WebSphere® Commerce

IBM

Version 5.7

# Installation Guide for Windows

**Note**
Before using this information and the product it supports, be sure to read the general information under "Notices" on page 225.

**First Edition (April 2005)**

This edition of this book applies to a limited release of WebSphere Commerce produced for selected customers and to all subsequent releases and modifications produced for these customers until otherwise indicated in new editions. This product is referred to as IBM WebSphere Commerce Business Edition Version 5.7 throughout this book.

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

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# About this book

## Document description

This installation guide provides information on how to install and configure the following products on Microsoft® Windows® operating systems:

- IBM® WebSphere® Commerce Business Edition
- IBM WebSphere Commerce Professional Edition
- IBM WebSphere Commerce - Express

It is intended for system administrators or 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 `readme` 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/`

For information updates that were made available after this book was published, refer to the technotes 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. |
| *Italic type* | 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.

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| | |
|---|---|
| Business | Indicates information specific to WebSphere Commerce Business Edition. |
| Professional | Indicates information specific to WebSphere Commerce Professional Edition. |
| Express | Indicates information specific to WebSphere Commerce - Express. |
| DB2 | Indicates information specific to DB2 Universal Database™ or to using DB2 Universal Database with WebSphere Commerce. |
| Oracle | Indicates information specific to Oracle9i Database or to using Oracle9i Database with WebSphere Commerce.<br><br>Oracle9i Database is only supported by WebSphere Commerce Business Edition and WebSphere Commerce Professional Edition.<br><br>Oracle9i Database is not supported by WebSphere Commerce - Express. |
| 2000 | Indicates information specific to Windows 2000. |
| 2003 | Indicates information specific to Windows Server 2003. |

## 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.

*federation*
When discussing federation, 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 a cell may or may not be running the same enterprise application as other nodes in the same cell.

## Path variables used in this book

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 as installed by the WebSphere Commerce installation wizard 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 Version 1.3.28 as installed by the WebSphere Commerce installation wizard is `C:\Program Files\WebSphere\IBMHttpServer`.

  The default installation directory for IBM HTTP Server Version 2.0.42.2 is `C:\Program Files\IBM HTTP Server 2.0`.

*IIS_installdir*
: This is the installation directory for Microsoft Internet Information Services (IIS).

  The installation directory for Microsoft IIS 5.0 on Windows 2000 is `C:\WINNT\system32\inetsrv`.

  The installation directory for Microsoft IIS 6.0 on Windows Server 2003 is `C:\WINDOWS\system32\inetsrv`.

*Oracle_installdir*
: This is the installation directory for Oracle. The default installation directory for Oracle9i Database is `C:\oracle\ora92`.

*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 as installed by the WebSphere Commerce installation wizard 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\CommerceServer57`.

## 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, Windows 2000 Advanced Server, or Windows Server 2003
- Basic operating system commands
- Business Professional DB2 Universal Database Enterprise Server Edition or Oracle9i Database operation, configuration, and maintenance
- Express DB2 Universal Database Express Edition or Enterprise Server Edition operation, configuration, and maintenance
- Business Professional One of the following:
  - IBM HTTP Server operation, configuration, and maintenance
  - Microsoft Internet Information Services (IIS) operation, configuration, and maintenance
  - Sun ONE Web Server operation, configuration, and maintenance
- Express IBM HTTP Server operation, configuration, and maintenance
- Basic SQL commands
- The Internet

Refer to the WebSphere Commerce Information Center for more information on configuring and administering WebSphere Commerce. For more information on the WebSphere Commerce Information Center, refer to "WebSphere Commerce information center" on page 221.

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

- WebSphere Application Server
- Business Professional DB2 Universal Database or Oracle9i Database operation, configuration, and maintenance
- Express DB2 Universal Database Express Edition or Enterprise Server Edition operation, configuration, and maintenance
- HTML and XML
- Structured Query Language (SQL)
- Java™ programming

Refer to the WebSphere Commerce Information Center 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
  - Space management in tablespaces
  - Online and offline tablespaces
  - Temporary tablespaces
  - Datafiles

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# Part 1. Read this section first!

This book describes how to install and configure WebSphere Commerce Version 5.7 for Windows. It is intended for system administrators or for anyone else responsible for performing installation and configuration tasks.

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# How to install WebSphere Commerce

This book provides instructions on how to install WebSphere Commerce. Use this book to install WebSphere Commerce as follows:

__ Step 1. Review Part 2, "Planning your WebSphere Commerce installation," on page 5.

This part of the book provides planning information to help you decide what software stack you will use with WebSphere Commerce and what topology you will use for your WebSphere Commerce installation.

It is strongly recommended that you review "Common topologies" on page 15 carefully to understand what is required for the topology you want to use for WebSphere Commerce.

__ Step 2. Based on your review of the planning information, decide what type of installation you will perform:

**Quick installation**

A quick installation does the following on a single machine:

- Installs DB2 Universal Database
- Installs IBM HTTP Server Version 1.3.28
- Installs WebSphere Application Server Base
- Installs required WebSphere Application Server fix packs, cumulative fixes, and interim fixes required by WebSphere Commerce.
- Installs WebSphere Commerce
- (optional) Installs WebSphere Commerce Payments
- Creates a WebSphere Commerce instance named `demo`.
- (optional) Creates a WebSphere Commerce Payments instance named `wpm`.

A quick installation requires a "clean machine" — none of the software installed by a quick installation is installed on the machine.

**Custom installation**

If you are planning a multi-node installation or the machine on which you are installing does not meet the requirements for a quick installation, you must perform a custom installation.

__ Step 3. Complete the steps in the table below for the type of installation you will perform:

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| Quick installation | Custom installation |
| --- | --- |
| Complete the tasks in Part 3, "Installing WebSphere Commerce using the quick installation," on page 39. | Complete the following sections of this book:<br>1. Complete the instructions in Part 4, "Preparing for a custom installation," on page 63.<br>2. Complete the tasks in Part 5, "Installing WebSphere Commerce using the custom installation," on page 85.<br>3. Complete the tasks in Part 6, "Creating a WebSphere Commerce and a WebSphere Commerce Payments instance," on page 105. |

__ Step 4. At this point, your installation of WebSphere Commerce is complete, review Part 7, "Last steps," on page 123 to decide on how to continue.

# Part 2. Planning your WebSphere Commerce installation

This section provides information to help you plan your configuration of WebSphere Commerce. Review all of the information in this section before continuing with your installation of WebSphere Commerce.

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# Migrating previous versions of WebSphere Commerce

Migration to WebSphere Commerce Version 5.7 from the following versions of WebSphere Commerce is supported:

- WebSphere Commerce Version 5.6
- WebSphere Commerce Version 5.5
- WebSphere Commerce Version 5.4

Migration from other versions of WebSphere Commerce and WebSphere Commerce Suite is not supported.

For information on how to migrate to WebSphere Commerce Version 5.7 from previous versions of WebSphere Commerce, refer to the *WebSphere Commerce Migration Guide*.

The *WebSphere Commerce Migration Guide* is available from the WebSphere Commerce technical library:

`http://www.ibm.com/software/commerce/library/`

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# Coexistence with previous versions of WebSphere Commerce

WebSphere Commerce Version 5.7 can coexist on the same machine with the following previous versions of WebSphere Commerce:

- WebSphere Commerce Version 5.6
- WebSphere Commerce Version 5.5
- WebSphere Commerce Version 5.4

Coexistence of other versions of WebSphere Commerce or WebSphere Commerce Suite is not supported.

The machines on which different versions of WebSphere Commerce will coexist must meet the requirements for WebSphere Commerce Version 5.7 documented in "Prerequisites" on page 29.

If you plan to run two or more versions of WebSphere Commerce at the same time:

- You will have port conflicts that must be resolved before you can run versions of WebSphere Commerce simultaneously.
- Your machine requirements will be greater than those listed in "Prerequisites" on page 29. For memory, hard disk requirements, you must sum the requirements for all versions of WebSphere Commerce running on the same machine in order to determine the hardware requirements.

If you plan to run only one version of WebSphere Commerce at a time:

- You will not need to resolve port conflicts with the other versions of WebSphere Commerce.
- Your machine must meet the requirements listed in "Prerequisites" on page 29.

For information on coexistence, refer to the *WebSphere Commerce Migration Guide*.

The *WebSphere Commerce Migration Guide* is available from the WebSphere Commerce technical library:

`http://www.ibm.com/software/commerce/library/`

## Coexistence with previous version of WebSphere Application Server

WebSphere Commerce Version 5.7 uses WebSphere Application Server Version 5.1.1.3. If you have a version of WebSphere Application Server lower than version 5.1 installed on the same machine where you install WebSphere Commerce, these versions of WebSphere Application Server may be able to coexist, however there will be port conflicts as both version of WebSphere Application Server use the same ports.

The WebSphere Commerce installation wizard does not setup WebSphere Application Server in a coexistence mode.

For more information on WebSphere Application Server coexistence support, refer to the following URL:

`http://publib.boulder.ibm.com/infocenter/ws51help/index.jsp?topic=/com.ibm.websphere.base.doc/info/aes/ae/rins_coexist.html`

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# Software supported by WebSphere Commerce

WebSphere Commerce requires a number of supporting software packages to run. The supporting software packages supported by WebSphere Commerce are listed in the following sections.

**Important**

This guide has been tested using the software levels listed in this sections. However, at the time of your installation, there may be more recent fixes and patches available for the WebSphere Commerce software stack components (for example, WebSphere Application Server or DB2 Universal Database). Unless these fixes or patches contain a resolution to a problem that is critical for your system, use the software levels documented in this guide when installing WebSphere Commerce. Once you have completed your installation of WebSphere Commerce, you can apply these later fixes and patches.

Also, this guide was tested with WebSphere Commerce and the supporting software stack running on the same operating system. Heterogeneous operating environments have not been tested.

## Supported database servers

The following table lists database servers supported by WebSphere Commerce:

| WebSphere Commerce edition | Database server supported |
|---|---|
| WebSphere Commerce Business Edition | DB2 Universal Database Version 8.2 Enterprise Server Edition<br><br>Oracle9i Database Release 2 Enterprise Edition with fix pack 1<br><br>Oracle9i Database Release 2 Standard Edition with fix pack 1 |
| WebSphere Commerce Professional Edition | DB2 Universal Database Version 8.2 Enterprise Server Edition<br><br>Oracle9i Database Release 2 Enterprise Edition with fix pack 1<br><br>Oracle9i Database Release 2 Standard Edition with fix pack 1 |
| WebSphere Commerce - Express | DB2 Universal Database Version 8.2 Express Edition (DB2 Universal Database Version 8.2 Express Edition)<br><br>DB2 Universal Database Version 8.2 Enterprise Server Edition (DB2 Universal Database Version 8.2 Enterprise Server Edition) |

Database servers not listed in this table are not supported — this includes versions or editions of DB2 Universal Database not listed in this table.

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## Supported Web servers

The following table lists Web servers supported by WebSphere Commerce:

| WebSphere Commerce edition | Web server supported |
| --- | --- |
| WebSphere Commerce Business Edition | IBM HTTP Server Version 1.3.28<br><br>IBM HTTP Server Version 2.0.42.2<br><br>2000 Microsoft IIS Version 5.0 with security patch Q327696<br><br>2003 Microsoft IIS Version 6.0<br>**Note:** IIS 6.0 is supported only in IIS 5.0 isolation mode<br><br>Sun ONE Web Server, Enterprise Edition Version 6.0.5 |
| WebSphere Commerce Professional Edition | IBM HTTP Server Version 1.3.28<br><br>IBM HTTP Server Version 2.0.42.2<br><br>2000 Microsoft IIS Version 5.0 with security patch Q327696<br><br>2003 Microsoft IIS Version 6.0<br>**Note:** IIS 6.0 is supported only in IIS 5.0 isolation mode<br><br>Sun ONE Web Server, Enterprise Edition Version 6.0.5 |
| WebSphere Commerce - Express | IBM HTTP Server Version 1.3.28<br><br>IBM HTTP Server Version 2.0.42.2 |

Web servers not listed in this table are not supported by WebSphere Commerce — this includes versions of IBM HTTP Server not listed.

## Supported application servers

WebSphere Commerce requires WebSphere Application Server Base Version 5.1 base with fix pack 1 and cumulative fix 3 (also known as WebSphere Application Server Base, Version 5.1.1.3) to run.

WebSphere Commerce does not support WebSphere Application Server - Express or WebSphere Application Server Enterprise.

The WebSphere Commerce installation wizard installs WebSphere Application Server Base Version 5.1.1.3 for you from the WebSphere Application Server and WebSphere Application Server fixes CDs provided with WebSphere Commerce.

If you have a pre-existing installation of WebSphere Application Server Version 5.1, the WebSphere Commerce installation wizard will apply the required fix packs, cumulative fixes, and interim fixes to bring the version up to Version 5.1.1.3.

If you are using a remote Web server with your existing installation of WebSphere Application Server, you must bring the WebSphere Application Server plug-in on the Web server up to the level required by WebSphere Commerce (Version 5.1.1.3).

Instructions for using an existing WebSphere Application Server are provided in "Using an existing WebSphere Application Server installation with WebSphere Commerce" on page 77.

For normal operation, only WebSphere Application Server Base is used. However, if you plan to cluster WebSphere Commerce, you must install WebSphere Application Server Network Deployment to enable clustering. For more information about clustering WebSphere Commerce, refer to "Clustering WebSphere Commerce" on page 139.

## Supported Web browsers

The Web browsers supported by WebSphere Commerce depend on the activity for which they will be used. Refer to the following sections for more information:

- "Web browser support for WebSphere Commerce tools"
- "Web browser support for WebSphere Commerce information center"

### Web browser support for WebSphere Commerce tools

You can only access the WebSphere Commerce tools 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.

The WebSphere Commerce tools function best if you also have the Macromedia Flash Player plug-in version 4 or higher for Microsoft Internet Explorer.

**Important:** Ensure that you do not have any pop-up blocker software installed on the machine(s) from which you want to access the WebSphere Commerce tools. Pop-up blocking software will prevent the WebSphere Commerce tools from displaying.

### Web browser support for WebSphere Commerce information center

You can access the WebSphere Commerce information center using Microsoft Internet Explorer Version 6.0 or higher, or Netscape Navigator Version 6.0 or higher.

# Common topologies

This section describes common topologies for WebSphere Commerce components and the supporting software, such as the database server and the Web server. Although the topologies described in this chapter are the most common, other topologies of WebSphere Commerce are still possible.

WebSphere Commerce is tested with all nodes in a given topology running the same operating system at the same level. This includes any patches, revisions, service packs or fix packs required by WebSphere Commerce.

This section often refers to ″software supported by WebSphere Commerce″. For a list of software supported by WebSphere Commerce, refer to “Software supported by WebSphere Commerce” on page 11.

In this chapter the following terms are used:

**Database node**
A node in a topology that only contains the database server used by WebSphere Commerce.

**Web server node**
A node in a topology that only contains the Web server used by WebSphere Commerce.

**WebSphere Commerce node**
A node in a topology that contains the WebSphere Commerce server. While the node may also contain the database server or Web server, depending on the topology, if a node contains the WebSphere Commerce server, it will be referred to as the WebSphere Commerce node.

**Important**

The instructions in this section are meant as a general outline only to provide information for planning purposes. Detailed instructions are provided later in this book.

For specific information on how to configure non-IBM software or pre-installed IBM software for use with WebSphere Commerce, refer to Part 4, “Preparing for a custom installation,” on page 63.

## One-node topology

In a one-node topology, all WebSphere Commerce components and the supporting software are installed on a single node. This includes your database server, Web server, WebSphere Application Server, WebSphere Commerce Payments, and the WebSphere Commerce server.

### Installing WebSphere Commerce in a one-node topology

To install WebSphere Commerce in a one-node topology, you have two options:

**Quick installation**
You can only use the quick installation option of the WebSphere Commerce

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installation wizard to install WebSphere Commerce in a one-node topology if the machine meets the following criteria:

- No version or edition of WebSphere Commerce is installed on the machine.
- No version or edition of DB2 Universal Database is installed on the machine.
- No edition or version of WebSphere Application Server is installed on the machine.
- No version or edition of IBM HTTP Server is installed on the machine.
- The node meets the requirements for WebSphere Commerce provided in "Prerequisites" on page 29.

During a quick installation, you can choose not to install the WebSphere Commerce Payments component, but all other WebSphere Commerce components and supported IBM software are installed.

A quick installation creates a WebSphere Commerce instance after all components and supporting software have been installed. If you choose to install WebSphere Commerce Payments, a WebSphere Commerce Payments instance is also created.

Instructions for completing a quick installation are provided in Part 3, "Installing WebSphere Commerce using the quick installation," on page 39.

**Custom installation**

You can use the custom installation option of the WebSphere Commerce installation wizard to install WebSphere Commerce in a one-node topology as long as the following conditions have been met:

**Hardware and operating system requirements**

The node meets the requirements for WebSphere Commerce provided in "Prerequisites" on page 29.

**Database requirements**

**DB2 Universal Database requirements**

Business Professional If DB2 Universal Database is not detected on the system, DB2 Universal Database Enterprise Server Edition, Version 8.2 will be installed for you when you select the **DB2 Universal Database** option.

Express If DB2 Universal Database Enterprise Server Edition or Express Edition is not detected on the system, DB2 Universal Database Express Edition, Version 8.2 will be installed for you when you select the **DB2 Universal Database** option.

If a DB2 Universal Database is already installed on the node, DB2 Universal Database must be at the version level required by WebSphere Commerce.

For instructions, refer to "Using an existing DB2 Universal Database installation with WebSphere Commerce" on page 75.

Business Professional **Oracle9i Database requirements**

If you want to use Oracle9i Database, Oracle9i Database must be already installed on the node and configured

according the information provided in "Installing and configuring Oracle9i Database" on page 65 before installing WebSphere Commerce.

**Web server requirements**

If IBM HTTP Server Version 1.3.28 is not detected on the system, IBM HTTP Server Version 1.3.28 will be installed when you select the **IBM HTTP Server** option.

If IBM HTTP Server Version 1.3.28 is already installed on the node, IBM HTTP Server must be configured correctly for WebSphere Commerce.

For instructions, refer to "Using an existing IBM HTTP Server Version 1.3.x installation with WebSphere Commerce" on page 75.

If you want to use any of the following Web servers, they must be installed and configured before you start the installation wizard:

- IBM HTTP Server Version 2.0.42.2

  For installation and configuration requirements, refer to "Using IBM HTTP Server Version 2.0.42.2 with WebSphere Commerce" on page 73.

- Business Professional Microsoft IIS

  For installation and configuration requirements, refer to "Installing and configuring Microsoft IIS" on page 67.

- Business Professional Sun ONE Web server

  For installation and configuration requirements, refer to "Installing and configuring Sun ONE Web Server 6.0.5" on page 69.

**WebSphere Application Server requirements**

If WebSphere Application Server is not detected on the node, it will be installed for you when choose to install WebSphere Commerce or WebSphere Commerce Payments.

If WebSphere Application Server is already installed on the node, WebSphere Application Server must be the edition and version of WebSphere Application Server supported by WebSphere Commerce.

If you have WebSphere Application Server Version 5.1 installed without the required fix packs, cumulative fixes, or interim fixes required by WebSphere Commerce, the required fix packs, cumulative fixes, and fixes required by WebSphere Commerce will be installed during the installation of WebSphere Commerce.

For more information on using a version of WebSphere Application Server already installed on the node, refer to "Using an existing WebSphere Application Server installation with WebSphere Commerce" on page 77.

Instruction for completing a custom installation are provided in Part 5, "Installing WebSphere Commerce using the custom installation," on page 85.

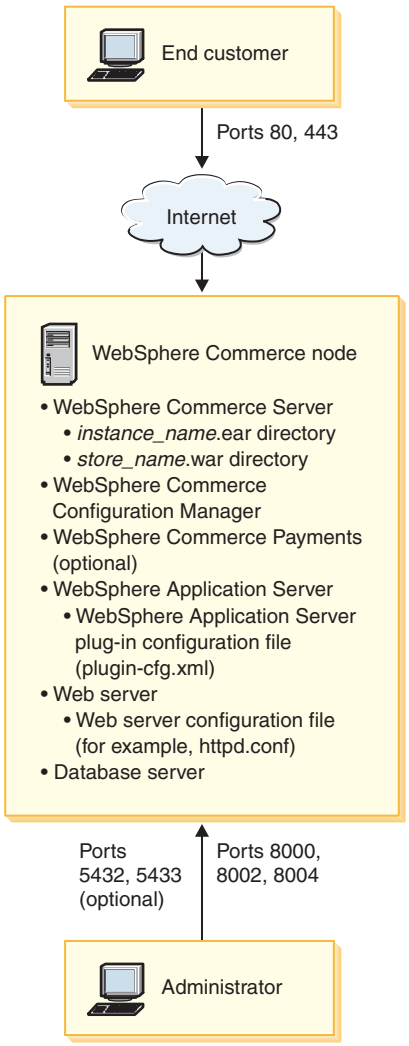
Select options in the installation wizard for a custom installation as follows:

| Database server | Web server | Custom installation options |
| --- | --- | --- |
| DB2 Universal Database<br><br>(not pre-existing) | IBM HTTP Server Version 1.3.28<br><br>(not pre-existing) | • **WebSphere Commerce Server**<br>• **WebSphere Commerce Payments** (optional)<br>• **DB2 Universal Database**<br>• **IBM HTTP Server** |
| | IBM HTTP Server Version 1.3.28<br><br>(pre-existing)<br><br>IBM HTTP Server Version 2.0.42.2<br><br>Business Professional Microsoft IIS<br><br>Business Professional Sun ONE Web server | • **WebSphere Commerce Server**<br>• **WebSphere Commerce Payments** (optional)<br>• **DB2 Universal Database**<br>• **WebSphere Application Server Web server plug-in** |
| DB2 Universal Database<br><br>(pre-existing) | IBM HTTP Server Version 1.3.28<br><br>(not pre-existing) | • **WebSphere Commerce Server**<br>• **WebSphere Commerce Payments** (optional)<br>• **IBM HTTP Server** |
| | IBM HTTP Server Version 1.3.28<br><br>(pre-existing)<br><br>IBM HTTP Server Version 2.0.42.2<br><br>Business Professional Microsoft IIS<br><br>Business Professional Sun ONE Web server | • **WebSphere Commerce Server**<br>• **WebSphere Commerce Payments** (optional)<br>• **WebSphere Application Server Web server plug-in** |

| Database server | Web server | Custom installation options |
| --- | --- | --- |
| Oracle9i Database | IBM HTTP Server Version 1.3.28 (not pre-existing) | • **WebSphere Commerce Server**<br>• **WebSphere Commerce Payments** (optional)<br>• **IBM HTTP Server** |
| | IBM HTTP Server Version 1.3.28 (pre-existing)<br>IBM HTTP Server Version 2.0.42.2<br>Business Microsoft IIS<br>Professional<br>Business Sun ONE Web server<br>Professional | • **WebSphere Commerce Server**<br>• **WebSphere Commerce Payments** (optional)<br>• **WebSphere Application Server Web server plug-in** |

A custom installation does not create a WebSphere Commerce instance or a WebSphere Commerce Payments instance. The instances must be manually created after completing the installation. Instructions for creating instances are provided in Part 6, "Creating a WebSphere Commerce and a WebSphere Commerce Payments instance," on page 105.

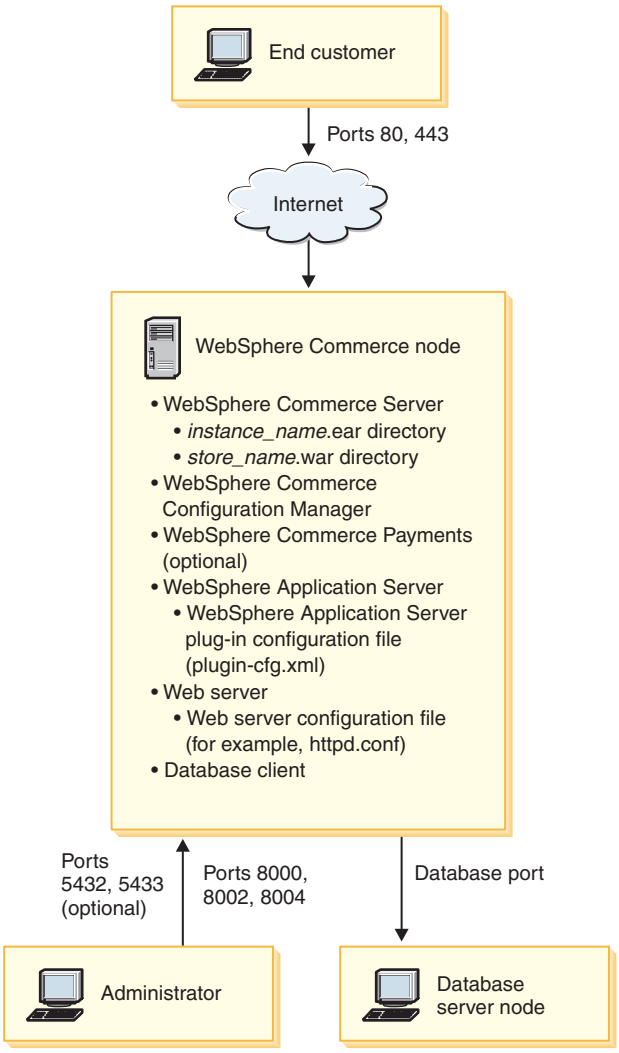
The following diagram shows a one-node topology:




## Two-node topology

In a two-node topology, the database server is installed on one node and all WebSphere Commerce components and the Web server are installed on a different node.

The following diagram shows a two-node topology:




## Installing WebSphere Commerce in a two-node topology

To install WebSphere Commerce in a three-node topology, do the following:

1. Ensure all nodes meet the requirements for WebSphere Commerce provided in "Prerequisites" on page 29.
2. If required, install the database server on the database node as follows:

   **DB2 Universal Database**

   To install DB2 Universal Database as your WebSphere Commerce database, perform a custom installation on the database node and select **DB2 Universal Database** from the list of components available. Instructions for performing a custom installation are provided in Part 5, "Installing WebSphere Commerce using the custom installation," on page 85.

   If a DB2 Universal Database is already installed on the database node, DB2 Universal Database must be at the version level required by WebSphere Commerce.

   For instructions, refer to "Using an existing DB2 Universal Database installation with WebSphere Commerce" on page 75.

Business Professional **Oracle9i Database**

If you want to use Oracle9i Database, Oracle9i Database must be already installed on the database node and configured according to the information provided in "Installing and configuring Oracle9i Database" on page 65.

3. If required, install the Web server on the WebSphere Commerce node, as follows:

   **IBM HTTP Server Version 1.3.28**

   If you want to use IBM HTTP Server Version 1.3.28 as your Web server and you are doing a new installation of the Web server, proceed to the next step where you will install IBM HTTP Server Version 1.3.28 along with other WebSphere Commerce components.

   If IBM HTTP Server Version 1.3.28 is already installed on the Web server node, IBM HTTP Server must be configured correctly for WebSphere Commerce before starting the installation wizard.

