered environment | <code>WAS_ND_installdir/config/cells/plugin-cfg.xml</code> |
| WebSphere Commerce in a non- clustered environment | <code>WAS_installdir/config/cells/plugin-cfg.xml</code> |

Default values for `WAS_installdir` and `WAS_ND_installdir` are listed in "Path variables" on page iv.

Important: The plugin-cfg.xml file contains directory-specific information. If you do not copy the file to the exact same directory structure on the Web server node, the Web server will not function correctly and WebSphere Commerce will be inaccessible.

3. For IBM HTTP Server users, ensure that the path for the WebSphere Application Server plug-in is shown correctly in the httpd.conf file on the Web server machine. The httpd.conf file is in the `HTTP_Server/conf` directory.

To check the path, open the httpd.conf file in a text editor and search for the following:

```
WebSpherePluginConfig
```

This entry should contain the full path to the plugin-cfg.xml file on the Web server node. If the path is incorrect, change the path, save the httpd.conf file.

4. For Sun ONE Web Server users, ensure that the path for the WebSphere Application Server plug-in is shown correctly in the configuration files. The line in a configuration file for the WebSphere Application Server plug-in resembles the following:

```
Init fn="as_init"  
bootstrap.properties="C:\WebSphere\AppServer\config\cells\plugin-cfg.xml"
```

This line has been formatted for this book. The line may not appear as shown in your file.

If the path in the configuration files does not match the full path to the plugin-cfg.xml file on the Web server node, correct the path.

5. Start the Web server according to the documentation provided with the Web server.

If you are working on a custom installation with WebSphere Commerce and WebSphere Commerce Payments on separate nodes, continue with "Merging the WebSphere Commerce Payments plugin-cfg.xml file" on page 116.

Merging the WebSphere Commerce Payments plugin-cfg.xml file

To merge the WebSphere Commerce Payments plugin-cfg.xml file with the Web server plugin-cfg.xml file, do the following:

1. Stop the Web server according to the documentation provided with the Web server.
2. On the Web server node, open the plugin-cfg.xml file in a text editor. The full path of the plugin-cfg.xml file is the following:

WAS_installdir/config/cells/plugin-cfg.xml

Default values for *WAS_installdir* are listed in "Path variables" on page iv.

3. Open the plugin-cfg.xml file from the WebSphere Commerce Payments node in a text editor. The full path of the plugin-cfg.xml file is the following:

WAS_installdir/config/cells/plugin-cfg.xml

4. Locate the following text in the WebSphere Commerce Payments plugin-cfg.xml file:

```
<VirtualHostGroup Name="VH_PYM_instance_name">
  <VirtualHost Name="short_host_name:5432"/>
  <VirtualHost Name="short_host_name:5433"/>
  <VirtualHost Name="host_name:5432"/>
  <VirtualHost Name="host_name:5433"/>
</VirtualHostGroup>
```

where the variables are defined as follows:

instance_name

This is the name of the WebSphere Commerce Payments instance.

short_host_name

This is the short host name of the WebSphere Commerce Payments node.

host_name

This is the fully qualified host name of the WebSphere Commerce Payments node.

5. Copy this section to the Web server plugin-cfg.xml file. Ensure that you insert this section below existing entries of the same type.
6. Locate the following text in the WebSphere Commerce Payments plugin-cfg.xml file:

```
<ServerCluster Name="instance_name_Commerce_Payments_Server_short_host_name_Cluster">
  <Server Name="instance_name_Commerce_Payments_Server">
    <Transport Hostname="IP_address" Port="9081" Protocol="http">
    <Transport Hostname="IP_address" Port="9091" Protocol="http">
  </Server>
  <PrimaryServers>
    <Server Name="instance_name_Commerce_Payments_Server">
  </PrimaryServers>
</ServerCluster>
```

where the variables are defined as follows:

instance_name

This is the name of the WebSphere Commerce Payments instance.

short_host_name

This is the short host name of the WebSphere Commerce Payments node.

IP_address

This is the TCP/IP address of the WebSphere Commerce Payments node.

