

IBM WebSphere Commerce Business Edition  
IBM WebSphere Commerce Professional Edition



# Installation Guide for UNIX systems

*Version 5.5*

**Note:**

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 165.

**First Edition, First Revision February 2004**

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

- IBM WebSphere Commerce Business Edition for AIX
- IBM WebSphere Commerce Business Edition for Solaris Operating Environment
- IBM WebSphere Commerce Professional Edition for AIX
- IBM WebSphere Commerce Professional Edition for Solaris Operating Environment

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

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

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## About this book

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### Document description

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

Installation instructions for the following UNIX operating systems are provided in this book:

- AIX®
- Solaris Operating Environment

Other UNIX operating systems are not supported by WebSphere Commerce.

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### Updates to this book

To learn about last-minute changes to the product, refer to the README file in the root directory of the WebSphere Commerce Disk 1 CD. In addition, a copy of this book, and any updated versions of this book, are available as PDF files from the WebSphere Commerce technical library Web site:

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

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

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

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

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

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### Conventions used in this book

This book uses the following highlighting conventions:

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



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







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**Important**

These sections highlight especially important information.

**Attention**

These sections highlight information intended to protect your data.

 Business	Indicates information specific to WebSphere Commerce Business Edition
 Professional	Indicates information specific to WebSphere Commerce Professional Edition.
 DB2	Indicates information specific to DB2 Universal Database™ or using DB2 Universal Database with WebSphere Commerce.
 Oracle	Indicates information specific to Oracle9i Database or using Oracle9i Database with WebSphere Commerce.
 AIX	Indicates information specific to programs running on AIX.
 Solaris	Indicates information specific to programs running on Solaris Operating Environment.

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## Terminology used in this book

This book uses the following terms:

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

**cluster**

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

**cluster member**

A single occurrence of WebSphere Application Server in a cluster.

**federate**

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

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

*WebSphere Commerce installation*

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

### *clustering*

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

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## Path variables

This guide uses the following variables to represent directory paths:

### *DB2\_installdir*

This is the installation directory for DB2 Universal Database. The following are the installation directories for DB2 Universal Database:


 /usr/opt/db2\_08\_01

 /opt/IBM/db2/V8.1

### *Oracle\_installdir*


This is the installation directory for Oracle9i Database. The following are the installation directories for Oracle9i Database:

 /oracle/u01/app/oracle/product/9.2.0.1.0

 /opt/oracle/u01/app/oracle/product/9.2.0.1.0

### *HTTPServer\_installdir*


This is the installation directory for IBM HTTP Server. The following are the installation directories for IBM HTTP Server:

 /usr/IBMHttpServer

 /opt/IBMHttpServer

### *SunONEweb\_installdir*

This is the installation directory for Sun ONE Web Server. The following are the installation directories for Sun ONE Web Server:

 WebSphere Commerce does not support Sun ONE Web Server on AIX.

 /opt/iplanet/servers

**Important:** Ensure that you install Sun ONE Web Server in its default location. Changing the installation location of Sun ONE Web Server will prevent the WebSphere Commerce installation wizard from recognizing that Sun ONE Web Server is installed, causing your installation of WebSphere Commerce to fail.

### *WAS\_installdir*


This is the installation directory for WebSphere Application Server. The following are the installation directories for WebSphere Application Server:

 /usr/WebSphere/AppServer

 /opt/WebSphere/AppServer

#### *WAS\_ND\_installdir*

This is the installation directory for WebSphere Application Server Network Deployment. The following are the installation directories for WebSphere Application Server Network Deployment:

 /usr/WebSphere/DeploymentManager

 /opt/WebSphere/DeploymentManager

#### *WC\_installdir*

This is the installation directory for WebSphere Commerce. The following are the installation directories for WebSphere Commerce:

 /usr/WebSphere/CommerceServer55



 /opt/WebSphere/CommerceServer55

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## 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:

- AIX or Solaris Operating Environment
- Basic operating system commands
- DB2 Universal Database or Oracle9i Database
-  IBM HTTP Server operation and maintenance
-  IBM HTTP Server or Sun ONE Web Server operation and maintenance
- Basic SQL commands
- The Internet

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

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

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

Refer to *WebSphere Commerce Programming Guide and Tutorials* for more information on customizing your store or mall. A copy of this book is included with both WebSphere Commerce and WebSphere Commerce Studio.

## 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. Getting ready to install WebSphere Commerce**



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## Chapter 1. Welcome to WebSphere Commerce

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


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

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

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### Products included with WebSphere Commerce

The following products are packaged with WebSphere Commerce:

- WebSphere Commerce:
  - WebSphere Commerce server, which includes:
    - LikeMinds client
    - Product Advisor
    - WebSphere Commerce Accelerator
    - WebSphere Commerce Administration Console
    - WebSphere Commerce Organization Administration Console
  - WebSphere Commerce Payments, which includes:
    - WebSphere Commerce Payments Cassette for VisaNet
    - WebSphere Commerce Payments Cassette for BankServACH
    - WebSphere Commerce Payments Cassette for Paymentech
    - WebSphere Commerce Payments CustomOffline Cassette
    - WebSphere Commerce Payments OfflineCard Cassette
  - Blaze Rules Server, version 4.5.5 and Blaze Innovator Runtime, Version 4.5.5
  - IBM WebSphere Commerce Analyzer Version 5.5
  - WebSphere Commerce Version 5.5 Recommendation Engine powered by LikeMinds
- IBM DB2 Universal Database Version 8.1.1 Enterprise Edition (DB2 Universal Database Version 8.1 Enterprise Edition with FixPak 1), which includes the following:
  - DB2 Universal Database Administration Clients
- IBM DB2<sup>®</sup> Text Extender 8.1
- IBM HTTP Server Version 1.3.26
- WebSphere Application Server Version 5.0
- IBM Directory Server Version 4.1
-  IBM Lotus<sup>®</sup> QuickPlace<sup>®</sup> Version 3.0
- IBM Lotus Sametime<sup>®</sup> Version 3.0

**Important**

All WebSphere Commerce components and the supporting software must run on the same operating system. The operating system must meet the requirements outlined in Chapter 2, “Preinstallation requirements,” on page 11.

WebSphere Commerce does not support a heterogeneous operating environment — all nodes in a multiple node topology must run the same version and level of operating system as documented in Chapter 2, “Preinstallation requirements,” on page 11.

## Alternative Web servers

Depending on the operating system, WebSphere Commerce may support Web servers other than IBM HTTP Server:

- ▶ **AIX** WebSphere Commerce only supports IBM HTTP Server.
- ▶ **Solaris** On Solaris Operating Environment, WebSphere Commerce supports Sun ONE Web Server, Enterprise Edition 6.0 as an alternative to IBM HTTP Server provided with WebSphere Commerce.

## Alternative databases

Although IBM DB2 Universal Database Version 8.1.1 Enterprise Edition is the database provided with WebSphere Commerce, you can use Oracle9i Database Release 2, Enterprise Edition or Standard Edition.

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## Components already installed

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

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

### IBM DB2 Universal Database Version 8.1.1

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

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

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

If you have IBM DB2 Universal Database Version 8.1.1 Enterprise Edition already installed, do the following:

1. Create the user IDs required by WebSphere Application Server as outlined in “Creating required WebSphere Application Server users and groups” on page 37. More information about these user IDs is provided in Chapter 9, “Quick reference to IDs required during installation,” on page 45.



You can use any user ID as the WebSphere Commerce non-root user ID except `mqm` or the database user ID. The non-root user ID is used to start any application server on the WebSphere Commerce and WebSphere Commerce Payments nodes. Starting the application servers as root is strongly discouraged as starting an application server as root changes the permissions of key WebSphere Commerce files, preventing WebSphere Commerce from functioning correctly.

For information about how to create user IDs and groups, refer to your operating system documentation.

Ensure that you set the passwords for this user ID, since it may be possible to create the user ID without a password. If this user ID does not have a password associated with it, WebSphere Commerce may not function correctly.

2. Add the DB2 Fenced user group to the list of groups associated with the WebSphere Commerce non-root user ID.
3. Add the DB2 Fenced user group to the list of groups associated with the DB2 Universal Database user ID.

For more information on the DB2 Fenced user group, refer to the DB2 Universal Database documentation.

4. Restart DB2 Universal Database.

## IBM HTTP Server Version 1.3.26

### Preparing Secure Sockets Layer protocol for testing

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

```
https://host_name
```

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

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

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

### IBM HTTP Server Version 1.3.26 and WebSphere Application Server Version 5.0

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

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

```
Alias /IBMWebAS/ WAS_installdir/web/  
Alias /WSsamples WAS_installdir/WSsamples/  
LoadModule ibm_app_server_http_module WAS_installdir/bin/  
mod_ibm_app_server_http.so
```

```
WebSpherePluginConfig WAS_installdir/config/cells/plugin-cfg.xml
```

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

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

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

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

---

## Supported Web browsers

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

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

- AOL 7 or above for Windows
- Microsoft Internet Explorer:
  - Version 5.5 or higher for Windows
  - Version 5 or higher for Macintosh
- Mozilla Version 1.0 or higher
- Netscape Version 6.0 or higher
- Netscape Navigator Version 4.6 or higher

---

## Port numbers used by WebSphere Commerce

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

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

**Important**

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

**Port Number****Used By**

- 21 FTP port. This port is required when creating a WebSphere Commerce or WebSphere Commerce Payments instance that uses a remote Web server.
- 80 IBM HTTP Server.
- 389 Lightweight Directory Access Protocol (LDAP) Directory Server.
- 443 IBM HTTP Server – secure port. This secure port requires SSL.
- 1099 WebSphere Commerce Configuration Manager server.
- 2809 WebSphere Application Server Bootstrap address.
- 5432 WebSphere Commerce Payments non-secure server.
- 5433 WebSphere Commerce Payments secure server. This secure port requires SSL.
- 5557 WebSphere Application Server Internal Java Messaging Service server.
- 5558 WebSphere Application Server Java Messaging Service server queued address.
- 5559 WebSphere Application Server Java Messaging Service direct address.
- 7873 WebSphere Application Server DRS client address.
- 8000 WebSphere Commerce Tools. This secure port requires SSL.
- 8002 WebSphere Commerce Administration Console. This secure port requires SSL.
- 8004 WebSphere Commerce Organization Administration Console. This secure port requires SSL.
- 8008 IBM HTTP Server Administration port.
- 8880 WebSphere Application Server SOAP Connector address.
- 9043 WebSphere Application Server Administration Console Secure Port. This secure port requires SSL.
- 9080 WebSphere Application Server HTTP Transport.
- 9090 WebSphere Application Server Administration Console Port.

**Note:**

On AIX, the AIX WebSM system management server listens on this port by default. If you suspect you have a port conflict issue this command:

```
netstat -an | grep 9090
```

If you get a match, another process is already listening on port 9090.

**Important:** Port 9090 **must** be available or WebSphere Commerce will not install on the system.

If you want the WebSM server and WebSphere Application Server to coexist, do the following:

1. Stop the WebSM server.
2. Remove or comment out the WebSM entry for port 9090 in the `/etc/services` file.
3. Complete the installation and configuration of WebSphere Commerce.
4. Change the HTTP transport port for the WebSphere Application Server Administrative Console. For more information, refer to the "Changing HTTP transport ports" topic in the WebSphere Application Server InfoCenter:

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

**Note:** If you change the HTTP transport port for the WebSphere Application Server Administrative Console, it is important that you remember what port is being used. Any WebSphere Commerce instructions that require you to access the WebSphere Application Server Administrative Console will refer to port 9090, which will no longer apply to your configuration.

Although not recommended, you can also disable the WebSM server. To disable the WebSM server, issue this command:

```
/usr/websm/bin/wmsserver -disable
```

The command permanently disables WebSM server startup.

For more information, refer to the AIX information in the "Platform-specific tips for installing and migrating" topic in the WebSphere Application Server InfoCenter:

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

- 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.

---

## Locales used by WebSphere Commerce

WebSphere Commerce only uses valid Java locales. Ensure that your systems have the appropriate locale installed for your language. Ensure that any locale-related environment variables are set to include the WebSphere Commerce-supported locale.

*Table 1. AIX locale codes supported by WebSphere Commerce*

Language	Locale Code	LC_ALL value
German	de_DE	de_DE
English	en_US	en_US
Spanish	es_ES	es_ES
French	fr_FR	fr_FR

Table 1. AIX locale codes supported by WebSphere Commerce (continued)

Language	Locale Code	LC_ALL value
Italian	it_IT	it_IT
Japanese	Ja_JP	Ja_JP
Korean	ko_KR	ko_KR
Brazilian Portuguese	pt_BR	pt_BR
Simplified Chinese	zh_CN	zh_CN
Traditional Chinese	zh_TW	zh_TW

Table 2. Solaris Operating Environment locale codes supported by WebSphere Commerce

Language	Locale Code	LC_ALL value
German	de_DE	de_DE.ISO8859-1
English	en_US	en_US.ISO8859-1
Spanish	es_ES	es_ES.ISO8859-1
French	fr_FR	fr_FR.ISO8859-1
Italian	it_IT	it_IT.ISO8859-1
Japanese	ja_JP	ja_JP.eucJP
Korean	ko_KR	ko_KR.EUC
Brazilian Portuguese	pt_BR	pt_BR.ISO8859-1
Simplified Chinese	zh_CN	zh_CN.GBK
Traditional Chinese	zh_TW	zh_TW.BIG5

To determine your locale, run the following command:

```
echo $LANG
```

If your locale is not supported, change your locale properties by running the following commands as root user:

```
LANG=xx_XX
export LANG
```

Where xx\_XX is your four letter locale code with the same capitalization as shown in the above table.



---

## Chapter 2. Preinstallation requirements

This chapter describes the steps you need to perform before you install WebSphere Commerce. To perform the steps described in this publication, you must have root user access.

Depending on your operating system, check the installation prerequisites according to the instructions in the following sections:

- “Prerequisite hardware and software for AIX”
- “Prerequisite hardware and software for Solaris Operating Environment” on page 13

---

### Prerequisite hardware and software for AIX

#### Prerequisite hardware for AIX

You require a dedicated machine from either the IBM @server pSeries or IBM RS/6000<sup>®</sup> family of machines such as the following:

- RS64: @server pSeries 620/660/680, RS/6000 F80/H80/M80
- Power3: @server pSeries 640, RS/6000 44P-170 or 44P-270
- Power4: Regatta

You must also meet the following hardware requirements

- A 375 MHz processor.
- A minimum of 1 GB of random access memory (RAM) per processor for the first WebSphere Commerce and WebSphere Commerce Payments instances.
- An additional 512 MB of RAM per additional set of WebSphere Commerce and WebSphere Commerce Payments instances.
- A minimum of 6 GB of free disk space, with the following recommended allocated file sizes:
  - /usr 4 GB (8388608 blocks with a block size of 512 bytes)
  - /tmp 1 GB (2097152 blocks with a block size of 512 bytes)
  - /home 1 GB (2097152 blocks with a block size of 512 bytes)
- A minimum of 1GB of paging space per processor.
- A CD-ROM drive.
- A graphics capable monitor.
- A local area network (LAN) adapter that supports the TCP/IP protocol.

#### Prerequisite software for AIX

- 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 have the following software installed to view the documentation available from the Installation Complete panel displayed when the installation wizard finishes:

##### **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>

### **Netscape Navigator Web browser**

The WebSphere Commerce launch pad requires the Netscape Navigator Web browser in order to use the documentation links in the Installation Complete panel.

The full path to the netscape executable file must be defined in your system's PATH environment variable so that Netscape Navigator can be launched by only issuing the netscape command. No path information should need to be part of the command to launch Netscape Navigator.

Netscape Navigator should be configured to launch Adobe Acrobat Reader so that URLs pointing to PDF files can be launched easily.

You can obtain the Netscape Navigator Web browser at the following URL:

<http://www.ibm.com/servers/aix/browsers/>

The Installation Complete panel does not support any other Web browsers.

- WebSphere Commerce is supported in 32-bit mode only. 64-bit mode is not exploited.
- Ensure that you have AIX 5.1 Maintenance Level 04 or later on your WebSphere Commerce machine. Check your operating system level by issuing this command: `oslevel -r`

This command should return the following:


```
5100-04
```

If the output from the command does not end in -04 or higher, you are at the incorrect Maintenance Level for WebSphere Commerce. Obtain the correct Maintenance Level from IBM @server pSeries Support:

<https://techsupport.services.ibm.com/server/support?view=pSeries>

- The following filesets must be installed and are not included in the base AIX 5.1 installation:
  - X11.adt.lib
  - X11.adt.motif
  - X11.base.lib
  - X11.base.rte
  - X11.motif.lib
  - bos.adt.base
  - bos.adt.include
  - bos.rte.net
  - bos.rte.libc
  - bos.net.tcp.client

For more information on determining if all the necessary filesets are installed and how to install them, refer to Chapter 26, "AIX Tasks," on page 139.