   For instructions, refer to "Using an existing IBM HTTP Server Version 1.3.x installation with WebSphere Commerce" on page 75.

   **IBM HTTP Server Version 2.0.42.2**

   IBM HTTP Server Version 2.0.42.2 must be installed and configured on the WebSphere Commerce server node before starting the installation wizard.

   For installation and configuration requirements, refer to "Using IBM HTTP Server Version 2.0.42.2 with WebSphere Commerce" on page 73.

   Business Professional **Microsoft IIS**

   Microsoft IIS must be installed and configured on the WebSphere Commerce node before starting the installation wizard.

   For installation and configuration requirements, refer to "Installing and configuring Microsoft IIS" on page 67.

   Business Professional **Sun ONE Web server**

   Sun ONE Web server must be installed and configured on the WebSphere Commerce node before starting the installation wizard.

   For installation and configuration requirements, refer to "Installing and configuring Sun ONE Web Server 6.0.5" on page 69.

4. Install the remaining WebSphere Commerce components on the WebSphere Commerce node.

   If WebSphere Application Server is already installed on the WebSphere Commerce node, WebSphere Application Server must be the edition and version of WebSphere Application Server supported by WebSphere Commerce.

   If you have WebSphere Application Server Version 5.1 installed without the required fix packs, cumulative fixes, or interim fixes required by WebSphere Commerce, the required fix packs, cumulative fixes, and interim fixes required by WebSphere Commerce will be installed during the installation of WebSphere Commerce.

   For more information on using a version of WebSphere Application Server already installed on the node, refer to "Using an existing WebSphere Application Server installation with WebSphere Commerce" on page 77.

   To install the remaining WebSphere Commerce components, perform a custom installation on the WebSphere Commerce node and select the following components from the list of components available:

- **WebSphere Commerce Server**
- **WebSphere Commerce Payments** (optional)

Installing WebSphere Commerce Payments is optional.

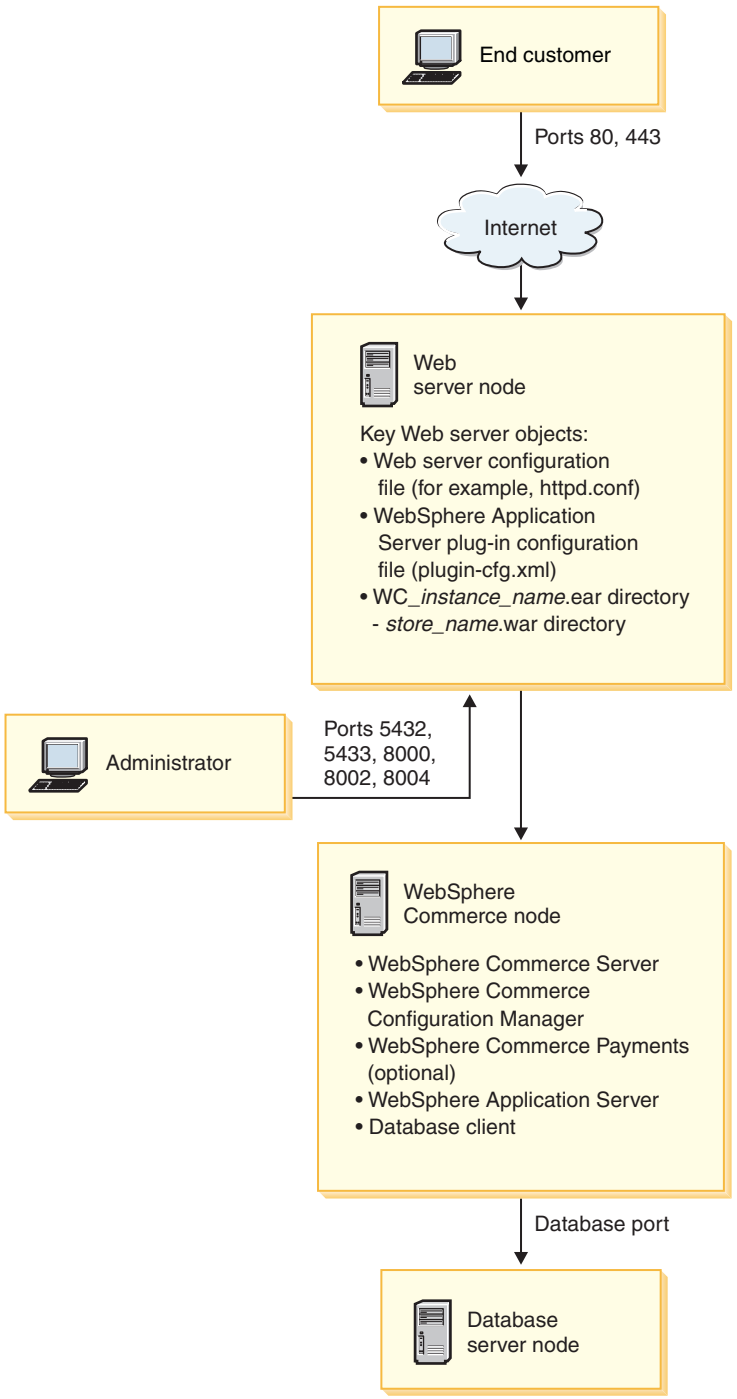
If you want to use IBM HTTP Server Version 1.3.28 as your Web server, select **IBM HTTP Server, including WebSphere Application Server plug-in** also.

Instructions for performing a custom installation are provided in Part 5, "Installing WebSphere Commerce using the custom installation," on page 85.

## Three-node topology

In a three-node topology, all WebSphere Commerce components are installed on one node, the database server is installed on a second node, and the Web server is installed on a third node.

The following diagram shows a three-node topology:




## Installing WebSphere Commerce in a three-node topology

To install WebSphere Commerce in a three-node topology, do the following:

1. Ensure all nodes meet the requirements for WebSphere Commerce provided in "Prerequisites" on page 29.
2. If required, install the database server on the database node as follows:

   **DB2 Universal Database**

   To install DB2 Universal Database as your WebSphere Commerce database, perform a custom installation on the database node and select **DB2 Universal Database** from the list of components available.

Instructions for performing a custom installation are provided in Part 5, "Installing WebSphere Commerce using the custom installation," on page 85.

If a DB2 Universal Database is already installed on the database node, DB2 Universal Database must be at the version level required by WebSphere Commerce.

For instructions, refer to "Using an existing DB2 Universal Database installation with WebSphere Commerce" on page 75.

Business Professional **Oracle9i Database**

If you want to use Oracle9i Database, Oracle9i Database must be already installed on the database node and configured according to the information provided in "Installing and configuring Oracle9i Database" on page 65.

3. If required, install the Web server on the Web server node, as follows:

**IBM HTTP Server Version 1.3.28**

To install IBM HTTP Server Version 1.3.28 as your WebSphere Commerce Web server, perform a custom installation on the Web server node and select **IBM HTTP Server, including WebSphere Application Server plug-in** from the list of components available. Instructions for performing a custom installation are provided in Part 5, "Installing WebSphere Commerce using the custom installation," on page 85.

If IBM HTTP Server Version 1.3.28 is already installed on the Web server node, IBM HTTP Server must be configured correctly for WebSphere Commerce before starting the installation wizard.

For instructions, refer to "Using an existing IBM HTTP Server Version 1.3.x installation with WebSphere Commerce" on page 75.

**IBM HTTP Server Version 2.0.42.2**

IBM HTTP Server Version 2.0.42.2 must be installed and configured on the Web server node before starting the installation wizard.

For installation and configuration requirements, refer to "Using IBM HTTP Server Version 2.0.42.2 with WebSphere Commerce" on page 73.

Business Professional **Microsoft IIS**

Microsoft IIS must be installed and configured on the Web server node before starting the installation wizard.

For installation and configuration requirements, refer to "Installing and configuring Microsoft IIS" on page 67.

Business Professional **Sun ONE Web server**

Sun ONE Web server must be installed and configured on the Web server node before starting the installation wizard.

For installation and configuration requirements, refer to "Installing and configuring Sun ONE Web Server 6.0.5" on page 69.

4. Install the remaining WebSphere Commerce components on the WebSphere Commerce node.

If WebSphere Application Server is already installed on the WebSphere Commerce node, WebSphere Application Server must be the edition and version of WebSphere Application Server supported by WebSphere Commerce.

If you have WebSphere Application Server Version 5.1 installed without the required fix packs, cumulative fixes, or interim fixes required by WebSphere

Commerce, the required fix packs, cumulative fixes, and interim fixes required by WebSphere Commerce will be installed during the installation of WebSphere Commerce.

For more information on using a version of WebSphere Application Server already installed on the node, refer to "Using an existing WebSphere Application Server installation with WebSphere Commerce" on page 77.

To install the remaining WebSphere Commerce components, perform a custom installation on the WebSphere Commerce node and select the following components from the list of components available:

- **WebSphere Commerce Server**
- **WebSphere Commerce Payments** (optional)

Installing WebSphere Commerce Payments is optional.

Instructions for performing a custom installation are provided in Part 5, "Installing WebSphere Commerce using the custom installation," on page 85.

# WebSphere Commerce environments

## Production server environment

The production server environment is the ″live″ environment that is open for business and accessible to customers.

**Important**
All nodes in a WebSphere Commerce production server configuration must be running the same operating system at the required levels. Heterogeneous operating environments are not supported.

## Staging server environment

The staging server environment is an instance of a WebSphere Commerce that is used for testing purposes before new functions or data are deployed to the production server.

Most production environments operate 24 hours a day, 365 days of the year, making it difficult to perform maintenance or test changes. The WebSphere Commerce staging environment allows Site Administrators to copy their production database to a staging database in order to test updates without affecting customers. This is useful for testing updates to the product catalog and new shopping process commands. It is also useful for testing WebSphere Commerce fixes against any custom code you have.

The staging environment requires you to configure the WebSphere Commerce instance as a staging server when you create the WebSphere Commerce instance. You cannot convert a WebSphere Commerce production server environment to a WebSphere Commerce staging server environment.

If you choose to install WebSphere Commerce using the quick installation option of the installation wizard, you must create a new WebSphere Commerce instance to use for the WebSphere Commerce staging server environment. The quick installation option of the installation wizard creates a production server instance for you.

If you choose to install WebSphere Commerce using the custom installation option of the installation wizard, you must create the WebSphere Commerce instance after the installation wizard finishes. You can choose to make this instance a staging server instance.

**Important**
All nodes in a WebSphere Commerce staging server configuration must be running the same operating system at the required levels. Heterogeneous operating environments are not supported.

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## Development environment

The development environment is used to customize parts of WebSphere Commerce and unit test any changes. The development environment must be installed on a separate machine from WebSphere Commerce. The machine must be running Microsoft Windows 2000 or Windows XP.

This development environment is provided in the WebSphere Commerce Developer product. It is not provided with WebSphere Commerce.

For more information about the development environment, refer to *WebSphere Commerce Developer Installation Guide*.

# Prerequisites

## Hardware prerequisites

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

You require an Intel® Pentium® III 733 MHz (1 GHz or higher recommended for a production environment) IBM-compatible personal computer. This machine should not be running any other applications other than those required by WebSphere Commerce and the machine must have 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 900 MB temporary disk space in the location defined by the Windows %tmp% environment variable
  - 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 wizard 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 storage** dialog box.

  2000 Access the **virtual storage** dialog box 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 storage**, click **Change**.

  2003 Access the **virtual storage** dialog box by doing the following:

  1. Select **Start > Control Panel > System**.
  2. In **System Properties**, select the **Advanced** tab.
  3. Click **Settings** in the **Performance** section.
  4. In **Performance Options**, select the **Advanced** tab.
  5. Under **virtual storage**, 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.

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## Operating system prerequisites

**Important**
This guide has been tested using the operating system levels listed in this section. However, at the time of your installation, there may be more recent fixes and patches available for your operating system. Unless these fixes or patches contain a resolution to a problem that is critical for your system, use the operating system levels documented in this guide when installing WebSphere Commerce. Once you have completed your installation of WebSphere Commerce, you can apply these later fixes and patches.

You must ensure that any system on which you plan to run the WebSphere Commerce installation wizard meets the following minimum software requirements before installing WebSphere Commerce:

- Ensure that you have one of the following Microsoft Windows operating systems installed:
  - Microsoft Windows 2000, Server Edition with service pack 4 (or higher)
  - Microsoft Windows 2000, Advanced Server Edition with service pack 4 (or higher)
  - Microsoft Windows Server 2003, Enterprise Edition
  - Microsoft Windows Server 2003, Standard Edition

  In addition to the required service pack levels, you should ensure that your system has all of the latest critical fixes issued by Microsoft.

  For more information about service packs and critical fixes, refer to the Microsoft Web site:

  `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 by causing problems when changing CDs during the installation.

  You can re-enable the virus scanning software immediately after completing the installation.

**Important**
If you have Terminal Services running in Application Server mode, you must activate install mode before installing WebSphere Commerce. To activate install mode, issue the following command from a command prompt session:

```
change user /install
```

For more information, review the following Microsoft Knowledge Base article:

`http://support.microsoft.com/kb/248340`

## Networking prerequisites

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 *mydomain.com*, the fully qualified host name is *system1.mydomain.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.
- Ensure that you will have no port conflicts in your planned configuration. For a list of port numbers used by a default installation of WebSphere Commerce, refer to "Port numbers used by WebSphere Commerce."
- Ensure that the DNS suffix has been set on each node in your planned WebSphere Commerce configuration.

  To set the DNS suffix, do the following:

2000

1. Right-click **My Computer** and select **Properties** from the pop-up menu.
2. Select the **Network Identification** tab and click **Properties**.
3. In the **Identification Changes** dialog, click **More**.
4. Enter the DNS suffix in the **Primary DNS suffix of this computer** field and click **OK**.
5. In the **Identification Changes** dialog, click **OK**.
6. Click **OK** to exit System Properties.
7. Reboot the machine for the change to take effect.

2003

1. Select **Start > Control Panel > System**.
2. Select the **Computer Name** tab and click **Change**.
3. In the **Computer Name Changes** dialog, click **More**.
4. Enter the DNS suffix in the **Primary DNS suffix of this computer** field and click **OK**.
5. In the **Computer Name Changes** dialog, click **OK**.
6. Click **OK** to exit System Properties.
7. Reboot the machine for the change to take effect.

## 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 these port are not in use. 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. |
| **636** | Lightweight Directory Access Protocol (LDAP) over 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 Accelerator. This secure port requires SSL. |
| **8001** | WebSphere Commerce information center (online help). This is the default port. |
| **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 Administrative Console Secure Port. This secure port requires SSL. |
| **9080** | WebSphere Application Server HTTP Transport. |
| **9090** | WebSphere Application Server Administrative 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.

Additional ports are used as you create additional WebSphere Commerce instances. When you create a new WebSphere Commerce instance, a new application server is created that has unique port numbers for the following ports:

- Bootstrap Address
- WebSphere Application Server Internal Java Messaging Service server
- WebSphere Application Server Java Messaging Service server queued address
- WebSphere Application Server SOAP Connector address
- WebSphere Application Server HTTP Transport

These additional port numbers are automatically selected by WebSphere Application Server. Generally, the new ports numbers are selected by incrementing by one the port number used by the last server created.

## National language prerequisites

For double-byte national languages (Japanese, Korean, Simplified Chinese, and Traditional Chinese), ensure that the local language of the machine is set to the language in which you read the prompts in the installation wizard.

If the operating system language setting does not match the language you select for the installation wizard, the prompts will not appear correctly. For Simplified Chinese and Traditional Chinese, the installation wizard prompt will appear in English if the operating system language setting does not match the language you select for the installation wizard.

## WebSphere Commerce tools prerequisites

The following WebSphere Commerce tools can be accessed on the same machine as WebSphere Commerce or a remote machine:

- WebSphere Commerce Accelerator
- WebSphere Commerce Administration Console
- WebSphere Commerce Organization Administration Console

Any machine that will be used to access these tools must meet the requirements listed in this section.

### WebSphere Commerce tools hardware prerequisites

In order to use the WebSphere Commerce tools, the machine must meet the following minimum requirements:

**Graphics adapter**
The following are the minimum requirements for the graphics adapter:

| Parameter | Minimum value |
|---|---|
| Resolution | 1024x768 |
| Color depth | 256 colors |

Ensure that the system meets or exceeds these requirements.

## WebSphere Commerce tools software prerequisites

In order to use the WebSphere Commerce tools, you require the following software and operating system settings:

**Web browser requirements**

You can only access the WebSphere Commerce tools 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.

**Accessing WebSphere Commerce tools from Windows Server 2003:**
Windows Server 2003 Internet Explorer Enhanced Security may prevent access to the WebSphere Commerce tools.

If you want to access the WebSphere Commerce tools from a Windows Server 2003 system, add the following URLs to the list of trusted sites in the security settings for Internet Explorer:

- http://*host_name*
- http://*fully_qualified_host_name*
- https://*host_name*
- https://*fully_qualified_host_name*

For example, if the fully qualified host name of your Web server is commerce.ibm.com, you would add the following URLs to the list of trusted sites:

- http://commerce
- http://commerce.ibm.com
- https://commerce
- https://commerce.ibm.com

Refer to you Internet Explorer documentation for instructions on how to add URLs to the list of trusted sites in the security settings.

**Operating system display settings**

Ensure that you have set the following display values to the recommended values or higher:

| Display setting | Minimum value |
|---|---|
| Screen area | 1024x768 |
| Colors | 256 colors |

## Documentation prerequisites

In order to view the WebSphere Commerce documentation and use the documentation links in the WebSphere Commerce launch pad, you must have the following software installed:

**Adobe Acrobat Reader**

Adobe Acrobat Reader is required to view any documentation that is provided as a PDF file.

You can obtain Adobe Acrobat Reader at the following URL:
`http://www.adobe.com/products/acrobat/readstep2.html`

**A Web browser**
Documentation is launched in the default Web browser for the system.

# Next steps

Depending on the type of installation you want to perform, go to one of the following sections:

**Quick installation**
Proceed to Part 3, "Installing WebSphere Commerce using the quick installation," on page 39.

**Custom installation**
Proceed to Part 4, "Preparing for a custom installation," on page 63.

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# Part 3. Installing WebSphere Commerce using the quick installation

The quick installation does the following:

- Installs DB2 Universal Database
- Installs IBM HTTP Server Version 1.3.28
- Installs WebSphere Application Server Base
- Installs required WebSphere Application Server fix packs, cumulative fixes, and interim fixes required by WebSphere Commerce.
- Installs WebSphere Commerce
- (optional) Installs WebSphere Commerce Payments
- Creates a WebSphere Commerce instance named `demo`.
- (optional) Creates a WebSphere Commerce Payments instance named `wpm`.

A quick installation will be prevented if any of the following conditions are detected on the system:

- DB2 Universal Database is installed
- IBM HTTP Server (any version) is installed
- Microsoft IIS is running
- Any edition of WebSphere Application Server is installed
- Any WebSphere Commerce Version 5.7 components are installed

You cannot use a quick installation if any of the following statements apply to your WebSphere Commerce configuration:

- Business Professional I want to use Oracle9i Database as the WebSphere Commerce database.
- I want to use an existing installation of DB2 Universal Database as the WebSphere Commerce database.
- Business Professional I want to use Microsoft IIS as the WebSphere Commerce Web server.
- Business Professional I want to use Sun ONE Web server as the WebSphere Commerce Web server.
- I want to use IBM HTTP Server Version 2.0.42.2 as the WebSphere Commerce Web server.
- I want to use an existing installation of IBM HTTP Server Version 1.3.28 as the WebSphere Commerce Web server.
- I want to use an existing installation of WebSphere Application Server as the WebSphere Commerce application sever.

If any of the above statements apply to your WebSphere Commerce configuration, you must use the custom installation. To use the custom installation option of the WebSphere Commerce installation wizard, refer to Part 5, “Installing WebSphere Commerce using the custom installation,” on page 85.

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**Important**

**If you want to install WebSphere Commerce Developer**

Refer to the *WebSphere Commerce Developer Installation Guide*.

# Preparing your system to run the WebSphere Commerce installation wizard

Before starting the WebSphere Commerce installation wizard, complete the following checklist:

__ 1. Review the WebSphere Commerce README file. 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.

For more information, see "Reviewing the README file" on page 42.

__ 2. If you have removed DB2 Universal Database, WebSphere Application Server, or IBM HTTP Server from your system and you want the WebSphere Commerce installation wizard to install them in the same location where they were installed earlier, do the following:

a. Backup any files from the directories you want to keep.

b. Delete the directories.

The directories will be recreated during the installation.

If you fail to clean up these directories before you attempt to reuse them, your installation of WebSphere Commerce will not function correctly.

__ 3. Ensure that the Windows administration user ID under which the installation is performed has the following user rights:

2000
- Act as part of the operating system
- Create a token object
- Increase quotas
- Log on as a service
- Replace a process level token

2003
- Act as part of the operating system
- Adjust memory quotas for a process
- Create a token object
- Log on as a service
- Replace a process level token

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

You must log off and log on again for these rights to take effect.

For instructions on granting user rights, refer to "Granting user rights to a Windows user ID" on page 43.

__ 4. If you have an anti-virus program active, disable it.

Anti-virus programs interfere with the installation wizard when you change CDs in the CD-ROM drive.

__ 5. If you have any applications running, stop them.

__ 6. Ensure that any Lotus® Notes® server, Web servers, Java application servers, and any non-essential Java processes are stopped before installing WebSphere Commerce.

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__ 7. Ensure that any other InstallShield MultiPlatform installers have completed or you have exited them before installing WebSphere Commerce.

__ 8. **(Custom installation only)** If DB2 Universal Database or Oracle9i Database is running on the machine, stop the database server.

__ 9. If you have a Web server or any other service on your machine that is currently using any of the following ports: `80`, `443`, `5432`, `5433`, `8000`, `8001`, `8002`, and `8004`, stop the Web server.

__ 10. If you plan to use IBM HTTP Server as your Web server, do the following:

- Ensure that the host name of the Web server machine does not contain an underscore ( _ ). IBM HTTP Server does not support machines with an underscore in their host name.
- Uninstall IIS if you no longer need it or stop the following services, if they exist on your Windows system:
  - 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, do one of the following, depending on the version of Windows you are using:

  - 2000 Select **Start > Settings > Control Panel > Administrative Tools > Services**.
  - 2003 Select **Start > Control Panel > Administrative Tools > Services**.

# Checklist tasks

Use the instructions in the following sections to complete the checklist used to ensure that you are ready to run the WebSphere Commerce installation wizard.

## 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 `readme` 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 |

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

## Granting user rights to a Windows user ID

The WebSphere Commerce installation wizard, requires that the Windows administration user ID under which the installation is performed has the following user rights:

2000
- Act as part of the operating system
- Create a token object
- Increase quotas
- Log on as a service
- Replace a process level token

2003
- Act as part of the operating system
- Adjust memory quotas for a process
- Create a token object
- Log on as a service
- Replace a process level token

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

1. Do one of the following, depending on the version of Windows you are using:
   - 2000 Select **Start > Settings > Control Panel > Administrative Tools > Local Security Policy**.
   - 2003 Select **Start > Control Panel > Administrative Tools > Local Security Policy**.
2. Expand **Local Policies** and select **User Rights Assignment**.
3. For each user right which you want to grant to a user ID, do the following:

   2000

   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**.

   2003

   a. Right-click the policy and select **Properties**.
   b. Click **Add User or Group**.

      To search for a user or group, click **Advanced** in the **Select Users or Groups** window.

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 **Apply**, then click **OK**.

4. After granting the required user rights, log off and then log in as the same user for the updated user rights to take effect.

After logging off and logging onto the system, confirm that the required user rights have taken effect by doing the following:

1. Do one of the following, depending on the version of Windows you are using:
   - 2000 Select **Start > Settings > Control Panel > Administrative Tools > Local Security Policy**.
   - 2003 Select **Start > Control Panel > Administrative Tools > Local Security Policy**.
2. Expand **Local Policies** and select **User Rights Assignment**.

2000 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.

2003 For each required right, the user ID should appear in the **Security Setting** column.

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, do one of the following, depending on the version of Windows you are using:

- 2000 Select **Start > Settings > Control Panel > Administrative Tools > Computer Management**.
- 2003 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 you log off and log back on again.

# Information required to complete a quick installation

**Prerequisites**: Before completing this section, ensure that you have completed "Preparing your system to run the WebSphere Commerce installation wizard" on page 41.

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:

**Windows user IDs**

Review the descriptions in "Operating system information required to complete the installation wizard" on page 46 then fill in this table:

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

**WebSphere Commerce and WebSphere Commerce Payments information**

Review the descriptions in "WebSphere Commerce information required to complete the installation wizard" on page 47 then fill in this table:

| Other information | Your value |
|---|---|
| WebSphere Commerce Site Administrator ID | |
| WebSphere Commerce Site Administrator password | |
| Merchant key | |
| WebSphere Commerce Payments instance password | |
| WebSphere Commerce Configuration Manager initial ID | **webadmin** |
| WebSphere Commerce Configuration Manager initial password | **webibm** |

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## Operating system information 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 | To install WebSphere Commerce, the user ID must have Administrator authority.<br><br>If your Windows user ID does *not* 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.<br><br>Ensure that this user ID must has the user rights documented in "Preparing your system to run the WebSphere Commerce installation wizard" on page 41.<br><br>The Windows services for DB2 Universal Database, IBM HTTP Server, WebSphere Commerce, and WebSphere Commerce Payments will be set to start under this user ID. |

**Notes:**

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 program.
2. For installing WebSphere Commerce with a local database, all user IDs can be the same ID on the local machine.

## 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`, `ADMINS`, `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.

## WebSphere Commerce information required to complete the installation wizard

To complete the installation of WebSphere Commerce, you will need to know the following additional information:

| Information | Description |
| --- | --- |
| WebSphere Commerce Site Administrator ID | This ID is used to access the WebSphere Commerce tools such as the WebSphere Commerce Accelerator, the WebSphere Commerce Administration Console, and the WebSphere Commerce Organization Administration Console.<br><br>This ID is also used to access the WebSphere Commerce Payments console.<br><br>This is not an operating system ID. This ID is created by the WebSphere Commerce installation wizard. |
| WebSphere Commerce Site Administrator password | WebSphere Commerce requires that the Site Administrator password adhere to the following rules:<br>• Must be at least 8 characters in length.<br>• Must contain at least one numeric character (0–9)<br>• Must contain at least one alphabetic character (a–z, A–Z)<br>• Cannot contain four consecutive occurrences of a character<br>• The same character cannot appear more than four times in the password. |
| Merchant Key | The merchant key is used by the WebSphere Commerce Configuration Manager as an encryption key. You must enter your own key in the Merchant key field. Ensure that the key that you enter will be sufficient to protect your site.<br><br>The merchant key is a 16 digit hexadecimal number that must meet the following criteria:<br>• Must contain at least one numeric character (0–9)<br>• Must contain at least one alphabetic character (a–f)<br>**Important:** Uppercase letters are not valid in the merchant key.<br>• Cannot contain four consecutive occurrences of a character.<br>• The same character cannot appear more than four times in the merchant key. |

| Information | Description |
| --- | --- |
| WebSphere Commerce Payments instance password | This is the password used by WebSphere Commerce Payments to connect to the WebSphere Commerce Payments database and decrypt any sensitive data that is stored in the database.<br><br>This password will be specified when issuing the `IBMPayServer` and `StopIBMPayServer` commands when starting and stopping WebSphere Commerce Payments from a command line. For more details, refer to "Starting or stopping a WebSphere Commerce Payments instance" on page 165.<br><br>The WebSphere Commerce Payments instance password must meet the following criteria:<br>• Must be at least 8 characters in length.<br>• Must contain at least one numeric character (0–9)<br>• Must contain at least one alphabetic character (a–z, A–Z)<br>• Cannot contain four consecutive occurrences of a character<br>• The same character cannot appear more than four times in the password. |

# Starting the installation wizard

You can start the installation in two ways — as a GUI based installation wizard or as a text based installation wizard. For instructions on how to start the wizard, refer to one of the following sections:

- "Starting the GUI based installation wizard."
- "Starting the text based installation wizard" on page 50.