7. Copy this section to the Web server `plugin-cfg.xml` file. Ensure that you insert this section below existing entries of the same type.
8. Locate the following text in the WebSphere Commerce Payments `plugin-cfg.xml` file:

```
<UriGroup Name="VH_PYM_instance_name_instance_name_Commerce_Payments_Server_short_host_name_Cluster_URIs">
  <Uri AffinityCookie="JSESSIONID" Name="/webapp/SampleCheckout/*">
  <Uri AffinityCookie="JSESSIONID" Name="/webapp/PaymentManager/*">
</UriGroup>
```

where the variables are defined as follows:

instance_name

This is the name of the WebSphere Commerce Payments instance.

short_host_name

This is the short host name (not fully-qualified) of the WebSphere Commerce Payments machine.

9. Copy this section to the Web server `plugin-cfg.xml` file. Ensure that you insert this section below existing entries of the same type.
10. Locate the following text in the WebSphere Commerce Payments `plugin-cfg.xml` file:

```
<Route ServerCluster="instance_name_Commerce_Payments_Server_short_host_name_Cluster"
  UriGroup="VH_PYM_instance_name_instance_name_Commerce_Payments_Server_short_host_name_Cluster_URIs"
  VirtualHostGroup="VH_PYM_instance_name"/>
```

where the variables are defined as follows:

instance_name

This is the name of the WebSphere Commerce Payments instance.

short_host_name

This is the short host name (not fully-qualified) of the WebSphere Commerce Payments machine.

11. Copy this section to the Web server `plugin-cfg.xml` file. Ensure that you insert this section below existing entries of the same type.
12. Save your changes and exit the text editor.
13. Start the Web server according to the documentation provided with the Web server.

Post-Store publishing tasks

If you are using a remote Web server, you must do the following every time you publish a store in WebSphere Commerce:

1. Replace the contents of the `Stores.war` directory on the Web server node with the contents of the `Stores.war` directory on the WebSphere Commerce.

The full path to the `Stores.war` directory on both nodes is the following:

`WAS_installdir/installedApps/node_name/WC_instance_name.ear/Stores.war`

where the variables are defined as follows:

WAS_installdir

Default values for *WAS_installdir* are listed in “Path variables” on page iv.

node_name

This is the short host name of the WebSphere Commerce node.

instance_name

This is the name of the WebSphere Commerce instance.

The `WC_instance_name.ear` directory should have been copied to the Web server node after the creation of the WebSphere Commerce instance.

Chapter 25. Setting and changing passwords

Most components in WebSphere Commerce use user IDs and passwords that are validated by the operating system. For information on changing those passwords, refer to your operating system documentation. This chapter covers how to set and change passwords for WebSphere Commerce components that do not validate user IDs and passwords through the operating system.

Changing your Configuration Manager password

You can change the Configuration Manager password when you launch the Configuration Manager by clicking **Modify** in the window where you enter your user ID and password.

Alternately, to change the Configuration Manager user ID or password issue the following commands in a command window:

```
WC_installdir/bin/config_env
java com.ibm.commerce.config.server.PasswordChecker -action action type
  -pwfile password_file -userid user_ID
  -password password [-newpassword new_password]
```

where the parameters are as follows:

action type

Valid actions types are Add, Check, Delete or Modify

password_file

The path to the file where the file will be stored. The default path is *WC_installdir/bin*.

user_ID

This is this user ID for which you want to add, create, delete, or modify the password.

password

This is password that you want to add, create, delete, or modify.

new_password

This parameter is only require if you specify **Modify** as the action type.

This is the new password to assign to the user ID.

Changing the WebSphere Commerce Site Administrator password

You can change your password using the WebSphere Commerce Administration Console.

To change your password using WebSphere Commerce Administration Console, do the following:

1. Start the WebSphere Commerce Administration Console.
2. Log on with the Site Administrator ID and password created when the WebSphere Commerce instance was created.
3. Select the **Change password** check box and click **Log On**. The Change Password page displays.