-  If you plan to install Oracle9i Database, you must also have the following filesets installed:
  - bos.adt.lib
  - bos.adt.libm



```

+           - bos.perf.perfstat
+
+           For more information on determining if all the necessary filesets are installed
+           and how to install them, refer to Chapter 26, "AIX Tasks," on page 139.
+
+           • Ensure you have the appropriate character filesets installed for the languages in
+           which you will use WebSphere Commerce by entering the following command:
+
+           ls1pp -l X11.fnt.ucs.ttf*
+
+           Depending on the languages in which you will use WebSphere Commerce, you
+           should see the following filesets:
+
+           - X11.fnt.ucs.ttf (for single-byte and Japanese character display)
+           - X11.fnt.ucs.ttf_KR (for Korean character display)
+           - X11.fnt.ucs.ttf_TW (for Simplified Chinese character display)
+           - X11.fnt.ucs.ttf_CN (for Traditional Chinese character display)
+
+           • Ensure that the stack quota limit is at least 32768. To check the current limit,
+           type the following in a command window:
+
+           ulimit -a
+
+           If the value returned for the stack is less than 32768, increase it to this level by
+           running the following command:
+
+           ulimit -s 32768

```

---

## Prerequisite hardware and software for Solaris Operating Environment

### Prerequisite hardware for Solaris Operating Environment

Any processor that supports Solaris 8 Operating Environment (SPARC platform edition) software, such as a Sun SPARC or UltraSPARC station, with the following:

- A 400 MHz processor.
- A minimum of 1GB of random access memory (RAM) per processor for the first WebSphere Commerce and WebSphere Commerce Payments.
- An additional 512 MB of RAM per additional set of WebSphere Commerce and WebSphere Commerce Payments instances.
- A minimum of 6 GB of free disk space, if you install all of the required and optional components, with the following recommended allocated file sizes:
  - /opt: 4 GB
  - /export: 1 GB
  - /tmp: 1 GB
- A minimum of 1 GB swap space per processor.
- A communication hardware adapter that uses the TCP/IP protocol stack to make network connections.
- A CD-ROM drive.
- A graphics capable monitor.

**Note:** Solaris 8 Operating Environment (Intel platform edition) software is *not* supported by WebSphere Commerce.

### Prerequisite software for Solaris Operating Environment

- 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 have the following software installed to view the documentation  
+ available from the Installation Complete panel when the installation wizard  
+ finishes:

#### + **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>

#### + **Netscape Navigator Web browser**

+ The WebSphere Commerce launch pad requires the Netscape Navigator  
+ Web browser in order to use the documentation links in the Installation  
+ Complete panel.

+ The full path to the netscape executable file must be defined in your  
+ system's PATH environment variable so that Netscape Navigator can be  
+ launched by only issuing the netscape command. No path information  
+ should need to be part of the command to launch Netscape Navigator.

+ Netscape Navigator should be configured to launch Adobe Acrobat  
+ Reader so that URLs pointing to PDF files can be launched easily.

+ You can obtain the Netscape Navigator Web browser at the following  
+ URL:

+ <http://www.sun.com/software/solaris/netscape/>

+ The Installation Complete panel does not support any other Web  
+ browsers.

- + • WebSphere Commerce is supported in 32-bit compatibility mode on 64-bit  
+ systems only. 64-bit mode is not exploited.
- + • Ensure that you have Solaris 8 Operating Environment (SPARC platform edition)  
+ software with maintenance update 5 (MU5) or higher and the most recent  
+ Solaris recommended patch cluster.
- + • Ensure that the kernel is configured according to the information in "Updating  
+ Solaris Operating Environment kernel configuration parameters for DB2  
+ Universal Database" on page 15.
- + • Ensure that you have the following Solaris patches installed at the indicated  
+ levels or higher:
  - + – 108434-03
  - + – 108652-27
  - + – 108528-12
  - + – 108827-01
  - + – 108921-12
  - + – 108940-24
  - + – 109147-16

+ You can check patch levels by using the `showrev -p` command. For information  
+ on using the `showrev -p` command, refer to your Solaris documentation.

- + • Ensure that the stack quota limit is at least 32768. To check the current limit,  
+ type the following in a command window:

+ `ulimit -a`

+ If the value returned for the stack is less than 32768, increase it to this level by  
+ running the following command:

## Updating Solaris Operating Environment kernel configuration parameters for DB2 Universal Database

### Important

If you are using DB2 Universal Database with WebSphere Commerce, you *must* set the Solaris Operating Environment kernel parameters as described in the chart below. If you are using a multi-tier configuration, only the DB2 Universal Database node must have these parameters set.

If you do not set the parameters as specified, DB2 Universal Database will not be able to create a DB2 instance ID.

Once you have set the Solaris Operating Environment kernel file parameters, you *must* restart your machine so that the changes take effect.

Log in as user ID root and use a text editor to add the following parameters to the Solaris Operating Environment kernel file, /etc/system. To set a kernel parameter, add a line at the end of the /etc/system file as follows:

```
set parameter-name=value
```

Do not leave any spaces at the end of any of the statements that you type into the kernel file. Select the values for the following parameters based on the configuration that applies to your system.

Table 3. Solaris Operating Environment Kernel Configuration Parameters (Minimum required values)

Kernel Configuration Parameter	Physical Memory			
	64 MB - 128 MB	128 MB - 256 MB	256 MB - 512 MB	512 MB+
msgsys:msginfo_msgmax	65535 (1)	65535 (1)	65535 (1)	65535 (1)
msgsys:msginfo_msgmnb	65535 (1)	65535 (1)	65535 (1)	65535 (1)
msgsys:msginfo_msgmap	258	514	1026	1026
msgsys:msginfo_msgmni	256	512	1024	1024
msgsys:msginfo_msgssz	16	16	32	32
msgsys:msginfo_msgtql	512	1024	2048	2048
msgsys:msginfo_msgseg	8192	16384	32767 (2)	32767 (2)
shmsys:shminfo_shmmax	67108864 (3)	134217728 (3)	4294967295 (3)	4294967295 (3)
shmsys:shminfo_shmseg	100	100	100	100
shmsys:shminfo_shmmni	1024	1024	1024	1024
semsys:seminfo_semmni	256	512	1024	2048
semsys:seminfo_semmsl	250	250	250	250
semsys:seminfo_semmap	260	516	1028	2050
semsys:seminfo_semmns	512	1024	2048	4096
semsys:seminfo_semopm	100	100	100	100

Table 3. Solaris Operating Environment Kernel Configuration Parameters (Minimum required values) (continued)

Kernel Configuration Parameter	Physical Memory			
	64 MB - 128 MB	128 MB - 256 MB	256 MB - 512 MB	512 MB+
semsys:seminfo_semmnu	256	512	1024	4096
semsys:seminfo_semmvmx	32767	32767	32767	32767
semsys:seminfo_semmume	50	50	50	50

**Notes:**

1. The parameters `msgsys:msginfo_msgmnb` and `msgsys:msginfo_msgmax` *must* be set to 65535 or larger.
2. The `msgsys:msginfo_msgseg` parameter must be set no higher than 32767.
3. The parameter `shmsys:shminfo_shmmax` should be set to the suggested value in the chart above or to 200% of the physical memory (in bytes), whichever is higher. For example, if you have 256 MB of physical memory in your system, set the `shmsys:shminfo_shmmax` parameter to 536870912 (256\*1024\*1024\*2).

 For more information on adjusting these parameters for DB2 Universal Database, refer to the *IBM DB2 Universal Database Quick Beginnings Guide*.

**Note:** You must restart the machine after updating the Solaris Operating Environment kernel parameters.

## Updating Solaris Operating Environment kernel configuration parameters for Oracle9i Database

Refer to the Oracle9i Database documentation for information about any changes to the Solaris Operating Environment kernel parameters required by Oracle9i Database.

---

## Network configuration requirements

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

- The system must have a resolvable domain name.  
The host name combined with the domain name is the fully qualified host name. For example, if the host name is *system1* and the domain is *ibm.com*, the fully qualified host name is *system1.ibm.com*.

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

```
nslookup 'fully_qualified_host_name'
```

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

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

```
nslookup 'IP_address'
```

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

---

## Reviewing the README file

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

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

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

`readme_language_code.htm`

where *language\_code* is one of the following:

Language	Language code
German	de_DE
English	en_US
Spanish	es_ES
French	fr_FR
Italian	it_IT
Japanese	ja_JP
Korean	ko_KR
Brazilian Portuguese	pt_BR
Simplified Chinese	zh_CN
Traditional Chinese	zh_TW

---

## Other requirements

You must also do the following:

- Ensure that any Web servers, Java application servers, and any non-essential Java processes are stopped before installing WebSphere Commerce.
- Ensure that any other InstallShield MultiPlatform installers have completed or are stopped before installing WebSphere Commerce
- If you are running Lotus Notes™, or any other server on your machine, stop the server. If you have a Web server on your machine that is currently using the following port, disable it: 80, 443, 5442, 5443, 8000, 8002, and 8004.



---

## Chapter 3. How to install WebSphere Commerce

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

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

1. Plan your configuration of WebSphere Commerce.

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

Review the descriptions of the installation configurations supported by the WebSphere Commerce installation wizard available in “Choosing your installation type” on page 39 to help plan your configuration.

2. Ensure that all of the nodes in your planned configuration meet the prerequisites outlined in Chapter 2, “Preinstallation requirements,” on page 11.
3. Install and configure the database according to the information available in Part 2, “Installing a database,” on page 21.

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

4. Install and configure the Web server according to the information available in Part 3, “Installing a Web server,” on page 29.

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

5. Create the operating system user IDs and groups required by WebSphere Commerce. For details, refer to “Creating required WebSphere Application Server users and groups” on page 37.
6. Gather all of the IDs and other information required to complete the WebSphere Commerce installation wizard. This information is outlined in Chapter 9, “Quick reference to IDs required during installation,” on page 45.
7. Complete the pre-installation checklist provided in “Preinstallation checklist” on page 38 to ensure that you are ready to install WebSphere Commerce.
8. Install WebSphere Commerce according to your planned configuration and the information available in Part 4, “Installing WebSphere Commerce,” on page 35. Ensure you review *all* of the chapters in the section before installing and configuring WebSphere Commerce.
9. Create a WebSphere Commerce instance and a WebSphere Commerce Payments instance according to the information available in Part 5, “Creating a WebSphere Commerce and a WebSphere Commerce Payments instance,” on page 67.

**Important**

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

If you forget the Site Administrator password, you can reset the password by following the instructions in “Resetting the Site Administrator password” on page 134.

If you forget the Site Administrator ID, you can recover the ID by following the instructions in “Recovering the Site Administrator ID” on page 135.

10. Complete the mandatory post-instance creation tasks outlined in Chapter 16, “Mandatory post-instance creation tasks,” on page 83.

After completing these steps, you are ready to perform any of the tasks outlined in Chapter 17, “Recommended post-instance creation tasks,” on page 85.



---

## Part 2. Installing a database

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

If you plan to use a database running on the same node as WebSphere Commerce and WebSphere Commerce Payments, follow the instructions in Chapter 4, “Using a local database with WebSphere Commerce,” on page 23.

If you plan to use a database running on a different node from WebSphere Commerce or WebSphere Commerce Payments, follow the instructions in Chapter 5, “Using a remote database with WebSphere Commerce,” on page 25.



---

## Chapter 4. Using a local database with WebSphere Commerce

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

---

### Using DB2 Universal Database as the local WebSphere Commerce database

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

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

Proceed with your installation of WebSphere Commerce by following the instructions in Part 3, “Installing a Web server,” on page 29.

---

### Using Oracle9i Database as the local WebSphere Commerce database

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

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

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

After installing Oracle9i Database, you must create and configure a database for use with WebSphere Commerce before installing WebSphere Commerce. Settings for the database are listed in Chapter 6, “Oracle9i Database settings for WebSphere Commerce,” on page 27.

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

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

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

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

---

## The next step

After completing the instructions in this chapter, proceed with your installation of WebSphere Commerce by following the instructions in Part 3, "Installing a Web server," on page 29.

---

## Chapter 5. Using a remote database with WebSphere Commerce

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

---

### Using DB2 Universal Database as the remote WebSphere Commerce database

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

Proceed with your installation of WebSphere Commerce by following the instructions in Part 3, “Installing a Web server,” on page 29.

---

### Using Oracle9i Database as the remote WebSphere Commerce database

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

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

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

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

3. If you plan to have WebSphere Commerce Payments on a separate node from WebSphere Commerce and the Oracle9i Database server node, repeat step 2 on page 25 on the WebSphere Commerce Payments node.
4. Ensure that the Oracle9i Database client(s) and server are configured to communicate correctly according to instructions found in the Oracle9i Database documentation.

After installing the Oracle9i Database server and client, you must create and configure a database for WebSphere Commerce and WebSphere Commerce Payments to use before installing WebSphere Commerce. Settings for the database are listed in Chapter 6, "Oracle9i Database settings for WebSphere Commerce," on page 27. For instructions on creating and configuring an Oracle9i Database, refer to the Oracle9i Database documentation.

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

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

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

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

---

## The next step

After completing the instructions in this chapter, proceed with your installation of WebSphere Commerce by following the instructions in Part 3, "Installing a Web server," on page 29.

---

## Chapter 6. Oracle9i Database settings for WebSphere Commerce

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

### Notes:

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

### Important

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

- “Using Oracle9i Database as the local WebSphere Commerce database” on page 23
- “Using Oracle9i Database as the remote WebSphere Commerce database” on page 25

---

## 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 4. 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 5. Recommended database parameter settings for Oracle9i Database*

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

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



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## Part 3. Installing a Web server

WebSphere Commerce supports different Web servers, depending on the operating system.

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### AIX

WebSphere Commerce supports IBM HTTP Server as its Web server. The Web server can be installed on the same machine as other WebSphere Commerce components, or it can be installed on a remote machine.

IBM HTTP Server is installed if you select IBM HTTP Server as the Web server when you install WebSphere Commerce. Continue to Part 4, "Installing WebSphere Commerce," on page 35.

---

### Solaris

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

IBM HTTP Server is installed if you select IBM HTTP Server as the Web server when you install WebSphere Commerce. Continue to Part 4, "Installing WebSphere Commerce," on page 35.

If you are using Sun ONE Web Server as your Web server, you must complete the appropriate chapter in this section before installing other WebSphere Commerce components. Install your Web server as described in the following chapter, and then continue to Part 4, "Installing WebSphere Commerce," on page 35.

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## Chapter 7. Installing Sun ONE Web Server

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

---

### Installing and configuring Sun ONE Web Server

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

1. Install Sun ONE Web Server according to the instructions provided by Sun. Ensure that you install the following components:
  - Sun ONE Web Server, Enterprise Server
  - Server Core
  - Java Runtime Environment
  - Java Support
  - SSJS Support
  - SSJS Database Support

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

#### **Important**

Ensure that you install Sun ONE Web Server in its default location. Changing the installation location of Sun ONE Web Server will prevent the WebSphere Commerce installation wizard from recognizing that Sun ONE Web Server is installed, causing your installation of WebSphere Commerce to fail.

2. Ensure that you create the following virtual servers following the instructions in the Sun ONE Web Server documentation:
  - non-SSL communication on port 80
  - SSL communication on port 443
  - SSL communication on port 8000
  - SSL communication on port 8002
  - SSL communication on port 8004

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

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

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

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

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

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

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

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

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

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

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

#### **Important**

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

Also, the installation and configuration of WebSphere Commerce will change the ownership of the following directories and files to allow WebSphere Commerce Configuration Manager to configure the files:

```
SunONE_installdir/https-admserv/config/
SunONE_installdir/https-admserv/config/magnus.conf
SunONE_installdir/https-host_name/config/
SunONE_installdir/https-host_name/config/magnus.conf
SunONE_installdir/https-host_name/config/identifier.obj.conf
```

**Note:** There will be one `obj.conf` file for each WebSphere Commerce or WebSphere Commerce Payments Web server port defined.

The variables are defined as follows:

*SunOne\_installdir*

Default values for this path are listed in "Path variables" on page v.

*host\_name*

This is the host name (not fully qualified) of the Web server.

*identifier*

This is the part of the `obj.conf` file name used to identify the various configurations for the virtual servers associated with the Web server.

---

## The next step

Now that you have installed and configured Sun ONE Web Server, you are ready to install WebSphere Commerce as described in Part 4, “Installing WebSphere Commerce,” on page 35.



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## **Part 4. Installing WebSphere Commerce**





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## Chapter 8. Before installing WebSphere Commerce

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

1. Create the user IDs and groups required by WebSphere Application Server on any machine on which you plan to install WebSphere Commerce or WebSphere Commerce Payments. For instructions, refer to “Creating required WebSphere Application Server users and groups.”
2. Complete the pre-installation checklist to ensure the all pre-installation requirements have been met. The pre-installation checklist is provided in “Preinstallation checklist” on page 38.
3. Choose an installation type based on the descriptions available in “Choosing your installation type” on page 39. The descriptions in this section will direct you to the appropriate instructions to complete the type of installation you choose.

---

### Creating required WebSphere Application Server users and groups

On any machine onto which you install WebSphere Commerce components including: WebSphere Commerce; WebSphere Commerce Payments; and WebSphere Commerce Configuration Manager client, do the following:

1. Log on as root.
2. Create a non-root user ID and give the new user ID a password.  
This user ID must be used to start the WebSphere Commerce and WebSphere Commerce Payments application servers, and the WebSphere Commerce Configuration Manager server and client. Using root to start these components causes permissions problems which will cause WebSphere Commerce, WebSphere Commerce Payments, and WebSphere Commerce Configuration Manager to function incorrectly.