## Starting the GUI based installation wizard

**Prerequisites:**

__ The system on which you are starting the installation wizard meets all of the requirements listed in "Prerequisites" on page 29.

__ You have completed all of the tasks listed in "Preparing your system to run the WebSphere Commerce installation wizard" on page 41.

This includes ensuring that the Windows administration user ID under which the installation is performed has the required user rights.

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

**Procedure:**

To start the GUI based installation wizard, 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. The installation wizard should start automatically.

   **Note:** Depending on your Windows system, the installation wizard may take 3 minutes or longer to start.
3. If the installation wizard does not start automatically, issue the following command:

   ```
   drive:\setup.exe
   ```

   where *drive* is the drive letter of the CD-ROM drive containing the WebSphere Commerce CD.

If at any point during the installation, the text in the installation wizard appears to be cut off or missing, resize the wizard so that you can read all of the text on the wizard.

**Note:** Depending on your Windows system, the installation wizard may take 3 minutes or longer to start.

**Important:** The installation wizard starts by displaying a language selection panel. The language selected in the language selection panel becomes the default language for all WebSphere Commerce instances. Attempting to create a WebSphere Commerce instance with a default language different from the language selected in the language selection panel

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will cause the WebSphere Commerce instance to be populated with data in the language originally selected in the language selection panel.

After you have completed the instructions in this section, proceed to "Completing a quick installation" on page 51.

## Starting the text based installation wizard

**Prerequisites:**

__ The system on which you are starting the installation wizard meets all of the requirements listed in "Prerequisites" on page 29.

__ You have completed all of the tasks listed in "Preparing your system to run the WebSphere Commerce installation wizard" on page 41.

This includes ensuring that the Windows administration user ID under which the installation is performed has the required user rights.

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

**Procedure:**

To start the text based installation wizard, 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. The WebSphere Commerce Launchpad starts. Click **Exit** to dismiss the Launchpad.
4. Issue the following command:

   ```
   drive:\setup.exe -console
   ```

   where *drive* is the drive letter of the CD-ROM drive containing the WebSphere Commerce CD.

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 two installation wizards differ.

**Important:** The installation wizard starts with a language selection prompt. The language selected at the language selection prompt 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 at the language selection prompt will cause the WebSphere Commerce instance to be populated with data in the language originally selected in the language selection panel.

After you have completed the instructions in this section, proceed to "Completing a quick installation" on page 51.

# Completing a quick installation

**Prerequisites:**

__ No version or edition of WebSphere Commerce is installed on the machine.

__ No version or edition of DB2 Universal Database is installed on the machine.

__ No version or edition of WebSphere Application Server is installed on the machine.

__ No version or edition of IBM HTTP Server is installed on the machine.

__ Microsoft IIS is disabled or not installed on the machine.

__ The system on which you are starting the installation wizard meets all of the requirements listed in "Prerequisites" on page 29.

__ You have completed all of the tasks listed in "Preparing your system to run the WebSphere Commerce installation wizard" on page 41.

__ You have started the installation wizard according to the instructions in "Starting the installation wizard" on page 49.

**Note:** Non-IBM software supported by WebSphere Commerce may be installed on the system before performing a quick installation, however the non-IBM software will not be used by WebSphere Commerce. The only exception is Microsoft IIS — Microsoft IIS must be disabled or not installed on the machine.

**Procedure:**

To complete a quick installation, do the following:

1. Select the installation language in the language selection panel, and select **OK**.

   The software will be installed in this language, regardless of the language settings of your system.

   **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.
2. Read the Welcome screen, and select **Next**.
3. Read the license agreement. If you accept the terms of the agreement, select that you accept the terms, and select **Next**.
4. When prompted to select an installation type, select **Quick Installation**, and select **Next**.
5. Accept the default destination directory or enter another directory, and select **Next**.

   If you accept the default destination directory, the WebSphere Commerce components will be installed to the following paths:

   DB2 Universal Database

   ```
   C:\Program Files\WebSphere\SQLLIB
   ```

   **Important:** The path for DB2 Universal Database can only contain English characters.

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IBM HTTP Server
```
C:\Program Files\WebSphere\IBMHttpServer
```

WebSphere Application Server
```
C:\Program Files\WebSphere\AppServer
```

WebSphere Commerce
```
C:\Program Files\WebSphere\CommerceServer57
```

**Important:** If you have removed DB2 Universal Database, WebSphere Application Server, or IBM HTTP Server from your system and you want the WebSphere Commerce installation wizard to install them in the same location where they were installed earlier, do the following:

a. Backup any files from the directories you want to keep.
b. Delete the directories.

   The directories will be recreated during the installation.

If you fail to clean up these directories before you continue to the next step, your installation of WebSphere Commerce will not function correctly.

6. Choose whether or not you want to install WebSphere Commerce Payments, then select **Next**.

   If you choose not to install WebSphere Commerce Payments, you can install WebSphere Commerce Payments later by using the **Custom Installation** option of the WebSphere Commerce installation wizard.

7. Enter the following information:
   - User ID
   - User password

   For descriptions of these items, refer to "Information required to complete a quick installation" on page 45.

   Select **Next** to continue.

   A message will display informing you if the user id you have entered has the correct user rights or not.

   If the message indicates that the user id has the correct user rights, select **OK** to dismiss the message and proceed with the installation.

   **Note:** When navigating through the Install Wizard, the following warning message may be posted after entering user information: `The system cannot validate the user password. Ensure the password is correct before proceeding.` This means that the user password cannot be validated due to a system limitation. This system limitation could be either the PAM library not being installed on your operating system or custom security settings on your system. No further action is required at this time. Ensure the correct password has been entered on the panel and click Next to proceed with the installation.

8. If you chose to install WebSphere Commerce Payments, enter the following information:
   - WebSphere Commerce Payments instance password

   For descriptions of this item, refer to "Information required to complete a quick installation" on page 45.

   Select **Next** to continue.

9. Enter the following information:

- Site Administrator ID
- Site Administrator password
- Merchant Key

**Important:** Ensure that you do not forget the Site Administrator ID and password entered when installing WebSphere Commerce. Without this ID and password, you will not be able to access WebSphere Commerce Accelerator, Administration Console, Organization Administration Console, or the WebSphere Commerce Payments console.

For descriptions of these items, refer to "Information required to complete a quick installation" on page 45.

Select **Next** to continue.

10. Select the languages of the documentation that you want installed, then select **Next** to continue.
11. Confirm your installation choices, then select **Next**.

    To modify your choices, select **Back**
12. Insert the CDs as prompted by the WebSphere Commerce installation wizard, following the on-screen prompts.

    **Notes:**

    a. When prompted to insert the IBM DB2 Universal Database Enterprise Server Edition Version 8.2 (8.1 FP7a) CD, insert the IBM DB2 Universal Database Enterprise Server Edition Version 8.2 (8.1 FP9) CD.

       WebSphere Commerce has provided a more recent version of DB2 Universal Database than indicated by the installation wizard.

    b. If a Windows Autorun window displays after changing CDs, close the window.

       A Windows Autorun window resembles an Explorer window.

    c. If a Windows Autoplay dialog displays after changing CDs, cancel or exit the dialog.

       A Window Autoplay dialog contains text similar to the following:

       ```
       Windows can perform the same action each time you insert a
       disk or connect a device with this kind of file:
       ```

    d. The following CDs must be available in the local CD-ROM drive or as an image on the local hard disk. Specifying a network location, either as a UNC path or a mapped drive, will cause the installation to fail:

       - DB2 Universal Database CD
       - WebSphere Application Server CD

    e. For all other CDs, do not specify locations of the CD or CD image as UNC paths (For example, \\system1\destination). You may use mapped drive letters.

    Progress bars indicate how much of the installation has completed.
13. When the installation is complete, click **Finish** to exit the installation wizard.
14. Re-enable any virus checking software that was disabled before starting the installation wizard.
15. If you chose to install WebSphere Commerce Payments, complete the steps in "Configuring WebSphere Commerce to use WebSphere Commerce Payments" on page 54.

After completing this section, proceed to “Verifying a quick installation” on page 55.

## Configuring WebSphere Commerce to use WebSphere Commerce Payments

If you chose to install WebSphere Commerce Payments, you must configure WebSphere Commerce to use WebSphere Commerce Payments:

1. Start the default WebSphere Application Server (server1).

   For instructions on starting an application server, refer to “Starting or stopping an application server” on page 177.
2. Start the WebSphere Commerce Configuration Manager. For details, refer to “Starting the Configuration Manager” on page 107.
3. Under **WebSphere Commerce**, expand *hostname* **> Commerce > Instance List > demo > Instance Properties**.
4. Select **Payments**.
5. In the **Web server Hostname** field, enter the fully qualified host name of the node.
6. In the **Web server Port** field, enter 5433.
7. Click **Apply**.
8. Exit Configuration Manager by selecting **Console > Exit**.
9. Stop the default WebSphere Application Server (server1).

   For instructions on stopping an application server, refer to “Starting or stopping an application server” on page 177.

# Verifying a quick installation

You can verify a quick installation by doing the following:

1. "Verifying your installation with the WebSphere Commerce tools."

   If you can complete this section successfully, you may skip the other verification steps.
2. "Verifying your installation using log files" on page 56.

After verifying your installation, proceed to "Next step" on page 61.

## Verifying your installation with the WebSphere Commerce tools

After completing a quick installation, you can verify your installation by doing the following:

1. If it is not started, start DB2 Universal Database
2. If it is not started, start IBM HTTP Server.
3. If it is not started, start WebSphere Commerce.
4. If you chose to install it and it is not started, start WebSphere Commerce Payments.

In the following steps, *fully_qualified_hostname* is the fully qualified host name of the machine on which you completed the quick installation of WebSphere Commerce.

5. Ensure that you can access the following URLs:
   - http://*fully_qualified_hostname*
   - https://*fully_qualified_hostname*

   If you cannot access the secure (https) URL, the keyfile database password has expired or the self-signed certificate has expired. You may need to create a new key database file and a new self-signed certificate. Refer to the IBM HTTP Server documentation for instructions.

   **Note:** The default SSL key is meant for testing only and should not be used in production.

   Ensure that the secure URL (https) functions before continuing.
6. Access the following URLs:
   - https://*fully_qualified_hostname*:8000/accelerator
   - https://*fully_qualified_hostname*:8002/adminconsole
   - https://*fully_qualified_hostname*:8004/orgadminconsole

   For each of these URLs, do the following:

   a. Ensure that you see the login page for each URL.
   b. For each URL, log in using the Site Administrator ID and password you entered when completing a quick installation.

   If you can log in to each of these URLs, you have installed WebSphere Commerce successfully.
7. If you chose to install WebSphere Commerce Payments, do the following:

   a. Access the following URLs:

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- http://*fully_qualified_hostname*:5432/webapp/PaymentManager
- https://*fully_qualified_hostname*:5433/webapp/PaymentManager

For each of these URLs, do the following:

1) Ensure that you see the login page for each URL.
2) For each URL, log in using the Site Administrator ID and password you entered when completing a quick installation.

b. Ensure that you can access WebSphere Commerce Payments from Administration Console as follows:

1) Access and log on to the Administration Console as Site Administrator at the following URL:

   `https://fully_qualified_hostname:8002/adminconsole`

2) Select **Site** and click **OK**.
3) Select any item in the **Payments** menu.

   Ensure that you do not receive any error messages or that the resulting screen is not blank.

4) Exit the Administration Console.

If you can complete this step successfully, you have installed WebSphere Commerce Payments successfully.

If you can complete this section successfully, you may skip the other verification steps.

## Verifying your installation using log files

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:

- "WebSphere Commerce installation logs"
- "DB2 Universal Database installation logs" on page 57
- "WebSphere Application Server installation logs" on page 58
- "IBM HTTP Server Version 1.3.28 installation logs" on page 59
- "WebSphere Commerce instance creation logs" on page 59
- "WebSphere Commerce Payments instance creation logs" on page 60

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

### WebSphere Commerce installation logs

The following log files contain messages generated by the WebSphere Commerce installation wizard:

- *WC_installdir*\logs\install_*date_time*.log

  **Note:** Depending on the number of installation attempts, there may be more than one of these log files. Ensure you look at the most recent log file.

- *WC_installdir*\logs\wctrace_*date_time*.log

  **Note:** This log file is intended for use by IBM support only. Examining this file will not provide you with any useful information.

- *WC_installdir*\logs\wcinstall.log

  The installation wizard will create this log file only if there have been any errors.

Default values for *WC_installdir* are listed in "Path variables used in this book" on page v.

If the installation of WebSphere Commerce fails, these log files will be in the directory defined the by the `%tmp%` environment variable.

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

The WebSphere Commerce installation is complete if the following message appears in the `install_`*`date_time`*`.log` log file:

```
WebSphere Commerce installation complete.
```

## DB2 Universal Database installation logs

The following log files are generated during the installation of DB2 Universal Database:

- *WC_installdir*`\logs\db2wi.log`
- *WC_installdir*`\logs\DB2.log`

If the WebSphere Commerce installation wizard did not complete successfully or was otherwise interrupted and DB2 Universal Database was installed, the log files will be in the following location:

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

The *drive*`:\Documents and Settings\`*user_id*`\Local Settings` directory is hidden by default. You may have to change the folder options to view this directory.

If you cannot find the log files in this location, use the Windows search facility to find the files. If the log files do not exist on the system, DB2 Universal Database was not installed on the system.

If the last line in the `db2wi.log` log file contains the following text, DB2 Universal Database installed successfully:

| | |
|---|---|
| Business | `Product: DB2 Enterprise Server Edition -- Installation operation completed successfully.` |
| Professional | `Product: DB2 Enterprise Server Edition -- Installation operation completed successfully.` |
| Express | `Product: DB2 Universal Database Express 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.

**Note:** The following errors can be safely ignored:

- `DEBUG: Error 2769:  Custom Action StreamLibrarysCA did not close 1 MSIHANDLEs.`
- `1: The Fast Connection Manager (FCM) base port was not specified for the instance "DB2". Default parameters will be used.`
- `1: The maximum number of logical nodes was not specified for the instance "DB2". Default parameters will be used."`

## WebSphere Application Server installation logs

The installation of WebSphere Application Server and its associated fixes generates the following log files:

- *WAS_installdir*/logs/http_plugin.log
- *WAS_installdir*/logs/log.txt
- *WAS_installdir*/logs/mq_install.log
- *WAS_installdir*/logs/WASFixes.err.log
- *WAS_installdir*/logs/WASFixes.log
- *WAS_installdir*/logs/WASFixPack.log
- *WAS_installdir*/logs/WASFixPack.err.log

Default values for *WAS_installdir* are listed in "Path variables used in this book" on page v.

If the WebSphere Commerce installation wizard did not complete successfully or was otherwise interrupted and WebSphere Application Server was installed, the log files will be in the following location:

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

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

```
INSTFIN: The WebSphere 5.1 install is complete.
```

To confirm that WebSphere Application Server is at the correct version required by WebSphere Commerce, open the following file in a text editor:

*WAS_installdir*/properties/version/BASE.product

WebSphere Application Server is at the correct version required by WebSphere Commerce if the version indicated in the file is 5.1.1.3.

**Note:** The following error messages in the WebSphere Application Server log files can be safely ignored:

*WAS_installdir*/logs/log.txt

Any error messages similar to the following can be safely ignored:

```
(date,time), Setup.product.install,
com.installshield.product.service.product.PureJavaProductServiceImpl
$InstallProduct, wrn, Did not replace installed object (IBM WebSphere
Application Server) with object (IBM WebSphere Application Server)
```

*WAS_installdir*/logs/WASFixPack.log

```
Fix pack: was51_fp1_win Checking product features:
IBM HTTP Server has been verified successfully.
The specified fix pack contains updates for an unavailable component
 (installation will continue):
samp.messaging
```

For the applied WebSphere Application Server fix packs, the following files are created for each fix pack:

*WAS_installdir*/properties/version/history/*fix*.ptfApplied
*WAS_installdir*/properties/version/history/*fix*.ptfDriver

where *fix* will be the following:

- was51_fp1_win
- was511_cf3_win

Ensure that the appropriate files were created for the fixes applied to your installation.

For the applied WebSphere Application Server interim fixes, the following files are created for each interim fix:

*WAS_installdir*/properties/version/history/*fix*.efixApplied
*WAS_installdir*/properties/version/history/*fix*.efixDriver

where *fix* will be the following:

- PQ99045
- PK05011
- PK02063

Ensure that the files were created for each fix.

## IBM HTTP Server Version 1.3.28 installation logs

The installation of IBM HTTP Server Version 1.3.28 and its associated fixes generates the following log files:

- *HTTPServer_installdir*/logs/error.log
- *WAS_installdir*/logs/ihs_log.txt
- *WAS_installdir*/logs/WASFixes.log
- *WAS_installdir*/logs/WASFixes.err.log
- *WAS_installdir*/logs/WASFixPack.log
- *WAS_installdir*/logs/WASFixPack.err.log

Default values for *HTTPServer_installdir* and *WAS_installdir* are listed in "Path variables used in this book" on page v.

If the WebSphere Commerce installation wizard did not complete successfully or was otherwise interrupted and IBM HTTP Server was installed, the log files will be in the following location:

*drive*:\Documents and Settings*user_ID*\Local Settings\Temp\

If no errors occurred during the installation of IBM HTTP Server Version 1.3.28 and its associated fixes, the following files will not exist, or if they do exist, they will be empty:

- *WAS_installdir*/logs/WASFixes.err.log
- *WAS_installdir*/logs/WASFixPack.err.log

**Note:** If IBM HTTP Server Version 1.3.28 and WebSphere Application Server are installed on the same machine, the following log files apply to both IBM HTTP Server Version 1.3.28 and WebSphere Application Server:

- *WAS_installdir*/logs/WASFixes.log
- *WAS_installdir*/logs/WASFixes.err.log
- *WAS_installdir*/logs/WASFixPack.log
- *WAS_installdir*/logs/WASFixPack.err.log

## WebSphere Commerce instance creation logs

The configuration information for the WebSphere Commerce instance created as part of the quick installation, `demo`, is stored in the following file:

*WC_installdir*/instances/demo/xml/demo.xml

where default values for *WC_installdir* are listed in "Path variables used in this book" on page v.

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

Creating a WebSphere Commerce instance produces log files in the following directory:

*WC_installdir*/instances/demo/logs

where default values for *WC_installdir* are listed in "Path variables used in this book" on page v.

## WebSphere Commerce Payments instance creation logs

The configuration information for the WebSphere Commerce Payments instance created as part of the quick installation, wpm, is stored in the following file:

*WC_installdir*/instances/wpm/xml/wpm.xml

where default values for *WC_installdir* are listed in "Path variables used in this book" on page v.

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:

| Log file directory | Log files |
| --- | --- |
| *WC_installdir*/instances | • CMQuickConfig.log<br>• Configurator.1.log<br>This log file will be required by IBM support if there was a problem with the WebSphere Commerce Payments instance creation.<br>• WCSconfig.log<br>• WCSconfig_*date_time*.log |
| *WC_installdir*/instances/wpm/logs | • createdb.log<br>• createdb.err.log |

where default values for *WC_installdir* are listed in "Path variables used in this book" on page v.

If instance creation failed, the WebSphere Commerce Payments instance can be created manually by following the instructions in Part 6, "Creating a WebSphere Commerce and a WebSphere Commerce Payments instance," on page 105.

## Next step

After you complete a quick installation, review Part 7, “Last steps,” on page 123 to decide how to continue.

**Important**

For WebSphere Commerce Configuration Manager, the initial ID is **webadmin** and the initial password is **webibm**.

The first time you log in to Configuration Manager, you will be asked to change the password for security purposes.

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# Part 4. Preparing for a custom installation

This part of the book covers the tasks you must perform to prepare for a custom installation.

Complete the instructions in this part of the book as follows:

1. Business Professional If you want to use Oracle9i Database as the WebSphere Commerce database, complete "Installing and configuring Oracle9i Database" on page 65.
2. If you want to use an existing installation of DB2 Universal Database as the WebSphere Commerce database, complete "Using an existing DB2 Universal Database installation with WebSphere Commerce" on page 75.

   If you want to use DB2 Universal Database but do not have an existing DB2 Universal Database installation, you can use the WebSphere Commerce installation wizard to install DB2 Universal Database.
3. Business Professional If you want to use Microsoft IIS as the WebSphere Commerce Web server, complete "Installing and configuring Microsoft IIS" on page 67.
4. Business Professional If you want to use Sun ONE Web server as the WebSphere Commerce Web server, complete "Installing and configuring Sun ONE Web Server 6.0.5" on page 69.
5. If you want to use IBM HTTP Server Version 2.0.42.2 as the WebSphere Commerce Web server, complete "Using IBM HTTP Server Version 2.0.42.2 with WebSphere Commerce" on page 73.
6. If you want to use an existing installation of IBM HTTP Server Version 1.3.28 as the WebSphere Commerce Web server, complete "Using an existing IBM HTTP Server Version 1.3.x installation with WebSphere Commerce" on page 75.

   If you want to use IBM HTTP Server Version 1.3.28 but do not have an existing IBM HTTP Server Version 1.3.28 installation, you can use the WebSphere Commerce installation wizard to install IBM HTTP Server Version 1.3.28.
7. If you want to use an existing installation of WebSphere Application Server as the WebSphere Commerce or WebSphere Commerce Payments application sever, complete "Using an existing WebSphere Application Server installation with WebSphere Commerce" on page 77.

   If you do not have an existing WebSphere Application Server installation, WebSphere Application Server will be installed for you when you choose to install WebSphere Commerce or WebSphere Commerce Payments.
8. Complete the instructions in "Preparing your systems to run the WebSphere Commerce installation wizard" on page 81.

   All users must complete this section before continuing.

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# Installing and configuring non-IBM software stack components

**Edition support**

The information in this section applies only to WebSphere Commerce Business Edition and WebSphere Commerce Professional Edition.

The software discussed in this section is not supported by WebSphere Commerce - Express.

If you use any non-IBM software as part of the WebSphere Commerce software stack, you cannot use the quick installation option in the WebSphere Commerce installation wizard. You must use the custom installation option.

## Installing and configuring Oracle9i Database

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

**Oracle9i Database support on 64–bit systems**

Oracle9i Database is supported in 32–bit compatibility mode on 64–bit systems only. 64–bit mode is not exploited.

To install and configure Oracle9i Database for use with WebSphere Commerce, do the following:

1. 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
2. If you plan to have the Oracle9i Database server on a separate node from the WebSphere Commerce or WebSphere Commerce Payments node, install the following Oracle9i Database components on the WebSphere Commerce and WebSphere Commerce Payments nodes:
   - Oracle9i Enterprise Client
   - SQL*Plus
   - Oracle JDBC/OCI Interfaces
   - Oracle Net Services

   Install these components according to the instructions found in the Oracle9i Database documentation.
3. Create and configure a database for use with WebSphere Commerce before installing WebSphere Commerce. Settings for the database are listed in "Oracle9i Database settings for WebSphere Commerce" on page 66.

   Create and configure the database according to the instructions in the Oracle9i Database documentation.

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When creating and configuring Oracle9i Database, take note of the following information:

- Oracle WebSphere Commerce database name
- (optional) Oracle WebSphere Commerce Payments database name
- Oracle SID for WebSphere Commerce database
- (optional) Oracle SID for WebSphere Commerce Payments database
- Oracle ID and password for database administrator
- Oracle ID and password for WebSphere Commerce database user

This information will be needed when creating the WebSphere Commerce instance and, optionally, the WebSphere Commerce Payments instance.

For security reasons, an Oracle DBA account should not be used as the WebSphere Commerce database user.

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.

## 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 Version 5.7 supports Oracle9i Database Release 2 with fix pack 1 (9.2.0.1), 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 section 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 "Installing and configuring Oracle9i Database" on page 65.

### 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 | 8 KB |
| db_cache_size (buffer cache) | 120 MB |
| open_cursors | 1000 |
| pga_aggregate_target | 50 MB |
| shared_pool_size | 120 MB |
| sort_area_size | 640 KB |

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

## Installing and configuring Microsoft IIS

WebSphere Commerce supports Microsoft IIS Version 5 with security patch Q327696 on Windows 2000 and Microsoft IIS Version 6 on Windows Server 2003. However, IIS 6.0 is supported only in IIS 5.0 isolation mode.

**Important information for a remote IIS configuration**

If you plan to have IIS on a node remote from the WebSphere Commerce node or a WebSphere Commerce Payments node, ensure that you follow the instructions in "Mandatory post-instance creation tasks" on page 117 after creating the WebSphere Commerce instance and a WebSphere Commerce Payments instance.

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

If you are using Microsoft IIS as your Web server, complete the following steps on the Web server node:

1. Install Microsoft IIS 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 authentication methods as follows:
   - Enable the **Anonymous access** authentication method.
   - Disable the following authentication methods:
     - **Basic authentication**
     - **Integrated Windows authentication**

   Other authentication methods may be enabled or disabled.
8. Test your installation and configuration of Microsoft IIS by opening a Web browser and going to the following URLs:

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

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

   ```
   http://IISWebServer_hostname:5432
   https://IISWebServer_hostname:5433
   ```

   where *IISWebServer_hostname* is the fully-qualified host name of the Microsoft IIS machine.

   If you have successfully created the virtual servers earlier, the default Microsoft IIS page should display for each URL. If the page does not display or you receive other errors, Microsoft IIS 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 Microsoft IIS documentation for help correcting any problems.
9. If you will use Microsoft IIS as a remote Web server, do the following:
   a. Install the WebSphere Application Server Web server plug-in using the custom installation option in the WebSphere Commerce installation wizard.

      Refer to Part 5, “Installing WebSphere Commerce using the custom installation,” on page 85 for instructions.
   b. Apply WebSphere Application Server Version 5.1 Fix Pack 1.

      For instructions, refer to “Applying WebSphere Application Server Version 5.1 Fix Pack 1” on page 183

      This brings your WebSphere Application Server plug-in version to Version 5.1.1.
   c. Apply WebSphere Application Server Version 5.1.1 Cumulative Fix 3.

For instructions, refer to "Applying WebSphere Application Server Version 5.1.1 Cumulative Fix 3" on page 184.

This brings your WebSphere Application Server plug-in version to Version 5.1.1.3.

d. Apply the WebSphere Application Server cumulative plug-in fix.