4. In the **Old Password** field, type your current Administration Console logon password. This field accepts up to 128 alphanumeric characters.
5. In the **New Password** field, type a new logon password. This field accepts up to 128 alphanumeric characters.
6. In the **New password confirmation** field, re-type the password.
7. Click **Change** to save the new password. The Select Store and Language page displays.
8. Exit the WebSphere Commerce Administration Console.

Resetting the Site Administrator password

If you forget the Site Administrator password and want to reset the password, do the following:

1. Start a command prompt session.
2. Issue the following command:

```
WC_installdir/bin/wcs_password password SALT merchant_key
```

where the variables are defined as follows:

password

The new password that you want to assign to the Site Administrator ID.

SALT This is any random 12–digit random that you want to use. This number seeds the encryption of the password.

Record this number as you must update the WebSphere Commerce database USERREG table entry for the Site Administrator with this number later.

merchant key

This is the merchant key defined when the WebSphere Commerce instance was created. The merchant key also seeds the encryption of the password.

The following is an example of the output from the command:

```
IBM*
Licensed Materials - Property of IBM
5697-A16
(C) Copyrights by IBM and by other(s) 1978, 1997. All Rights Reserved.
* Trademark of International Business Machines Corp.
=== WCS Encrypted Password ===
ASCII Format: pArp97jT4NOXN6MyWswTQpwaPbIFsEWQGwfeu08yIyM=
Hex Format: 7041727039376a54344e4f584e364d79577377545170776d
```

DB2 Record the ASCII format value of the encrypted password.

Oracle Record the Hex format value of the encrypted password.

3. Connect to the WebSphere Commerce database.

Depending on the database management system being used for WebSphere Commerce, issue one of the commands below:

DB2 `db2 connect to db_name user user_name using password`

```
► Oracle sqlplus wc_user_ID/wc_password@wc_SID
```

where the variables are defined as follows:

db_name

The name of your WebSphere Commerce database.

user_name

The DB2 database user ID for the WebSphere Commerce database.

password

The password associated with the DB2 database user ID.

wc_user_ID

The Oracle user ID for the WebSphere Commerce database.

wc_password

The password associated with Oracle user ID.

wc_SID

The Oracle System Identifier (SID) for the WebSphere Commerce database instance.

4. Update the SALT and LOGONPASSWORD columns in the USERREG table for the Site Administrator ID by issuing the following commands:

```
► DB2 db2 "update USERREG set LOGONPASSWORD='ASCII_encrypted_string'
      where LOGONID='site_admin_id'"
      db2 "update USERREG set SALT='SALT' where LOGONID='site_admin_id'"
```

```
► Oracle update USERREG set LOGONPASSWORD='Hex_encrypted_string'
      where LOGONID='site_admin_id';
      update USERREG set SALT='SALT' where LOGONID='site_admin_id';
```

where the variable are defined as follows:

ASCII_encrypted_string

This is the ASCII format value obtained from the wcs_password command.

Hex_encrypted_string

This is the Hex format value obtained from the wcs_password command.

SALT This is the random 12–digit number you used to seed the wcs_password command.

site_admin_id

This is the Site Administrator ID for which you are resetting the password.

Recovering the Site Administrator ID

If you forget the Site Administrator ID defined when the WebSphere Commerce instance was created and you have no other IDs authorized as Site Administrators, you can recover the Site Administrator ID by doing the following:

1. Depending on the database management system being used for WebSphere Commerce, issue the commands below:

```
> DB2 db2 connect to db_name user user_name using password
db2 select LOGONID from USERREG where USERS_ID=-1000
```

```
> Oracle sqlplus wc_user_ID/wc_password@wc_SID
select LOGONID from USERREG where USERS_ID=-1000;
```

where the variables are defined as follows:

db_name

The name of your WebSphere Commerce database.

user_name

The DB2 database user ID for the WebSphere Commerce database.

password

The password associated with the DB2 database user ID.

wc_user_ID

The Oracle user ID for the WebSphere Commerce database.

wc_password

The password associated with Oracle user ID.

wc_SID

The Oracle System Identifier (SID) for the WebSphere Commerce database instance.

These commands should return the Site Administrator ID.

Chapter 26. Administrative Tasks

This chapter contains a variety of tasks that an administrative user may have to perform during the installation and maintenance of WebSphere Commerce.