By default, the WebSphere Commerce installation wizard specifies **wasuser** as the non-root WebSphere Commerce user ID and **wasgroup** as the group ID for the non-root WebSphere Commerce user ID. You can either create this user and group or replace the default values in the installation wizard with the user ID and group you create.

3. Create a new user group and add the non-root user ID to the new group.  
Take note of the non-root user ID, user group ID for the non-root user, and the full path of the home directory for the non-root user. This information will be required to complete the WebSphere Commerce installation wizard.
4. Create the user IDs and groups required by the WebSphere Application Server embedded messaging components. These user IDs and groups are required for WebSphere Application Server to install successfully.

Create the required user IDs and groups as follows:

- a. Create the user ID `mqm` and give the user ID a password.
- b. Create the following user groups:
  - `mqm`
  - `mqbrkrs`
- c. Add the following users to the `mqm` user group:

- mqm
  - root
- d. Add the following user to the mqbrkrs user group:
- root
- e. Log off.
- f. Log on as root to allow the group membership changes to take effect.



For instructions on creating users, creating user groups, and adding users to groups, refer to your operating system documentation.

If these user IDs and groups are not set up correctly before starting the WebSphere Commerce installation wizard, the installation wizard will not proceed past the point where the wizard checks for the existence of the required users and groups.

---

## Preinstallation checklist

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

- All of the systems in the planned installation meet the hardware and software requirements outlined in Chapter 2, “Preinstallation requirements,” on page 11.
- All of the ports required by WebSphere Commerce are available. The ports required by WebSphere Commerce are listed in “Port numbers used by WebSphere Commerce” on page 6.
- The correct locale codes are set on the machines on all of the nodes in the planned installation. The locale codes required by WebSphere Commerce are listed in “Locales used by WebSphere Commerce” on page 8.
-  **Solaris** If you plan to use DB2 Universal Database as your database, the kernel parameters have been set according to the instructions in “Updating Solaris Operating Environment kernel configuration parameters for DB2 Universal Database” on page 15.
- All the IDs, passwords, paths, and other information required to complete the WebSphere Commerce installation wizard have been gathered. The information required to complete the WebSphere Commerce installation wizard is listed in Chapter 9, “Quick reference to IDs required during installation,” on page 45.
- The WebSphere Application Server embedded messaging user ID and groups have been created and configured correctly. The IDs, groups and their configuration is covered in “Creating required WebSphere Application Server users and groups” on page 37.
- The non-root user ID required to start and run WebSphere Commerce and WebSphere Commerce Payments has been created and the password for this user ID has been set. Details on this user ID are provided in “User IDs required to complete the installation wizard” on page 46.
-  **Oracle** If you are using Oracle9i Database as your database, it is already installed as described in Part 2, “Installing a database,” on page 21.
-  **Oracle** If you plan to have a remote Oracle9i Database server, Oracle9i Database is installed on the database node and the Oracle9i Database client is installed and configured on the WebSphere Commerce node as described in “Using Oracle9i Database as the remote WebSphere Commerce database” on page 25. Ensure that SQL\*Plus works on the WebSphere Commerce node.

- **Solaris** If you are using Sun ONE Web Server, it is already installed as described in Part 3, “Installing a Web server,” on page 29.
- Any pre-installed Web servers are stopped. If a Web server is running on the machine during the WebSphere Commerce installation, the installation will not complete successfully.
- Any Java application servers, and any non-essential Java processes are stopped.
- Any other InstallShield MultiPlatform installers have completed or are stopped.

**Important**

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

---

## Choosing your installation type

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

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

- “Quick installation”
- “Typical 1–node installation” on page 40
- “Typical 3–node installation” on page 40
- “Custom installation” on page 42

### Quick installation

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

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

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

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

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

## Typical 1–node installation

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

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

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

Completing a typical 1-node installation is described in Chapter 10, “Completing a typical installation,” on page 49.

## Typical 3–node installation

This will install the WebSphere Commerce software across three nodes:

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

All nodes must be running the same operating system meeting the operating system requirements listed in Chapter 2, “Preinstallation requirements,” on page 11.

Completing a typical 3-node installation is described in Chapter 10, “Completing a typical installation,” on page 49.

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

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

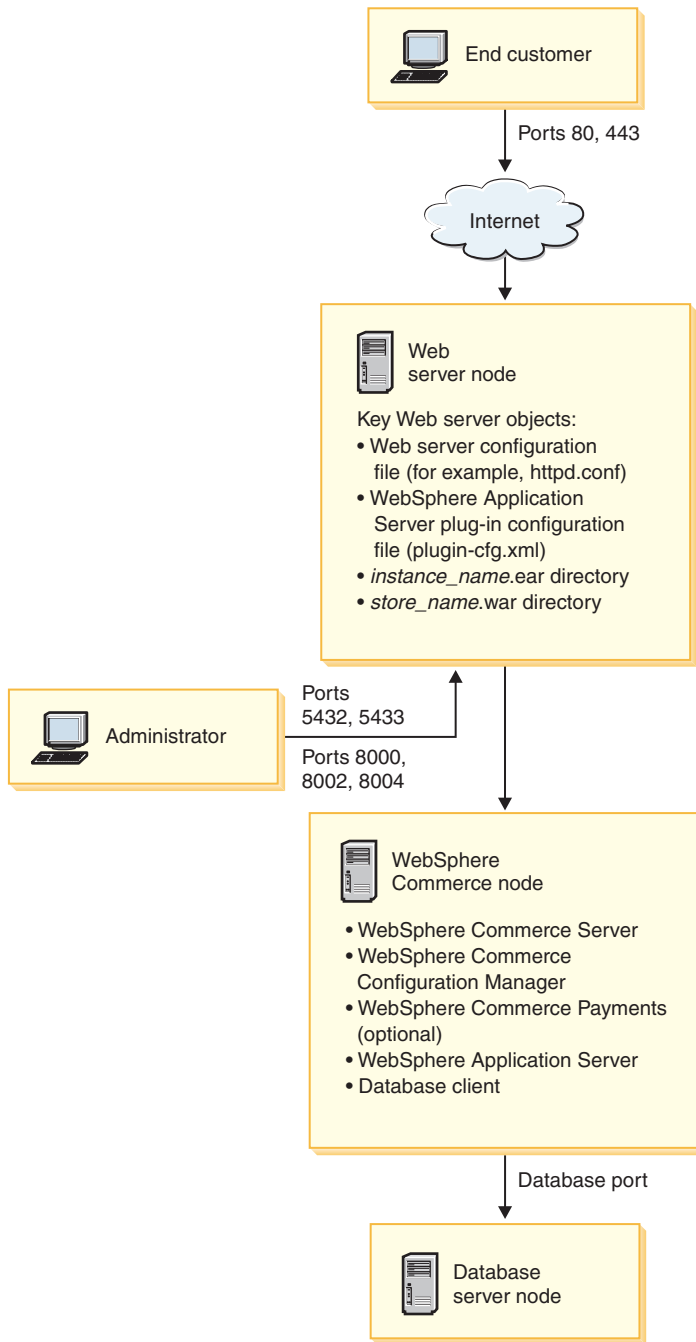


Figure 1. Typical 3-node installation

## Custom installation

A custom installation can be used to install WebSphere Commerce components across several nodes. All nodes must be running the same operating system meeting the operating system requirements listed in Chapter 2, “Preinstallation requirements,” on page 11.

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

- You want to install a topography of WebSphere Commerce not supported by the other install options. For example, a two-node installation with the database server on one node and all other WebSphere Commerce components on the other node.
- You want WebSphere Commerce Payments to run remotely from WebSphere Commerce.
- You want to install only the WebSphere Commerce Configuration Manager client on a system.
- You want to install only the WebSphere Application Server Web server plug-in for a remote Web server.
- You want to distribute WebSphere Commerce components over several machines, offering the following benefits:
  - Improved speed of transactions by dispersing CPU load
  - You can use existing databases, Web servers, and machines with limited space
  - Offers the ability to cluster for redundancy for mission critical WebSphere Commerce data
  - Improved scalability and load balancing abilities

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

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

Completing a custom installation is described in Chapter 11, “Completing a custom installation,” on page 59.

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

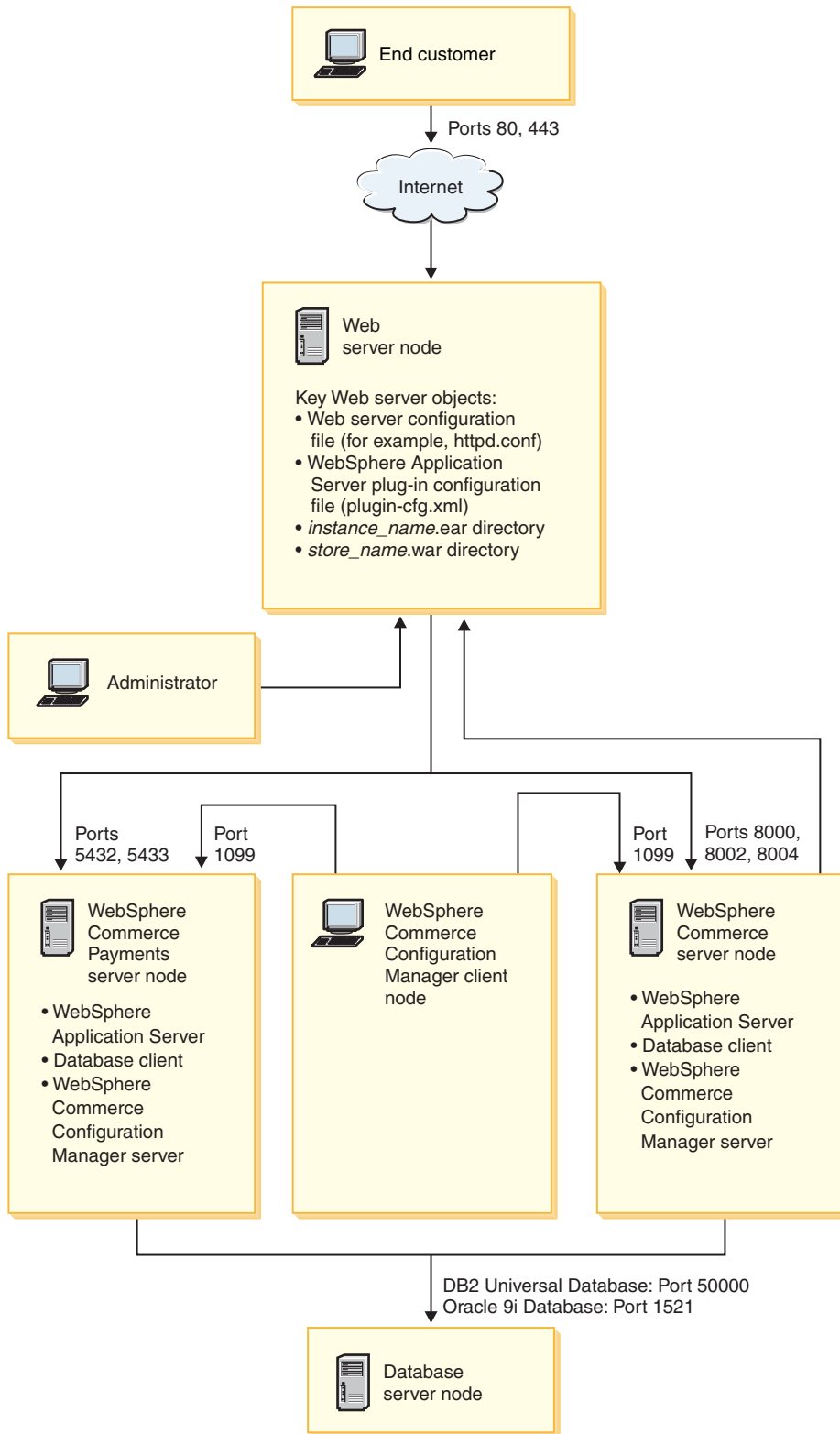


Figure 2. Custom 5-node installation







---

## Chapter 9. Quick reference to IDs required during installation

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

### User ids

Review the descriptions in “User IDs required to complete the installation wizard” on page 46 then fill in this table:

User ID description	User ID	Password	Group	Full path of home directory
 DB2 user ID				
 Oracle user ID				
Non-root WebSphere Commerce user ID				

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

Instructions for creating the WebSphere Commerce non-root user are provided in “Creating required WebSphere Application Server users and groups” on page 37.

By default, the WebSphere Commerce installation wizard specifies **wasuser** as the non-root WebSphere Commerce user ID and **wasgroup** as the group ID for the non-root WebSphere Commerce user ID. You can either create this user and group or replace the default values in the installation wizard with the user ID and group you create.

### Other required users and groups

The installation of WebSphere Commerce requires that specific user IDs and groups exist before installing WebSphere Commerce. Create any users and groups that do not exist and ensure that the users are added to the groups before installing WebSphere Commerce.

User ID or group description	User ID	User ID must exist in these groups
root user	root	mqrbrks, mqm
WebSphere Application Server embedded messaging user	mqm	mqm

Details for creating these user IDs and groups are provided in “Creating required WebSphere Application Server users and groups” on page 37.

**Important:** The existence of these user IDs and groups is *not* optional. The installation wizard will halt if these specific user IDs and groups do not exist.

If the installation wizard halts because these user IDs and groups do not exist, create the user IDs and groups, then click **Back** and then **Next**. The installation wizard should continue.

## 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
DB2 database user ID	<p>This operating system ID is required if you want WebSphere Commerce to install DB2 Universal Database. This ID must not exist before installing DB2 Universal Database through the WebSphere Commerce installation wizard.</p> <p>As part of the installation of DB2 Universal Database, the user ID under which all DB2 processes run is created.</p> <p>To create the DB2 user, the following information will be required:</p> <ul style="list-style-type: none"> <li>• User ID</li> <li>• password</li> <li>• Group to which the user ID will belong</li> <li>• Full path to the home directory for the user ID</li> </ul> <p>Ensure that the <code>.profile</code> script for the user ID does not contain any errors.  <b>Note:</b> The user ID must meet DB2 Universal Database user ID requirements outlined in “DB2 Universal Database user ID requirements” on page 47.</p>
Oracle database user ID	<p>This operating system ID is required if you are using Oracle9i Database with WebSphere Commerce. This is the operating system user ID that owns the physical Oracle9i Database files on the system.</p> <p>This ID must exist before installing WebSphere Commerce. During the installation of WebSphere Commerce, you will be prompted for the following information about the Oracle database user ID:</p> <ul style="list-style-type: none"> <li>• User ID</li> <li>• password</li> <li>• Group to which the user ID belongs</li> <li>• Full path to the home directory for the user ID</li> </ul> <p>Ensure that the <code>.profile</code> script for the user ID does not contain any errors.  <b>Note:</b> The user ID must meet any Oracle9i Database user ID requirements outlined in the Oracle9i Database documentation.</p>
WebSphere Commerce non-root user ID	<p>This ID is required to start the WebSphere Commerce and WebSphere Commerce Payments application servers. This ID must exist before installing WebSphere Commerce. Ensure that you set the password for this user ID.</p> <p>This prevents any security exposures that may occur from running the application servers as a user with root privileges.</p> <p>To create the non-root WebSphere Commerce user ID, the following information will be required:</p> <ul style="list-style-type: none"> <li>• User ID</li> <li>• Group the user ID belongs to</li> <li>• Full path of the home directory for the user ID</li> </ul> <p>Also, this information is required to complete the WebSphere Commerce installation wizard.</p>

Instructions for creating the WebSphere Commerce non-root ID are provided in “Creating required WebSphere Application Server users and groups” on page 37.

## **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:

- They cannot be more than 8 characters in length.
- They can contain only the characters a to z and 0 to 9 (upper-case letters are not permitted).
- 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.



---

## Chapter 10. Completing a typical installation

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

---

### Performing a typical one-node installation

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

1. Ensure the user IDs required by WebSphere Application Server have been created. For instructions on creating these user IDs, refer to “Creating required WebSphere Application Server users and groups” on page 37.
2. Ensure that the pre-installation checklist is completed. Failure to complete this checklist could result in a failed installation. For more information, refer to “Preinstallation checklist” on page 38.
3. Ensure that you are logged onto your system as root.
4. Insert WebSphere Commerce Disk 1 CD into the CD-ROM drive of the node. Mount the CD-ROM drive, but do not change directory to the mount point. Changing directories to the mount point will lock the CD drive and prevent you from being able to swap CDs.
5. From a terminal session, issue the following command:

```
export DISPLAY=host_name:0.0
```



where *host\_name* is the fully qualified host name of the machine from which you want to run the installation wizard.

**Note:** If you are running the installation wizard in an X client, the X client may need to be authorized to access the X server using the `xhost` command. To authorize an X client, issue the following command from the system console as root:

```
xhost +host_name
```

where *host\_name* is the fully qualified host name of the machine from which you want to run the installation wizard.