For instructions and to obtain the fix, refer to the following URL:

`http://www.ibm.com/support/docview.wss?uid=swg24007227`

The WebSphere Application Server cumulative plug-in fix is updated frequently and is not provided on the WebSphere Application Server fixes CD provided with WebSphere Commerce.

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

## Installing and configuring Sun ONE Web Server 6.0.5

If you are using Sun ONE Web Server, Enterprise Edition Version 6.0.5 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 host 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.

5. If you will use Sun ONE Web server as a remote Web server, do the following:
   a. Install the WebSphere Application Server Web server plug-in using the custom installation option in the WebSphere Commerce installation wizard.

      Refer to Part 5, "Installing WebSphere Commerce using the custom installation," on page 85 for instructions.
   b. Apply WebSphere Application Server Version 5.1 Fix Pack 1.

      For instructions, refer to "Applying WebSphere Application Server Version 5.1 Fix Pack 1" on page 183.

      This brings your WebSphere Application Server plug-in version to Version 5.1.1.
   c. Apply WebSphere Application Server Version 5.1.1 Cumulative Fix 3.

      For instructions, refer to "Applying WebSphere Application Server Version 5.1.1 Cumulative Fix 3" on page 184.

      This brings your WebSphere Application Server plug-in version to Version 5.1.1.3.
   d. Apply the WebSphere Application Server cumulative plug-in fix.

      For instructions and to obtain the fix, refer to the following URL:

      ```
      http://www.ibm.com/support/docview.wss?uid=swg24007227
      ```

      The WebSphere Application Server cumulative plug-in fix is updated frequently and is not provided on the WebSphere Application Server fixes CD provided with WebSphere Commerce.

**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.

# Using IBM HTTP Server Version 2.0.42.2 with WebSphere Commerce

**Important:** Follow the instructions in this section only if you want to use a *new* installation of IBM HTTP Server Version 2.0.42.2 with WebSphere Commerce. If you want to use an existing IBM HTTP Server Version 2.0.x installation with WebSphere Commerce, refer to "Using an existing IBM HTTP Server Version 2.0.x installation with WebSphere Commerce" on page 76.

By default, WebSphere Commerce uses IBM HTTP Server Version 1.3.28 provided with WebSphere Application Server. However, you may use IBM HTTP Server Version 2.0.42.2 with WebSphere Commerce.

If you want use IBM HTTP Server Version 2.0.42.2 with WebSphere Commerce, you must install IBM HTTP Server Version 2.0 and bring it up to the required level before starting the WebSphere Commerce installation wizard. Also, you cannot use the quick installation option of the WebSphere Commerce installation wizard. You must use the custom installation option.

To use IBM HTTP Server Version 2.0.42.2 with WebSphere Commerce, do the following before continuing with your installation of WebSphere Commerce:

1. Review the information at the following URL:

   ```
   http://publib.boulder.ibm.com/infocenter/ws51help/index.jsp?
    topic=/com.ibm.websphere.base.doc/info/aes/ae/tins_installIHS2.html
   ```

   **Important:** You must install the operating system fixes listed in this document for your operating system before continuing.
2. Install IBM HTTP Server Version 2.0.42.2 according to the documentation provided with the IBM HTTP Server Version 2.0.42.2 package.

   Refer to "IBM HTTP Server information" on page 222 for information on where to find IBM HTTP Server documentation.
3. Follow the instructions in "Using an existing IBM HTTP Server Version 2.0.x installation with WebSphere Commerce" on page 76.

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# Configuring pre-existing IBM software stack components

If you have use any pre-existing IBM software as part of the WebSphere Commerce software stack, you cannot use the quick installation option in the WebSphere Commerce installation wizard. You must use the custom installation option.

This section does not cover migration from previous versions of WebSphere Commerce. For WebSphere Commerce migration information, refer to *WebSphere Commerce Migration Guide*.

## Using an existing DB2 Universal Database installation with WebSphere Commerce

**Prerequisites:**

- Business Professional Your existing DB2 Universal Database installation must be DB2 Universal Database Enterprise Server Edition Version 8.2 or higher.
- Express Your existing DB2 Universal Database installation must be DB2 Universal Database Express Edition or Enterprise Server Edition Version 8.2 or higher.

**Procedure:**

To use an existing DB2 Universal Database installation with WebSphere Commerce, do the following:

1. Ensure that the DB2 Application Development Tools are installed on the database server. WebSphere Commerce requires the DB2 Application Development Tools to function correctly.

## Using an existing IBM HTTP Server Version 1.3.x installation with WebSphere Commerce

**Prerequisites:**

- You have IBM HTTP Server Version 1.3.x installed.

**Procedure:**

If you are using an existing IBM HTTP Server installation with WebSphere Commerce, do the following:

1. If your version of IBM HTTP Server is lower than Version 1.3.28, upgrade your version of IBM HTTP Server to IBM HTTP Server Version 1.3.28.
2. Ensure that Secure Sockets Layer (SSL) protocol is enabled.

   For instructions on enabling SSL in IBM HTTP Server Version 1.3.28, refer to your IBM HTTP Server Version 1.3.28 documentation.

   Refer to "IBM HTTP Server information" on page 222 for information on where to find IBM HTTP Server documentation.

   If SSL is enabled, you should be able to open the following URL in a Web browser:

   `https://host_name`

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

3. If you will be using your existing IBM HTTP Server as a remote Web server, do the following:
   a. Install the WebSphere Application Server Web server plug-in using the custom installation option in the WebSphere Commerce installation wizard.

      Refer to Part 5, "Installing WebSphere Commerce using the custom installation," on page 85 for instructions.
   b. Apply WebSphere Application Server Version 5.1 Fix Pack 1.

      For instructions, refer to "Applying WebSphere Application Server Version 5.1 Fix Pack 1" on page 183

      This brings your WebSphere Application Server plug-in version to Version 5.1.1.
   c. Apply WebSphere Application Server Version 5.1.1 Cumulative Fix 3.

      For instructions, refer to "Applying WebSphere Application Server Version 5.1.1 Cumulative Fix 3" on page 184.

      This brings your WebSphere Application Server plug-in version to Version 5.1.1.3.
   d. Apply the WebSphere Application Server cumulative plug-in fix.

      For instructions and to obtain the fix, refer to the following URL:

      `http://www.ibm.com/support/docview.wss?uid=swg24007227`

      The WebSphere Application Server cumulative plug-in fix is updated frequently and is not provided on the WebSphere Application Server fixes CD that is packaged with WebSphere Commerce.
4. If you are using an existing IBM HTTP Server installation with an existing WebSphere Application Server installation, follow the instructions in "Using an existing WebSphere Application Server installation with WebSphere Commerce" on page 77.

## Using an existing IBM HTTP Server Version 2.0.x installation with WebSphere Commerce

**Prerequisites:**

- You have IBM HTTP Server Version 2.0.x installed.

**Procedure:**

If you are using an existing IBM HTTP Server installation with WebSphere Commerce, do the following:

1. If your version of IBM HTTP Server is lower than Version 2.0.42.2, upgrade your version of IBM HTTP Server to IBM HTTP Server Version 2.0.42.2.
2. Ensure that Secure Sockets Layer (SSL) protocol is enabled.

   For instructions on enabling SSL in IBM HTTP Server Version 2.0.42.2, refer to your IBM HTTP Server Version 2.0.42.2 documentation.

   Refer to "IBM HTTP Server information" on page 222 for information on where to find IBM HTTP Server documentation.

   When enabling SSL, store the keyfile database files in the *HTTPServer_installdir*`/ssl` directory and use `keyfile.kdb` as your database.

   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.

3. If you will be using your existing IBM HTTP Server as a remote Web server, do the following:
   a. Install the WebSphere Application Server Web server plug-in using the custom installation option in the WebSphere Commerce installation wizard.

      Refer to Part 5, "Installing WebSphere Commerce using the custom installation," on page 85 for instructions.
   b. Ensure the plug-in has been applied to the *HTTPServer_installdir*/conf/httpd.conf file.

      The following four lines should exist in the httpd.conf file:

      ```
      Alias /WSsamples WAS_installdir/WSsamples/
      Alias /IBMWebAS/ WAS_installdir/web/
       LoadModule was_ap20_module WAS_installdir/bin/
       mod_was_ap20_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.
   c. Apply WebSphere Application Server Version 5.1 Fix Pack 1.

      For instructions, refer to "Applying WebSphere Application Server Version 5.1 Fix Pack 1" on page 183

      This brings your WebSphere Application Server plug-in version to Version 5.1.1.
   d. Apply WebSphere Application Server Version 5.1.1 Cumulative Fix 3.

      For instructions, refer to "Applying WebSphere Application Server Version 5.1.1 Cumulative Fix 3" on page 184.

      This brings your WebSphere Application Server plug-in version to Version 5.1.1.3.
   e. Apply the WebSphere Application Server cumulative plug-in fix.

      For instructions and to obtain the fix, refer to the following URL:

      ```
      http://www.ibm.com/support/docview.wss?uid=swg24007227
      ```

      The WebSphere Application Server cumulative plug-in fix is updated frequently and is not provided on the WebSphere Application Server fixes CD that is packaged with WebSphere Commerce.
4. If you are using IBM HTTP Server Version 2.0.42.2 with an existing WebSphere Application Server installation that you will be using for WebSphere Commerce, follow the instructions in "Using an existing WebSphere Application Server installation with WebSphere Commerce."

## Using an existing WebSphere Application Server installation with WebSphere Commerce

**Prerequisites:**

- WebSphere Application Server Version 5.1 is already installed.

**Notes:**

1. WebSphere Application Server Enterprise Edition is not supported by WebSphere Commerce

**Procedure:**

If you are using an existing WebSphere Application Server Version 5.1, it will be upgraded to the level required by WebSphere Commerce when you install WebSphere Commerce or WebSphere Commerce Payments.

If you are using an existing WebSphere Application Server installation with an existing IBM HTTP Server installation, follow the instructions in one of the following sections, depending on the version of IBM HTTP Server you are using:

- "IBM HTTP Server Version 1.3.28 and WebSphere Application Server Version 5.1.1.3"
- "IBM HTTP Server Version 2.0.42.2 and WebSphere Application Server Version 5.1.1.3" on page 79

## IBM HTTP Server Version 1.3.28 and WebSphere Application Server Version 5.1.1.3

**Important:** Follow the instructions in this section only if you have both IBM HTTP Server Version 1.3.28 and WebSphere Application Server Version 5.1.1.3 already installed.

If you have IBM HTTP Server Version 1.3.28 and WebSphere Application Server Version 5.1.1.3 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:
     a. Ensure the plug-in has been applied to the *HTTPServer_installdir*/conf/httpd.conf file. The following four lines should exist in the httpd.conf file:

        ```
        Alias /WSsamples WAS_installdir/WSsamples/
        Alias /IBMWebAS/ WAS_installdir/web/
        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. 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, save your changes, 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 httpd.conf file. If any of the following four lines exist, remove them from the httpd.conf file:

     ```
     Alias /WSsamples WAS_installdir/WSsamples/
     Alias /IBMWebAS/ WAS_installdir/web/
     ```

```
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. 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.

## IBM HTTP Server Version 2.0.42.2 and WebSphere Application Server Version 5.1.1.3

**Important:** Follow the instructions in this section only if you have both IBM HTTP Server Version 2.0.42.2 and WebSphere Application Server Version 5.1.1.3 already installed.

If you have IBM HTTP Server 2.0.42 and WebSphere Application Server Version 5.1.1.3 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:
     a. Ensure the plug-in has been applied to the *HTTPServer_installdir*/conf/httpd.conf file. The following four lines should exist in the httpd.conf file:

        ```
        Alias /WSsamples WAS_installdir/WSsamples/
        Alias /IBMWebAS/ WAS_installdir/web/
         LoadModule was_ap20_module WAS_installdir/bin/
         mod_was_ap20_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 httpd.conf file. If any of the following four lines exist, remove them from the httpd.conf file:

     ```
     Alias /WSsamples WAS_installdir/WSsamples/
     Alias /IBMWebAS/ WAS_installdir/web/
      LoadModule was_ap20_module WAS_installdir/bin/
      mod_was_ap20_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.

# Preparing your systems to run the WebSphere Commerce installation wizard

Before starting the WebSphere Commerce installation wizard, complete the following checklist:

__ 1. Review the WebSphere Commerce README file. 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.

For more information, see "Reviewing the README file" on page 82.

__ 2. If you have removed DB2 Universal Database, WebSphere Application Server, or IBM HTTP Server from your system and you want the WebSphere Commerce installation wizard to install them in the same location where they were installed earlier, do the following:

a. Backup any files from the directories you want to keep.

b. Delete the directories.

The directories will be recreated during the installation.

If you fail to clean up these directories before you attempt to reuse them, your installation of WebSphere Commerce will not function correctly.

__ 3. Ensure that the Windows administration user ID under which the installation is performed has the following user rights:

2000
- Act as part of the operating system
- Create a token object
- Increase quotas
- Log on as a service
- Replace a process level token

2003
- Act as part of the operating system
- Adjust memory quotas for a process
- Create a token object
- Log on as a service
- Replace a process level token

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

You must log off and log on again for these rights to take effect.

For instructions on granting user rights, refer to "Granting user rights to a Windows user ID" on page 83.

__ 4. If you have an anti-virus program active, disable it.

Anti-virus programs interfere with the installation wizard when you change CDs in the CD-ROM drive.

__ 5. If you have any applications running, stop them.

__ 6. Ensure that any Lotus Notes server, Web servers, Java application servers, and any non-essential Java processes are stopped before installing WebSphere Commerce.

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__ 7. Ensure that any other InstallShield MultiPlatform installers have completed or you have exited them before installing WebSphere Commerce.

__ 8. **(Custom installation only)** If DB2 Universal Database or Oracle9i Database is running on the machine, stop the database server.

__ 9. If you have a Web server or any other service on your machine that is currently using any of the following ports: `80`, `443`, `5432`, `5433`, `8000`, `8001`, `8002`, and `8004`, stop the Web server.

__ 10. If you plan to use IBM HTTP Server as your Web server, do the following:

- Ensure that the host name of the Web server machine does not contain an underscore ( _ ). IBM HTTP Server does not support machines with an underscore in their host name.
- Uninstall IIS if you no longer need it or stop the following services, if they exist on your Windows system:
  - 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, do one of the following, depending on the version of Windows you are using:

  - 2000 Select **Start > Settings > Control Panel > Administrative Tools > Services**.
  - 2003 Select **Start > Control Panel > Administrative Tools > Services**.

# Checklist tasks

Use the instructions in the following sections to complete the checklist used to ensure that you are ready to run the WebSphere Commerce installation wizard.

## 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 `readme` 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 |

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

## Granting user rights to a Windows user ID

The WebSphere Commerce installation wizard, requires that the Windows administration user ID under which the installation is performed has the following user rights:

2000
- Act as part of the operating system
- Create a token object
- Increase quotas
- Log on as a service
- Replace a process level token

2003
- Act as part of the operating system
- Adjust memory quotas for a process
- Create a token object
- Log on as a service
- Replace a process level token

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

1. Do one of the following, depending on the version of Windows you are using:
   - 2000 Select **Start > Settings > Control Panel > Administrative Tools > Local Security Policy**.
   - 2003 Select **Start > Control Panel > Administrative Tools > Local Security Policy**.
2. Expand **Local Policies** and select **User Rights Assignment**.
3. For each user right which you want to grant to a user ID, do the following:

   2000

   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**.

   2003

   a. Right-click the policy and select **Properties**.
   b. Click **Add User or Group**.

      To search for a user or group, click **Advanced** in the **Select Users or Groups** window.

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 **Apply**, then click **OK**.

4. After granting the required user rights, log off and then log in as the same user for the updated user rights to take effect.

After logging off and logging onto the system, confirm that the required user rights have taken effect by doing the following:

1. Do one of the following, depending on the version of Windows you are using:
   - 2000 Select **Start > Settings > Control Panel > Administrative Tools > Local Security Policy**.
   - 2003 Select **Start > Control Panel > Administrative Tools > Local Security Policy**.
2. Expand **Local Policies** and select **User Rights Assignment**.

2000 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.

2003 For each required right, the user ID should appear in the **Security Setting** column.

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, do one of the following, depending on the version of Windows you are using:

- 2000 Select **Start > Settings > Control Panel > Administrative Tools > Computer Management**.
- 2003 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 you log off and log back on again.

# Part 5. Installing WebSphere Commerce using the custom installation

Before completing the instructions in this section, ensure that you have completed the instructions in "Preparing your systems to run the WebSphere Commerce installation wizard" on page 81.

**Important**

**If you have completed a quick installation**

The WebSphere Commerce instance was created as part of the quick installation process. If you chose to install WebSphere Commerce Payments, a WebSphere Commerce Payments instance was also created for you. You can skip this section and continue your installation and configuration of WebSphere Commerce by following the instructions in Part 7, "Last steps," on page 123.

If you did not choose to install WebSphere Commerce Payments and need to do so, perform a custom installation.

**If you want to install WebSphere Commerce Developer**

Refer to the *WebSphere Commerce Developer Installation Guide*.

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

**WebSphere Commerce components**

**WebSphere Commerce Server**

This component provides all of the functionality 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 information center
- WebSphere Commerce starter stores
- WebSphere Application Server base product (if it has not already been installed)
- DB2 Universal Database Administration client (if required)

  If you have an existing installation of the DB2 Universal Database Administration client, it must be upgraded manually before starting the installation wizard.

**Important:**

1. If you are not planning to use IBM HTTP Server Version 1.3.28 as the WebSphere Commerce Web server, you must have a Web server installed and configured before selecting this component.
2. If you are not planning to use DB2 Universal Database as the WebSphere Commerce database, you must have a database installed and configured before selecting this component.

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| | |
|---|---|
| Business DB2<br>Professional<br>Express | 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.<br><br>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. The DB2 Universal Database Administration Client will be installed on the WebSphere Commerce machine for you.<br><br>**Note WebSphere Commerce - Express users:** If the installation wizard detects that DB2 Universal Database Enterprise Server Edition is installed on the system, it will be used and DB2 Universal Database Express Edition will not be installed. |
| Business Oracle<br>Professional | If you plan to use a local Oracle9i 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.<br><br>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.<br><br>For more information, refer to "Installing and configuring Oracle9i Database" on page 65. |

**WebSphere Commerce Payments**

This component installs all of the functionality 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 information center
- WebSphere Application Server base product (if it has not already been installed)
- DB2 Universal Database Administration client (if required)

  If you have an existing installation of the DB2 Universal Database Administration client, it must be upgraded manually before starting the installation wizard.

**Important:**

1. If you are not planning to use IBM HTTP Server Version 1.3.28 as the WebSphere Commerce Payments Web server, you must have a Web server installed and configured before selecting this component.

2. If you are not planning to use DB2 Universal Database as the WebSphere Commerce Payments database, you must have a database installed and configured before selecting this component.

| | |
|---|---|
| Business DB2<br>Professional<br>Express | 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.<br><br>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. The DB2 Universal Database Administration Client will be installed on the WebSphere Commerce Payments machine for you.<br><br>**Note for WebSphere Commerce - Express users:** If the installation wizard detects that DB2 Universal Database Enterprise Server Edition is installed on the system, it will be used and DB2 Universal Database Express Edition will not be installed. |
| Business Oracle<br>Professional | 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.<br><br>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.<br><br>For more information, refer to "Installing and configuring Oracle9i Database" on page 65. |

**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 the following editions of DB2 Universal Database, depending on your edition of WebSphere Commerce:

| | |
|---|---|
| Business<br>Professional | DB2 Universal Database Version 8.2 Enterprise Server Edition |
| Express | DB2 Universal Database Version 8.2 Express Edition |

Selecting this component will not install the DB2 Administration Client on a WebSphere Commerce or WebSphere Commerce Payments node — the Administration Client will be installed on these nodes when you choose to install WebSphere Commerce or WebSphere Commerce Payments, do not choose to install DB2 Universal Database, but select DB2 Universal Database as the WebSphere Commerce database.

**IBM HTTP Server**

Selecting this component installs and configures IBM HTTP Server Version 1.3.28. It does not install and configure IBM HTTP Server Version 2.0.42.2. It also installs the WebSphere Application Server plug-in for IBM HTTP Server.

**WebSphere Application Server Web server plug-in**

Business
Professional

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

If you use Sun ONE Web Server, ensure that Sun ONE Web Server is installed to its default directory. Installation of the WebSphere Application Server Web server plug-in will only be successful if Sun ONE Web Server is installed in its default directory.

Express

This option is only available if IBM HTTP Server is detected on the system and the WebSphere Application Server Web server plug-in is not detected.

Selecting this component installs the WebSphere Application Server Web server plug-in for IBM HTTP Server

# Information required to complete a custom 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" 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 | This ID is required to install WebSphere Commerce. This ID will also be assigned to start the services for the following WebSphere Commerce components and supporting software during the installation:<br>• DB2 Universal Database (if installed by the WebSphere Commerce installation wizard)<br>• IBM HTTP Server (if installed by the WebSphere Commerce installation wizard)<br>• WebSphere Commerce Configuration Manager server<br>• Any WebSphere Application Server services<br><br>Ensure that this user ID has the user rights documented in "Preparing your systems to run the WebSphere Commerce installation wizard" on page 81.<br><br>If your Windows user ID does *not* 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.<br><br>**Notes:**<br>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.<br>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" on page 90. |

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**Notes for DB2 Universal Database users:**

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 program.
2. For installing WebSphere Commerce with a local database, all user IDs can be the same ID on the local machine.
3. The database administrator ID and database user ID must meet DB2 Universal Database user ID requirements outlined in "DB2 Universal Database user ID requirements."

**Notes for Oracle9i Database users::**

1. Oracle IDs must be defined on the Oracle server machine. For installing WebSphere Commerce with a local database, the Oracle server machine and WebSphere Commerce machine are the same machine. For installing WebSphere Commerce with a remote database, the Oracle server machine and WebSphere Commerce machine are different machines.
2. The database administrator ID and database user ID must meet any requirements for Oracle9i Database user IDs as outlined in the Oracle9i Database documentation.
3. Oracle IDs are case-sensitive. Ensure that you have the correct case for the database administrator ID and the database user ID.

## 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`, `ADMINS`, `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.

# Starting the installation wizard

You can start the installation in two ways — as a GUI based installation wizard or as a text based installation wizard. For instructions on how to start the wizard, refer to one of the following sections:

- "Starting the GUI based installation wizard."
- "Starting the text based installation wizard" on page 92.

## Starting the GUI based installation wizard

**Prerequisites:**

__ The system on which you are starting the installation wizard meets all of the requirements listed in "Prerequisites" on page 29.

__ You have completed all of the tasks listed in "Preparing your systems to run the WebSphere Commerce installation wizard" on page 81.

This includes ensuring that the Windows administration user ID under which the installation is performed has the required user rights.

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

**Procedure:**

To start the GUI based installation wizard, 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. The installation wizard should start automatically.

   **Note:** Depending on your Windows system, the installation wizard may take 3 minutes or longer to start.
3. If the installation wizard does not start automatically, issue the following command:

   ```
   drive:\setup.exe
   ```

   where *drive* is the drive letter of the CD-ROM drive containing the WebSphere Commerce CD.

If at any point during the installation, the text in the installation wizard appears to be cut off or missing, resize the wizard so that you can read all of the text on the wizard.

**Note:** Depending on your Windows system, the installation wizard may take 3 minutes or longer to start.

**Important:** The installation wizard starts by displaying a language selection panel. The language selected in the language selection panel becomes the default language for all WebSphere Commerce instances. Attempting to create a WebSphere Commerce instance with a default language different from the language selected in the language selection panel

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will cause the WebSphere Commerce instance to be populated with data in the language originally selected in the language selection panel.

After you have completed the instructions in this section, proceed to "Completing a custom installation" on page 93.

## Starting the text based installation wizard

**Prerequisites:**

__ The system on which you are starting the installation wizard meets all of the requirements listed in "Prerequisites" on page 29.

__ You have completed all of the tasks listed in "Preparing your systems to run the WebSphere Commerce installation wizard" on page 81.

This includes ensuring that the Windows administration user ID under which the installation is performed has the required user rights:

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

**Procedure:**

To start the text based installation wizard, 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. The WebSphere Commerce Launchpad starts. Click **Exit** to dismiss the Launchpad.
4. Issue the following command:

   ```
   drive:\setup.exe -console
   ```

   where *drive* is the drive letter of the CD-ROM drive containing the WebSphere Commerce CD.

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 two installation wizards differ.

**Important:** The installation wizard starts with a language selection prompt. The language selected at the language selection prompt 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 at the language selection prompt will cause the WebSphere Commerce instance to be populated with data in the language originally selected in the language selection panel.

After you have completed the instructions in this section, proceed to "Completing a custom installation" on page 93.

# Completing a custom installation

**Prerequisites:**

__ The machines on which you are starting the installation wizard meets all of the requirements listed in "Prerequisites" on page 29.

__ You have completed all of the tasks listed in "Preparing your systems to run the WebSphere Commerce installation wizard" on page 81.

__ You have started the installation wizard according to the instructions in "Starting the installation wizard" on page 91.

**Procedure:**

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

1. Select the installation language in the language selection panel, and select **OK**.

   The software will be installed in this language, regardless of the language settings of your system.

   **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.
2. On the Welcome panel, select **Next**.
3. 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 select **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 select **Next**. Declining the terms of the license agreement exits the install program.
4. If you accept the terms of the license agreement, the install type panel displays. Select **Custom Installation**. select **Next** to continue.
5. Select the components you want to install on the node. Select **Next** to continue.

   Descriptions of each component are provided at the beginning of this chapter.

   Components detected on the system will be unavailable for selection in the wizard.
6. 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, selecting **Next** to move to the next panel.

   Descriptions of the values required to complete the installation wizard are provided in "User IDs required to complete the installation wizard" on page 89.

   **Note:** When navigating through the Install Wizard, the following warning message may be posted after entering user information: `The system cannot validate the user password. Ensure the password is correct`

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`before proceeding.` This means that the user password cannot be validated due to a system limitation. This system limitation could be either the PAM library not being installed on your operating system or custom security settings on your system. No further action is required at this time. Ensure the correct password has been entered on the panel and click **OK** to proceed with the installation.

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

**Important:** If you are installing DB2 Universal Database, the DB2 Universal Database installation path can only contain English characters.

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

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

   **Notes:**

   a. If you are using the custom installation to add WebSphere Commerce Payments to WebSphere Commerce, 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.

   c. If you have removed DB2 Universal Database, WebSphere Application Server, or IBM HTTP Server from your system and you want the WebSphere Commerce installation wizard to install them in the same location where they were installed earlier, do the following:

      1) Backup any files from the directories you want to keep.
      2) Delete the directories.

         The directories will be recreated during the installation.

      If you fail to clean up these directories before you attempt to reuse them, your installation or WebSphere Commerce will not function correctly.

8. Insert the CDs as prompted by the WebSphere Commerce installation wizard, following the on-screen prompts.

   **Notes:**

   a. When prompted to insert the IBM DB2 Universal Database Enterprise Server Edition Version 8.2 (8.1 FP7a) CD, insert the IBM DB2 Universal Database Enterprise Server Edition Version 8.2 (8.1 FP9) CD.

      WebSphere Commerce has provided a more recent version of DB2 Universal Database than indicated by the installation wizard.

   b. If a Windows Autorun window displays after changing CDs, close the window.

      A Windows Autorun window resembles an Explorer window.

   c. If a Windows Autoplay dialog displays after changing CDs, cancel or exit the dialog.

      A Windows Autoplay dialog contains text similar to the following:

      ```
      Windows can perform the same action each time you insert a
      disk or connect a device with this kind of file:
      ```

   d. The following CDs must be available in the local CD-ROM drive or as an image on the local hard disk. Specifying a network location, either as a UNC path or a mapped drive, will cause the installation to fail:

- DB2 Universal Database CD
- WebSphere Application Server CD

e. For all other CDs, do not specify locations of the CD or CD image as UNC paths (For example, \\system1\destination). You may use mapped drive letters.

Progress bars indicate how much of the installation has completed.

**Important**

When prompted for the WebSphere Application Server CD, ensure that you insert the correct WebSphere Application Server CD for the version of Windows you are using:

- 2000 **IBM WebSphere Application Server Version 5.0.0 for Windows 2000**
- 2003 **IBM WebSphere Application Server Version 5.0.2 for Windows Server 2003**

  After inserting this CD, the WebSphere Application Server Launchpad may be displayed. If this happens, click **Cancel** on the Launchpad to exit the WebSphere Application Server Launchpad.

9. The installation of the selected components is complete when the Installation Complete panel displays. Select **Finish** to exit the installation wizard.

   If you chose to install the WebSphere Commerce Server or WebSphere Commerce Payments components, a dialog displays asking if you want to reboot your computer.
10. Reenable any virus checking software that was disabled before starting the installation wizard.
11. If you chose to install the WebSphere Commerce Server or WebSphere Commerce Payments components, reboot your machine.
12.

# Verifying a custom installation

## Verifying your installation using log files

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

- "WebSphere Commerce installation logs"
- "DB2 Universal Database installation logs"
- "WebSphere Application Server installation logs" on page 98

  Check these log files if you chose to install WebSphere Commerce, WebSphere Commerce Payments, or the WebSphere Application Server Web server plug-in on a remote Web server.
- "IBM HTTP Server Version 1.3.28 installation logs" on page 100

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

### WebSphere Commerce installation logs

The following log files contain messages generated by the WebSphere Commerce installation wizard:

- *WC_installdir*\logs\install_*date_time*.log

  **Note:** Depending on the number of installation attempts, there may be more than one of these log files. Ensure you look at the most recent log file.
- *WC_installdir*\logs\wctrace_*date_time*.log

  **Note:** This log file is intended for use by IBM support only. Examining this file will not provide you with any useful information.
- *WC_installdir*\logs\wcinstall.log

  The installation wizard will create this log file only if there have been any errors.

Default values for *WC_installdir* are listed in "Path variables used in this book" on page v.

If the installation of WebSphere Commerce fails, these log files will be in the directory defined the by the %tmp% environment variable.

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

The WebSphere Commerce installation is complete if the following message appears in the install_*date_time*.log log file:

```
WebSphere Commerce installation complete.
```

### DB2 Universal Database installation logs

The following log files are generated during the installation of DB2 Universal Database:

- *WC_installdir*\logs\db2wi.log
- *WC_installdir*\logs\DB2.log

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If the WebSphere Commerce installation wizard did not complete successfully or was otherwise interrupted and DB2 Universal Database was installed, the log files will be in the following location:

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

The *drive*:\Documents and Settings*user_id*\Local Settings directory is hidden by default. You may have to change the folder options to view this directory.

If you cannot find the log files in this location, use the Windows search facility to find the files. If the log files do not exist on the system, DB2 Universal Database was not installed on the system.

If the last line in the db2wi.log log file contains the following text, DB2 Universal Database installed successfully:

| | |
|---|---|
| Business | Product: DB2 Enterprise Server Edition --<br>Installation operation completed successfully. |
| Professional | Product: DB2 Enterprise Server Edition --<br>Installation operation completed successfully. |
| Express | Product: DB2 Universal Database Express Edition --<br>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.

**Note:** If you only installed DB2 Universal Database and no other components using the WebSphere Commerce installation wizard, the log files will be in the following location:

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

If you are using a remote DB2 Universal Database as the WebSphere Commerce database and installed only the WebSphere Commerce Server component, the WebSphere Commerce Payments component, or both, on the WebSphere Commerce machine, the db2wi.log log file will contain the following message if the installation of the DB2 Administration Client was successful:

```
Product: DB2 Administration Client -- Installation operation completed successfully.
```

**Note:** The following errors can be safely ignored:

- DEBUG: Error 2769:  Custom Action StreamLibrarysCA did not close 1 MSIHANDLEs.
- 1: Can not set the "SVCENAME=db2c_DB2" value in the Database Manager Configuration File for the instance "DB2". Return code is "-104".
- 1: The Fast Connection Manager (FCM) base port was not specified for the instance "DB2". Default parameters will be used.
- 1: The maximum number of logical nodes was not specified for the instance "DB2". Default parameters will be used."

## WebSphere Application Server installation logs

The installation of WebSphere Application Server and its associated fixes generates the following log files:

- *WAS_installdir*/logs/http_plugin.log

- *WAS_installdir*/logs/log.txt
- *WAS_installdir*/logs/mq_install.log
- *WAS_installdir*/logs/WASFixes.err.log
- *WAS_installdir*/logs/WASFixes.log
- *WAS_installdir*/logs/WASFixPack.log
- *WAS_installdir*/logs/WASFixPack.err.log

Default values for *WAS_installdir* are listed in "Path variables used in this book" on page v.

If the WebSphere Commerce installation wizard did not complete successfully or was otherwise interrupted and WebSphere Application Server was installed, the log files will be in the following location:

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

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

```
INSTFIN: The WebSphere 5.1 install is complete.
```

To confirm that WebSphere Application Server is at the correct version required by WebSphere Commerce, open the following file in a text editor:

*WAS_installdir*/properties/version/BASE.product

WebSphere Application Server is at the correct version required by WebSphere Commerce if the version indicated in the file is 5.1.1.3.

**Note:** The following error messages in the WebSphere Application Server log files can be safely ignored:

*WAS_installdir*/logs/log.txt

Any error messages similar to the following can be safely ignored:

```
(date,time), Setup.product.install,
com.installshield.product.service.product.PureJavaProductServiceImpl
$InstallProduct, wrn, Did not replace installed object (IBM WebSphere
Application Server) with object (IBM WebSphere Application Server)
```

*WAS_installdir*/logs/WASFixPack.log

```
Fix pack: was51_fp1_win Checking product features:
IBM HTTP Server has been verified successfully.
The specified fix pack contains updates for an unavailable component
 (installation will continue):
samp.messaging
```

For the applied WebSphere Application Server fix packs, the following files are created for each fix pack:

*WAS_installdir*/properties/version/history/*fix*.ptfApplied
*WAS_installdir*/properties/version/history/*fix*.ptfDriver

where *fix* will be the following:

- was51_fp1_win
- was511_cf3_win

Ensure that the appropriate files were created for the fixes applied to your installation.

For the applied WebSphere Application Server interim fixes, the following files are created for each interim fix:

*WAS_installdir*/properties/version/history/*fix*.efixApplied
*WAS_installdir*/properties/version/history/*fix*.efixDriver

where *fix* will be the following:

- PQ99045
- PK05011
- PK02063

Ensure that the files were created for each fix.

If you have a distributed installation of WebSphere Commerce, check the WebSphere Application Server log files on the following nodes:

- WebSphere Commerce node
- WebSphere Commerce Payments node
- Web server node

**Note:** On a remote Web server node where you only installed the WebSphere Application Server plug-in, the *WAS_installdir*/properties/version/BASE.product may indicate a version different than the required 5.1.1.3. The minimum version you should see is 5.1.0.0.

You will apply the required fixes to the WebSphere Application Server plug-in after you create a WebSphere Commerce instance and, optionally, a WebSphere Commerce Payments instance when you complete the instructions in "Remote Web server post-instance creation tasks" on page 118.

## IBM HTTP Server Version 1.3.28 installation logs

The installation of IBM HTTP Server Version 1.3.28 and its associated fixes generates the following log files:

- *HTTPServer_installdir*/logs/error.log
- *WAS_installdir*/logs/ihs_log.txt
- *WAS_installdir*/logs/WASFixes.log
- *WAS_installdir*/logs/WASFixes.err.log
- *WAS_installdir*/logs/WASFixPack.log
- *WAS_installdir*/logs/WASFixPack.err.log

Default values for *HTTPServer_installdir* and *WAS_installdir* are listed in "Path variables used in this book" on page v.

If the WebSphere Commerce installation wizard did not complete successfully or was otherwise interrupted and IBM HTTP Server was installed, the log files will be in the following location:

*drive*:\Documents and Settings*user_ID*\Local Settings\Temp\

If no errors occurred during the installation of IBM HTTP Server Version 1.3.28 and its associated fixes, the following files will not exist, or if they do exist, they will be empty:

- *WAS_installdir*/logs/WASFixes.err.log

- *WAS_installdir*/logs/WASFixPack.err.log

**Note:** If IBM HTTP Server Version 1.3.28 and WebSphere Application Server are installed on the same machine, the following log files apply to both IBM HTTP Server Version 1.3.28 and WebSphere Application Server:

- *WAS_installdir*/logs/WASFixes.log
- *WAS_installdir*/logs/WASFixes.err.log
- *WAS_installdir*/logs/WASFixPack.log
- *WAS_installdir*/logs/WASFixPack.err.log

## Next steps

After you complete installing WebSphere Commerce components using a custom installation, continue by creating a WebSphere Commerce and (optionally) a WebSphere Commerce Payments instance. For instructions, refer to Part 6, “Creating a WebSphere Commerce and a WebSphere Commerce Payments instance,” on page 105.

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# Part 6. 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:


- "Before you create or modify an instance with Configuration Manager" on page 107
- "Creating a WebSphere Commerce instance" on page 111
- "Creating a WebSphere Commerce Payments instance" on page 113


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# 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 42.
2. Ensure that you meet the prerequisites for starting Configuration Manager. The prerequisites are listed in "Configuration Manager prerequisites."
3. Start the default WebSphere Application Server application server (server1).

   For instructions on starting an application, refer to "Starting or stopping an application server" on page 177.
4. 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:

__ You have started your WebSphere Commerce database server.

__ You have started the default WebSphere Application Server application server (server1).

For instructions on starting an application, refer to "Starting or stopping an application server" on page 177.

## Starting the Configuration Manager

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

1. Ensure that the Configuration Manager server is running by opening the Windows Services panel and checking that the `IBM WC 5.7 Configuration Manager` service has a status of Started.

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Open the Windows Services panel by selecting one of the following, depending on the version of Windows you are using:

2000 **Start > Settings > Control Panel > Administrative Tools > Services**

2003 **Start > Settings > Administrative Tools > Services**

If the IBM WC 5.7 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 5.7 Configuration Manager service running could potentially pose a security problem. Stop the IBM WC 5.7 Configuration Manager service when you are not using the Configuration Manager.

To prevent potential security problems, you should also ensure that the IBM WC 5.7 Configuration Manager service 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 5.7 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 one of the following, depending on the version of Windows you are using:

   2000 **Start > Programs > IBM WebSphere > Commerce Server v5.7 > Configuration**

   2003 **Start > All Programs > IBM WebSphere > Commerce Server v5.7 > 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 host name of the Configuration Manager server machine.

   To obtain the host name of the Configuration Manager server machine, issue the hostname command from a command prompt session on 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

Continue with the following sections:

- "Creating a WebSphere Commerce instance" on page 111.
- "Creating a WebSphere Commerce Payments instance" on page 113.

# 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 168.

When you create a WebSphere Commerce instance, always specify the fully-qualified host name in the appropriate Configuration Manager panels.

## Creating a new WebSphere Commerce instance

**Important**

If you use IBM HTTP Server or Sun ONE Web server, WebSphere Commerce modifies the Web server configuration file whenever you do any of the following:

- Create a WebSphere Commerce instance.
- Create a WebSphere Commerce Payments instance.
- Update information in the Web Server panel in Configuration Manager for an existing instance.

These changes are marked by the following text:

```
IBM WebSphere Commerce (Do not edit this section)
```

or

```
IBM WebSphere Payments (Do not edit this section)
```

Customized changes within these sections are not supported by WebSphere Commerce as any changes made within these sections may be overwritten at any time by WebSphere Commerce configuration tools such as Configuration Manager.

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

1. If have not started the default WebSphere Application Server application server (server1), start it now.

   For instructions on starting an application, refer to "Starting or stopping an application server" on page 177.
2. Start the WebSphere Commerce Configuration Manager. For details, refer to "Starting the Configuration Manager" on page 107.
3. Under **WebSphere Commerce**, expand your *hostname*.
4. Expand **Commerce**.
5. Right-click on **Instance List**.
6. From the resulting pop-up menu, select **Create Instance**. The Instance Creation wizard starts.

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7. 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.

8. When you have completed the necessary information in the panels, the **Finish** button is enabled. Click **Finish** to create the WebSphere Commerce instance.

The time required to create an instance depends on the speed of your system.

9. When instance creation is complete, a dialog box appears containing a summary. Click **OK** to close the dialog box.
10. Other dialog boxes may display containing additional instructions, ensure that you review the contents of the dialog boxes before dismissing them.
11. Exit Configuration Manager by selecting **Console > 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 used in this book" on page v 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 log files in the following directory:

*WC_installdir*/instances/*instance_name*/logs

where default values for *WC_installdir* are listed in "Path variables used in this book" on page v and *instance_name* is the name of WebSphere Commerce instance.

## The next step

After you have created a WebSphere Commerce instance, you can continue by doing one of the following:

- If you installed WebSphere Commerce Payments, continue by creating a WebSphere Commerce Payments instance. Instructions for creating a WebSphere Commerce Payments are provided in "Creating a WebSphere Commerce Payments instance" on page 113.
- If you did not install WebSphere Commerce Payments, continue by completing the tasks in "Mandatory post-instance creation tasks" on page 117. You must complete the tasks in that section for WebSphere Commerce to function correctly.

# 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 168.

WebSphere Commerce Payments is an optional component of WebSphere Commerce, however some of the starter stores provided with WebSphere Commerce require WebSphere Commerce Payments. Refer to the WebSphere Commerce Information Center for more information.

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 starter store, refer to the WebSphere Commerce Information Center.

**Note:** You should only change WebSphere Commerce Payments ports through the WebSphere Commerce Configuration Manager, as stated in "Before you create or modify an instance with Configuration Manager" on page 107 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

**Important**

If you use IBM HTTP Server or Sun ONE Web server, WebSphere Commerce modifies the Web server configuration file whenever you do any of the following:

- Create a WebSphere Commerce instance.
- Create a WebSphere Commerce Payments instance.
- Update information in the Web Server panel in Configuration Manager for an existing instance.

These changes are marked by the following text:

```
IBM WebSphere Commerce (Do not edit this section)
```

or

```
IBM WebSphere Payments (Do not edit this section)
```

Customized changes within these sections are not supported by WebSphere Commerce as any changes made within these sections may be overwritten at any time by WebSphere Commerce configuration tools such as Configuration Manager.

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 107.

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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. Select **WebSphere Commerce** > *hostname* > **Payments** and right-click **Instance List**.
3. From the resulting pop-up menu, select **Create Payments Instance**. The Payments Instance Creation wizard starts.
4. 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.

**Important:**

a. 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 the WebSphere Commerce instance was created — either from a quick installation or manually creating a WebSphere Commerce instance.

   For a quick installation, the Site Administrator ID was entered when completing the installation wizard.

   When creating a WebSphere Commerce instance manually, the Site Administrator ID is the value that was entered in the **Site Admin ID** field of the WebSphere Commerce instance creation wizard.

b. When completing the WCSRealm information, ensure that you enter the fully qualified host name for the ***WebSphere Commerce Web server*** in the **Commerce Webserver Hostname** field.

5. 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.
6. 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.
7. DB2 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.

8. 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.
9. Select **WebSphere Commerce** > *hostname* > **Commerce** > **Instance List** > *instance_name* > **Instance Properties** and click **Payments**.
10. Complete the fields and click **Apply**. For help on completing the fields, click **Help**.
11. 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 used in this book" on page v 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 log files in the following directory:

*WC_installdir*/instances/*payments_instance_name*/logs

where default values for *WC_installdir* are listed in "Path variables used in this book" on page v and *payments_instance_name* is the name of WebSphere Commerce Payments instance.

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

- DB2 createdb.log
- DB2 createdb.err.log

Creating a WebSphere Commerce Payments instance also produces the following files in the *WC_installdir*/instances directory:

- Configurator.1.log

  This log file will be required by IBM support if there was a problem with the Payments instance creation.
- WCSconfig.log
- WCSconfig_*date_time*.log

## The next step

After you have created your WebSphere Commerce Payments instance, continue by following the instructions in "Mandatory post-instance creation tasks" on page 117. You must complete the instructions in that section for WebSphere Commerce and WebSphere Commerce Payments to function correctly.

# Mandatory post-instance creation tasks

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

**If you are using IBM HTTP Server Version 2.0.42.2**

Do the following:

1. "IBM HTTP Server Version 2.0.42.2 tasks."
2. If you have a remote Web server, perform the tasks in "Remote Web server post-instance creation tasks" on page 118.

**If you are using Sun ONE Web server**

Do the following:

1. "Sun ONE Web server tasks" on page 118
2. If you have a remote Web server, perform the tasks in "Remote Web server post-instance creation tasks" on page 118.

2003 **If you are using Microsoft IIS Version 6.0**

Do the following:

1. "Microsoft IIS 6.0 Tasks" on page 118
2. If you have a remote Web server, perform the tasks in "Remote Web server post-instance creation tasks" on page 118.

**If you are using any other supported Web server.**

Do the following:

1. If you have a remote Web server, perform the tasks in "Remote Web server post-instance creation tasks" on page 118.

## IBM HTTP Server Version 2.0.42.2 tasks

After creating a WebSphere Commerce or WebSphere Commerce Payments instance for the first time, review the document available at the following URL:

`http://www.ibm.com/support/docview.wss?uid=swg21115062`

This document outlines IBM HTTP Server 2.0 plug-in support with WebSphere Application Server Version 5.1.x. It describes the steps you must take to ensure that IBM HTTP Server Version 2.0.42.2 functions correctly with WebSphere Application Server. This ensures that IBM HTTP Server Version 2.0.42.2 will work correctly with WebSphere Commerce and WebSphere Commerce Payments.

Also, ensure the plug-in has been applied to the *HTTPServer_installdir*`/conf/httpd.conf` file.

The following four lines should exist in the `httpd.conf` file:

```
Alias /WSsamples WAS_installdir/WSsamples/
Alias /IBMWebAS/ WAS_installdir/web/
 LoadModule was_ap20_module WAS_installdir/bin/
 mod_was_ap20_http.dll
WebSpherePluginConfig WAS_installdir/config/cells/plugin-cfg.xml
```

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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 you have a remote Web server, perform the tasks in "Remote Web server post-instance creation tasks" after completing the tasks outlined in the document.

## Sun ONE Web server tasks

After creating a WebSphere Commerce or WebSphere Commerce Payments instance for the first time, apply WebSphere Application Server interim fix PQ82361.

For instructions on applying WebSphere Application Server interim fixes, refer to "Applying WebSphere Application Server interim fixes" on page 185.

If you have a remote Web server, perform the tasks in "Remote Web server post-instance creation tasks" after installing the fix.

## Microsoft IIS 6.0 Tasks

After creating a WebSphere Commerce or WebSphere Commerce Payments instance, do the following:

1. Manually configure the WebSphere Application Server Web server plug-in according to the instructions at the following URL:

   ```
   http://publib.boulder.ibm.com/infocenter/wasinfo/index.jsp?topic=/
    com.ibm.websphere.base.doc/info/aes/ae/tins_manualWebServer.html
   ```

   Follow the instructions on this page for **Internet Service Manager Web server**.

   Do not close Internet Information Services (IIS) Manager after completing the instructions outlined. You will need IIS Manager in the following steps.

   To open IIS Manager, select **Start > Control Panel > Administrative Tools > Internet Information Services (IIS) Manager**.
2. Expand the navigation tree until **Web Service Extensions** is visible and click **Web Service Extensions**.
3. Select **All unknown ISAPI Extensions** and click **Allow**.
4. Expand the navigation tree until **Web sites** is visible.
5. Right-click **Web Sites** and select **Properties** from the pop-up menu.
6. Click the **Service** tab.
7. Select **Run WWW service in IIS 5.0 isolation mode**.
8. Click **OK**.

   Choose to restart the Web server if you are prompted to do so.

If you have a remote Web server, perform the tasks in "Remote Web server post-instance creation tasks."

## 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. Examine the *WAS_installdir*/properties/version/BASE.product file to ensure that WebSphere Application Server plug-in is at the required level (5.1.1.3). If your WebSphere Application Server plug-in is not at the required level, do one of the following:
   - If your version level is 5.1.0.0, you must apply WebSphere Application Server Version 5.1 Fix Pack 1 and WebSphere Application Server Version 5.1.1 Cumulative Fix 3 to the plug-in.

     For instructions on applying WebSphere Application Server Version 5.1 Fix Pack 1, refer to "Applying WebSphere Application Server Version 5.1 Fix Pack 1" on page 183.

     For instructions on applying WebSphere Application Server Version 5.1.1 Cumulative Fix 3, refer to "Applying WebSphere Application Server Version 5.1.1 Cumulative Fix 3" on page 184.
   - If your version level is 5.1.1.0, you must apply WebSphere Application Server Version 5.1.1 Cumulative Fix 3 to the plug-in.

     For instructions on applying WebSphere Application Server Version 5.1.1 Cumulative Fix 3, refer to "Applying WebSphere Application Server Version 5.1.1 Cumulative Fix 3" on page 184.
2. If you have not already applied the WebSphere Application Server cumulative plug-in fix, apply the fix now.

   For instructions and to obtain the fix, refer to the following URL:

   http://www.ibm.com/support/docview.wss?uid=swg24007227

   The WebSphere Application Server cumulative plug-in fix is updated frequently and is not provided on the WebSphere Application Server fixes CD that is packaged with WebSphere Commerce.
3. 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 187.
4. 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 188.
5. If it does not exist, create a directory on the Web server node that matches the *WAS_installdir* directory on the WebSphere Commerce node.
6. Copy the following directory from the WebSphere Commerce node to the Web server node:

   *WAS_installdir*/installedApps/*cell_name*/WC_*instance_name*.ear

   where the variables are defined as follows:

   *WAS_installdir*
   : Default values for this variables are listed in "Path variables used in this book" on page v

   *cell_name*
   : This is the short host name of the machine on which WebSphere Commerce is installed.

   *Commerce_instance_name*
   : This is the name of the WebSphere Commerce instance.

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**

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.

7. 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 *HTTPServer_installdir*`/conf/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.

8. For Microsoft IIS (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 used in this book" on page v.

   b. On the remote IIS node, start a command prompt session, switch to the directory into which the `IISAddAliasInstance.js` file was copied, then issue the following command:

      ```
      cscript IISAddAliasInstance.js
      ```

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

9. Stop and restart the Web server.

   **Note:** If you are using Microsoft IIS, you must stop and restart all Microsoft IIS related services and applications. See Microsoft IIS documentation for instructions on how to stop and start these services and servers.

# Next steps

After creating a WebSphere Commerce and a WebSphere Commerce Payments instance, review Part 7, “Last steps,” on page 123 to decide how to continue.

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# Part 7. Last steps

Continue your installation and configuration of WebSphere Commerce by performing the following tasks:

**Review the README file**

If you have not already done so, review the WebSphere Commerce README file. 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.

For more information, see "Reviewing the README file" on page 42.

**Update the WebSphere Commerce information center**

Important updates, additional information, and corrections are often made to the WebSphere Commerce information center. The information center (online help) contains most of the information you will need after installing or migrating WebSphere Commerce.

Ensure that you download the latest version of the WebSphere Commerce information center from the WebSphere Commerce Library for your edition of WebSphere Commerce. The WebSphere Commerce Library is available at the following URLs:

| | |
|---|---|
| Business | http://www.ibm.com/software/genservers/commerce/wcbe/library/lit-tech-general-en.html |
| Professional | http://www.ibm.com/software/genservers/commerce/wcpe/library/lit-tech-general-en.html |
| Express | http://www.ibm.com/software/genservers/commerce/express/library/lit-tech-general-en.html |

**Review the security of your WebSphere Commerce installation**

Security is a crucial component of a production WebSphere Commerce site. Refer to the WebSphere Commerce Information Center for instructions on enabling WebSphere Application Server security, configuring single sign-on and other security options for your installation.

**Publish a WebSphere Commerce starter store**

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

If you do not publish a sample store, you should publish the access control policies, organization structures, and other information associated with one of the starter stores to provide the framework for developing your store. For more information, refer to the WebSphere Commerce Information Center.

To get up and running quickly with a WebSphere Commerce starter store, refer to the **Easy Start** section of the WebSphere Commerce Information Center.

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For information on publishing a WebSphere Commerce starter store, working with the starter stores provided with WebSphere Commerce, and developing a store in WebSphere Commerce, refer to the WebSphere Commerce Information Center.

The information center includes information on changing database settings to improve the time required to publish a store. Refer to the **Configuring publish** topic in the WebSphere Commerce information center.

If you are using a remote web server, ensure that you complete the tasks outlined in "Post-Store publishing tasks" on page 189 each time you publish a store.

**Install and configure the additional software provided with WebSphere Commerce**

WebSphere Commerce provides a number of additional software packages that enhance WebSphere Commerce and provide additional functionality. 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 221 for more information.

Business Professional **Perform advanced configuration tasks**

Advanced configurations for WebSphere Commerce include federation, clustering, and multiple instances. Advanced configuration are covered in Part 8, "Advanced configuration options," on page 125.

# Part 8. Advanced configuration options

**Edition support**

The information in this section applies only to WebSphere Commerce Business Edition and WebSphere Commerce Professional Edition.

The configurations described in this section are not supported by WebSphere Commerce - Express.

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


- "Creating multiple WebSphere Commerce and WebSphere Commerce Payments instances" on page 127
- "Federating WebSphere Commerce and WebSphere Commerce Payments" on page 133
- "Clustering WebSphere Commerce" on page 139


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# 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*.

**Important**

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 "Clustering WebSphere Commerce" on page 139.

While it is possible to create multiple instances 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 and database server exist 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:

| Object | Original instance variable | New instance variable |
|---|---|---|
| WebSphere Commerce instance name | *WC_instance_1* | *WC_instance_2* |
| WebSphere Commerce Payments instance name | *Payments_instance_1* | *Payments_instance_2* |
| IP address | xxx.xxx.xxx.xxx | yyy.yyy.yyy.yyy |
| Host name | *host1* | *host2* |
| Domain name | *domain* | *domain* |
| Fully qualified host name | *host1.domain* | *host2.domain* |

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| Object | | Original instance variable | New instance variable |
|---|---|---|---|
| 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_1*TBLSPC | *WC_instance_2*TBLSPC |
| DB2 | WebSphere Commerce Payments database name | *Payments_db1* | *Payments_db2* |
| Oracle | WebSphere Commerce Payments tablespace name | *Payments_instance_1*TBLSPC | *Payments_instance_2*TBLSPC |

These variables represent the parameter values for your first and second instance and 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

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'
  ```

- If you are using the minimum required amount of system memory, increase the system's memory by 512 MB for each additional WebSphere Commerce instance and its associated WebSphere Commerce Payments instance on a system.
- For each additional WebSphere Commerce instance and its associated WebSphere Commerce Payments instance on a system, increase the system's virtual storage by 1 GB.
- Oracle 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 create the instances.