Other command line configuration tasks

Through the command line you can:

- Update an instance:
`config_client -startCmdLineConfig updateInstance <xml_file>`
- Delete an instance:
`config_client -startCmdLineConfig deleteInstance <instance_name>`
- List existing instances:
`config_client -startCmdLineConfig getInstanceNames`
- Find information about an instance:
`config_client -startCmdLineConfig getInstanceInfo <instance_name>`
- Print configuration information for an instance to a file:
`config_client -startCmdLineConfig getInstanceConfig
instance_name print_to_file_name`

Cataloging a Remote DB2 Universal Database Database

Enable the database client/server connection and catalog the node and the database on the client by entering the following commands on a DB2 command window from the database client machine:

```
db2 catalog tcpip node node_name remote host_name server port_number  
db2 catalog db db_name at node node_name
```

The variable information in the commands is defined as follows:

node_name

A unique name of your choice that DB2 will use to identify the TCP/IP node. To ensure that your name is unique, you can enter the following command in a DB2 command window:

```
db2 list node directory
```

and look for the name in the response. If the name is *not* listed, you can use it as your node name.

host_name

The fully qualified host name of the machine on which the WebSphere Commerce database resides.

port_number

The port number that identifies the TCP/IP connection. To determine the port number, do the following from the database server machine:

1. On a DB2 command window on the machine running your database, enter the following command:

```
db2 get dbm cfg
```

and note the value of SVCENAME (which is also identified by the text TCP/IP Service Name).

2. On the machine running your database, open the file *drive:\winnt\system32\drivers\etc\services* and look for the line that begins with the name you noted in the previous step. The port number appears in the second column of the same line (with the string */tcp* appended to it). The default port number for DB2 Universal Database is 50000.

db_name

The name of the remote database.

The name of the default WebSphere Commerce database is Mall.

The name of the default WebSphere Commerce Payments database is wpm.

Chapter 27. User IDs required when administering WebSphere Commerce

Administration in the WebSphere Commerce environment requires a variety of user IDs. These user IDs along with their requisite authorities are described in the list below. For the WebSphere Commerce user IDs, the default passwords are identified.

Windows User ID

Refer to “User IDs required to complete the installation wizard” on page 38 for a description of this ID.



If you need to create a user ID fitting the above criteria, you can find information on creating a Windows user ID in the Windows online help.

Configuration Manager user ID

The Configuration Manager tool’s graphical interface allows you to modify the way WebSphere Commerce is configured. The default Configuration Manager user ID and password are `webadmin` and `webim`.

You can access Configuration Manager from your WebSphere Commerce machine, or any machine on the same network as WebSphere Commerce which supports a graphical user interface, and has the Configuration Manager client installed.

If you apply any WebSphere Commerce fix packs in the future, ensure that both the WebSphere Commerce Configuration Manager server and client machines are at the same fix pack level.

WebSphere Commerce Site Administrator

The Site Administrator user ID and password apply to the following WebSphere Commerce tools:

WebSphere Commerce Accelerator

To access the WebSphere Commerce Accelerator from a machine running a Windows operating system, open your Internet Explorer Web browser, and type the following URL:

`https://host_name:8000/accelerator`

You can also access WebSphere Commerce Accelerator by selecting **Start > Programs > IBM WebSphere Commerce > WebSphere Commerce Accelerator**

WebSphere Commerce Administration Console

To access the WebSphere Commerce Administration Console from a machine running a Windows operating system, open your Internet Explorer Web browser, and type the following URL:

`https://host_name:8002/adminconsole`

You can also access WebSphere Commerce Administration Console by selecting **Start > Programs > IBM WebSphere Commerce > Administration Console**

WebSphere Commerce Organization Administration Console

To access the WebSphere Commerce Organization Administration

Console from a machine running a Windows operating system, open your Internet Explorer Web browser, and type the following URL:

`https://host_name:8004/orgadminconsole`

You can also access WebSphere Commerce Organization Administration Console by selecting **Start > Programs > IBM WebSphere Commerce > Organization Administration Console**

The initial Site Administrator user ID and password are specified during the creation of a WebSphere Commerce instance. WebSphere Commerce requires that the Site Administrator password adhere to the following rules:

- The password must be at least 8 characters in length.
- The password must include at least 1 numeric digit.
- The password does not contain more than 4 occurrences of the same character.
- The password does not repeat the same character more than 3 times.