6. Issue one of the following commands, as root, depending on your operating system:

```
mount_point/setup_aix  
 AIX  
or  
mount_point/setup_aix -console  
mount_point/setup_solaris  
 Solaris  
or  
mount_point/setup_solaris -console
```

where *mount\_point* is the CD-ROM mount point. For example, `/mnt/cdrom0`. Using the `-console` parameter starts a text-based installation wizard. The steps in the text-based installation wizard and the GUI-based installation wizard are the same, but the methods of selection options and continuing in the installation wizard differ.

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



---

Do not switch directories to the CD-ROM mount point. This will prevent you from switching the CDs in the CD-ROM drive when prompted to do so by the installation wizard.

---

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

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

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

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

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

8. If your system meets the pre-installation requirements, click **Next** on the Welcome panel.
9. The Software License Agreement page displays. Review the terms of the license agreement in the Software License Agreement page.

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

If you decline the terms of the license agreement, select **I do not accept the terms in the license agreement** and click **Next**. Declining the terms of the License agreement exits the install program.
10. If you accept the terms of the license agreement, the install type panel displays. Select **Typical Installation**. Click **Next** to continue.
11. When prompted for the topology, select **One-node installation**. Click **Next** to continue.
12. Select your database and Web server from the drop-down lists. Click **Next** to continue.
13. If you selected Oracle9i Database as the database, verify the version of Oracle9i Database installed. Click **Next** to continue.
14. Accept the default destination directories for the products being installed, or enter another directory. Click **Next** to continue.
15. Enter the information for the database user as prompted by the installation wizard. Click **Next** to continue. Ensure that the database user ID and password meet the requirements outlined in Chapter 9, "Quick reference to IDs required during installation," on page 45.

**Note:** Ensure that the database user information is the information for the operating system ID that owns the database instance.

16. Select the language of the documentation that you want installed. Click **Next** to continue.
17. Enter the information for the non-root user ID as prompted by the installation wizard. This user ID was created when you completed the instructions in “Creating required WebSphere Application Server users and groups” on page 37.
18. Do one of the following:
  - If selected Sun ONE Web Server or IBM HTTP Server as your Web server and the Web server is already installed, enter the directory where the Web server configuration files are located. Click **Next** to continue.
  - If you do not have a Web server installed, click **Next** to continue. IBM HTTP Server will be installed.  
In this case, the field displaying the path to the Web server configuration file cannot be edited. The contents of the field are for display purposes only.

The Summary panel displays.

19. Review the contents of the Summary panel, then click **Next** to continue.
20. Insert the CDs as prompted, and enter the location of the CDs.  
As components are being installed, panels display showing the progress of the installation of the component.  
You may be required to unmount the CD-ROM drive in order to change CDs in the CD-ROM drive. After changing CDs, you must remount the CD-ROM drive.
21. The installation is complete when the summary panel displays. Click **Next** to continue.
22. The Installation Complete panel displays. From the Installation Complete panel, you can access more information about WebSphere Commerce or exit the installation wizard by clicking **Finish**.

After completing a typical one-node installation, follow the instructions in “The next step” on page 58.


---

## Performing a typical three-node installation

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

1. Install the database. For details, see “Installing the database in a typical three-node installation.”
2. Install the Web server. For details, see “Installing the Web server in a typical three-node installation” on page 54.
3. Install the remaining WebSphere Commerce components. For details, see “Installing the remaining WebSphere Commerce components in a typical three-node installation” on page 56.

### Installing the database in a typical three-node installation

 If you are using Oracle9i Database as your database, install it as described in “Using Oracle9i Database as the remote WebSphere Commerce database” on page 25. After installing Oracle9i Database, continue to “Installing the Web server in a typical three-node installation” on page 54.

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

1. Ensure that you are logged onto your system as root.
2. Insert WebSphere Commerce Disk 1 CD into the CD-ROM drive of the node. Mount the CD-ROM drive, but do not change directory to the mount point. Changing directories to the mount point will lock the CD drive and prevent you from being able to swap CDs.
3. From a terminal session, issue the following command:  
`export DISPLAY=host_name:0.0`

where *host\_name* is the fully qualified host name of the machine from which you want to run the installation wizard.

**Note:** If you are running the installation wizard in an X client, the X client may need to be authorized to access the X server using the `xhost` command. To authorize an X client, issue the following command from the system console as root:

```
xhost +host_name
```

where *host\_name* is the fully qualified host name of the machine from which you want to run the installation wizard.

4. Issue one of the following commands, as root, depending on your operating system:

```
mount_point/setup_aix
```

**AIX**

or

```
mount_point/setup_aix -console
```

```
mount_point/setup_solaris
```

**Solaris**

or

```
mount_point/setup_solaris -console
```

where *mount\_point* is the CD-ROM mount point. For example, `/mnt/cdrom0`. Using the `-console` parameter starts a text-based installation wizard. The steps in the text-based installation wizard and the GUI-based installation wizard are the same, but the methods of selection options and continuing in the installation wizard differ.

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



---

Do not switch directories to the CD-ROM mount point. This will prevent you from switching the CDs in the CD-ROM drive when prompted to do so by the installation wizard.

---

5. Select the language you want to use during the install and click **OK**.  
After selecting the language you want to use during the install, a check is performed to ensure that the system meets the pre-installation requirements. If your system meets the pre-installation requirements the Welcome panel displays.



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

6. If your system meets the pre-installation requirements, click **Next** on the Welcome panel.

7. The Software License Agreement page displays. Review the terms of the license agreement in the Software License Agreement page.

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

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

8. If you accept the terms of the license agreement, the install type panel displays. Select **Typical Installation**. Click **Next** to continue.

9. When prompted for the topology, select **Three-node installation**. Click **Next** to continue.

10. When prompted for the node on which you are installing, select **Database server node**. Click **Next** to continue.

11. Select your database from the drop-down list. Click **Next** to continue.

12. Accept the default destination directories for the products being installed, or enter another directory. Click **Next** to continue.

13. Complete the panel by entering the appropriate information in each field. Ensure that any user IDs and passwords entered meet the requirements outlined in Chapter 9, "Quick reference to IDs required during installation," on page 45.

**Note:** Ensure that the database user information is the information for the operating system ID that owns the database instance.

Click **Next** to continue.

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

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

15. Insert the CDs as prompted, and enter the location of the CDs.

As components are being installed, panels display showing the progress of the installation of the component. Follow any additional prompts that may display at this time.

16. The installation of DB2 Universal Database is complete when the summary panel displays. Click **Next** to continue.

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

Continue the typical three-node installation by following the instructions in "Installing the Web server in a typical three-node installation" on page 54.

## Installing the Web server in a typical three-node installation

**Solaris** If you are using Sun ONE Web Server, ensure that the Web server is installed and configured as described in Part 3, “Installing a Web server,” on page 29 before following the instructions in this section. Following the instructions in this section will install additional components required for the Web server to work correctly with WebSphere Commerce.

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

1. Ensure that you are logged onto your system as root.
2. From a terminal session, issue the following command:

```
export DISPLAY=host_name:0.0
```

where *host\_name* is the fully qualified host name of the machine from which you want to run the installation wizard.

**Note:** If you are running the installation wizard in an X client, the X client may need to be authorized to access the X server using the `xhost` command. To authorize an X client, issue the following command from the system console as root:

```
xhost +host_name
```

where *host\_name* is the fully qualified host name of the machine from which you want to run the installation wizard.

3. Insert WebSphere Commerce Disk 1 CD into the CD-ROM drive of the node. Mount the CD-ROM drive, but do not change directory to the mount point. Changing directories to the mount point will lock the CD drive and prevent you from being able to swap CDs.
4. Issue one of the following commands, as root, depending on your operating system:

```
mount_point/setup_aix
```

**AIX**

or

```
mount_point/setup_aix -console
```

```
mount_point/setup_solaris
```

**Solaris**

or

```
mount_point/setup_solaris -console
```

where *mount\_point* is the CD-ROM mount point. For example, `/mnt/cdrom0`. Using the `-console` parameter starts a text-based installation wizard. The steps in the text-based installation wizard and the GUI-based installation wizard are the same, but the methods of selection options and continuing in the installation wizard differ.

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



---

Do not switch directories to the CD-ROM mount point. This will prevent you from switching the CDs in the CD-ROM drive when prompted to do so by the installation wizard.

---


5. Select the language you want to use during the install and click **OK**.  
 After selecting the language you want to use during the install, a check is performed to ensure that the system meets the pre-installation requirements. If your system meets the pre-installation requirements the Welcome panel displays.  
 If your system does not meet the pre-installation requirements, a dialog box will display detailing the requirements which have not been met. Click **Cancel** and then **Exit Setup** to exit the installation program. Take the appropriate steps to meet the pre-installation requirements which were listed and begin the installation again.
6. If your system meets the pre-installation requirements, click **Next** on the Welcome panel.
7. The Software License Agreement page displays. Review the terms of the license agreement in the Software License Agreement page.  
 If you accept the terms of the license agreement, select **I accept the terms in the license agreement** and click **Next** to accept the terms of the license agreement.  
 If you decline the terms of the license agreement, select **I do not accept the terms in the license agreement** and click **Next**. Declining the terms of the License agreement exits the install program.
8. If you accept the terms of the license agreement, the install type panel displays. Select **Typical Installation**. Click **Next** to continue.
9. When prompted for the topology, select **Three-node installation**. Click **Next** to continue.
10. When prompted for the node on which you are installing, select **Web server node**. Click **Next** to continue.
11. Select your Web server from the drop-down list. Click **Next** to continue.
12. Accept the default destination directories for the products being installed, or enter another directory. Click **Next** to continue.
13. Select the language of the documentation that you want installed. Click **Next** to continue.
14. Enter the information for the non-root user ID as prompted by the installation wizard. This user ID was created when you completed the instructions in "Creating required WebSphere Application Server users and groups" on page 37.
15. Do one of the following:
  - If selected Sun ONE Web Server or IBM HTTP Server as your Web server and the Web server is already installed, enter the directory where the Web server configuration files are located. Click **Next** to continue.
  - If you do not have a Web server installed, click **Next** to continue. IBM HTTP Server will be installed.  
 In this case, the field displaying the path to the Web server configuration file cannot be edited. The contents of the field are for display purposes only.

The Summary panel displays.
16. On the Summary panel, review the components being installed and their location. To make any changes, use the **Back** button to return to the panel where you want to make changes.  
 To begin installing the components listed on the confirmation page, click **Next**.

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

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

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

 Ensure that the Oracle9i Database client components are installed on this node before proceeding with the installation. Guidelines for installing Oracle9i Database can be found in Part 2, “Installing a database,” on page 21.

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

1. Ensure the user IDs required by WebSphere Application Server have been created. For instructions on creating these user IDs, refer to “Creating required WebSphere Application Server users and groups” on page 37.
2. Ensure that you are logged onto your system as root.
3. From a terminal session, issue the following command:

```
export DISPLAY=host_name:0.0
```

where *host\_name* is the fully qualified host name of the machine from which you want to run the installation wizard.

**Note:** If you are running the installation wizard in an X client, the X client may need to be authorized to access the X server using the `xhost` command. To authorize an X client, issue the following command from the system console as root:

```
xhost +host_name
```

where *host\_name* is the fully qualified host name of the machine from which you want to run the installation wizard.

4. Insert WebSphere Commerce Disk 1 CD into the CD-ROM drive of the node. Mount the CD-ROM drive, but do not change directory to the mount point. Changing directories to the mount point will lock the CD drive and prevent you from being able to swap CDs.
5. Issue one of the following commands, as root, depending on your operating system:

```
mount_point/setup_aix
```



or

```
mount_point/setup_aix -console
```

```
mount_point/setup_solaris
```

Solaris

or

```
mount_point/setup_solaris -console
```

where *mount\_point* is the CD-ROM mount point. For example, `/mnt/cdrom0`. Using the `-console` parameter starts a text-based installation wizard. The steps in the text-based installation wizard and the GUI-based installation wizard are the same, but the methods of selection options and continuing in the installation wizard differ.

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



---

Do not switch directories to the CD-ROM mount point. This will prevent you from switching the CDs in the CD-ROM drive when prompted to do so by the installation wizard.

---

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

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

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

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

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

7. If your system meets the pre-installation requirements, click **Next** on the Welcome panel.
8. The Software License Agreement page displays. Review the terms of the license agreement in the Software License Agreement page.

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

If you decline the terms of the license agreement, select **I do not accept the terms in the license agreement** and click **Next**. Declining the terms of the License agreement exits the install program.
9. If you accept the terms of the license agreement, the install type panel displays. Select **Typical Installation**. Click **Next** to continue.
10. When prompted for the topology, select **Three-node installation**. Click **Next** to continue.
11. When prompted for the node on which you are installing, select **WebSphere Commerce Server node**. Click **Next** to continue.

12. Select the database management system installed on the database node from the drop-down list. Click **Next** to continue.
13. If you selected Oracle9i Database as the database, verify the version of Oracle9i Database installed. Click **Next** to continue.
14. Accept the default destination directories for the products being installed, or enter another directory. Click **Next** to continue.
15. Complete the panel by entering the appropriate information in each field. Click **Next** to continue. Ensure that any user IDs and passwords entered meet the requirements outlined in Chapter 9, “Quick reference to IDs required during installation,” on page 45.

**Note:** Ensure that the database user information is the information for the operating system ID that owns the database instance.

16. Select the language of the documentation that you want installed. Click **Next** to continue.
17. Enter the information for the non-root user ID as prompted by the installation wizard. This user ID was created when you completed the instructions in “Creating required WebSphere Application Server users and groups” on page 37.
18. On the confirmation page, review the components being installed and their location. To make any changes, use the **Back** button to return to the panel where you want to make changes.  
To begin installing the components listed on the confirmation page, click **Next**.
19. Insert the CDs as prompted, and enter the location of the CDs.  
As components are being installed, panels display showing the progress of the installation of the component. Follow any additional prompts that may display at this time.
20. The installation is complete when the summary panel displays. Click **Next** to continue.
21. The Installation Complete panel displays. From the Installation Complete panel, you can access more information about WebSphere Commerce or exit the installation wizard by clicking **Finish**.

---

## The next step

After completing a typical installation, do the following:

1. If you have not yet done so, review the README file and install any additional fixes mentioned in the README file. For more information about the README file, refer to “Reviewing the README file” on page 17.
2. Verify your installation by following the instructions in Chapter 12, “Verifying your installation,” on page 65.

---

## Chapter 11. Completing a custom installation

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

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

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

### WebSphere Commerce components


#### WebSphere Commerce Server

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

Selecting this component installs the following on the node:

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

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

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

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





If you plan to use a local Oracle9i Database database with the WebSphere Commerce server component, ensure that you have Oracle9i Database installed and configured on the node before installing the WebSphere Commerce server component. For more information, refer to Part 2, “Installing a database,” on page 21.

If you plan to use a remote Oracle9i Database with the WebSphere Commerce server component, ensure that you have the Oracle9i Database client software installed and configured on the node before installing the WebSphere Commerce Server component. For more information, refer to Part 2, “Installing a database,” on page 21.

### WebSphere Commerce example files

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

This component does not include the WebSphere Commerce sample stores.

### WebSphere Commerce online help

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

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

### WebSphere Commerce Payments

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

Selecting this component installs the following on the node:

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

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



**DB2**

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

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

**Oracle**

If you plan to use a local Oracle9i Database with the WebSphere Commerce Payments component, ensure that you have Oracle9i Database installed and configured on the node before installing the WebSphere Commerce Payments component. For more information, refer to Part 2, "Installing a database," on page 21.

If you plan to use a remote Oracle9i Database with the WebSphere Commerce Payments component, ensure that you have the Oracle9i Database client software installed and configured on the node before installing the WebSphere Commerce Payments component. For more information, refer to Part 2, "Installing a database," on page 21.

**Remote WebSphere Commerce Configuration Manager client**

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

**Supporting software****DB2 Universal Database**

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

**IBM HTTP Server**

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

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

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

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

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.

---

## Performing a custom installation

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

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

1. Ensure that you are logged onto your system as `root`.
2. From a terminal session, issue the following command:

```
export DISPLAY=host_name:0.0
```

where *host\_name* is the fully qualified host name of the machine from which you want to run the installation wizard.

**Note:** If you are running the installation wizard in an X client, the X client may need to be authorized to access the X server using the `xhost` command. To authorize an X client, issue the following command from the system console as `root`:

```
xhost +host_name
```

where *host\_name* is the fully qualified host name of the machine from which you want to run the installation wizard.

3. Insert WebSphere Commerce Disk 1 CD into the CD-ROM drive of the node. Mount the CD-ROM drive, but do not change directory to the mount point. Changing directories to the mount point will lock the CD drive and prevent you from being able to swap CDs.
4. Issue one of the following commands, depending on your operating system:

```
mount_point/setup_aix
```

 AIX

or

```
mount_point/setup_aix -console
```

```
mount_point/setup_solaris
```

 Solaris

or

```
mount_point/setup_solaris -console
```

where *mount\_point* is the CD-ROM mount point. For example, `/mnt/cdrom0`. Using the `-console` parameter starts a text-based installation wizard. The steps in the text-based installation wizard and the GUI-based installation wizard are the same, but the methods of selection options and continuing in the installation wizard differ.