## Web server prerequisites

If you are using IBM HTTP Server, you can skip this section.

If you are using Microsoft IIS 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. Do the following, depending on your Web server:

   **Microsoft IIS**
   Configure the Web server according the instructions found "Installing and configuring Microsoft IIS" on page 67.

   **Sun ONE Web server**
   Configure the Web server according the instructions found "Installing and configuring Sun ONE Web Server 6.0.5" on page 69.
3. Configure the Web server according the instructions found "Installing and configuring Sun ONE Web Server 6.0.5" on page 69.

Before continuing, ensure that the following URLs work:

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

## 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 "Creating a WebSphere Commerce instance" on page 111. 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 | *WC_instance_1* | *WC_instance_2* |
| Instance - Instance root path | *WC_installdir*/instances/*WC_instance_1* | *WC_installdir*/instances/*WC_instance_2* |
| DB2 Database - Database name | *WC_db1* | *WC_db2* |
| Oracle Database - Datafile name | *Oracle_datafile1* | *Oracle_datafile2* |
| Oracle Database - Database user ID | *Oracle_user1* | *Oracle_user2* |
| Oracle Database - Tablespace name | *WC_instance_1*TBLSPC | *WC_instance_2*TBLSPC |
| Web server - hostname | *host1.domain* | *host2.domain* |
| Web server - Primary Document Root (IBM HTTP Server) | N/A | N/A |
| Web server - Primary Document Root (Sun ONE Web Server) | *SunONEweb_installdir*/docs1 | *SunONEweb_installdir*/docs2 |
| Web server - Primary Document Root (Microsoft IIS) | C:\WINNT\System32\inetsrv\iisadmin*htmldocs1* | C:\WINNT\System32\inetsrv\iisadmin*htmldocs2* |
| WebSphere Commerce Payments - hostname | *host1.domain* | *host2.domain* |

Default values for *WC_installdir*, *SunONEweb_installdir*, and *IBM HTTP Server* are listed in "Path variables used in this book" on page v.

Ensure that you verify the instance creation by following the instructions in "Verifying the instance creation" on page 112.

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.

If you are not using WebSphere Commerce Payments, proceed to "Testing multiple instances" on page 132.

## 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 "Creating a WebSphere Commerce Payments instance" on page 113. 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 | *Payments_instance_1* | *Payments_instance_2* |
| WebSphere Node Name | *host_name* | *host_name*<br><br>This should be the same host name as the original WebSphere Commerce Payments instance. |
| DB2 Database - Database name | *Payments_db1* | *Payments_db2* |
| Oracle Database - Datafile name | *Oracle_datafile1* | *Oracle_datafile2* |
| Oracle Database - Database user ID | *Oracle_user1* | *Oracle_user2* |
| Oracle Database - Tablespace name | *Payments_instance_1*TBLSPC | *Payments_instance_2*TBLSPC |
| Web server - hostname | *host1.domain* | *host2.domain* |
| WebSphere Commerce - hostname | *host1.domain* | *host2.domain* |
| Web server - Primary Document Root (IBM HTTP Server) | *HTTP_installdir/htdocs1* | *HTTP_installdir/htdocs2* |
| Web server - Primary Document Root (Sun ONE Web Server) | *SunONEweb_installdir/docs1* | *SunONEweb_installdir/docs2* |

| Field in Configuration Manager | Original instance | New instance |
| --- | --- | --- |
| Web server - Primary Document Root (Microsoft IIS) | `C:\WINNT\System32\inetsrv\iisadmin\`*`htmldocs1`* | `C:\WINNT\System32\inetsrv\iisadmin\`*`htmldocs2`* |

Ensure that you verify the instance creation by following the instructions in "Verifying the instance creation" on page 115.

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 165.
2. If you are using WebSphere Commerce Payments, start all WebSphere Commerce Payments instances. For instructions, refer to "Starting or stopping a WebSphere Commerce Payments instance" on page 165.
3. Test the following URLs:

| Original instance | New instance |
| --- | --- |
| • http://*host1.domain*<br>• http://*host1.domain*:5432/webapp/PaymentManager<br>• https://*host1.domain*<br>• https://*host1.domain*:5433/webapp/PaymentManager<br>• https://*host1.domain*:8000/accelerator<br>• https://*host1.domain*:8002/adminconsole<br>• https://*host1.domain*:8004/orgadminconsole | • http://*host2.domain*<br>• http://*host2.domain*:5432/webapp/PaymentManager<br>• https://*host2.domain*<br>• https://*host2.domain*:5433/webapp/PaymentManager<br>• https://*host2.domain*:8000/accelerator<br>• https://*host2.domain*:8002/adminconsole<br>• https://*host2.domain*:8004/orgadminconsole |

# Federating WebSphere Commerce and WebSphere Commerce Payments

When WebSphere Commerce and WebSphere Commerce Payments are installed, they use the WebSphere Application Server base product. Both WebSphere Commerce and WebSphere Commerce Payments can be considered base WebSphere Application Server nodes.

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*.

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.

**Important**

Take note of the following considerations when federating WebSphere Commerce and WebSphere Commerce Payments:

- Before federating WebSphere Commerce, it 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 information center available through the following URL:

  `http://www.ibm.com/software/webservers/appserv/infocenter.html`
- If you want to create a WebSphere Commerce instance or a WebSphere Commerce Payments instance in a federated environment, you must disable WebSphere Application Server global security before you create the instance.

## Federating WebSphere Commerce

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.

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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.

2. Apply the WebSphere Application Server fixes to WebSphere Application Server Network Deployment as documented in "Applying WebSphere Application Server interim fixes" on page 185.

   Ensure that you apply fix pack 1, cumulative fix 3 and any interim fixes to WebSphere Application Server Network Deployment.

3. 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 178 for instructions.

4. On the WebSphere Commerce node, do the following:

   a. Ensure that no application servers (for example, server1) are running.

   b. 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 used in this book" on page v.

      *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.

5. 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 used in this book" on page v.

**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 179

## 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 42.

   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 178 for instructions.
3. On the WebSphere Commerce Payments node, 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 used in this book" on page v.

*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 used in this book" on page v.

   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 179

## 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 178 for instructions.
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 178 for instructions.
3. Create a backup of your current configuration. A backup is recommend in case the `removeNode` command fails.

   To create a backup of your current configuration, issue the following command on the application server node machine:

   ```
   WAS_installdir/bin/backupConfig.sh backup_file.zip
   ```

   where *backup_file* specifies the file to which the backup is written. The system will create this file for you.
4. On the application server node machine, issue the following command:

   ```
   WAS_installdir/bin/removeNode
   ```

   Default values for *WAS_installdir* are listed in "Path variables used in this book" on page v.

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.

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

# Clustering WebSphere Commerce

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

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.

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

- "Clustering with horizontal cluster members" on page 141
- "Clustering with vertical cluster members" on page 141

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 135.

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

**Important**

Before clustering WebSphere Commerce, it 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 information center:

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

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

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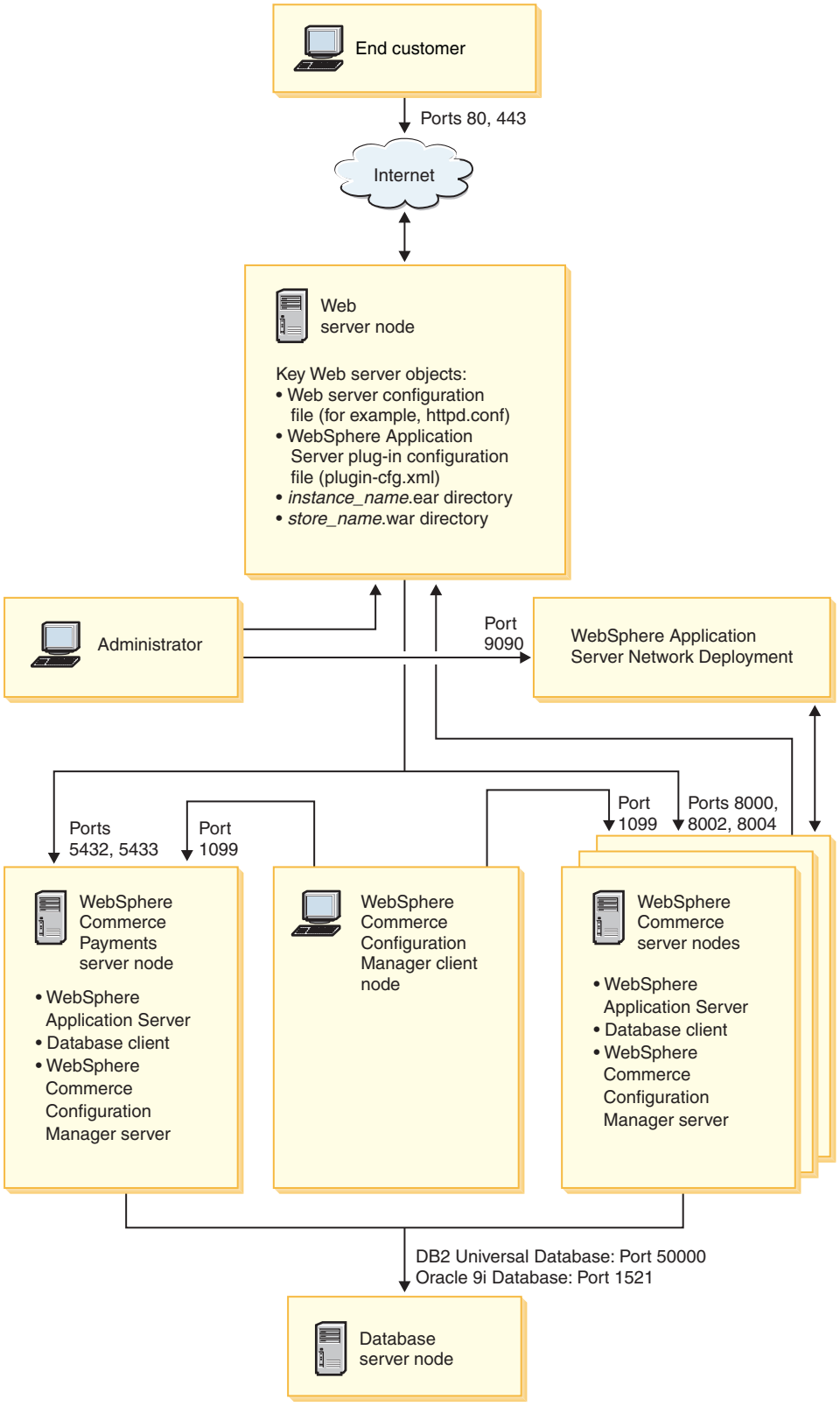


*Figure 1. Five node installation with clustering*

## 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 using the custom install option of the installation wizard. For instructions, refer to Part 5, "Installing WebSphere Commerce using the custom installation," on page 85.
2. Create a WebSphere Commerce instance. For instructions, refer to Part 6, "Creating a WebSphere Commerce and a WebSphere Commerce Payments instance," on page 105.
3. Federate the WebSphere Commerce node into a deployment manager cell. For instructions refer to "Federating WebSphere Commerce" on page 133.
4. Prepare additional nodes for each node you want to add to the cluster. For instructions, refer to "Preparing additional nodes" on page 142.
5. Create the WebSphere Commerce cluster. For instructions, refer to "Creating the WebSphere Commerce cluster" on page 143.
6. Verify the JDBC provider path for each cluster member. For instructions, refer to "Verifying the JDBC provider path" on page 144.
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 145.
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 146.
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 146.

**Important**

Ensure you publish your store before creating a cluster. Publishing a store after clustering is not recommended.

## 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 using the custom install option of the installation wizard. For instructions, refer to Part 5, "Installing WebSphere Commerce using the custom installation," on page 85.
2. Create a WebSphere Commerce instance. For instructions, refer to Part 6, "Creating a WebSphere Commerce and a WebSphere Commerce Payments instance," on page 105.
3. Federate the WebSphere Commerce node into a deployment manager cell. For instructions refer to "Federating WebSphere Commerce" on page 133.
4. Create the WebSphere Commerce cluster. For instructions, refer to "Creating the WebSphere Commerce cluster" on page 143.
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 145.

**Important**

Ensure you publish your store before creating a cluster. Publishing a store after clustering is not recommended.

## 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 Part 5, "Installing WebSphere Commerce using the custom installation," on page 85.

   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 "Installing and configuring Oracle9i Database" on page 65 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 the DB2 Universal Database documentation.

   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 133.

**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 178 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 178.
3. Open the WebSphere Application Server Administrative Console. For instructions, refer to "Starting the WebSphere Application Server Administrative Console" on page 179.
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 143 through 12 for each cluster member you want to add.
14. When you have finished adding cluster members, click **Next**.
15. Click **Finish** on the Summary page.
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 178.
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 178 for instructions.
3. Open the WebSphere Application Server Administrative Console. For instructions, refer to "Starting the WebSphere Application Server Administrative Console" on page 179.
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 178 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 178.
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 Network Deployment Administrative Console. For instructions, refer to "Starting the WebSphere Application Server Administrative Console" on page 179.
     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 Network Deployment Administrative Console.
     e. Open the `plugin-cfg.xml` file in a text editor. The `plugin-cfg.xml` file is in the following directory:

        *WAS_ND_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 187.
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 188.

   **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 148.
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 used in this book" on page v.
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 148.

## 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 148.

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/*server_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 used in this book" on page v.

   *server_name*
   This is the machine 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 148.

## 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 143.

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 178.
2. If you want to add a horizontal cluster member to the cluster, complete the tasks in "Preparing additional nodes" on page 142.
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 178 for instructions.
4. Open the WebSphere Application Server Administrative Console. For instructions, refer to "Starting the WebSphere Application Server Administrative Console" on page 179.
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 145.
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 187.
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 146.
    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 146.

## 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 178.
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 178 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 179.
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 178.
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 178 for instructions.
3. Open the WebSphere Application Server Administrative Console. For instructions, refer to "Starting the WebSphere Application Server Administrative Console" on page 179.
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 145.

# Part 9. Uninstalling WebSphere Commerce

WebSphere Commerce components must be uninstalled in the reverse order from which they were installed. Uninstall WebSphere Commerce and its software stack components in the following order:

1. All WebSphere Commerce components.

   For example, WebSphere Commerce, WebSphere Commerce Payments, and the WebSphere Commerce Configuration Manager server and client.

   All WebSphere Commerce components should be removed from all nodes on which they are installed before uninstalling any other software stack components.
2. WebSphere Application Server
3. Web server
4. Database

After removing all components, reboot the machine.

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# 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 165.
2. Stop WebSphere Commerce Payments as described in "Starting or stopping a WebSphere Commerce Payments instance" on page 165.
3. Stop the WebSphere Commerce information center as described in "Starting and stopping the WebSphere Commerce information center" on page 167.
4. Delete any WebSphere Commerce instances following the instructions provided in "Deleting a WebSphere Commerce instance" on page 168.
5. Delete any WebSphere Commerce Payments instances following the instructions provided in "Deleting a WebSphere Commerce Payments instance" on page 172.
6. Ensure the `IBM WC 5.7 Configuration Manager` service is stopped by checking the Windows services panel.
7. 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 components.

   Default values for *WC_installdir* are listed in "Path variables used in this book" on page v.
8. Start the uninstallation wizard by doing the following, depending on the version of Windows you are using:

   **2000**

   1. Select **Start > Settings > Control Panel > Add/Remove Programs**
   2. Click **Change or Remove Programs**.
   3. Select **IBM WebSphere Commerce 5.7**
   4. Click **Remove**

   **2003**

   1. Select **Start > Control Panel > Add or Remove Programs**
   2. Click **Change or Remove Programs**.
   3. Select **IBM WebSphere Commerce 5.7**
   4. Click **Remove**

   **Note:** You can also start the uninstall wizard by starting a command prompt session and issuing the following command:

   ```
   WC_installdir\_uninst\uninstall
   ```

**Note:** The WebSphere Commerce uninstallation wizard can not be used to uninstall WebSphere Application Server, the Web server, or the database server.

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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.

9. Complete the uninstallation wizard by following the prompts.
10. If the *WC_installdir* directory still exists on the node, remove it.

    Default values for *WC_installdir* are listed in "Path variables used in this book" on page v.
11. Reboot the machine.

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

If you have a distributed installation of WebSphere Commerce, you must uninstall WebSphere Application Server from the WebSphere Commerce node, the WebSphere Commerce Payments node, and the Web server node.

For information on uninstalling WebSphere Application Server, refer to *IBM WebSphere Application Server Version 5.0.x Getting Started*. This publication is available through the WebSphere Application Server information center library:

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

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# 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 5.1.x Getting Started*. This publication is available through the WebSphere Application Server information center library:

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

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# Uninstalling IBM HTTP Server

If IBM HTTP Server Version 1.3.28 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 Version 1.3.28, refer to the IBM HTTP Server Version 1.3.28 information center at the following URL:

`http://www-306.ibm.com/software/webservers/httpservers/doc/v1326/manual/ibm/index.html`

For information on uninstalling IBM HTTP Server Version 2.0.42.2, refer to the IBM HTTP Server Version 2.0.42.2 information center at the following URL:

`http://www.ibm.com/software/webservers/httpservers/doc/v20/manual/ibm/index.html`

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# Uninstalling DB2 Universal Database

If you have a distributed installation of WebSphere Commerce, you must uninstall DB2 Universal Database from the database server node and uninstall the DB2 Universal Database Administration client from the WebSphere Commerce node and the WebSphere Commerce Payments node.

Business Professional 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`

Express For information on uninstalling DB2 Universal Database, refer to *IBM DB2 Universal Database Quick Beginnings for DB2 UDB Express Edition*. 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`

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# Part 10. Installation and administration tasks

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# 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. (optional) Ensure that the WebSphere Commerce information center is started.

   For instructions, refer to "Starting and stopping the WebSphere Commerce information center" on page 167.

   The WebSphere Commerce information center provides help when using the WebSphere Commerce tools such as WebSphere Commerce Accelerator. If the information center is not started, no help will be available when using the WebSphere Commerce tools.
4. Start, stop, or restart the application server from a command line 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 177.

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.

**Important**

- If you start and stop a WebSphere Commerce instance from a command line, the status of the service for that WebSphere Commerce instance will not change in the Services panel.
- If you start a WebSphere Commerce instance from the Services panel, you must stop that WebSphere Commerce instance from the Services panel.
- If you start a WebSphere Commerce instance from a command line, you must stop that WebSphere Commerce instance from a command line.

## 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.

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3. Start Configuration Manager. For instructions on starting Configuration Manager, refer to "Starting the Configuration Manager" on page 107.
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.

## Starting or stopping a WebSphere Commerce Payments instance from a command prompt session

Ensure that the WebSphere Commerce Payments Web server is started before you start a WebSphere Commerce Payments instance.

To start the WebSphere Commerce Payments instance:

1. From a command prompt session, navigate to the *WC_installdir*/payments/bin directory.
2. Run the following command:

   ```
   IBMPayServer payments_instance_name password
   ```

   where *payments_instance_name* is the Payments instance name and *password* is the corresponding Payments instance password.

To stop the WebSphere Commerce Payments instance:

1. From a command prompt session, navigate to the *WC_installdir*/payments/bin directory.
2. Run the following command:

   ```
   StopIBMPayServer payments_instance_name password
   ```

## Starting or stopping a WebSphere Commerce Payments instance from the Windows services panel

Ensure that the WebSphere Commerce Payments Web server is started before you start a WebSphere Commerce Payments instance.

To start the WebSphere Commerce Payments instance:

1. Start the following the service from the Windows services panel:

   ```
   IBM WebSphere Application Server V5 -
        instance_name_Commerce_Payments_Server
   ```

2. From a command prompt session, navigate to the *WC_installdir*/payments/bin directory.
3. Run the following command:

   ```
   IBMPayServer payments_instance_name password
   ```

where *payments_instance_name* is the Payments instance name and *password* is the corresponding Payments instance password.

To stop the WebSphere Commerce Payments instance:

1. From a command prompt session, navigate to the *WC_installdir*/payments/bin directory.
2. Run the following command:

   ```
   StopIBMPayServer payments_instance_name password
   ```

3. Stop the following the service from the Windows services panel:

   ```
   IBM WebSphere Application Server V5 -
        instance_name_Commerce_Payments_Server
   ```

## Starting and stopping the WebSphere Commerce information center

The WebSphere Commerce information center can be started and stopped from the Services panel by starting or stopping the following service:

```
IBM WC 5.7 Help Server
```

The WebSphere Commerce information center will use port 8001.

When the information center is started, the WebSphere Commerce information center will available at the following URL:

```
http://host_name:8001/help/index.jsp
```

where *host_name* is the fully-qualified host name of the WebSphere Commerce machine.

If you want to use a different port number for the WebSphere Commerce information center, refer to the WebSphere Commerce Information Center for instructions on starting the information center on a different port.

If you specify a port other than 8001 for the WebSphere Commerce information center, you must change the port used for contextual help in the WebSphere Commerce tools in Configuration Manager. If the port used for contextual help in the WebSphere Commerce tools does not match the port number on which you started the information center, you will not be able to access contextual help in the WebSphere Commerce tools, such as Accelerator. You will still be able to access all of the online help in the information center using the information center URL.

Refer to the WebSphere Commerce Information Center for instructions on how to change the port used for contextual help in the WebSphere Commerce tools.

## Modifying a WebSphere Commerce or WebSphere Commerce Payments instance

**Important**

If you use IBM HTTP Server or Sun ONE Web server, WebSphere Commerce modifies the Web server configuration file whenever you do any of the following:

- Create a WebSphere Commerce instance.
- Create a WebSphere Commerce Payments instance.
- Update information in the Web Server panel in Configuration Manager for an existing instance.

These changes are marked by the following text:

```
IBM WebSphere Commerce (Do not edit this section)
```

or

```
IBM WebSphere Payments (Do not edit this section)
```

Customized changes within these sections are not supported by WebSphere Commerce as any changes made within these sections may be overwritten at any time by WebSphere Commerce configuration tools such as Configuration Manager.

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

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

1. Ensure the database management system is started.
2. Start the default WebSphere Application Server application server (server1).

   For instructions on starting an application, refer to "Starting or stopping an application server" on page 177.
3. Start Configuration Manager. For instructions on starting Configuration Manager, refer to "Starting the Configuration Manager" on page 107.
4. In Configuration Manager, under **WebSphere Commerce**, expand ***hostname***. Choose to expand **Commerce** or **Payments** and select the instance you wish to alter.

   Refer to the online help for the Configuration Manager for information about the various fields and panels of Configuration Manager.
5. After you update your instance, click **Apply** to apply your changes.
6. When the changes have been successfully applied, exit the Configuration Manager client. This also terminates the Configuration Manager server.
7. 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 165.

   **Note:** The WebSphere Commerce information center does not need to be stopped when deleting a WebSphere Commerce instance.
2. Ensure that there are no open connections to the WebSphere Commerce database.
3. 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 136.
4. 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.
5. Delete the WebSphere Commerce instance by doing the following:
   a. Start the default WebSphere Application Server application server (server1).

      For instructions on starting an application, refer to "Starting or stopping an application server" on page 177.
   b. Start a command prompt session.
   c. In the command prompt session, change directories to *WC_installdir*/bin/.
   d. Issue the following command from a command prompt session:

      ```
      config_ant.bat
           -DdbUserName=database_user_ID
           -DdbUserPassword=database_user_password
           -DinstanceName=instance_name
           RemoveInstance
      ```

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

      After you issue this command, you will be asked if you want to delete the WebSphere Commerce database schema for DB2 Universal Database or the WebSphere Commerce database tables for Oracle9i Database, depending on the database software you are using with WebSphere Commerce.

      **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.

      The command does the following:

- If you chose to, deletes the WebSphere Commerce database schema for DB2 Universal Database or the WebSphere Commerce database tables for Oracle9i Database, depending on the database software you are using with WebSphere Commerce.

  The WebSphere Commerce database is not dropped. If you want to drop the WebSphere Commerce database, you must do so manually. Refer to your database software documentation for instructions on dropping a database.
- Removes the WebSphere Commerce data source from WebSphere Application Server.
- Removes the WebSphere Commerce virtual hosts from WebSphere Application Server.
- Uninstalls the WebSphere Commerce EAR from WebSphere Application Server.
- Removes the WebSphere Commerce application server from WebSphere Application Server.
- Removes WebSphere Commerce configuration information from the Web server configuration file (local and remote Web server).
- Delete the WebSphere Commerce instance directory.
- Regenerates the WebSphere Application Server Web server plug-in configuration file.
- Removes the WebSphere Commerce instance from Configuration Manager.

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

   *WC_installdir*/instances/*instance_name*
   *WAS_installdir*/logs/WC_*instance_name*
   *WAS_installdir*/temp/*node_name*/WC_*instance_name*
   *WAS_installdir*/installedApps/*cell_name*/WC_*instance_name*.ear

   where *node_name* is the node name for WebSphere Application Server and *instance_name* is the name of the WebSphere Commerce instance you deleted. The WebSphere Application Server node name is usually the same as the host name of the machine on which WebSphere Application Server is installed.

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

| Web server | Actions |
|---|---|
| IBM HTTP Server | No additional steps need to be performed when using a local IBM HTTP Server.<br><br>If you are using a remote IBM HTTP Server:<br>1. Delete the following directory on the remote IBM HTTP Web Server node:<br>*WAS_installdir*/installedApps/*hostname*/WC_*instance_name*.ear<br><br>where *instance_name*e is the name of the WebSphere Commerce instance you are deleting.<br>2. If the IBM HTTP Server node is remote from the WebSphere Commerce node, copy the WebSphere Application Server Web server plug-in configuration file from the WebSphere Commerce node to the remote Web server node. For instructions, refer to "Copying the plugin-cfg.xml file to Web server" on page 187.<br>3. Restart the Web server. |

| Web server | Actions |
| --- | --- |
| Microsoft IIS | 1. Remove the following WebSphere Commerce aliases from the IIS configuration:<br>• accelerator<br>• adminconsole<br>• orgadminconsole<br>• wcadmin<br>• wcorgadmin<br>• wcs<br>• wcsstore<br>2. If the Microsoft IIS node is remote from the WebSphere Commerce node, delete the following directory on the Microsoft IIS node:<br>*WAS_installdir*/installedApps/*hostname*/ WC_*instance_name*.ear<br>where *instance_name* is the name of the WebSphere Commerce instance you are deleting.<br>3. If the Microsoft IIS node is remote from the WebSphere Commerce node, copy the WebSphere Application Server Web server plug-in configuration file from the WebSphere Commerce node to the remote Web server node. For instructions, refer to "Copying the plugin-cfg.xml file to Web server" on page 187.<br>4. Restart the Web server.<br>Refer to your Microsoft IIS documentation for instructions. |
| Sun ONE Web Server | 1. From the Sun ONE Web Server configuration files (for each WebSphere Commerce port), remove any sections delimited by the following text:<br>`IBM WebSphere Commerce (Do not edit this section)`<br>`End of IBM WebSphere Commerce (Do not edit this section)`<br>2. 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:<br>*WAS_installdir*/installedApps/*hostname*/ WC_*instance_name*.ear<br>where *instance_name* is the name of the WebSphere Commerce instance you are deleting.<br>3. If the Sun ONE Web Server node is remote from the WebSphere Commerce node, copy the WebSphere Application Server Web server plug-in configuration file from the WebSphere Commerce node to the remote Web server node. For instructions, refer to "Copying the plugin-cfg.xml file to Web server" on page 187.<br>4. Restart the Web server.<br>Refer to your Sun ONE Web Server documentation for instructions. |

## Deleting a WebSphere Commerce Payments instance

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

1. Ensure that WebSphere Commerce Payments is stopped. For instructions, refer to "Starting or stopping a WebSphere Commerce Payments instance" on page 165.