Part 9. Appendixes

Appendix A. Known problems and limitations

This section covers known problems and limitations with WebSphere Commerce. Refer to the README file for any late-breaking problems or limitations.

Additional troubleshooting information can be gathered by turning on the trace feature for WebSphere Commerce in WebSphere Application Server. For more information on the trace feature, refer to *WebSphere Commerce Administration Guide*.

Installation problems and limitations

Free space message does not change when installing in console mode

If you change the installation directory when running the installation wizard in console mode, the message displaying the free space available in the directory is not updated to reflect the free space in the selected location.

If there is not enough free space to install the product in the new location, you will receive an error when you click **Next**.

Web server problems and limitations

Secure (HTTPS) URLs do not work

If any of the secure URLs for WebSphere Commerce do not work, the SSL certificate for the Web server may be missing or expired.

Refer to the Web server documentation for information on installing or updating the SSL certificate.

WebSphere Commerce instance problems and limitations

Configuration Manager does not accept mapped network drive

When the Configuration Manager server is started from the Services panel, it may not accept the mapped network drive location of a Web server. If this occurs, do the following:



1. Exit Configuration Manager and ensure that the Configuration Manager server service is stopped.
2. Start the Configuration Manager from a command prompt session by issuing the following command:
`WC_installdir/bin/configServer`
3. Start the Configuration Manager client by selecting **Start** → **IBM WebSphere Commerce** → **Configuration**.

Creating a WebSphere Commerce instance with a default language other than the WebSphere Commerce installation language

During WebSphere Commerce installation, the language selected for the installation wizard sets the default language used when creating a WebSphere Commerce instance. The creation of an instance with a default language other than the installation language will create an instance populated with data that is invalid for the chosen language.

When creating an instance with a default language other than the installation language, do the following:

1. Open a text editor to edit the following files, depending on the database used for the WebSphere Commerce database:

| WebSphere Commerce database type | Files to edit |
|--|---|
|  DB2 | <i>WC_installdir</i> /schema/wcs.schema.ws_ml_db2.input <i>WC_installdir</i> /schema/wcs.schema2.ws_ml_db2.input |
|  Oracle | <i>WC_installdir</i> /schema/wcs.schema.ws_ml_oracle.input <i>WC_installdir</i> /schema/wcs.schema2.ws_ml_oracle.input |

Default values for *WC_installdir* are listed in “Path variables” on page iv.

2. Replace all occurrences of the locale code for the installation language with the locale code for the new default instance language. Locale codes used by WebSphere Commerce are listed in “Valid locale codes for instance creation.”
3. Save your changes and exit the text editor.
4. Create a new WebSphere Commerce instance ensuring you specify the new default language. Instructions for creating a WebSphere Commerce instance are provided in Part 5, “Creating a WebSphere Commerce and a WebSphere Commerce Payments instance,” on page 59.

Valid locale codes for instance creation

The following are the valid locale codes to use when updating the instance creation files:

| Language | Locale Code |
|----------------------|-------------|
| German | de_DE |
| English | en_US |
| Spanish | es_ES |
| French | fr_FR |
| Italian | it_IT |
| Japanese | ja_JP |
| Korean | ko_KR |
| Brazilian Portuguese | pt_BR |
| Simplified Chinese | zh_CN |
| Traditional Chinese | zh_TW |

Instance creation wizard fails when selecting Remote Configuration in the Web Server panel

If you receive a Java exception message when clicking **Next** after entering the remote Web server information, do the following:

1. Exit Configuration Manager and ensure that the Configuration Manager server service is stopped.
2. Ensure the FTP service is installed on the Web server node and that the FTP service is running.
3. Start Configuration Manager and create the WebSphere Commerce instance.