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



Do not switch directories to the CD-ROM mount point. This will prevent you from switching the CDs in the CD-ROM drive when prompted to do so by the installation wizard.

---

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

**Important:** The language selected here become the default language for the WebSphere Commerce instance. Attempting to create a WebSphere

Commerce instance with a default language different from the language selected here will cause the WebSphere Commerce instance to be populated with invalid data.

6. On the Welcome panel, click **Next**.
7. The Software License Agreement page displays. Review the terms of the license agreement in the Software License Agreement page.

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

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

Descriptions of the values required to complete the installation wizard are provided in Chapter 9, "Quick reference to IDs required during installation," on page 45.

After you have completed the panels requesting information, the confirmation page displays.
11. On the confirmation page, review the components being installed and their location. To make any changes, use the **Back** button to return to the panel where you want to make changes.

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

As components are being installed, panels display showing the progress of the installation of the component. Follow any additional prompts that may display at this time.

**Notes:**

  - a. Do not specify locations of the CD or CD image as UNC paths (For example, \\system1\destination). You may use mapped drive letters.
  - b. The WebSphere Application Server CD must be available in the local CD-ROM drive or as an image on the local hard drive. Specifying a network location for the WebSphere Application Server CD will cause the installation to fail.
13. The installation of the selected components is complete when the summary panel displays. Click **Next** to continue.
14. The Installation Complete panel displays. From the Installation Complete panel, you can access more information about WebSphere Commerce or exit the installation wizard by clicking **Finish**.
15. Reenable any virus checking software that was disabled before starting the installation wizard.

---

## The next step

After completing a custom installation, do the following:

1. If you have not yet done so, review the README file and install any additional fixes mentioned in the README file. For more information about the read me file, refer to “Reviewing the README file” on page 17.
2. Verify your installation by following the instructions in Chapter 12, “Verifying your installation,” on page 65.

---

## Chapter 12. Verifying your installation

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

- “DB2 Universal Database installation log”  
Only check this log file if you installed DB2 Universal Database using the WebSphere Commerce installation wizard.
- “WebSphere Application Server installation log” on page 66
- “WebSphere Commerce components installation log” on page 66

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

---

### DB2 Universal Database installation log

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

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

```
WC_installdir/logs/db2setup.log
```

Default values for *WC\_installdir* are listed in “Path variables” on page v.

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

```
/tmp
```

DB2 Universal Database installed successfully the messages at the end of the log file indicate success. As an example, here is the end section of the DB2 Universal Database installation log file from a typical 1-node installation on AIX:

```
Installing DB2 file sets:.....Success
Registering DB2 licenses:.....Success
Setting default global profile registry variables:.....Success
Creating the DB2 Administration Server:.....Success
The Fast Connection Manager (FCM) base port was not specified for the instance "db2user".
Default parameters will be used.

Initializing instance list:.....Success
Customizing DB2 instance configuration:.....Success
Command to be run: "/usr/opt/db2_08_01/instance/db2icrt -a server -s ese -u db2fwc1 -w 32
-p db2c_db2user db2user".
The instance "db2user" has been created successfully.

The value "SVCENAME=db2c_db2user" was set in the DBM CFG file for the "db2user"instance.

The value "DB2AUTOSTART=YES" was set in the Profile Registry for the "db2user"instance.

Creating DB2 instances:.....Success
Registering DB2 licenses:.....Success
Configuring the DB2 Administration Server:.....Success
Updating global profile registry:.....Success
```

The content of your log file may be different.

If the log file contains any components with a status of FAILURE, examining the installation log file carefully to see where errors occurred during installation. Refer to the DB2 Universal Database documentation to correct any errors that occurred.

Correct any DB2 Universal Database installation errors before continuing with the instructions in this book.

---

## WebSphere Application Server installation log

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

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

```
WAS_installdir/logs/log.txt
```

Default values for *WAS\_installdir* are listed in “Path variables” on page v.

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

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

---

## WebSphere Commerce components installation log

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

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

```
WC_installdir/logs/install_date_time.log
```

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

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

```
/tmp
```

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

```
WebSphere Commerce installation Complete.
```

---

## The next step

Continue your installation and configuration of WebSphere Commerce by creating a WebSphere Commerce instance and a WebSphere Commerce Payments instance. For instructions on creating instances, follow the instructions in Part 5, “Creating a WebSphere Commerce and a WebSphere Commerce Payments instance,” on page 67.

---

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

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

This section contains the following chapters:

- Chapter 13, “Before you create or modify an instance with Configuration Manager,” on page 69
- Chapter 14, “Creating a WebSphere Commerce instance,” on page 73
- Chapter 15, “Creating a WebSphere Commerce Payments instance,” on page 77





---

## Chapter 13. 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 17.
2. Ensure that you meet the prerequisites for starting Configuration Manager. The prerequisites are listed in “Configuration Manager prerequisites.”
3. Start the Configuration Manager by following the instructions in “Starting the Configuration Manager.”

### Important

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

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

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

---

### + Configuration Manager prerequisites

+ Before starting the WebSphere Commerce Configuration Manager, complete the following checklist to ensure that you meet all the prerequisites:

- + — The systems on which you are starting the Configuration Manager server and the Configuration Manager client use a supported locale as described in “Locales used by WebSphere Commerce” on page 8.
- + — If you log on to a CDE desktop, ensure that the `.dtprofile` file has been modified to read the `.profile` file of the WebSphere Commerce non-root user.
- + — You are using the Korn shell.
- + — The database server is running.

---

### Starting the Configuration Manager

To start WebSphere Commerce Configuration Manager, do the following:

1. Log in as the WebSphere Commerce non-root user ID. This ID was created before installing WebSphere Commerce.

**Important information for Solaris Operating Environment users**

Ensure that you do not run WebSphere Commerce commands under the Bourne shell. Running WebSphere Commerce commands under the Bourne shell will cause the commands to fail.

If you are in the Bourne shell at this point, switch shells now. Use the Korn shell when running WebSphere Commerce commands.

2. Depending on the instance you are creating or modifying, start the server by doing the following on the WebSphere Commerce node or WebSphere Commerce Payments node:

- a. Open a terminal window.
- b. Issue the following commands:

```
cd WC_installdir/bin
./config_server.sh
```

Default values for *WC\_installdir* are listed in "Path variables" on page v.

**Notes:**

- 1) Do not close the terminal window you entered the `config_server` command in or the Configuration Manager server will stop.
- 2) Do not run the Configuration Manager server as a background process – this is a potential security risk.
- 3) The Configuration Manager server is now listening on port 1099 for a connection. To have the Configuration Manager server listen on a different port, issue the following command instead of the `./config_server.sh` command:

```
./config_server.sh -port port_number
```

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

3. Start the client by doing one the following:

- To run the WebSphere Commerce Configuration Manager on the local machine, do the following:
  - a. Open another terminal window.
  - b. As the non-root user ID created before installing WebSphere Commerce, issue the following commands:

```
export DISPLAY=host_name:0.0
cd WC_installdir/bin
./config_client.sh [-port cm_port]
```

where the variables are defined as follows:

*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.

**Note:** The X client may need to be authorized to access the X server using the `xhost` command. To authorize an X client, issue the following command from the system console as root:

```
xhost +host_name
```

where *host\_name* is the fully qualified host name of the machine from which you want to run the installation wizard.

- c. 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.
- To run the WebSphere Commerce Configuration Manager client on a remote machine, do the following:
  - a. Log on to the remote machine as the non-root user ID created before installing WebSphere Commerce.

**Important information for Solaris Operating Environment users**

Ensure that you do not run WebSphere Commerce commands under the Bourne shell. Running WebSphere Commerce commands under the Bourne shell will cause the commands to fail.

If you are in the Bourne shell at this point, switch shells now. Use the Korn shell when running WebSphere Commerce commands.

- b. Open a terminal window.
- c. Issue the following commands:

```
export DISPLAY=host_name:0.0
cd WC_installdir/bin
```
- d. Do one of the following, depending on how the Configuration Client was installed on the remote system:
  - If the remote system has both a Configuration Manager server and a client, issue the following command:

```
./config_client.sh -hostname cm_hostname [-port cm_port]
```
  - If the Configuration Client was installed on the remote system using the custom installation option of the WebSphere Commerce installation wizard, issue the following command:

```
./configClient.sh -hostname cm_hostname [-port cm_port]
```

where the variables are defined as follows:

*hostname*

The fully qualified host name of the machine from which you want to access the Configuration Manager.

*cm\_hostname*

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

*cm\_port*

The port specified when starting the Configuration Manager server.

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

Default values for *WC\_installdir* are listed in “Path variables” on page v.

**Note:** The X client may need to be authorized to access the X server using the *xhost* command. To authorize an X client, issue the following command from the system console as root:

```
xhost +host_name
```

where *host\_name* is the fully qualified host name of the machine from which you want to run the installation wizard.

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

---

## The next step

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

- Chapter 14, “Creating a WebSphere Commerce instance,” on page 73.
- Chapter 15, “Creating a WebSphere Commerce Payments instance,” on page 77.

---

## Chapter 14. 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 117.

---



### Creating a new WebSphere Commerce instance

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

1. Start the WebSphere Commerce Configuration Manager. For details, refer to “Starting the Configuration Manager” on page 69.
2. Under **WebSphere Commerce**, expand your *hostname*.
3. Expand **Commerce**.
4. Right-click on **Instance List**.
5. From the resulting pop-up menu, select **Create Instance**. The Instance Creation wizard starts.
6. Complete the Instance Creation wizard.



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

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

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

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

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

---

### Verifying the instance creation




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

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

where default values for *WC\_installdir* are listed in “Path variables” on page 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 the following log files:

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

The files are located in the following directory:


*WC\_installdir/instances/instance\_name/logs*

where default values for *WC\_installdir* are listed in “Path variables” on page v and *instance\_name* is the name of WebSphere Commerce instance.

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

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

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

- createdb.log
- createsp.log
-  createdb.db2.log

---

## The next step

After you have configured your WebSphere Commerce instance, you should continue by creating a WebSphere Commerce Payments instance. Instructions for creating a WebSphere Commerce Payments are provided in Chapter 15, “Creating a WebSphere Commerce Payments instance,” on page 77.





---

## Chapter 15. 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 117.

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

**Note:** You should only change WebSphere Commerce Payments ports through the WebSphere Commerce Configuration Manager, as stated in Chapter 13, “Before you create or modify an instance with Configuration Manager,” on page 69 and not through the WebSphere Application Server Administrative Console. This ensures that all properties and files are updated with the same information.

---

### Creating a new WebSphere Commerce Payments instance

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

1. Start the WebSphere Commerce Configuration Manager. For details, see “Starting the Configuration Manager” on page 69.

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

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





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

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

---

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

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

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

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

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

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

---

## Verifying the instance creation

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

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

where default values for *WC\_installdir* are listed in “Path variables” on page 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 the following log files:

- createdb.log
- createdb.err.log

The files are located in the following directory:

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

where default values for *WC\_installdir* are listed in “Path variables” on page v and *instance\_name* is the name of WebSphere Commerce Payments instance.

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

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

---

## The next step

After you have configured your WebSphere Commerce Payments instance, you can continue by following the instructions in Part 6, “Last steps,” on page 81.

If you are using a remote Web server, you must follow the instructions in Chapter 16, “Mandatory post-instance creation tasks,” on page 83.



---

## Part 6. Last steps

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



---

## Chapter 16. Mandatory post-instance creation tasks

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

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

---

### Local Web server post-instance creation tasks

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

---

### Remote Web server post-instance creation tasks

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

1. Copy the `plugin-cfg.xml` from the WebSphere Commerce node to the Web server node. For instructions, refer to “Copying the `plugin-cfg.xml` file to Web server” on page 129.
2. If WebSphere Commerce and WebSphere Commerce Payments are installed on different nodes, merge the contents of the `plugin-cfg.xml` file on the WebSphere Commerce Payments node with the `plugin-cfg.xml` on the Web server node. For instructions, refer to “Merging the WebSphere Commerce Payments `plugin-cfg.xml` file” on page 130.
3. If it does not exist, create a directory on the Web server node that matches the `WAS_installdir` directory on the WebSphere Commerce node.
4. Copy the following directories from the WebSphere Commerce node to the Web server node:

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

where the variables are defined as follows:

*WAS\_installdir*

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

*WC\_installdir*

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

*cell\_name*

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

*Commerce\_instance\_name*

This is the name of the WebSphere Commerce instance.

*locale*

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

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

**Important**

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

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

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

```
WebSpherePluginConfig
```

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

6. For IBM HTTP Server users, ensure that the following lines are uncommented in the `httpd.conf` file:

```
AddModule mod_ibm_ssl.c
```

```
Listen 80
```

7. Stop and restart the Web server.



---

## Chapter 17. Recommended post-instance creation tasks

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

### **Review the security of the WebSphere Commerce installation**

Security is a crucial component of a production WebSphere Commerce site. Refer to the *WebSphere Commerce Security Guide* for instructions on enabling Secure Sockets Layer (SSL), WebSphere Application Server security, configuring single sign-on and other security options for your installation. This book is available from the WebSphere Commerce technical library. Refer to “WebSphere Commerce technical library” on page 161 for more information.

### **Publish a WebSphere Commerce sample store**

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

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

For information on developing a store in WebSphere Commerce, refer to the *WebSphere Commerce Store Development Guide*. This book is available from the WebSphere Commerce technical library. Refer to “WebSphere Commerce technical library” on page 161 for more information.

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

### **Install additional software provided with WebSphere Commerce**

WebSphere Commerce provides a number of additional software packages that enhance WebSphere Commerce and provide additional function. For more information on the additional software provided with WebSphere Commerce, refer to *WebSphere Commerce Additional Software Guide*. This book is available from the WebSphere Commerce technical library. Refer to “WebSphere Commerce technical library” on page 161 for more information.

### **Perform advanced configuration tasks**

Advanced configurations for WebSphere Commerce include federation, clustering, and multiple instances. Advanced configurations are covered in Part 7, “Advanced configuration options,” on page 87.



---

## Part 7. Advanced configuration options

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

- Chapter 18, "Creating multiple WebSphere Commerce and WebSphere Commerce Payments instances," on page 89
- Chapter 19, "Federating WebSphere Commerce and WebSphere Commerce Payments," on page 95
- Chapter 20, "Clustering WebSphere Commerce," on page 103



---

## Chapter 18. Creating multiple WebSphere Commerce and WebSphere Commerce Payments instances

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

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







Multiple instances, as described in this chapter, are used mainly to have different occurrences of WebSphere Commerce that do not share information. Each instance will be unique. To have multiple cloned occurrences of the same WebSphere Commerce instance, refer to Chapter 20, "Clustering WebSphere Commerce," on page 103.

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

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

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

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

		Original instance	New instance
	WebSphere Commerce database name	<i>WC_db1</i>	<i>WC_db2</i>
	WebSphere Commerce datafile name	<i>Oracle_datafile1</i>	<i>Oracle_datafile2</i>
	WebSphere Commerce database user ID	<i>Oracle_user1</i>	<i>Oracle_user2</i>
	WebSphere Commerce tablespace name	<i>WC_instance_1TBLSPC</i>	<i>WC_instance_2TBLSPC</i>
	WebSphere Commerce Payments database name	<i>Payments_db1</i>	<i>Payments_db2</i>
	WebSphere Commerce Payments tablespace name	<i>Payments_instance_1TBLSPC</i>	<i>Payments_instance_2TBLSPC</i>

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

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

---

## Prerequisites

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

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



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


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

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

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

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

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

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

## Web server prerequisites

If you are using Sun ONE Web Server, you must do the following:

1. Create a new Web server associated with the new virtual host name and new IP address. Refer to the Web server documentation for instructions.
2. Configure the Web server according the instructions found Part 3, "Installing a Web server," on page 29.

Before continuing, ensure that the following URLs work:





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

## Creating multiple WebSphere Commerce instances

Assuming you have already created your first WebSphere Commerce instance, you can create each additional instance that you require by following the instructions in Chapter 14, "Creating a WebSphere Commerce instance," on page 73. In the following table, the existing instance is represented by **Original instance** and the new instance is represented by **New instance**. You do not have to modify the values for an existing instance.

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

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

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

Default values for *WC\_installdir*, *SunONEweb\_installdir*, and *IBM HTTP Server* are listed in “Path variables” on page v.

Ensure that you verify the instance creation by following the instructions in “Verifying the instance creation” on page 73.

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

---





## Creating multiple WebSphere Commerce Payments instances

Assuming you have already created your first WebSphere Commerce Payments instance, you can create each additional instance that you require by following the instructions in Chapter 15, “Creating a WebSphere Commerce Payments instance,” on page 77. In the following table, the existing instance is represented by **Original instance** and the new instance is represented by **New instance**. You do not have to modify the values for an existing instance.