   **Note:** The WebSphere Commerce information center does not need to be stopped when deleting a WebSphere Commerce Payments instance.
2. Delete the WebSphere Commerce Payments 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 107.
   b. In Configuration Manager, under **WebSphere Commerce** expand *hostname* > **Payments > Instance List**.
   c. Right-click the instance you want to delete and select **Delete Payments Instance**.

      A dialog displays confirming that you want to delete the instance.

      When the instance is deleted, a message displays. Click **OK**.
   d. Exit Configuration Manager.

   This step also deletes the WebSphere Commerce Payments application server.
3. Do one of the following, depending on the database you are using for WebSphere Commerce Payments:

| | |
|---|---|
| Business DB2<br>Professional<br>Express | Drop the WebSphere Commerce Payments database associated with the WebSphere Commerce Payments instance you want to delete.<br><br>To drop a local WebSphere Commerce Payments database, issue the following commands from a DB2 command window:<br>`db2 drop db db_name`<br><br>where *db_name* is the name of the WebSphere Commerce Payments database.<br><br>To drop a remote WebSphere Commerce Payments database, issue the following commands from a DB2 command session on the WebSphere Commerce Payments machine:<br>`db2 attach to remote_db_node_name user db_admin_ID using db_admin_password`<br>`db2 drop db db_name`<br>`db2 uncatalog db db_alias`<br><br>where the variables are defined as follows:<br>*remote_db_node_name*<br>The database node name that was specified when the WebSphere Commerce Payments instance was created.<br>*db_admin_ID*<br>The database administrator ID that was specified when the WebSphere Commerce Payments instance was created.<br>*db_admin_password*<br>The password for the database administrator<br>*db_name*<br>The name of the WebSphere Commerce Payments database.<br>*db_alias* This is the alias under which the remote WebSphere Commerce Payments database is cataloged on the WebSphere Commerce Payments machine. |
| Business Oracle<br>Professional | 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, depending on your Web server:

| Web server | Actions |
| --- | --- |
| IBM HTTP Server | • Open *HTTPServer_installdir*/conf/httpd.conf in a text editor.<br>• Remove all sections delimited by the following text:<br>`IBM WebSphere Payments (Do not edit this section)`<br>`End of IBM WebSphere Payments (Do not edit this section)`<br>There will be multiple sections in the file delimited by the text. Remove the delimiting text as well.<br>• Save the changes and exit the text editor.<br>• Restart the Web server. |
| Microsoft IIS | No additional steps need to be performed when using Microsoft IIS. |
| 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 180.

## Changing the ports used for WebSphere Commerce tools

In the Instance creation wizard, you can specify the WebSphere Commerce tools ports to be different from the default values (8000, 8002, 8004). However, if you want to change the tools ports after the instance creation, do the following:

1. Start Configuration Manager. For instructions on starting Configuration Manager, refer to "Starting the Configuration Manager" on page 107.
2. From the list of instances, expand the instance for which you want to change the tools ports.
3. Expand **Instance Properties** and click **WebServer**.
4. Change the port values in fields listed in the following table, depending on which ports you want to change:

| WebSphere Commerce tool | Field | Default port |
| --- | --- | --- |
| WebSphere Commerce Accelerator | WC Accelerator Port | 8000 |
| WebSphere Commerce Administration Console | WC Admin Port | 8002 |
| WebSphere Commerce Organization Administration Console | WC OrgAdmin Port | 8004 |

5. Click **Apply**.
6. Exit Configuration Manager.
7. If you have a remote Web server, copy the WebSphere Application Server Web server plug-in configuration file from the WebSphere Commerce machine to the remote Web server. For instructions, refer to "Copying the plugin-cfg.xml file to Web server" on page 187.

If are using WebSphere Commerce Payments and have it installed remotely, you must merge the plug-in configuration files from the WebSphere Commerce and WebSphere Commerce Payments machines into one file before copying the merged plug-in configuration file to the Web server. For instructions, refer to "Merging the WebSphere Commerce Payments plugin-cfg.xml file" on page 188.

8. For Sun ONE Web server users, create a virtual server for the new ports. Ensure that the new virtual server is SSL enabled.
9. For Microsoft IIS users, change the port values to match the new port values for the tools.
10. Start WebSphere Commerce.
11. Restart the Web server.

# 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 a 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 used in this book" on page v.
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 or stop.

| Application server name | Description |
|---|---|
| *Commerce_app_server* | WebSphere Commerce application server.<br><br>The name of the WebSphere Commerce application server is `WC_instance_name`, where *instance_name* is the name of the WebSphere Commerce instance.<br><br>For example, if you have a WebSphere Commerce instance called `demo`, the application server name is `WC_demo`. |
| server1 | Default WebSphere Application Server application server |

**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 179.

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## 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 used in this book" on page v.
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 used in this book" on page v.
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:

| | | |
|---|---|---|
| Business<br>Professional | WebSphere Commerce in a clustered environment | Before starting the WebSphere Application Server Administrative Console, you must start the following:<br>• The WebSphere Application Server node agent on each federated node. For instructions, refer to "Starting and stopping the WebSphere Application Server node agent" on page 178.<br>• 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 178. |
| | WebSphere Commerce in a non-clustered environment | 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 177. |
| Express | 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 177. | |

Open the WebSphere Application Server Administrative Console by selecting the following, depending on your version of Windows:

| | |
|---|---|
| 2000 | **Start > Programs > IBM WebSphere > Application Server v5.1 > Administrative Console** |
| 2003 | **Start > All Programs > IBM WebSphere -> Application Server v5.1 > Administrative Console** |

## 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 148.

For information on federating the WebSphere Commerce application server and the WebSphere Commerce Payments application server into a deployment manager cell, refer to "Federating WebSphere Commerce and WebSphere Commerce Payments" on page 133.

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 178 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 179.
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 |
|---|---|
| *Commerce_ app_server* | WebSphere Commerce application server.<br><br>The name of the WebSphere Commerce application server is `WC_`*`instance_name`*, where *instance_name* is the name of the WebSphere Commerce instance.<br><br>For example, if you have a WebSphere Commerce instance called `demo`, the application server name is `WC_demo`. |
| *Payments_ app_server* | WebSphere Commerce Payments application server<br><br>The name of the WebSphere Commerce Payments application server is *`instance_name`*`_Commerce_Payments_Server`, where *instance_name* is the name of the WebSphere Commerce Payments instance.<br><br>For example, if you have a WebSphere Commerce Payments instance called `wpm`, the application server name is `wpm_Commerce_Payments_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 145.

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 177 for instructions.
2. Open the WebSphere Application Server Administrative Console. For instructions, refer to "Starting the WebSphere Application Server Administrative Console" on page 179.
3. In the Navigation area, expand **Environment**, then click **Update Web Server Plugin**.
4. Click **OK** to generate a new `plugin-cfg.xml` file.
5. Log out of 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 you are using a local Web server, restart the Web server according to the documentation provided with the Web server.

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 187.
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 188.
3. Restart the Web server according to the documentation provided with the Web server.

# Applying WebSphere Application Server fixes

## Applying WebSphere Application Server Version 5.1 Fix Pack 1

The instructions in this section only cover the installation of WebSphere Application Server Version 5.1 Fix Pack 1 using the update installation wizard. If you want to install this fix silently or want more information about WebSphere Application Server Version 5.1 Fix Pack 1, refer to the instructions available at the following URL:

`http://www-1.ibm.com/support/docview.wss?uid=swg24007195`

Apply WebSphere Application Server Version 5.1., Fix Pack 1 as follows:

1. If WebSphere Application Server is installed on the machine, ensure that all application servers are stopped.
2. If there is Web server installed on the machine, ensure that the Web server is stopped.
3. Insert the WebSphere Application Server Fixes CD from your WebSphere Commerce package provided with WebSphere Commerce into the CD-ROM drive of the machine where you have your Web server installed.
4. From the WebSphere Application Server fixes CD, copy the `updateInstaller` directory to a temporary location on the machine.

   If you plan to apply multiple fixes, you only need to perform this step once.
5. Start a command prompt session and do the following:
   - Change directories to the updateInstaller directory on the hard disk.
   - Issue the following commands:

     *WAS_installdir*`/bin/setupCmdLine`
     `updateWizard`

     This starts the update installation wizard.
6. Depending on the edition of WebSphere Application Server you are using, select one of the following when you are prompted to select the product to update:

   **WebSphere Application Server Base**
   **IBM WebSphere Application Server v5.1.0**

   **WebSphere Application Server Network Deployment**
   **IBM WebSphere Network Deployment v5.1.0**

   If you do not see either of these product to update, you are at the wrong version of the product to apply WebSphere Application Server Version 5.1 Fix Pack 1.

   Click **Next**.
7. Select **Install fix packs** and click **Next**.
8. Depending on the edition of WebSphere Application Server you are using, enter one of the following paths in the **Fix pack directory** field:

   **WebSphere Application Server Base**
   *CD-ROM drive*`:\BASE\fixpack`

   **WebSphere Application Server Network Deployment**
   *CD-ROM drive*`:\ND\fixpack`

   Click **Next**.

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9. Depending on the edition of WebSphere Application Server you are using, ensure that one of the following fix packs is selected and click **Next**:

   **WebSphere Application Server Base**
   was51_fp1_win

   **WebSphere Application Server Network Deployment**
   was51_nd_fp1_win
10. Continue through the update installation wizard until the installation starts.
11. When the installation has completed, do one of the following:

    If you have more fixes to install:
    Click **Run Wizard Again**.

    If you have no more fixes to install:
    Click **Finish**.

## Applying WebSphere Application Server Version 5.1.1 Cumulative Fix 3

The instructions in this section only cover the installation of WebSphere Application Server Version 5.1.1 Cumulative Fix 3 using the update installation wizard. If you want to install this fix silently or want more information about WebSphere Application Server Version 5.1.1 Cumulative Fix 3, refer to the instructions available at the following URL:

`http://www.ibm.com/support/docview.wss?uid=swg24008771`

Apply WebSphere Application Server Version 5.1.1 Cumulative Fix 3 as follows:

1. If WebSphere Application Server is installed on the machine, ensure that all application servers are stopped.
2. If there is Web server installed on the machine, ensure that the Web server is stopped.
3. Iff the update installation wizard is not running from the installation of a previous fix, do the following:
   a. If necessary, insert the WebSphere Application Server Fixes CD from your WebSphere Commerce package provided with WebSphere Commerce into the CD-ROM drive of the machine.
   b. If necessary, copy the `updateInstaller` directory from the WebSphere Application Server Fixes CD to a temporary location on the Web server machine.

      If you plan to apply multiple fixes, you only need to perform this step once.
   c. Start a command prompt session and do the following:
      - Change directories to the updateInstaller directory on the hard disk.
      - Issue the following commands:

        ```
        WAS_installdir/bin/setupCmdLine
        updateWizard
        ```

        This starts the update installation wizard.
   d. Depending on the edition of WebSphere Application Server you are using, select one of the following when you are prompted to select the product to update:

      **WebSphere Application Server Base**
      **IBM WebSphere Application Server v5.1.1**

      **WebSphere Application Server Network Deployment**
      **IBM WebSphere Network Deployment v5.1.1**

If you do not see either of these products to update, you are at the wrong version of the product to apply WebSphere Application Server Version 5.1 Fix Pack 1.

Click **Next**.

4. Select **Install fix packs** and click **Next**.
5. Depending on the edition of WebSphere Application Server you are using, enter one of the following paths in the **Fix pack directory** field:

   **WebSphere Application Server Base**
   *CD-ROM drive*:\BASE\fixpack

   **WebSphere Application Server Network Deployment**
   *CD-ROM drive*:\ND\fixpack

   Click **Next**.
6. Depending on the edition of WebSphere Application Server you are using, ensure that one of the following cumulative fixes is selected and click **Next**

   **WebSphere Application Server Base**
   was511_cf3_win

   **WebSphere Application Server Network Deployment**
   was511_nd_cf3_win
7. Continue through the update installation wizard until the installation starts.
8. When the installation has completed, do one of the following:

   If you have more fixes to install:
   Click **Run Wizard Again**.

   If you have no more fixes to install:
   Click **Finish**.

## Applying WebSphere Application Server interim fixes

The instructions in this section only cover the installation of WebSphere Application Server interim fixes using the update installation wizard. If you want to install interim fixes silently, refer to the instructions available at the following URL:

http://www.ibm.com/support/docview.wss?uid=swg24001908

Apply WebSphere Application Server interim fixes as follows:

1. If WebSphere Application Server is installed on the machine, ensure that all application servers are stopped.
2. If there is Web server installed on the machine, ensure that the Web server is stopped.
3. If the update installation wizard is not running from the installation of a previous fix:
   a. If necessary, insert the WebSphere Application Server Fixes CD from your WebSphere Commerce package provided with WebSphere Commerce into the CD-ROM drive of the machine.
   b. If necessary, copy the updateInstaller directory from the WebSphere Application Server Fixes CD to a temporary location on the machine.

      If you plan to apply multiple fixes, you only need to perform this step once.
   c. Start a command prompt session and do the following:
      - Change directories to the updateInstaller directory on the hard disk.

- Issue the following commands:

  ```
  WAS_installdir/bin/setupCmdLine
  updateWizard
  ```

  This starts the update installation wizard.

d. Depending on the edition of WebSphere Application Server you are using, select one of the following when you are prompted to select the product to update:

   **WebSphere Application Server Base**
   **IBM WebSphere Application Server v5.1.1.3**

   **WebSphere Application Server Network Deployment**
   **IBM WebSphere Network Deployment v5.1.1.3**

   If you do not see either of these products to update, you are at the wrong version of the product to apply WebSphere Application Server Version 5.1.1.3 interim fixes.

   Click **Next**.

4. Select **Install fixes** and click **Next**.
5. Depending on the edition of WebSphere Application Server you are using, enter one of the following paths in the **Fix directory** field:

   **WebSphere Application Server Base**
   *CD-ROM drive*:\BASE\fixes

   **WebSphere Application Server Network Deployment**
   *CD-ROM drive*:\ND\fixes

   Click **Next**.
6. Select the fix you want to install and click **Next**.

   Ensure that you install the following fixes:

   - PQ99045
   - PK05011
   - PK02063
7. Continue through the update installation wizard until the installation starts.
8. When the installation has completed, do one of the following:

   If you have more fixes to install:
   Click **Run Wizard Again**.

   If you have no more fixes to install:
   Click **Finish**.

# 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:

| | | |
|---|---|---|
| Business | WebSphere Commerce in a clustered environment | *WAS_ND_installdir*/config/cells/plugin-cfg.xml |
| Professional | WebSphere Commerce in a non- clustered environment | *WAS_installdir*/config/cells/plugin-cfg.xml |
| Express | *WAS_installdir*/config/cells/plugin-cfg.xml | |

   Default values for *WAS_installdir* and *WAS_ND_installdir* are listed in "Path variables used in this book" on page v.

   Overwrite any existing `plugin-cfg.xml` file on the Web server node.

   **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.

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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."

## 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 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 used in this book" on page v.
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 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 CloneSeparatorChange="false" LoadBalance="Round Robin"
   Name="instance_name_Commerce_Payments_Server_short_host_name_Cluster"
   PostSizeLimit="10000000" RemoveSpecialHeaders="true" RetryInterval="60">
    <Server ConnectTimeout="0" ExtendedHandshake="false" MaxConnections="0"
  Name="short_host_name_instance_name_Commerce_Payments_Server"
  WaitForContinue="false">
        <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_Commerce_Payments_Server_short_host_name_Cluster_URIs">
 <Uri AffinityCookie="JSESSIONID" AffinityURLIdentifier="jsessionid" Name="/webapp/SampleCheckout/*"/>
 <Uri AffinityCookie="JSESSIONID" AffinityURLIdentifier="jsessionid" Name="/webapp/SampleCheckoutservlet/*"/>
 <Uri AffinityCookie="JSESSIONID" AffinityURLIdentifier="jsessionid" Name="/webapp/PaymentManager/*"/>
 <Uri AffinityCookie="JSESSIONID" AffinityURLIdentifier="jsessionid" Name="/webapp/PaymentManagerservlet/*"/>
</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 node.

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 used in this book" on page v.

*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.

**Important**
Remove any JSP and JAR files from the WC_ *instance_name*.ear directory (and subdirectories) on the Web server. Only static-content files should be in the WC_*instance_name*.ear directory on the Web server.

# 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 the 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, you can change the Configuration Manager password as follows:

1. Start a command promptQShell session.
2. Issue the following commands:

   ```
   cd  WC_installdir/bin
   wcs_encrypt.sh new_password
   ```

   where *new_password* is new password for the Configuration Manager. An encrypted version of the new password will be generated by running the command as above.

   Two encrypted versions of the new password will be generated by running the command as above:

   - ASCII encrypted string
   - HEX encrypted string

   The ASCII encrypted string will be required for the next step.
3. Open the `PwdMgr.xml` file found in the *WC_userdir*`/instances` directory.
4. Modify the LoginPassword field, with the ASCII encrypted password generated in step 2.
5. Save your changes.

## 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.

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6. In the **New password confirmation** field, re-type the new logon 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.

## Unlocking the Site Administrator ID

If the Site Administrator ID is locked due to too many failed login attempts or the Site Administrator account was disabled for other reasons, you can unlock the Site Administrator ID by doing the following:

1. Confirm that the Site Administrator ID is locked by issuing the following commands, depending on the database management system being used for WebSphere Commerce:

DB2
```
db2 connect to db_name user user_name using password
db2 select STATUS from USERREG where LOGONID='site_admin_ID'
```

Oracle
```
sqlplus wc_user_ID/wc_password@wc_SID
select STATUS from USERREG where LOGONID='site_admin_ID';
```

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.

*site_admin_ID*
The WebSphere Commerce Site Administrator 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.

If these commands return a status of `0`, the Site Administrator ID has been disabled.

2. To re-enable the Site Administrator ID, issue the following commands, depending on the database management system being used for WebSphere Commerce:

DB2
```
db2 connect to db_name user user_name using password
db2 update USERREG set status=1 where LOGONID='site_admin_ID'
```

Oracle
```
sqlplus wc_user_ID/wc_password@wc_SID
update USERREG set status=1 where LOGONID='site_admin_ID';
```

For users other than the Site Administrator, use the Organization Administration console to re-enable users. For information on how to re-enable users in the Organization Administration console, refer to the WebSphere Commerce Information Center.

## 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 following commands:

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.

# Part 11. Appendixes

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# Appendix A. Troubleshooting

This sections discusses some common problems encountered when using the WebSphere Commerce components and tools and how to correct them. Additional troubleshooting information is provided in Appendix B, “Known problems and limitations,” on page 205

You should go through the checklists in the following sections before contacting your IBM support representative.

## Troubleshooting installation and configuration problems

The following sections discuss some common errors encountering when installing WebSphere Commerce and how to workaround them or correct them.

### WebSphere Application Server silent installation fails

If you receive a message that indicates the WebSphere Application Server silent installation has failed, your Windows user rights for the user ID under which you are preforming the installation have not been set correctly.

Ensure that you have logged off and logged back in again after setting the required user rights to ensure that the require user rights are active.

### WebSphere Commerce instance creation fails when using Oracle9i Database

If the database name you entered when creating a WebSphere Commerce instance does not match the name of the database you created in Oracle for the WebSphere Commerce instance to use, WebSphere Commerce instance creation will fail.

To check the name of the database the WebSphere Commerce instance uses, check the Database panel for your WebSphere Commerce instance in Configuration Manager.

Refer to “Modifying a WebSphere Commerce or WebSphere Commerce Payments instance” on page 168 for information on how to access the configuration for an existing WebSphere Commerce instance.

If the name of the database for the WebSphere Commerce instance does not match the name of the database you created in Oracle for the WebSphere Commerce instance to use, you must delete the WebSphere Commerce instance and recreate it as follows:

1. Delete the WebSphere Commerce instance according to the instructions in “Deleting a WebSphere Commerce instance” on page 168.

   You may not be able to perform all steps in this section because your instance creation was unsuccessful. Follow as many of the steps as possible.
2. Recreate the WebSphere Commerce instance according to the instructions in “Creating a WebSphere Commerce instance” on page 111.

   Ensure that you use the correct database name. You can check the database names in the following Oracle file:

   *drive*:\oracle\admin\orcl\pfile\init.ora.*timestamp*

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Searching for the string db_name under Database Identification. Ensure that you do not make any changes to this file — only view the contents of it.

## Troubleshooting WebSphere Commerce

If you are having problems accessing the WebSphere Commerce tools, check the following:

__ • If you have not rebooted the machine since performing a quick installation, reboot the machine.

Some path variables required by WebSphere Commerce may not be set correctly until the machine is rebooted.

__ • If you have started WebSphere Commerce from the Windows Services panel, ensure that you have waited a few moments after the Services panel indicates that WebSphere Commerce is started before attempting to access WebSphere Commerce in any way.

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 files to ensure that WebSphere Commerce is started:

*WAS_installdir*/logs/WC_*instance_name*/startServer.log
*WAS_installdir*/logs/WC_*instance_name*/SystemOut.log

where the variables are defined as follows:

*WAS_installdir*
Default values for *WAS_installdir* are listed in "Path variables used in this book" on page v.

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

If the log files indicate that WebSphere Commerce is started, restart your Web server and then attempt to access WebSphere Commerce again.

__ • Ensure that you have stopped and restarted the Web server after creating a WebSphere Commerce instance.

__ • Ensure that you can access secure (HTTPS) URLs.

If you receive an error when accessing https://*hostname*, where *hostname* is the fully qualified host name of the Web server used by WebSphere Commerce and WebSphere Commerce Payments, your SSL certificate may not be installed on your Web server or the certificate may have expired.

Refer to your Web server documentation for instructions on installing or updating the SSL certificate.

__ • Ensure that WebSphere Commerce is started.

Refer to the WebSphere Commerce Information Center for information on how to ensure that WebSphere Commerce is started.

__ • If you are using Microsoft IIS as your Web server, ensure that the authentication methods are set as described in "Installing and configuring Microsoft IIS" on page 67.

If the authentication methods are set incorrectly, WebSphere Commerce cannot authenticate the ID when logging on to WebSphere Commerce.

__ • If you are using a remote Web server, ensure that the full path of the WebSphere Commerce enterprise archive (EAR) is *exactly* the same on both the Web server and WebSphere Commerce nodes.

This includes the drive letter of the path.

If they are not the same, do the following:

1. Do not remove the existing path of the WebSphere Commerce EAR on the Web server node.
2. On the Web server, create each directory required to reproduce the path of the WebSphere Commerce EAR as it exists on the WebSphere Commerce node.
3. Copy the WebSphere Commerce EAR from the WebSphere Commerce node to the new location on the Web server node.

> **Important**
> Remove any JSP and JAR files from the WC_ *instance_name*.ear directory (and subdirectories) on the Web server. Only static-content files should be in the WC_*instance_name*.ear directory on the Web server.

4. If you are using Microsoft IIS as the remote Web server, start a command prompt session, switch to the directory into which the `IISAddAliasInstance.js` file was copied, then issue the following command:

   ```
   cscript IISAddAliasInstance.js
   ```

   This command will add all the necessary aliases to the Microsoft IIS Web server configuration for WebSphere Commerce and WebSphere Commerce Payments.
5. Stop and restart the Web server.

__ • If you are using Sun ONE Web server as your Web server, ensure that all required virtual servers have been created and all required fixes have been applied as documented in "Installing and configuring Sun ONE Web Server 6.0.5" on page 69.

## Troubleshooting WebSphere Commerce Payments

If you are having problems accessing WebSphere Commerce Payments, check the following:

__ • Ensure that you have stopped and restarted the Web server after creating a WebSphere Commerce Payments instance.

__ • Ensure that you can access secure (HTTPS) URLs.

If you receive an error when accessing https://*hostname*, where *hostname* is the fully qualified host name of the Web server used by WebSphere Commerce and WebSphere Commerce Payments, your SSL certificate may not be installed on your Web server or the certificate may have expired.

Refer to your Web server documentation for instructions on installing or updating the SSL certificate.

__ • If you are using IBM HTTP Server, ensure that the `Listen 443` line in the `IBM WebSphere Commerce (Do not edit this section)` section of the `httpd.conf` file in uncommented.

__ • Ensure that WebSphere Commerce Payments is started.

Refer to the WebSphere Commerce Information Center for information on how to ensure that WebSphere Commerce Payments is started.

__ • Ensure that WebSphere Commerce Payments knows the Web server that WebSphere Commerce is using by using Configuration Manager.

Refer to "Modifying a WebSphere Commerce or WebSphere Commerce Payments instance" on page 168 for information on how to access the configuration for an existing WebSphere Commerce Payments instance.

Check that the Web server host name is shown on the WCSRealm panel of the WebSphere Commerce Payments instance matches that on the Web Server panel for the WebSphere Commerce instance.

__ • If you are using Microsoft IIS as your Web server, ensure that the authentication methods are set as described in "Installing and configuring Microsoft IIS" on page 67.

If the authentication methods are set incorrectly, WebSphere Commerce Payments cannot authenticate the ID when logging on to WebSphere Commerce Payments.

__ • Ensure that WebSphere Commerce and WebSphere Commerce Payments are using the same Site Administrator ID.

Check the Site Administrator ID defined in the configuration information for WebSphere Commerce and WebSphere Commerce Payments matches.

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

*WC_installdir*/instances/*instance_name*/xml/*instance_name*.xml

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

*WC_installdir*/instances/*payments_instance_name*/xml/*payments_instance_name*.xml

where default values for *WC_installdir* are listed in "Path variables used in this book" on page v, *instance_name* is the name of WebSphere Commerce instance and *payments_instance_name* is the name of WebSphere Commerce Payments instance.

If the Site Administrator IDs in the configuration files do not match, you must do the following:

1. Create a new user in the WebSphere Commerce Organization Administration Console with the same ID as the Site Administrator ID for the WebSphere Commerce Payments instance.