Internal Server Error received when accessing the WebSphere Commerce tools

If you start WebSphere Commerce from the Windows Services panel, you may receive **Internal Server Error** when accessing the WebSphere Commerce tools (Administration Console, Organization Administration Console, Accelerator).

This error will occur if you start the WebSphere Commerce tools immediately after starting WebSphere Commerce from the Services panel. There is a delay between when the Services panel indicates that WebSphere Commerce is started and when WebSphere Commerce is fully initialized and ready to receive requests.

Before accessing the WebSphere Commerce tools, check the following log file to ensure that WebSphere Commerce is started file:

WAS_installdir/logs/WC_instance_name/startServer.log

where the variables are defined as follows:

WAS_installdir

Default values for *WAS_installdir* are listed in "Path variables" on page iv.

instance_name

This is the name of the WebSphere Commerce instance.

If you receive **Internal Server Error**, do the following:

1. Exit any Web browsers with which you are accessing the WebSphere Commerce tools.
2. Check the *startServer.log* file and ensure that WebSphere Commerce is started.
3. Restart the Web server.

After restarting the Web server, you should be able to access the WebSphere Commerce tools successfully.

Viewing port conflicts in the log

Attempting to start your WebSphere Commerce instance may result in the following message:

```
EJB6121: Application server did not start
```

Check the *SystemOut.log* file found in the following directory:

WAS_installdir/logs/WC_instance_name

where *instance_name* is the name of the WebSphere Commerce instance that failed to start.

The SystemOut.log may indicate a port that is already in use. The message will be similar to:

```
SRVE0146E: Failed to Start Transport on host, port xxxx.
```

The likely cause of this message is that the port is already in use. Please ensure that no other applications are using this port and restart the server.

WebSphere Commerce Payments instance problems and limitations

Remote WebSphere Commerce Payments instance does not work

If a remote WebSphere Commerce Payments instance does not work, the WebSphere Commerce Payments instance may be configured incorrectly.

To check the configuration of WebSphere Commerce Payments, do the following:

1. On the WebSphere Commerce node, open the following file in a text editor:

```
WC_installdir/instances/WC_instance_name/xml/  
WC_instance_name.xml
```

where *WC_instance_name* is the name of the WebSphere Commerce instance.

Default values for *WC_installdir* are listed in “Path variables” on page iv.

2. Search for the following text:

```
<PaymentManager
```

3. Ensure that the Hostname entry under the found text points to the Web server node used by WebSphere Commerce Payments.

The entry should contain the fully qualified host name of the Web server node.

4. Save any changes and exit the text editor.
5. On the WebSphere Commerce Payments node, open the following file in a text editor:

```
WC_installdir/instances/Payments_instance_name/xml/  
Payments_instance_name.xml
```

where *payments_instance_name* is the name of the WebSphere Commerce Payments instance.

Default values for *WC_installdir* are listed in “Path variables” on page iv.

6. Search for the following text:

```
<PMWCSRealm
```

7. Ensure that the Hostname entry under the found text points to the Web server node used by WebSphere Commerce.

The entry should contain the fully qualified host name of the Web server node.

8. Save any changes and exit the text editor.
9. Restart WebSphere Commerce and WebSphere Commerce Payments. For instructions, refer to Chapter 22, “WebSphere Commerce tasks,” on page 105.

WebSphere Commerce Payments instance does not start

The WebSphere Commerce Payments instance will not start if WebSphere Application Server is configured to use a port other than port 9090.

To confirm that this the cause of the problem, do the following:

1. Open the following in a text editor:

```
WAS_installdir/logs/payments_instance_name_Commerce_Payments_Server/  
SystemOut.log
```

where *payments_instance_name* is the name of the WebSphere Commerce Payments instance.

Default values for *WAS_installdir* are listed in “Path variables” on page iv.

2. Search the file for the following message:

```
SRVE0146E: Failed to Start Transport on host *, port 9090.
```

If you have this error message, change the WebSphere Commerce Payments port. For instructions, refer to “Changing WebSphere Commerce Payments ports.”

If you do not have this error message, contact your IBM support representative.