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



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

Field in Configuration Manager	Original instance	New instance
Instance - Instance name	<i>Payments_instance_1</i>	<i>Payments_instance_2</i>
 Database - Database name	<i>Payments_db1</i>	<i>Payments_db2</i>
 Database - Datafile name	<i>Oracle_datafile1</i>	<i>Oracle_datafile2</i>
 Database - Database user ID	<i>Oracle_user1</i>	<i>Oracle_user2</i>
 Database - Tablespace name	<i>Payments_instance_1TBLSPC</i>	<i>Payments_instance_2TBLSPC</i>
Web server - hostname	<i>host1.domain</i>	<i>host2.domain</i>
WebSphere Commerce - hostname	<i>host1.domain</i>	<i>host2.domain</i>
Web server - Primary Document Root (IBM HTTP Server)	<i>HTTP_installdir/htdocs1</i>	<i>HTTP_installdir/htdocs2</i>
Web server - Primary Document Root (Sun ONE Web Server)	<i>SunONEweb_installdir/docs1</i>	<i>SunONEweb_installdir/docs2</i>

Ensure that you verify the instance creation by following the instructions in “Verifying the instance creation” on page 78.

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

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## 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 117.
2. Start all WebSphere Commerce Payments instances. For instructions, refer to “Starting or stopping a WebSphere Commerce Payments instance” on page 117.

3. Test the following URLs:

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

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## + Chapter 19. Federating WebSphere Commerce and WebSphere Commerce Payments

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

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

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

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### Important

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

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

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## + Federating WebSphere Commerce

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

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

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

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

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

**Important:** Ensure that you apply any WebSphere Application Server fixes documented in the WebSphere Commerce README file to the WebSphere Application Server Network Deployment installation. For more information about the README file, refer to “Reviewing the README file” on page 17.

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

2. Ensure that you are logged into the WebSphere Commerce node and WebSphere Application Server Network Deployment node as root.
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 124 for instructions.
4. Federate the WebSphere Commerce application server into the deployment manager cell by issuing the following command:

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

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

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

*WAS\_installdir*

Default values for *WAS\_installdir* are listed in “Path variables” on page 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.



If you receive an out of memory error, refer to “addNode.sh command returns out of memory error” on page 154 for information on correcting the problem.

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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.sh instance_name`

+ where *instance\_name* is the name of the WebSphere Commerce instance.

+ Default values for *WC\_installdir* are listed in “Path variables” on page 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.

- + 6. Correct the permissions of important WebSphere Commerce files, by issuing the  
+ following command on the WebSphere Commerce machine as root:

+ `WC_installdir/bin/wc55nonroot.sh`

+ Default values for *WC\_installdir* are listed in “Path variables” on page v.

+ **Important:** Ensure that no application servers are running before issuing this  
+ command. The node agent may be left running.

- + 7. Change the process execution user ID and group for the WebSphere Commerce  
+ application server. For instructions, refer to “Changing the process execution  
+ user ID and group” on page 99.

+ 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 125

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## + 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 17.

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

2. Ensure that you are logged into the WebSphere Commerce Payments node and WebSphere Application Server Network Deployment node as root.
3. 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 124 for instructions.
4. Federate the WebSphere Commerce Payments application server into the deployment manager cell by issuing the following command:

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

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

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

*WAS\_installdir*

Default values for *WAS\_installdir* are listed in “Path variables” on page 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.



If you receive an out of memory error, refer to “addNode.sh command returns out of memory error” on page 154 for information on correcting the problem.

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5. 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.sh instance_name
```

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

+ Default values for *WC\_installdir* are listed in “Path variables” on page v.

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

+ 6. Correct the permissions of important WebSphere Commerce Payments files, by  
+ issuing the following command on the WebSphere Commerce machine:  
+ `WC_installdir/bin/wc55nonroot.sh`

+ Default values for *WC\_installdir* are listed in “Path variables” on page v.

+ Ensure that no application servers, other than the node agent, are running  
+ before issuing this command.

+ 7. Change the process execution user ID and group for the WebSphere Commerce  
+ Payments application server. For instructions, refer to “Changing the process  
+ execution user ID and group.”

+ 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 125

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## + Changing the process execution user ID and group

+ After federating a WebSphere Commerce or WebSphere Commerce Payments  
+ application server node into a cell, you must change the process execution user  
+ and group to the non-root WebSphere Commerce user ID and group created before  
+ installing WebSphere Commerce.

+ You must perform the instructions in this section for each node you have added to  
+ a deployment manager cell.

+ To change the process execution user ID and group for a node in a cell, do the  
+ following:

- + 1. Ensure that you are logged into the application server node as root.
- + 2. On the application server node, start the node agent. Refer to “Starting and  
+ stopping the WebSphere Application Server node agent” on page 124 for  
+ instructions.
- + 3. On the WebSphere Application Server Network Deployment machine, start the  
+ deployment manager application server. Refer to “Starting and stopping the  
+ WebSphere Application Server Network Deployment deployment manager” on  
+ page 124 for instructions.
- + 4. Open the WebSphere Application Server Administrative Console. For  
+ instructions, refer to “Starting the WebSphere Application Server Administrative  
+ Console” on page 124.
- + 5. In the Navigation area, expand **Servers** and click **Application Servers**. The  
+ Application Servers page displays.
- + 6. On the Application Servers, click the name of the application server. The  
+ application server page displays.



For WebSphere Commerce, the application server name is `WC_commerce_instance_name`, where `commerce_instance_name` is the name of the WebSphere Commerce instance.

For WebSphere Commerce Payments, the application server name is `payments_instance_name_Commerce_Payments_Server`, where `payments_instance_name` is the name of the WebSphere Commerce Payments instance.

7. In the **Additional Properties** table on the application server page, click **Process Definition**. The Process Definition page displays.
8. In the **Additional Properties** table on the Process Definition page, click **Process Execution**. The Process Execution page displays.
9. In the **Run as user** field, enter the non-root user ID created before installing WebSphere Commerce.
10. In the **Run as group** field, enter the user group to which the non-root user ID belongs.
11. Click **OK**.
12. Click **Save** in the Administrative Console taskbar.
13. On the Save page, select **Synchronize changes with Node**.
14. On the Save page, click **Save**.
15. Exit the WebSphere Application Server Administrative Console.
16. Restart the node agent as the non-root user by doing the following on the application server node:
  - a. Stop the node agent. Refer to “Starting and stopping the WebSphere Application Server node agent” on page 124 for instructions.
  - b. Correct the permissions of important files, by issuing the following command on the WebSphere Commerce machine:

```
WC_installdir/bin/wc55nonroot.sh
```

Default values for `WC_installdir` are listed in “Path variables” on page v.

Ensure that no application servers, including the node agent, are running before issuing this command.

- c. Switch users to the non-root user ID created before installing WebSphere Commerce by issuing the following command:

```
su - non_root_user_ID
```

where `non_root_user_ID` is the non-root user ID created before installing WebSphere Commerce.

- d. Start the node agent. Refer to “Starting and stopping the WebSphere Application Server node agent” on page 124 for instructions.

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## 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 124 for instructions.



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2. On the WebSphere Application Server Network Deployment machine, start the deployment manager. Refer to “Starting and stopping the WebSphere Application Server Network Deployment deployment manager” on page 124 for instructions.

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

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



If you receive an out of memory error, refer to “removeNode.sh command returns out of memory error” on page 155 for information on correcting the problem.

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

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



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## + Chapter 20. Clustering WebSphere Commerce

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

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

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

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- “Clustering with horizontal cluster members” on page 105

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- “Clustering with vertical cluster members” on page 105

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When clustering WebSphere Commerce, each WebSphere Commerce node in the cluster must use the same WebSphere Commerce Payments instance as WebSphere Commerce Payments does not support clustering. However, to manage WebSphere Commerce Payments with the WebSphere Commerce cluster, you can federate the WebSphere Commerce Payments application server into the same deployment manager cell as the WebSphere Commerce cluster by following the instructions in “Federating WebSphere Commerce Payments” on page 97.

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

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### **Important**

Before clustering WebSphere Commerce, it is strongly recommended that you backup the WebSphere Application Server administrative configuration.

Backing up the administrative configuration will allow you to restore the original configuration if clustering fails during the clustering process. For more information, refer to the “Backing up and restoring administrative configurations” topic in the WebSphere Application Server InfoCenter:

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

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

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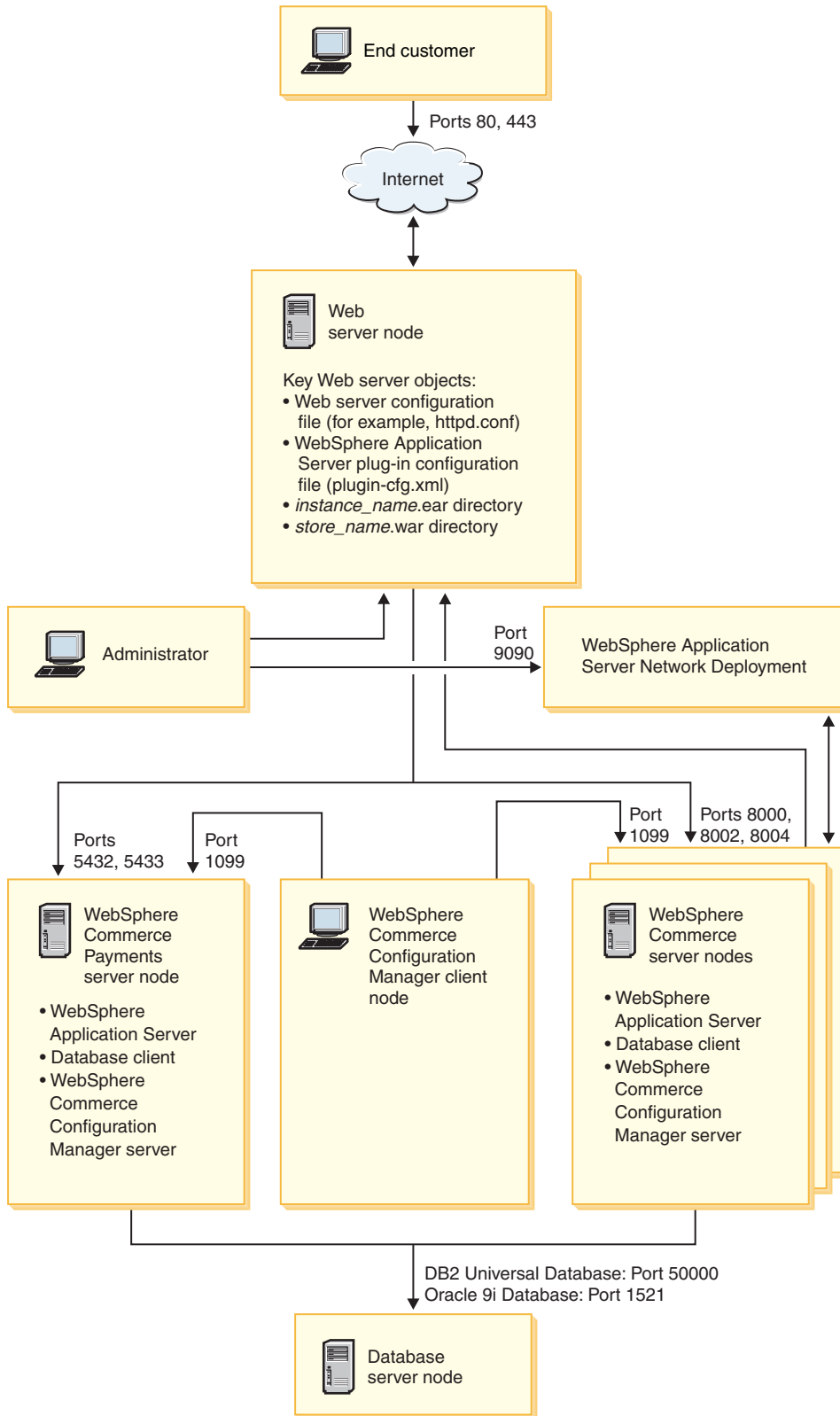


Figure 3. Custom 5-node installation with clustering

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## Clustering with horizontal cluster members

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

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

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

1. Complete the installation of a WebSphere Commerce node. For instructions, refer to Part 4, “Installing WebSphere Commerce,” on page 35.
2. Create a WebSphere Commerce instance. For instructions, refer to Part 5, “Creating a WebSphere Commerce and a WebSphere Commerce Payments instance,” on page 67.
3. Federate the WebSphere Commerce node into a deployment manager cell. For instructions refer to “Federating WebSphere Commerce” on page 95.
4. Prepare additional nodes for each node you want to add to the cluster. For instructions, refer to “Preparing additional nodes” on page 106.
5. Create the WebSphere Commerce cluster. For instructions, refer to “Creating the WebSphere Commerce cluster” on page 107.
6. Verify the JDBC provider path for each cluster member. For instructions, refer to “Verifying the JDBC provider path” on page 108.
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 109.
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 110.
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 110.

### Important

Before publishing a store in a cluster with horizontal cluster members, review “Publishing a store in a WebSphere Commerce cluster” on page 114.

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## Clustering with vertical cluster members

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

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

1. Complete the installation of a WebSphere Commerce node. For instructions, refer to Part 4, “Installing WebSphere Commerce,” on page 35.
2. Create a WebSphere Commerce instance. For instructions, refer to Part 5, “Creating a WebSphere Commerce and a WebSphere Commerce Payments instance,” on page 67.
3. Federate the WebSphere Commerce node into a deployment manager cell. For instructions refer to “Federating WebSphere Commerce” on page 95.
4. Create the WebSphere Commerce cluster. For instructions, refer to “Creating the WebSphere Commerce cluster” on page 107.
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 109.

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## Preparing additional nodes

This section applies only to clustering with horizontal cluster members.

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

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

1. Install the WebSphere Commerce Server component of WebSphere Commerce on the machine hosting the horizontal cluster member. Use the custom installation option of the WebSphere Commerce installation wizard to do this. Instructions on completing a custom installation are provided in Chapter 11, “Completing a custom installation,” on page 59.

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

**Oracle** If you want to use Oracle as the database when performing a custom install, you must install the Oracle components for an Oracle client machine as outlined in step 2 on page 25 of “Using Oracle9i Database as the remote WebSphere Commerce database” on page 25 before starting the WebSphere Commerce installation wizard.

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

**DB2** You may need to catalog the remote WebSphere Commerce database node and the remote WebSphere Commerce database. For instructions, refer to “Cataloging a Remote DB2 Database” on page 137.

**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 95.

**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 124 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 124.

Ensure that you start each node agent as the WebSphere Commerce non-root user.

3. Open the WebSphere Application Server Administrative Console. For instructions, refer to “Starting the WebSphere Application Server Administrative Console” on page 124.
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 107 through 12 for each cluster member you want to add.
14. When you have finished adding cluster members, click **Next**.
15. Click **Finish**.
16. Click **Save** in the Administrative Console task bar.
17. On the Save page, select **Synchronize changes with node**.
18. On the Save page, click **Save**.
19. Exit the WebSphere Application Server Administrative Console.

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## 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 124.
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 124 for instructions.
3. Open the WebSphere Application Server Administrative Console. For instructions, refer to “Starting the WebSphere Application Server Administrative Console” on page 124.
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.

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

When regenerating the plug-in, ensure that you are logged in as the non-root user created before installing WebSphere Commerce.

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 124 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 124.
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](http://publib.boulder.ibm.com/infocenter/wasinfo/index.jsp?topic=/com.ibm.websphere.nd.doc/info/ae/ae/trun_app_regen.html)

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

- Using the WebSphere Application Server Administrative Console:
  - a. Open the WebSphere Application Server Administrative Console. For instructions, refer to “Starting the WebSphere Application Server Administrative Console” on page 124.
  - b. In the Navigation area, expand **Environment** and click **Update Web Server Plugin**.
  - c. Click **OK** to generate a new plugin-cfg.xml file.
  - d. Exit the WebSphere Application Server Administrative Console.
  - e. Open the plugin-cfg.xml file in a text editor. The plugin-cfg.xml file is in the following directory:

`WAS_installdir/config/cells`

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

For example, if the newly generated plugin-cfg.xml file contains /opt/WebSphere/DeploymentManager in some of the elements, but WebSphere Application Server is installed in /opt/WebSphere/AppServer

+ on the WebSphere Commerce node, change all occurrences of  
+ /opt/WebSphere/DeploymentManager in the plugin-cfg.xml file to  
+ /opt/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 129.
- + 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 130.

+ **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.

+ Perform all tasks in this section as the non-root user created before installing  
+ WebSphere Commerce.

+ 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 113.
- + 2. Stop the Web server according the documentation provided with the Web  
+ server.
- + 3. Copy the contents of the following directory on the original WebSphere  
+ Commerce node to the same directory on the other machines:

+ *WC\_installdir/instances/instance\_name*

+ where *instance\_name* is the name of the WebSphere Commerce instance.

+ Default values for *WC\_installdir* are listed in “Path variables” on page 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 113.

---

## + 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.

Perform all tasks in this section as the non-root user created before installing WebSphere Commerce.

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 113.
2. Stop the Web server according to the documentation provided with the Web server.
3. Copy the contents of the following directory on the original WebSphere Commerce node to the same directory on the node:

`WAS_installdir/installedApps/cell_name/WC_instance_name.ear`

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

The variables are defined as follows:

*WAS\_installdir*

Default values for *WAS\_installdir* are listed in “Path variables” on page v.

*cell\_name*

This is the name of the original WebSphere Commerce node.

*instance\_name*

This is the name of the WebSphere Commerce instance.

4. Start the Web server according to the documentation provided with the Web server.
5. Start the cluster. For instructions, refer to “Starting or stopping a WebSphere Commerce cluster” on page 113.

---

## 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 107.

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 124.  
Ensure that you start each node agent as the WebSphere Commerce non-root user.
2. If you want to add a horizontal cluster member to the cluster, complete the tasks in “Preparing additional nodes” on page 106.
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 124 for instructions.
4. Open the WebSphere Application Server Administrative Console. For instructions, refer to “Starting the WebSphere Application Server Administrative Console” on page 124.

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 109.
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 129.
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 110.
  - 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 110.

---

## Starting or stopping a WebSphere Commerce cluster

Perform all tasks in this section as the non-root user created before installing WebSphere Commerce.

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 124.
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 124 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 124.
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 124.  
Ensure that you start the node agent on each node as the WebSphere Commerce non-root user.
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 124 for instructions.
3. Open the WebSphere Application Server Administrative Console. For instructions, refer to “Starting the WebSphere Application Server Administrative Console” on page 124.
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 109.

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## + Publishing a store in a WebSphere Commerce cluster

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### + Publishing a store in a cluster with horizontal cluster members

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

1. Copy WebSphere Commerce instance information from the original WebSphere Commerce node to each horizontal cluster member. For instructions, refer to “Copying instance information” on page 110.
2. Copy WebSphere Commerce application and store information from the original WebSphere Commerce node to each horizontal cluster member. For instructions, refer to “Copying WebSphere Commerce application and store information” on page 110.
3. Publish your store.

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

For information on developing a store in WebSphere Commerce, refer to *WebSphere Commerce Store Development Guide*. This book is available from the WebSphere Commerce technical library. Refer to “WebSphere Commerce technical library” on page 161 for more information.

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### + Publishing a store in a cluster with vertical cluster members

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

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

For information on developing a store in WebSphere Commerce, refer to *WebSphere Commerce Store Development Guide*. This book is available from the WebSphere Commerce technical library. Refer to “WebSphere Commerce technical library” on page 161 for more information.

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## **Part 8. Installation and administration tasks**

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





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## Chapter 21. WebSphere Commerce tasks

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

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### Starting or stopping a WebSphere Commerce instance

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

1. Ensure that the database management system is started.
2. Ensure that the Web server is started.
3. Start, stop, or restart the application server for the WebSphere Commerce instance you want to start. Instructions for starting and stopping an application server are provided in “Starting or stopping an application server” on page 123.

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

---

### Starting or stopping a WebSphere Commerce Payments instance

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

1. Ensure that the database management system is started.
2. Ensure that the Web server is started.
3. Start Configuration Manager. For instructions on starting Configuration Manager, refer to “Starting the Configuration Manager” on page 69.
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.

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### Modifying a WebSphere Commerce or WebSphere Commerce Payments instance

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

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

1. Ensure the database management system is started.
2. Start Configuration Manager. For instructions on starting Configuration Manager, refer to “Starting the Configuration Manager” on page 69.
3. From the list of instances, select the instance you want to configure and select the node for which you want to alter the settings. Refer to the online help for the Configuration Manager for information about the various fields and panels of Configuration Manager.
4. After you update your instance, click **Apply** to apply your changes.
5. When the changes have been successfully applied, exit the Configuration Manager client. This also terminates the Configuration Manager server.
6. Restart the instance you have modified.

---

## Deleting a WebSphere Commerce instance

To delete a WebSphere Commerce instance, do the following:

1. Ensure that WebSphere Commerce is stopped. For instructions on stopping WebSphere Commerce, refer to “Starting or stopping a WebSphere Commerce instance” on page 117.
2. If you are deleting a WebSphere Commerce instance from a deployment manager cell, remove the WebSphere Commerce instance from the deployment manager cell. For instructions, refer to “Removing an application server node from a cell” on page 100.
3. Backup any critical or customized files found in the following directories:
  - `WC_installdir/instances/instance_name`
  - `WAS_installdir/logs/WC_instance_name`
  - `WAS_installdir/installedApps/hostname/WC_instance_name.ear`

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

4. Delete the WebSphere Commerce instance from Configuration Manager by doing the following:
  - a. Start Configuration Manager. For instructions on starting Configuration Manager, refer to “Starting the Configuration Manager” on page 69.
  - b. In Configuration Manager, under **WebSphere Commerce**, expand *hostname* → **Commerce** → **Instance List**.
  - c. Right-click the instance you want to delete and select **Delete instance**.
  - d. Exit Configuration Manager when the process completes.
5. Do one of the following:

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