   This user should have the following properties:

| Property | Value |
|---|---|
| Account policy | Administrators |
| Parent organization | Root Organization |
| Member groups | UserRegistrationApprovalGroup — Root Organization |
| Roles | Root Organization — Site Administrator |

   Refer to the WebSphere Commerce Information Center for information on using the WebSphere Commerce Organization Administration Console.
2. From the WebSphere Commerce Payments console, assign the Site Administrator ID for the WebSphere Commerce instance the Payments Administrator role

   Refer to the WebSphere Commerce Information Center for information on using the WebSphere Commerce Payments console.

The result of this that you will have two Site Administrator IDs — the Site Administrator ID originally defined for the WebSphere Commerce instance and the Site Administrator ID originally defined for the WebSphere Commerce Payments instance.

__ • Oracle Ensure that the WebSphere Commerce Payments database name is correct. This name should match the database that you created for WebSphere Commerce Payments to use.

Refer to "Modifying a WebSphere Commerce or WebSphere Commerce Payments instance" on page 168 for information on how to access the configuration for an existing WebSphere Commerce Payments instance.

If the WebSphere Commerce Payments database name is incorrect, you must delete the WebSphere Commerce Payments instance and recreate it:

1. Delete the WebSphere Commerce Payments application server, enterprise application, and virtual hosts as follows:
   a. Stop WebSphere Commerce according to the instructions in "Starting or stopping a WebSphere Commerce instance" on page 165.
   b. Start the WebSphere Application Server Administrative Console according to the instructions in "Starting the WebSphere Application Server Administrative Console" on page 179.
   c. Expand **Servers** and click **Application Servers**.
   d. Select *instance_name*_**Commerce_Payments_Server** and click **Delete**, where *instance_name* is the name of the WebSphere Commerce Payments instance.

      If you receive a prompt that says "could not contact process to shut down server. Make sure that server is shut down before deleting it", click **OK**.
   e. Expand **Applications** and click **Enterprise Applications**.
   f. Select *instance_name*_**Commerce_Payments_App** and click **Uninstall**, where *instance_name* is the name of the WebSphere Commerce Payments instance.
   g. Expand **Environment** and click **Virtual Hosts**.
   h. Select **VH_PYM**_*instance_name* and click **Delete**, where *instance_name* is the name of the WebSphere Commerce Payments instance.
   i. Click **Save** in the Administrative Console task bar.
   j. On the Save page, click **Save**.
   k. Regenerate the Web server plugin according to the instructions in "Regenerating the WebSphere Application Server Web server plug-in configuration file" on page 180.
   l. Exit the WebSphere Application Server Administrative Console.
2. Follow steps 3 on page 172, 4 on page 173, and 5 on page 174 in "Deleting a WebSphere Commerce Payments instance" on page 172.
3. Recreate the WebSphere Commerce Payments instance by following the instructions in "Creating a WebSphere Commerce Payments instance" on page 113.

   When recreating the WebSphere Commerce Payments instance ensure that you specify the name of the Oracle database you created for WebSphere Commerce Payments to use.

# Appendix B. 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 the WebSphere Commerce Information Center.

## Installation and uninstallation 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

### Modifying a WebSphere Commerce or WebSphere Commerce Payments instance

If you use IBM HTTP Server or Sun ONE Web server, WebSphere Commerce modifies the Web server configuration file whenever you do any of the following:

- Create a WebSphere Commerce instance.
- Create a WebSphere Commerce Payments instance.
- Update information in the Web Server panel in Configuration Manager for an existing instance.

These changes are marked by the following text:

```
IBM WebSphere Commerce (Do not edit this section)
```

or

```
IBM WebSphere Payments (Do not edit this section)
```

Customized changes within these sections are not supported by WebSphere Commerce as any changes made within these sections may be overwritten at any time by WebSphere Commerce configuration tools such as Configuration Manager.

### 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.

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# 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/config_server
3. Start the Configuration Manager client by selecting one of the following, depending on the version of Windows you are using:

| | |
|---|---|
| 2000 | **Start > Programs > IBM WebSphere > Commerce Server v5.7 > Configuration** |
| 2003 | **Start > All Programs > IBM WebSphere > Commerce Server v57 > 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 | *WC_installdir*/schema/wcs.schema.ws_ml_db2.input<br>*WC_installdir*/schema/wcs.schema2.ws_ml_db2.input |
| Oracle | *WC_installdir*/schema/wcs.schema.ws_ml_oracle.input<br>*WC_installdir*/schema/wcs.schema2.ws_ml_oracle.input |

   Default values for *WC_installdir* are listed in "Path variables used in this book" on page v.
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" on page 207.
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 6, "Creating a WebSphere Commerce and a WebSphere Commerce Payments instance," on page 105.

### 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 files to ensure that WebSphere Commerce is started:

*WAS_installdir*/logs/WC_*instance_name*/startServer.log
*WAS_installdir*/logs/WC_*instance_name*/SystemOut.log

where the variables are defined as follows:

*WAS_installdir*
: Default values for *WAS_installdir* are listed in "Path variables used in this book" on page v.

*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 used in this book" on page v.
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 used in this book" on page v.

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 "WebSphere Commerce tasks" on page 165.

## 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 is 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 used in this book" on page v.
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 107.
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 "Before you create or modify an instance with Configuration

Manager" on page 107 and not through the WebSphere Application Server Administration Console. This ensures that all properties and files are updated with the same information.

# Appendix C. Capacity planning for WebSphere Commerce Implementations

This section provides guidelines on estimating the hardware required for WebSphere Commerce implementations. Considerations for disk usage and memory are discussed for each of the WebSphere Commerce tiers:

- "Web server tier"
- "Database server tier" on page 212
- "Application server tier" on page 218 (WebSphere Commerce tier)

This section provides information for selected software packages for each tier. All software supported by WebSphere Commerce is not covered by this section.

**Important**

The information in this section is based on configurations tested by IBM. Because not all configurations have been tested, information of your specific configuration may not be available.

For capacity planning assistance for your specific configuration, contact your IBM representative.

## Web server tier

The section provides guidelines for estimating disk usage and memory size for the Web server tier in WebSphere Commerce.

### Estimating disk usage for the Web server tier

Disk usage on the web server is affected by the following:

- Software installation footprint
- Static images used for your site
- Logging of web server requests and any other maintenance activity

  IBM suggests reserving approximately 2 GB of disk space for this.

The following table lists the approximate footprint size for selected Web server software. You will need to fill in the expected size for static images and total the appropriate column.

*Table 3. Disk usage on Web Server*

| Web server | Footprint® | Logging | Static images |
|---|---|---|---|
| 2000 IBM HTTP Server Version 1.3.28 | 25 MB | 2 GB | |

### Estimating memory size for the Web server tier

Memory requirements for Web Server depends on following factors:

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**Number of concurrent clients which can be processed by the Web server**
Increasing the number of clients would require additional memory to be allocated for processing the additional clients

**Caching**
When caching is online and memory driven, you will need additional memory for storing cached information.

Based on our capacity planning test runs, IBM recommends 1 GB memory per WebSphere Commerce instance to manage user requests and online caching.

Additional information on IBM HTTP Server memory requirements is available at the following URL:

`http://www.ibm.com/software/webservers/httpservers/sysreq`

# Database server tier

The section provides guidelines for estimating disk usage and memory size for the database server tier in WebSphere Commerce.

## Estimating disk usage for the database server tier

Factors affecting disk usage on the database server includes:

- Database software installation footprint
- Size of the WebSphere Commerce database
- Size of the WebSphere Commerce Payments database (assuming the same server is used for both databases)

You can calculate the approximate size of the WebSphere Commerce database by estimating the size of the factors that have the largest impact on the size of the database.

- The size of the catalog
- The number of registered users
- The number of orders

Disk usage calculations in the follow sections are based on the following configurations:

- DB2 Universal Database on Windows 2000

For help calculating database disk usage for configurations other than those listed here, contact your IBM representative.

### Disk sizing for the catalog

The following tables help estimate the size for database tables and indexes related to the catalog. The first table helps estimate the number of rows, the second table lists a few key tables, their minimum and maximum row lengths, followed by estimated row length. The number of rows estimated for an index is the same as the table for unique indexes and sixty percent of the base table row estimate for non-unique indexes. You can enter a different value for the estimated row lengths to better reflect your data. The estimated value is provided for an approximate sizing in the absence of any known data.

Complete the following table, based on estimates for your site:

| Key | Entity | Value for your site |
|---|---|---|
| A | Number of products | |
| B | Number of items per product | |
| C | Number of attributes per product | |
| D | Number of values per attribute | |
| E | Number of languages | |

Complete the catalog database size table as follows:

1. Fill in the **Estimated rows** column using the formula in the **Estimated rows calculation** column.
2. Fill in the **Estimated size** column by multiplying **Estimated rows** by value **Estimated row length**.
3. Sum the values in the **Estimated size** column to obtain disk size required for your catalog.

*Table 4. Catalog database size*

| Table name | Index name | Minimum row length | Maximum row length | Estimated row length | Estimated rows calculation | Estmated rows | Estimed size |
|---|---|---|---|---|---|---|---|
| ATTRIBUTE | | 101 | 1295 | 220 | A *C * E | | |
| | GENERATED | 12 | 12 | 12 | A *C * E | | |
| | I0000019 | 16 | 272 | 42 | A *C * E | | |
| | I0000298 | 11 | 77 | 18 | A *C * E * 0.6 | | |
| ATTRVALUE | | 387 | 1709 | 519 | A * C * D * E | | |
| | GENERATED | 12 | 12 | 12 | A * C * D * E | | |
| | I0000020 | 23 | 279 | 49 | A * C * D * E | | |
| | I0000021 | 269 | 289 | 289 | A * C * D * E | | |
| | 10000453 | 8 | 8 | 8 | A * C * D * E * 0.6 | | |
| | I194153 | 36 | 36 | 36 | A * C * D * E * 0.6 | | |
| CATENTDESC | | 528 | 2009532 | 201428 | (A + (A * B)) * E | | |
| | GENERATED | 12 | 12 | 12 | (A + (A * B)) * E | | |
| | I0000304 | 145 | 145 | 145 | (A + (A * B)) * E * 0.6 | | |
| CATENTREL | | 97 | 663 | 154 | A * B | | |
| | GENERATED | 48 | 48 | 48 | A * B | | |
| | 10000365 | 40 | 40 | 40 | A * B * 0.6 | | |
| | 10000517 | 8 | 8 | 8 | A * B * 0.6 | | |
| CATENTRY | | 169 | 1173 | 269 | A + (A * B) | | |
| | GENERATED | 8 | 8 | 8 | A + (A * B) | | |
| | I0000064 | 10 | 76 | 17 | A + (A * B) | | |
| | I0000065 | 12 | 12 | 12 | A + (A * B) | | |
| | I0000305 | 29 | 29 | 29 | A + (A * B) | | |
| | 10000375 | 9 | 9 | 9 | A + (A * B) | | |
| | 10000518 | 16 | 16 | 16 | A + (A * B) | | |

*Table 4. Catalog database size (continued)*

| Table name | Index name | Minimum row length | Maximum row length | Estimated row length | Estimated rows calculation | Estmated rows | Estimed size |
|---|---|---|---|---|---|---|---|
| | 10000519 | 8 | 8 | 8 | A + (A * B) | | |
| | I263103 | 24 | 24 | 24 | A + (A * B) | | |
| | I263121 | 9 | 9 | 9 | A + (A * B) | | |
| | I263122 | 9 | 9 | 9 | A + (A * B) | | |
| | | | | | | **TOTAL:** | |

## Disk sizing for user information

The following tables help estimate the size for database tables and indexes related to the number of users. The first table helps estimate the number of rows, the second table lists a few key tables, their minimum and maximum row lengths, followed by estimated row length. The number of rows estimated for an index is the same as the table for unique indexes and sixty percent of the base table row estimate for non-unique indexes. You can enter a different value for the estimated row lengths to better reflect your data. The estimated value is provided for an approximate sizing in the absence of any known data.

Complete the following table, based on estimates for your site:

| Key | Entity | Value for your site |
|---|---|---|
| A | Number of users | |
| B | Number of organization entities | |

Complete the user database size table as follows:

1. Fill in the **Estimated rows** column using the formula in the **Estimated rows calculation** column.
2. Fill in the **Estimated size** column by multiplying **Estimated row length** by value **Estimated rows**.
3. Sum the values in the **Estimated size** column to obtain disk size required for your user data.

*Table 5. User database size*

| Table Name | Index Name | Minimum row length | Maximum row length | Estimated row length | Estimated rows calculation | Estmated rows | Estimed size |
|---|---|---|---|---|---|---|---|
| ADDRBOOK | | 27 | 531 | 77 | A | | |
| | GENERATED | 8 | 8 | 8 | A | | |
| | I0000013 | 16 | 16 | 16 | A | | |
| | I0000014 | 8 | 8 | 8 | A * 0.6 | | |
| ADDRESS | | 219 | 3294 | 527 | A | | |
| | GENERATED | 8 | 8 | 8 | A | | |
| | I0000015 | 21 | 21 | 21 | A * 0.6 | | |
| | I0000016 | 25 | 25 | 25 | A * 0.6 | | |
| | I0000346 | 3 | 133 | 16 | A * 0.6 | | |
| BUSPROF | | 61 | 983 | 153 | A | | |

*Table 5. User database size (continued)*

| Table Name | Index Name | Minimum row length | Maximum row length | Estimated row length | Estimated rows calculation | Estmated rows | Estimed size |
|---|---|---|---|---|---|---|---|
| | GENERATED | 8 | 8 | 8 | A | | |
| | I0000324 | 3 | 133 | 16 | A * 0.6 | | |
| | 10000486 | 9 | 9 | 9 | A * 0.6 | | |
| | 10000487 | 9 | 9 | 9 | A * 0.6 | | |
| EMLUSRRCV | | 16 | 16 | 16 | A | | |
| | GENERATED | 12 | 12 | 12 | A | | |
| | 10000567 | 4 | 4 | 4 | A * 0.6 | | |
| MBRREL | | 20 | 20 | 20 | A | | |
| | GENERATED | 16 | 16 | 16 | A | | |
| | I0000328 | 12 | 12 | 12 | A * 0.6 | | |
| | I0000336 | 12 | 12 | 12 | A * 0.6 | | |
| MBRROLE | | 20 | 20 | 20 | A * 3 | | |
| | GENERATED | 20 | 20 | 20 | A * 3 | | |
| | I0000275 | 16 | 16 | 16 | (A * 3) * 0.6 | | |
| | I0000329 | 12 | 12 | 12 | (A * 3) * 0.6 | | |
| | 10000617 | 4 | 4 | 4 | (A * 3) * 0.6 | | |
| MEMBER | | 16 | 16 | 16 | A + B | | |
| | GENERATED | 8 | 8 | 8 | A + B | | |
| | I1274130 | 11 | 11 | 11 | (A + B) * 0.6 | | |
| ORGENTITY | | 88 | 3788 | 458 | B | | |
| | GENERATED | 8 | 8 | 8 | B | | |
| | 10000677 | 9 | 9 | 9 | B * .6 | | |
| USERS | | 110 | 1864 | 285 | A | | |
| | GENERATED | 8 | 8 | 8 | A | | |
| | I348118 | 15 | 15 | 15 | A * 0.6 | | |
| USERDEMO | | 77 | 769 | 146 | A | | |
| | GENERATED | 8 | 8 | 8 | A | | |
| USERPROF | | 62 | 6192 | 675 | A | | |
| | GENERATED | 8 | 8 | 8 | A | | |
| USERREG | | 206 | 1214 | 307 | A | | |
| | GENERATED | 8 | 8 | 8 | A | | |
| | I0000260 | 2 | 258 | 28 | A | | |
| | I0000330 | 5 | 5 | 5 | A * 0.6 | | |
| | I716117 | 10 | 266 | 36 | A * 0.6 | | |
| | | | | | | **TOTAL:** | |

## Disk sizing for order history

The following tables help estimate the size for databae tables and indexes related to order history. The first table helps estimate the number of rows, the second table

lists a few key tables, their minimum and maximum row lengths, followed by estimated row length. The number of rows estimated for an index is the same as the table for unique indexes and sixty percent of the base table row estimate for non-unique indexes. You can enter a different value for the estimated row lengths to better reflect your data. The estimated value is provided for an approximate sizing in the absence of any known data.

Complete the following table, based on estimates for your site:

| Key | Entity | Value for your site |
|---|---|---|
| A | Number of orders | |
| B | Number of items per order | |

Complete the order database size table as follows:

1. Fill in the **Estimated rows** column using the formula in the **Estimated rows calculation** column.
2. Fill in the **Estimated size** column by multiplying **Estimated rows** by value **Estimated rows**.
3. Sum the values in the **Estimated size** column to obtain disk size required for your order data.

*Table 6. Order database size*

| Table Name | Index Name | Minimum row length | Maximum row length | Estimated row length | Estimated rows calculation | Estimated rows | Estimated size |
|---|---|---|---|---|---|---|---|
| ORDERITEMS | | 413 | 1923 | 564 | A * B | | |
| | GENERATED | 8 | 8 | 8 | A * B | | |
| | I0000173 | 34 | 34 | 34 | (A * B) * 0.6 | | |
| | I0000360 | 21 | 21 | 21 | (A * B) * 0.6 | | |
| | I172138 | 22 | 22 | 22 | (A * B) * 0.6 | | |
| | 10000369 | 4 | 4 | 4 | (A * B) * 0.6 | | |
| | 10000639 | 9 | 9 | 9 | (A * B) * 0.6 | | |
| | 10000640 | 9 | 9 | 9 | (A * B) * 0.6 | | |
| | 10000641 | 9 | 9 | 9 | (A * B) * 0.6 | | |
| | 10000642 | 9 | 9 | 9 | (A * B) * 0.6 | | |
| | 10000643 | 9 | 9 | 9 | (A * B) * 0.6 | | |
| | 10000644 | 9 | 9 | 9 | (A * B) * 0.6 | | |
| | 10000645 | 9 | 9 | 9 | (A * B) * 0.6 | | |
| | 10000646 | 9 | 9 | 9 | (A * B) * 0.6 | | |
| | 10000647 | 9 | 9 | 9 | (A * B) * 0.6 | | |
| | 10000648 | 9 | 9 | 9 | (A * B) * 0.6 | | |
| | 10000649 | 5 | 5 | 5 | (A * B) * 0.6 | | |
| ORDERS | | 230 | 986 | 306 | A | | |
| | GENERATED | 8 | 8 | 8 | A | | |
| | I0000176 | 14 | 14 | 14 | A * 0.6 | | |
| | 10000652 | 9 | 9 | 9 | A * 0.6 | | |

*Table 6. Order database size (continued)*

| Table Name | Index Name | Minimum row length | Maximum row length | Estimated row length | Estimated rows calculation | Estimated rows | Estimated size |
|---|---|---|---|---|---|---|---|
| | 10000653 | 9 | 9 | 9 | A * 0.6 | | |
| | 10000654 | 4 | 4 | 4 | A * 0.6 | | |
| | I173124 | 11 | 11 | 11 | A * 0.6 | | |
| ORDPAYINFO | | 84 | 336 | 109 | A * 4 | | |
| | GENERATED | 8 | 8 | 8 | A * 4 | | |
| | I0000179 | 8 | 8 | 8 | (A * 4) * 0.6 | | |
| ORDPAYMTHD | | 478 | 1001486 | 100579 | A | | |
| | GENERATED | 85 | 85 | 85 | A | | |
| | 10000664 | 9 | 9 | 9 | A * 0.6 | | |
| | 10000665 | 9 | 9 | 9 | A * 0.6 | | |
| | 10000666 | 9 | 9 | 9 | A * 0.6 | | |
| | 10000667 | 9 | 9 | 9 | A * 0.6 | | |
| | 10000668 | 9 | 9 | 9 | A * 0.6 | | |
| | 10000669 | 9 | 9 | 9 | A * 0.6 | | |
| | 10000670 | 9 | 9 | 9 | A * 0.6 | | |
| ORDTAX | | 34 | 34 | 34 | A * 2 | | |
| | GENERATED | 12 | 12 | 12 | A * 2 | | |
| | 10000676 | 4 | 4 | 4 | A * 2 * 0.6 | | |
| SUBORDERS | | 149 | 401 | 174 | A | | |
| | GENERATED | 8 | 8 | 8 | A | | |
| | I0000242 | 12 | 12 | 12 | A * 0.6 | | |
| | I0000243 | 8 | 8 | 8 | A * 0.6 | | |
| | 10000801 | 9 | 9 | 9 | A * 0.6 | | |
| | | | | | | **TOTAL:** | |

## Total disk sizing

Use the following table to calculate your total disk size requirements:

*Table 7. Total disk sizing*

| Disk size factor | Size |
|---|---|
| Footprint | 400® MB |
| Bootstrap data | 60 MB |
| Catalog data (from Table 4 on page 213) | |
| User data (from Table 5 on page 214) | |
| Order data (from Table 6 on page 216 | |
| **Total:** | |

## Estimating memory size for the database server tier

Memory estimation is provided for 32-bit implementations of single partition DB2 Universal Database distributed databases only.

DB2 Refer to your DB2 Universal Database documentation for memory estimation of other DB2 Universal Database implementations.

Oracle Refer to your Oracle9i Database documentation for memory estimation for Oracle9i Database implementations.

Memory consumption at the database server is affected by two main components. The amount of memory allocated to the database, and the amount of memory consumed by connections.

For a quick estimation, you can estimate the amount of memory allocated to the database as the maximum amount possible for 32-bit single partition implementations. If your database disk size is smaller than this maximum, then use the database disk size as the estimate.

*Table 8. Maximum memory allocation by platform, DB2 Universal Database 32-bit single partition*

| Platform | Maximum Memory |
|---|---|
| Windows 2000 | 2 GB |

In addition to the memory allocated to the database, each database connection will also require some memory. To derive a quick estimation, you can use the rule of thumb that an active connection takes up about 25 MB of memory and an idle connection takes about 15 MB of memory. This will give you an upper and lower bound for memory, based on the number of database connections you configure.

# Application server tier

The section provides guidelines for estimating disk usage and memory size for the Application server tier in WebSphere Commerce. The application server tier is where the WebSphere Commerce Server application runs.

## Estimating disk usage on the application server tier

Disk usage on the application server tier consists of:

- Software installation footprint for WebSphere Application Server and WebSphere Commerce
- Web assets developed for you, such as JSP files and corresponding compiled code. In the absence of any known data, estimate 0.5 GB.
- Logging of application server activity and any other maintenance fixes. Reserve about 5 GB for this.

The following table lists the approximate footprint size for selected software on the application server tier:

*Table 9. Disk usage on Web Server*

| Applications | Footprint | Logging | Web assets |
|---|---|---|---|
| 2000 • WebSphere Application Server Base Version 5.1.1.3<br>• WebSphere Commerce Version 5.7<br>• DB2 Universal Database Client | 1.5 MB | 5 GB | [0.5 GB] |

Replace the value in the **Web assets** column with the an estimate of the size of any web assets developed for you, such as JSP files and corresponding compiled code.

## Estimating memory size for the application server tier

An application server instance runs inside a Java Virtual Machine (JVM) and the amount of memory required per JVM is ideally established by iterative tuning. The memory size for the application server tier depends on the size of the WebSphere Commerce application, the size of the prepared statement cache for JDBC prepared statement caching and the extent to which WebSphere Application Server dynamic cache is being used. Nevertheless, for planning purposes, it can be safe to assume 1 GB of memory per JVM.

For information on tuning WebSphere Application Server, refer to the WebSphere Application Server information center at the following URL:

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

# Appendix D. 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 information center"
- "WebSphere Commerce technical library"
- "IBM Publications Center" on page 222
- "WebSphere Commerce support" on page 222

### WebSphere Commerce information center

The WebSphere Commerce information center is your primary source of information for customizing, administering, and reconfiguring WebSphere Commerce. The WebSphere Commerce information center is installed when you install WebSphere Commerce or WebSphere Commerce Payments.

To access the WebSphere Commerce information center, do the following:

1. If the WebSphere Commerce information center is not started, start the WebSphere Commerce information center.

   For instructions, refer to "Starting and stopping the WebSphere Commerce information center" on page 167.
2. Go to the following URL:

   `http://host_name:port/help/index.jsp`

   where *host_name* is the fully-qualified host name of the WebSphere Commerce machine and *port* is the port number you specified when starting the information center. If you did not specify a port number, or you started the information center from the Services panel, the information center will use port 8001 and you must use 8001 for the *port* parameter in the information center URL.

Updates to the information center will be available from the "WebSphere Commerce technical library."

You can also access the WebSphere Commerce information center on the World Wide Web at the following URL:

`http://publib.boulder.ibm.com/infocenter/wc57help/index.jsp`

### WebSphere Commerce technical library

The WebSphere Commerce technical library is available at the following URL:

| | |
|---|---|
| Business | `http://www.ibm.com/software/genservers/commerce/wcbe/library/lit-tech-general-en.html` |
| Professional | `http://www.ibm.com/software/genservers/commerce/wcpe/library/lit-tech-general-en.html` |

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Express http://www.ibm.com/software/genservers/commerce/express/library/lit-tech-general-en.html

A copy of this book, any updated versions of this book, and any other new and updated documentation will be available from the WebSphere Commerce technical library Web site.

### IBM Publications Center

WebSphere Commerce books, such as this one, are also available from the IBM Publication Center at the following URL:

http://www.elink.ibmlink.ibm.com/public/applications/publications/cgibin/pbi.cgi

### WebSphere Commerce support

WebSphere Commerce support provides additional information in the form of flashes (alerts) and technotes (FAQs). Check the WebSphere Commerce support Web site for the latest flashes and technotes before you install WebSphere Commerce or if you run into problems while running WebSphere Commerce.

The WebSphere Commerce support Web site is available at the following URL:

Business http://www.ibm.com/software/genservers/commerce/wcbe/support/

Professional http://www.ibm.com/software/genservers/commerce/wcpe/support/

Express http://www.ibm.com/software/genservers/commerce/express/support/

## WebSphere Commerce Payments information

WebSphere Commerce Payments information is available from the WebSphere Commerce information center. For instructions on accessing the WebSphere Commerce information center, refer to "WebSphere Commerce information center" on page 221.

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 library:

http://www.ibm.com/software/webservers/httpservers/library/

The documents in the IBM HTTP Server library are available in HTML format, PDF files, or both.

The IBM HTTP Server Version 1.3.28 information center is available at the following URL:

http://www.ibm.com/software/webservers/httpservers/doc/v1326/manual/ibm/

The IBM HTTP Server Version 2.0.42.2 information center is available at the following URL:

http://www.ibm.com/software/webservers/httpservers/doc/v20/manual/ibm/index.html

## WebSphere Application Server information

WebSphere Application Server information is available at the WebSphere Application Server library:

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

The WebSphere Application Server information center is available at the following URL:

http://publib.boulder.ibm.com/infocenter/ws51help/index.jsp

## DB2 Universal Database information

DB2 information is available on your system after you install DB2. To access the DB2 Information Center, do the following:

Select **Start > Programs > IBM DB2 > Information > Information Center**

Select **Start > All Programs > IBM DB2 > Information > Information Center**

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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