Changing WebSphere Commerce Payments ports

To change WebSphere Commerce Payments ports, do the following:

1. Start WebSphere Commerce Configuration Manager. For instructions, refer to “Starting the Configuration Manager” on page 61.
2. Under **WebSphere Commerce**, expand your *hostname*.
3. Expand **Payments** → **Instance List** → *payments_instance_name* → **Instance Properties**.
4. Click on the **Webserver** tab.
5. Update the desired ports.
6. Click **Apply** to apply your changes.

Note: All Payments ports should be changed through the Configuration Manager, as stated in Chapter 14, “Before you create or modify an instance with Configuration Manager,” on page 61 and not through the WebSphere Application Server Administration Console. This ensures that all properties and files are updated with the same information.

Appendix B. Uninstalling WebSphere Commerce components

WebSphere Commerce components must be uninstalled in the reverse order from which they were installed. Uninstall WebSphere Commerce components in the following order:

1. WebSphere Commerce, WebSphere Commerce Payments, and the WebSphere Commerce Configuration Manager server and client

These components should be removed from all nodes on which they are installed before uninstalling any other components.

2. WebSphere Application Server
3. Web server
4. Database

Uninstalling WebSphere Commerce, WebSphere Commerce Payments, or the WebSphere Commerce Configuration Manager client

To uninstall WebSphere Commerce, WebSphere Commerce Payments, or the WebSphere Commerce Configuration Manager client from a node, do the following:

1. Stop WebSphere Commerce as described in “Starting or stopping a WebSphere Commerce instance” on page 105.
2. Stop WebSphere Commerce Payments as described in “Starting or stopping a WebSphere Commerce Payments instance” on page 105.
3. Delete any WebSphere Commerce instances following the instructions provided in “Deleting a WebSphere Commerce instance” on page 106.
4. Delete any WebSphere Commerce Payments instances following the instructions provided in “Deleting a WebSphere Commerce Payments instance” on page 109.
5. Ensure the IBM WC Configuration Manager service is stopped by checking the Windows services panel.
6. If you have created or customized any files in the *WC_installdir* directory or its subdirectories, and you wish to retain them, back them up to a directory that is not used by any WebSphere Commerce component.
Default values for *WC_installdir* are listed in “Path variables” on page iv.
7. Start the uninstallation wizard by starting a command prompt session and issuing the following command:

```
WC_installdir\_uninst\uninstall
```

For a distributed installation of WebSphere Commerce, run the uninstallation wizard on the WebSphere Commerce node, the WebSphere Commerce Payments node, and the WebSphere Commerce Configuration Manager client node.

8. Complete the uninstallation wizard by following the prompts.

Wait for the uninstallation wizard to complete before continuing.

9. If the *WC_installdir* directory still exists on the node, remove it.

Default values for *WC_installdir* are listed in “Path variables” on page iv.

Repeat the instructions on each node where you have WebSphere Commerce, WebSphere Commerce Payments, or the WebSphere Commerce Configuration Manager client installed.

Uninstalling WebSphere Application Server

For information on uninstalling WebSphere Application Server, refer to *IBM WebSphere Application Server Version 5 Getting Started*. This publication is available through the WebSphere Application Server library:

<http://www.ibm.com/software/webservers/appserv/was/library/>

Uninstalling WebSphere Application Server Network Deployment

WebSphere Application Server must be uninstalled from the WebSphere Commerce and WebSphere Commerce Payments nodes.

For information on uninstalling WebSphere Application Server Network Deployment, refer to *IBM WebSphere Application Server Network Deployment Version 5 Getting Started*. This publication is available through the WebSphere Application Server library:

<http://www.ibm.com/software/webservers/appserv/was/library/>

Uninstalling IBM HTTP Server

If IBM HTTP Server is installed on the same node as WebSphere Application Server, IBM HTTP Server will be uninstalled automatically when you uninstall WebSphere Application Server.