```
WC_installdir/bin/rmCommerceServer.sh instance_name
```

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

Default values for *WC\_installdir* are listed in “Path variables” on page v.

**Important**

Ensure you run this command as the non-root user created for WebSphere Commerce.

Also, ensure that you enter the name of the WebSphere Commerce instance and *not* the name of the WebSphere Commerce application server.

When the name of the WebSphere Commerce instance is *instance\_name*, the name of the WebSphere Commerce application server is **WC\_instance\_name**.

If you use *WC\_instance\_name*, you will receive an error message.

*If WebSphere Commerce is running in a federated environment:*

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

For instructions on starting the WebSphere Application Server Network Deployment Administration Console, refer to “Starting the WebSphere Application Server Administrative Console” on page 124.

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

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

**DB2**

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

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

```
db2 attach to remote_db_node_name
```

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

```
db2 drop db db_name
```

where *db\_name* is the name of the WebSphere Commerce database.

**Oracle**

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

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

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

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

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

`WAS_installdir/installedApps/hostname/WC_instance_name.ear`

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

Web server	Actions
IBM HTTP Server	<ol style="list-style-type: none"> <li>Open <code>httpd.conf</code> in a text editor.</li> <li>Remove all sections delimited by the following text: IBM WebSphere Commerce (Do not edit this section)  End of IBM WebSphere Commerce (Do not edit this section)  There will be multiple sections in the file delimited by the text.</li> <li>Save the changes and exit the text editor.</li> <li>If the IBM HTTP Server node is remote from the WebSphere Commerce node, delete the following directory on the IBM HTTP Server node: <code>WAS_installdir/installedApps/hostname/WC_instance_name.ear</code>  where <code>instance_name</code> is the name of the WebSphere Commerce instance you are deleting.</li> <li>Restart the Web server.</li> </ol>
Sun ONE Web Server	<ol style="list-style-type: none"> <li>From the Sun ONE Web Server configuration files (for each WebSphere Commerce port), remove any sections delimited by the following text: IBM WebSphere Commerce (Do not edit this section)  End of IBM WebSphere Commerce (Do not edit this section)</li> <li>If the Sun ONE Web Server node is remote from the WebSphere Commerce node, delete the following directory on the Sun ONE Web Server node: <code>WAS_installdir/installedApps/hostname/WC_instance_name.ear</code>  where <code>instance_name</code> is the name of the WebSphere Commerce instance you are deleting.</li> <li>Restart the Web server.</li> </ol>

10. If you plan to use other WebSphere Application Server application servers after deleting the WebSphere Commerce instance, you must regenerate the WebSphere Application Server plug-in configuration file. For information on regenerating the WebSphere Application Server plug-in configuration file, refer to “Regenerating the WebSphere Application Server Web server plug-in configuration file” on page 126.

---

## 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 117.
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 69.
  - 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**.
  - d. Exit Configuration Manager when the process completes.

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:

**DB2**

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

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

```
db2 attach to remote_db_node_name
```

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

```
db2 drop db db_name
```

where *db\_name* is the name of the WebSphere Commerce Payments database.

**Oracle**

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

4. Delete the following directories if they exist:

```
WC_installdir/instances/instance_name
```

```
WC_installdir/payments/instances/instance_name
```

```
WAS_installdir/logs/instance_name_Commerce_Payments_Server
```

```
WAS_installdir/installedApps/hostname/instance_name_Commerce_Payments_App.ear
```

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

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

Web server	Actions
IBM HTTP Server	<ol style="list-style-type: none"> <li>1. Open <code>httpd.conf</code> in a text editor.</li> <li>2. Remove all sections delimited by the following text:  <code>IBM WebSphere Payments (Do not edit this section)</code>   <code>End of IBM WebSphere Payments (Do not edit this section)</code>             There will be multiple sections in the file delimited by the text.</li> <li>3. Save the changes and exit the text editor.</li> </ol>
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 126.

---

## Chapter 22. 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. Ensure that your database management system is started.
2. Type the following commands in a terminal window:

```
su - non_root_user  
cd WAS_installdir/bin
```

```
non_root_user
```

is the non-root user ID created before installing WebSphere Commerce.

```
WAS_installdir
```

is the installation directory for WebSphere Application Server or WebSphere Application Server Network Deployment. Default values for *WAS\_installdir* are listed in “Path variables” on page v.

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

where:

```
application_server_name
```

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

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

where *instance\_name* is the name of the WebSphere Commerce instance.

**Note:** If the WebSphere Commerce node is federated into a WebSphere Application Server Network Deployment cell, you cannot start WebSphere Commerce or using this command. For instructions on starting WebSphere Commerce when 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 125.

---

## 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. Ensure that your database management system is started.
2. Enter the following commands in a terminal window:

```
cd WAS_ND_installdir/bin
```

```
WAS_ND_installdir
```

is the installation directory for WebSphere Application Server Network Deployment. Default values for *WAS\_installdir* are listed in “Path variables” on page v.

3. Do one of the following:
  - To start the deployment manager, enter the following command:  
`./startManager.sh`
  - To stop the deployment Manager, enter the following command:  
`./stopManager.sh`

---

## Starting and stopping the WebSphere Application Server node agent

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

1. Ensure that you are logged in as the non-root user ID created before installing WebSphere Commerce.
2. Ensure that your database management system is started.
3. Enter the following commands in a terminal window:

```
su - non_root_user  
cd WAS_installdir/bin
```

```
WC_non_root_user
```

is the non-root user ID created before installing WebSphere Commerce.

```
WAS_installdir
```

is the installation directory for WebSphere Application Server or WebSphere Application Server Network Deployment. Default values for *WAS\_installdir* are listed in “Path variables” on page v.

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

---

## Starting the WebSphere Application Server Administrative Console

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

### Federated application servers

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

- The WebSphere Application Server node agent on each federated node. For instructions, refer to “Starting and stopping the WebSphere Application Server node agent.”



- The WebSphere Application Server Network Deployment deployment manager. For instructions, refer to “Starting and stopping the WebSphere Application Server Network Deployment deployment manager” on page 124.

#### **A standalone (unfederated) application server**

Before starting the WebSphere Application Server Administrative Console, you must start the default WebSphere Application Server application server (server1). For instructions, refer to “Starting or stopping an application server” on page 123.

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

```
http://hostname:port/admin
```

or

```
https://hostname:port/admin
```

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

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

---

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

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

The instructions in this section do not apply when starting or stopping a cluster of application servers. For instructions on starting or stopping a cluster of application servers, refer to “Starting or stopping a WebSphere Commerce cluster” on page 113.

For information on federating the WebSphere Commerce application server and the WebSphere Commerce Payments application server into a deployment manager cell, refer to Chapter 19, “Federating WebSphere Commerce and WebSphere Commerce Payments,” on page 95.

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 124 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 124.
4. In the Navigation area, expand **Servers** and click **Application Servers**. The Application Servers page displays.
5. Select the check box next to the application server you want to start or stop and click **Start** or **Stop**. The following table lists the WebSphere Commerce application servers that may be available:

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

---

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

Perform all tasks in this section as the non-root user created before installing WebSphere Commerce.

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 109.

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 123 for instructions.
2. Open the WebSphere Application Server Administrative Console. For instructions, refer to “Starting the WebSphere Application Server Administrative Console” on page 124.
3. In the Navigation area, expand **Environment** and click **Update Web Server Plugin**.
4. Click **OK** to generate a new `plugin-cfg.xml` file.
5. Exit the WebSphere Application Server Administrative Console.
6. If WebSphere Commerce Payments is on a separate node, repeat all of these steps on the WebSphere Commerce Payments node.

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

1. Copy the plug-in from the WebSphere Commerce node to the Web server node. For details, refer to “Copying the `plugin-cfg.xml` file to Web server” on page 129.
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 130.

3. Restart the Web server according to the documentation provided with the Web server.



---

## Chapter 23. Remote Web server tasks

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

---

### Copying the plugin-cfg.xml file to Web server

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

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

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

Default values for *WAS\_installdir* and *WAS\_ND\_installdir* are listed in “Path variables” on page v.

**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="/opt/WebSphere/AppServer/config/cells/plugin-cfg.xml"
```

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

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

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

If you are working on a custom installation with WebSphere Commerce and WebSphere Commerce Payments on separate nodes, continue with “Merging the WebSphere Commerce Payments plugin-cfg.xml file” on page 130.

---

## Merging the WebSphere Commerce Payments plugin-cfg.xml file

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

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

*WAS\_installdir/config/cells/plugin-cfg.xml*

Default values for *WAS\_installdir* are listed in "Path variables" on page 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 are defined as follows:

*instance\_name*

This is the name of the WebSphere Commerce Payments instance.

*short\_host\_name*

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

*host\_name*

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

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

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

where the variables are defined as follows:

*instance\_name*

This is the name of the WebSphere Commerce Payments instance.

*short\_host\_name*

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

*IP\_address*

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

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

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

where the variables are defined as follows:

*instance\_name*

This is the name of the WebSphere Commerce Payments instance.

*short\_host\_name*

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

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

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

where the variables are defined as follows:

*instance\_name*

This is the name of the WebSphere Commerce Payments instance.

*short\_host\_name*

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

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

---

## Post-Store publishing tasks

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

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

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

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

where the variables are defined as follows:

*WAS\_installdir*

Default values for *WAS\_installdir* are listed in “Path variables” on page 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.



---

## Chapter 24. Setting and changing passwords

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

---

### Changing your Configuration Manager password

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

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

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

where the parameters are as follows:

*action type*

Valid actions types are Add, Check, Delete or Modify

*password\_file*

The path to the file where the file will be stored. The default path is *WC\_installdir/bin*.

*user\_ID*

This is this user ID for which you want to add, create, delete, or modify the password.

*password*

This is password that you want to add, create, delete, or modify.

*new\_password*

This parameter is only require if you specify **Modify** as the action type.

This is the new password to assign to the user ID.

---

### Changing the WebSphere Commerce Site Administrator password

You can change your password using the WebSphere Commerce Administration Console.

To change your password using WebSphere Commerce Administration Console, do the following:

1. Start the WebSphere Commerce Administration Console.
2. Log on with the Site Administrator ID and password created when the WebSphere Commerce instance was created.
3. Select the **Change password** check box and click **Log On**. The Change Password page displays.

4. In the **Old Password** field, type your current Administration Console logon password. This field accepts up to 128 alphanumeric characters.
5. In the **New Password** field, type a new logon password. This field accepts up to 128 alphanumeric characters.
6. In the **New password confirmation** field, re-type the password.
7. Click **Change** to save the new password. The Select Store and Language page displays.
8. Exit the WebSphere Commerce Administration Console.

---

## Resetting the Site Administrator password

If you forget the Site Administrator password and want to reset the password, do the following:

1. Start a command prompt session.

Ensure you are not using the Bourne shell. WebSphere Commerce commands will not work in the Bourne shell. The Korn shell is recommended for running WebSphere Commerce commands.

2. Issue the following command:

```
WC_installdir/bin/wcs_password.sh 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: pArp97jT4N0XN6MyWswTQpwaPbIFsEWQGwfeu08yIyM=
Hex Format: 7041727039376a54344e4f584e364d79577377545170776d
```

 Record the ASCII format value of the encrypted password.

 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.sh` command.

*Hex\_encrypted\_string*

This is the Hex format value obtained from the `wcs_password.sh` command.

*SALT* This is the random 12–digit number you used to seed the `wcs_password.sh` command.

*site\_admin\_id*

This is the Site Administrator ID for which you are resetting the password.

---

## Recovering the Site Administrator ID

If you forget the Site Administrator ID defined when the WebSphere Commerce instance was created and you have no other IDs authorized as Site Administrators, you can recover the Site Administrator ID by doing the following:

1. Depending on the database management system being used for WebSphere Commerce, issue the commands below:

```
> DB2 db2 connect to db_name user user_name using password
db2 select LOGONID from USERREG where USERS_ID=-1000
```

```
> Oracle sqlplus wc_user_ID/wc_password@wc_SID
select LOGONID from USERREG where USERS_ID=-1000;
```

where the variables are defined as follows:

**db\_name**

The name of your WebSphere Commerce database.

**user\_name**

The DB2 database user ID for the WebSphere Commerce database.

**password**

The password associated with the DB2 database user ID.

**wc\_user\_ID**

The Oracle user ID for the WebSphere Commerce database.

**wc\_password**

The password associated with Oracle user ID.

**wc\_SID**

The Oracle System Identifier (SID) for the WebSphere Commerce database instance.

These commands should return the Site Administrator ID.

---

## Chapter 25. General administrative tasks

This chapter describes some of the general administrative tasks you may need to perform as you use WebSphere Commerce.