For information on uninstalling IBM HTTP Server, refer to the IBM HTTP Server V1.3.26 powered by Apache Installation file available through the following URL:

<http://www.ibm.com/software/webservers/httservers/library.html>

Uninstalling DB2 Universal Database

For information on uninstalling DB2 Universal Database, refer to *IBM DB2 Universal Database Installation and Configuration Supplement*. This publication is available through the DB2 Universal Database library:

http://www.ibm.com/cgi-bin/db2www/data/db2/udb/winos2unix/support/v8pubs.d2w/en_main

Appendix C. Where to find more information

More information about the WebSphere Commerce system and its components is available from a variety of sources in different formats. The following sections indicate what information is available and how to access it.

WebSphere Commerce information

The following are the sources of WebSphere Commerce information:

- WebSphere Commerce online help
- WebSphere Commerce technical library

WebSphere Commerce online help

The WebSphere Commerce online information is your primary source of information for customizing, administering, and reconfiguring WebSphere Commerce. After you have installed WebSphere Commerce, you can access topics in the online information by visiting the following URL:

`https://host_name:8000/wche1p/`

where *host_name* is the fully qualified TCP/IP host name of the machine on which WebSphere Commerce is installed.

WebSphere Commerce technical library

The WebSphere Commerce technical library is available at the following URL:

`http://www.ibm.com/software/commerce/library/`

A copy of this book, and any updated versions of this book, are available as PDF files from the Library section of the WebSphere Commerce Web site. In addition, new and updated documentation may also be available from the WebSphere Commerce technical library Web site.

WebSphere Commerce Payments information

Help for WebSphere Commerce Payments is available by clicking the following help icon:



This help icon displays on the WebSphere Commerce Payments user interface within the WebSphere Commerce Administration Console and WebSphere Commerce Accelerator and in the standalone WebSphere Commerce Payments user interface at the following URL:

`http://host_name:http_port/webapp/PaymentManager`

or

`https://host_name:ssl_port/webapp/PaymentManager`

Where the variables are defined as follows:

host_name

The fully qualified TCP/IP host name of the Web server associated with WebSphere Commerce Payments.

http_port

The HTTP port used by WebSphere Commerce Payments. The default HTTP port is 5432.

ssl_port

The SSL port used by WebSphere Commerce Payments. The default SSL port is 5433.

If WebSphere Commerce Payments is SSL-enabled, you can use either URL. If IWebSphere Commerce Payments is not SSL-enabled, you can only use the non-secure URL (http).

Help is also available at the following URL:

`http://host_name:http_port/webapp/PaymentManager/language/docenter.html`

or

`https://host_name:ssl_port/webapp/PaymentManager/language/docenter.html`

Where the variables are defined as follows:

host_name

The fully qualified TCP/IP host name of the Web server associated with WebSphere Commerce Payments.

http_port

The HTTP port used by WebSphere Commerce Payments. The default HTTP port is 5432.

ssl_port

The SSL port used by WebSphere Commerce Payments. The default SSL port is 5433.

language

A language code for the language in which the help page will be displayed. It is two letters for most languages. The language codes are as follows:

| Language | Code |
|----------------------|-------|
| German | de |
| English | en |
| Spanish | es |
| French | fr |
| Italian | it |
| Japanese | ja |
| Korean | ko |
| Brazilian Portuguese | pt |
| Simplified Chinese | zh |
| Traditional Chinese | zh_TW |

More information about WebSphere Commerce Payments and the Payments Cassettes is available at the WebSphere Commerce Technical Library:

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

IBM HTTP Server information

IBM HTTP Server information is available at the IBM HTTP Server Web site:

<http://www.ibm.com/software/webservers/httpservers/>

The documents are in HTML format, PDF files, or both.

WebSphere Application Server information

WebSphere Application Server information is available at the WebSphere Application Server InfoCenter:

<http://www.ibm.com/software/webservers/appserv/infocenter.html>

DB2 Universal Database information

DB2 information is available on your system after you install DB2. To access the DB2 Information Center, select **Start → Programs → IBM DB2 → Information → Information Center**.

For a complete list of the available DB2 documentation, and how to view or print it, refer to the *DB2 Quick Beginnings for Windows* book. Additional DB2 information is available at the DB2 Technical Library:

<http://www.ibm.com/software/data/db2/library/>

Other IBM publications

You can purchase copies of most IBM publications from your IBM authorized dealer or marketing representative.

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