---

### Command line configuration tasks

Through the command line you can:

- Update an instance:

```
WC_installdir/bin/config_client.sh -startCmdLineConfig  
updateInstance xml_file
```

- Delete an instance:

```
WC_installdir/bin/config_client.sh -startCmdLineConfig  
deleteInstance instance_name
```

- List existing instances:

```
WC_installdir/bin/config_client.sh -startCmdLineConfig  
getInstances
```

- Find information about an instance:

```
WC_installdir/bin/config_client.sh -startCmdLineConfig  
getInstanceInfo instance_name
```

- Print configuration information for an instance to a file:

```
WC_installdir/bin/config_client.sh -startCmdLineConfig  
getInstanceConfig instance_name print_to_file_name
```

Default values for *WC\_installdir* are listed in “Path variables” on page v.

**Note:** The commands in this sections appear on multiple lines for display purposes only. Enter these commands on one line.

---

### Cataloging a Remote DB2 Database

Enable the database client/server connection, and catalog the node and the database on the client by entering the following commands on a DB2 command window from the database client machine:

```
db2 catalog tcpip node node_name remote host_name server port_num  
db2 catalog db db_name at node node_name
```

The variable information in the commands is defined as follows:

*node\_name*

A unique name of your choice that DB2 will use to identify the TCP/IP node. To ensure that your name is unique, you can enter the following command in a DB2 command window:

```
db2 list node directory
```

and look for the name in the response. If the name is *not* listed, you can use it as your node name.

*host\_name*

The fully qualified host name of the machine on which the WebSphere Commerce database resides.

*port\_num*

The port number that identifies the TCP/IP connection. To determine the port number, do the following from the database server machine:

1. In a DB2 command session on the database node, issue the following command:

```
db2 get dbm cfg
```

and note the value of SVCENAME (which is also identified by the text TCP/IP Service Name).

2. On the machine running your database, open the Services file `\etc\services` and look for the line that begins with the name you noted in the previous step. The port number appears in the second column of the same line (with the string `/tcp` appended to it). The default port number for DB2 Universal Database is 50000.

*db\_name*

The name of the remote database.

The name of the default WebSphere Commerce database is `Ma11`.

The name of the default WebSphere Commerce Payments database is `wpm`.

---

## Chapter 26. AIX Tasks

This appendix describes a variety of tasks that an AIX administrator will perform during the installation of WebSphere Commerce. These include:

- Allocating and mounting a CD file system
- Increasing free space
- Working with paging space
- Determining the size of a physical partition
- Installing prerequisite filesets

---

### Allocate and mount a CD file system

#### Allocate a CD file system

If your CD-ROM does *not* mount automatically, allocate a CD file system by doing the following:

1. Log in as user ID root.
2. In a terminal window, type `smitty storage`.
3. Select **File Systems**.
4. Select **Add/Change/Show/Delete File Systems**.
5. Select **CDROM File Systems**.
6. Select **Add a CDROM File System**.
7. At the DEVICE name prompt, Press F4=List to select the device name.
8. At the MOUNT POINT prompt, type in a directory name to used as your CD-ROM directory, such as `/cdrom`. If this directory already exists, ensure it is empty before using it as a mount point.
9. Press **Enter**.
10. The Command Status window appears. When the command completes, Press F10=Exit.

#### Mount a CD file system

If your CD-ROM is not mounted, mount the CD-ROM file system by doing the following:

1. Log in as user ID root.
2. In a terminal window, type `smitty mountfs`.
3. At the FILE SYSTEM prompt, either type `/dev/cd0` or select it from the list.
4. At the DIRECTORY prompt, select the name of your CD-ROM directory from the list.
5. At the TYPE prompt, press F4=List and select `cdarfs` from the list.
6. Ensure that the "Mount as a READ-ONLY system?" prompt is set to "yes".
7. Press **Enter**.
8. The Command Status window appears. When the command completes, press F10=Exit.

---

## Increase free space

You must have the following minimum amounts of free space:

- 1GB (2097152 blocks with a block size of 512 bytes) in the /home directory. This is required for DB2. If there is not enough space in the /home directory, the DB2 installation may fail or encounter difficulties. Depending on the size of your database, you may require more space.
- 4 GB (8388608 blocks with a block size of 512 bytes) in the /usr directory.
- 1GB (2097152 blocks with a block size of 512 bytes) in the /tmp directory. The /tmp directory may be used to store temporary files during installation.

To determine whether you have enough space, type `df` on an AIX command line and look for information about the /home, /usr and /tmp directories. If the free space is greater than the amounts indicated above, continue with step “Verify paging space.”

If there is not enough free space, record the current size and amount of free space currently available (to use in step 9 below), and change the size of the /home, /usr and /tmp directories by following the steps below.

**Note:** Do not increase the size of these directories by decreasing the size of another file system. Use only the method described below.

1. Log in as user ID root.
2. In a terminal window, type `smitty`.
3. From the System Management menu, select **System Storage Management (Physical & Logical Storage)**.
4. Select **File Systems**.
5. Select **Add/Change/Show/Delete File Systems**.
6. Select **Journalled File Systems**.
7. Select **Change/Show Characteristics of a Journalled File System**.
8. Select **/home**.
9. Calculate the size required for the /home directory by using this formula:  
$$new\_size = current\_size + required\_space - free\_space$$

where *current\_size* and *free\_space* are the values you recorded above, and *required\_space* is the amount of free space required as indicated at the beginning of this section.

10. Type the value of *new\_size* into the **SIZE of file system** field.
11. Click **Enter**.
12. Press F10=Exit.
13. Repeat these steps for the /usr and /tmp directories, if necessary.

---

## Paging space

### Verify paging space

You must have at least 1 GB of paging space per processor per WebSphere Commerce instance.

To determine whether you have enough paging space, do the following:

1. On an AIX command line, type `lspcs -a`.



2. All the *active* paging space is now listed. Ensure that the total is at least 1 GB per processor per WebSphere Commerce instance. If not, record the total, and increase the amount of paging space by following the instructions in “Increase the size of an existing paging space.”

## Activate an inactive paging space

To activate an inactive paging space, do the following:

1. From the System Management menu, select **System Storage Management (Physical & Logical Storage)**.
2. Select **Logical Volume Manager**.
3. Select **Paging Space**.
4. Select **Change/Show Characteristics of a Page Space**.
5. Select the paging space that you want to activate.
6. Select **yes** in the **Use this paging space each time the system is RESTARTED** field.
7. Click **OK**.
8. The Command Status window appears, indicating that your request has started. When the command completes, press F10=Exit.
9. Restart your machine.
10. Check whether the paging space has been activated or not by issuing the following command:

```
lspcs -a
```

## Increase the size of an existing paging space

Before increasing the size of an existing paging space, you will need to know the size of the physical partitions on your AIX machine. Refer to “Find the size of physical partitions” on page 142 for instructions on finding the size of physical partitions.

To increase the size of an existing paging space, do the following:

1. From the System Management menu, select **System Storage Management (Physical & Logical Storage)**.
2. Select **Logical Volume Manager**.
3. Select **Paging Space**.
4. Select **Change/Show Characteristics of Paging Space**.
5. Select the paging space whose size you want to increase.
6. Calculate the number of partitions that you need to add by subtracting the total size for all active partitions (in MB) from 1024 and dividing by the physical partition size of the physical volume. Round up any fractional result to the next whole number. For example, if after completing the steps in “Verify paging space” on page 140, you calculated the total size for all the active partitions to be 256 MB and you have a physical partition size of 16, you require  $(1024-256)/16 = 48$  additional partitions for paging space.
7. Enter the value you calculated above in the **NUMBER of additional logical partitions** field.
8. Click **OK**.
9. The Command Status window appears, indicating that your request has started. When the command completes, press F10=Exit.
10. Restart your machine.

11. Recheck the size of your paging space, using the procedure in “Verify paging space” on page 140. If it is still less than 1 GB, repeat the steps in this section.

## Create new paging space

Before creating new paging space, you will need to know the size of the physical partitions on your AIX machine. Refer to “Find the size of physical partitions” for instructions on finding the size of physical partitions.

To create a new paging space, do the following:

1. From the System Management menu, select **System Storage Management (Physical & Logical Storage)**.
2. Select **Logical Volume Manager**.
3. Select **Paging Space**.
4. Select **Add Another Paging Space**.
5. Select a volume group from a list of names.
6. In the Add Another Paging Space menu, do the following:
  - a. Calculate the number of partitions that you need to add by subtracting the total size for all active partitions from 1024 and dividing by the physical partition size. For example, if after completing the steps in “Verify paging space” on page 140, you calculated the total size for all the active partitions to be 256 MB and the physical partition size to be 16 MB, you require  $(1024-256)/16 = 48$  partitions of additional paging space.
  - b. Enter the value you calculated above in the **SIZE of paging space (in logical partitions)** field.
  - c. Use the Tab key to select yes in the **Start using the paging space now** field.
  - d. Use the Tab key to select yes in the **Use this paging space each time the system is RESTARTED** field.
7. Click **OK**.
8. The Command Status window appears, indicating that your request has started. When the command completes, press F10=Exit.
9. Check the size of your paging space, using the procedure in “Verify paging space” on page 140. If it is less than 1 GB, perform the procedures outlined in “Increase the size of an existing paging space” on page 141.

---

## Find the size of physical partitions

To find the size of physical partitions, do the following:

1. In a command line window, enter the following command: **lsvg -o**. This command returns a list of all active volume groups on your AIX machine. Take note of the output, you will need it in the next step. For example, executing the command on a machine with the default volume group, will return the following:

```
rootvg
```
2. In a command line window, run the following command: **lsvg volume\_group** where *volume\_group* is one of the volume groups from the list you found in step 1. For example, `lsvg rootvg`
3. From the command output, take note of the **PP SIZE**. It is the physical partition size of the physical volume. For example, here is the output from the example command in step 2:

VOLUME GROUP:	rootvg	VG IDENTIFIER:	0007866266359e7e
VG STATE:	active	PP SIZE:	16 megabyte(s)
VG PERMISSION:	read/write	TOTAL PPs:	1352 (21632 megabytes)
MAX LVs:	256	FREE PPs:	1077 (17232 megabytes)
LVs:	12	USED PPs:	275 (4400 megabytes)
OPEN LVs:	9	QUORUM:	2
TOTAL PVs:	3	VG DESCRIPTORS:	3
STALE PVs:	0	STALE PPs:	0
ACTIVE PVs:	3	AUTO ON:	yes
MAX PPs per PV:	1016	MAX PVs:	32

In this case, the partition size of the rootvg volume group is 16MB.

- Repeat steps 2 through 3 for each volume group you found in step 1. Take note of the physical partition size of each volume group.

---

## Ensure that prerequisite filesets are installed

The following filesets must be installed and are not included in the base AIX 5.1 installation:

- X11.adt.lib
- X11.adt.motif
- X11.base.lib
- X11.base.rte
- X11.motif.lib
- bos.adt.base
- bos.adt.include
- bos.rte.net
- bos.rte.libc
- bos.net.tcp.client

If you plan to use Oracle as your database, the following filesets are required in addition to the filesets listed above:

- bos.adt.lib
- bos.adt.libm

To determine if the files are present on your system, run the following command from a terminal window:

```

lslpp -l X11.adt.lib X11.adt.motif X11.base.lib X11.base.rte X11.motif.lib
lslpp -l bos.adt.base bos.adt.include bos.rte.net bos.rte.libc
bos.net.tcp.client
lslpp -l X11.adt.lib X11.adt.motif X11.base.lib X11.base.rte X11.motif.lib
lslpp -l bos.adt.base bos.adt.include bos.rte.net bos.rte.libc
bos.net.tcp.client bos.adt.lib bos.adt.libm

```

If the files are present they will be listed as follows in the output:

Fileset	Level	State	Description
-----			
Path: /usr/lib/objrepos			
X11.adt.lib	5.1.0.0	COMMITTED	AIXwindows Application Development Toolkit Libraries
X11.adt.motif	5.1.0.0	COMMITTED	AIXwindows Application Development Toolkit Motif
bos.adt.base	5.1.0.10	COMMITTED	Base Application Development Toolkit
bos.adt.include	5.1.0.10	COMMITTED	Base Application Development Include Files

For Oracle:

Fileset	Level	State	Description
-----			
Path: /usr/lib/objrepos			
X11.adt.lib	5.1.0.0	COMMITTED	AIXwindows Application Development Toolkit Libraries
X11.adt.motif	5.1.0.0	COMMITTED	AIXwindows Application Development Toolkit Motif
bos.adt.base	5.1.0.10	COMMITTED	Base Application Development Toolkit
bos.adt.include	5.1.0.10	COMMITTED	Base Application Development Include Files
bos.adt.lib	5.1.0.10	COMMITTED	Base Application Development Libraries
bos.adt.libm	5.1.0.0	COMMITTED	Base Application Development Math Library

Any files that are not installed will be listed as errors at the bottom of the command output; for example:

```
ls1pp: 0505-132 Fileset X11.adt.lib not installed
```

To install any files that are not present on your system, complete the following steps:

1. Insert AIX 5.1 Vol. 1 CD in the CD-ROM drive of the machine.
2. Run the following command from terminal window:

```
installp -aX -d device_path X11.adt.lib X11.adt.motif bos.adt.base
bos.adt.include
installp -aX -d device_path X11.adt.lib X11.adt.motif bos.adt.base
bos.adt.include bos.adt.lib bos.adt.libm
```

This command is presented on separate lines for readability only; ensure that you type it on a single line.

3. Follow any instructions that appear in the terminal window while this command runs.
4. The Installation Summary panel opens indicating the fileset levels installed.

---

## Chapter 27. User IDs required when administering WebSphere Commerce

Administration in the WebSphere Commerce environment requires a variety of user IDs. These user IDs along with their requisite authorities are described in the list below. For the WebSphere Commerce user IDs, the default passwords are identified.

### Configuration Manager user ID

The Configuration Manager tool's graphical interface allows you to modify the way WebSphere Commerce is configured. The default Configuration Manager user ID and password are `webadmin` and `webim`.

You can access Configuration Manager from your WebSphere Commerce machine, or any machine on the same network as WebSphere Commerce which supports a graphical user interface, and has the Configuration Manager client installed.

If you apply any WebSphere Commerce fix packs in the future, ensure that both the WebSphere Commerce Configuration Manager server and client machines are at the same fix pack level.

**Important:** Both the Configuration Manager server and the Configuration Manager client must be started under the WebSphere Commerce non-root user ID. Also, the Configuration Manager server or client cannot be started in the Bourne-shell.

### WebSphere Commerce Site Administrator

The Site Administrator user ID and password apply to the following WebSphere Commerce tools:

#### WebSphere Commerce Accelerator

To access the WebSphere Commerce Accelerator from a machine running a Windows operating system, open your Internet Explorer Web browser, and type the following URL:

```
https://host_name:8000/accelerator
```

#### WebSphere Commerce Administration Console

To access the WebSphere Commerce Administration Console from a machine running a Windows operating system, open your Internet Explorer Web browser, and type the following URL:

```
https://host_name:8002/adminconsole
```

#### WebSphere Commerce Organization Administration Console

To access the WebSphere Commerce Organization Administration Console from a machine running a Windows operating system, open your Internet Explorer Web browser, and type the following URL:

```
https://host_name:8004/orgadminconsole
```

The initial Site Administrator user ID and password are specified during the creation of a WebSphere Commerce instance. WebSphere Commerce requires that the Site Administrator password adhere to the following rules:

- The password must be at least 8 characters in length.

- The password must include at least 1 numeric digit.
- The password does not contain more than 4 occurrences of the same character.
- The password does not repeat the same character more than 3 times.

---

## Part 9. Appendixes





---

## Appendix A. Known problems and limitations

This section covers known problems and limitations with WebSphere Commerce. Refer to the README file for any late-breaking problems or limitations.

Additional troubleshooting information can be gathered by turning on the trace feature for WebSphere Commerce in WebSphere Application Server. For more information on the trace feature, refer to *WebSphere Commerce Administration Guide*.

---

### Installation problems and limitations

#### Free space message does not change when installing in console mode

If you change the installation directory when running the installation wizard in console mode, the message displaying the free space available in the directory is not updated to reflect the free space in the selected location.

If there is not enough free space to install the product in the new location, you will receive an error when you click **Next**.

#### Installation problems introduced by a previous DB2 Universal Database installation on a machine

If DB2 Universal Database was previously installed on the machine and is now uninstalled, ensure that the following conditions are met before using the WebSphere Commerce installation wizard to install DB2 Universal Database:

- Ensure that all previous databases were properly dropped and uncataloged.
- Ensure that all database IDs have been dropped using the `dasdrop` and `db2idrop` commands.

For information on these commands and their use, refer to the DB2 Universal Database documentation.

- Ensure that any DB2 ports have been removed from the `/etc/services` file.
- Ensure that the following users do not exist on the system:
  - `db2fwc1`
  - `daswc1`
- Ensure that the following groups do not exist on the system:
  - `daswcg1`
  - `db2fwcg1`

---

### Web server problems and limitations

#### Secure (HTTPS) URLs do not work

If any of the secure URLs for WebSphere Commerce do not work, the SSL certificate for the Web server may be missing or expired.

Refer to the Web server documentation for information on installing or updating the SSL certificate.

---

## WebSphere Commerce instance problems and limitations

### Bad ulimit message when starting Configuration Manager

On Solaris Operating Environment, you may receive a bad ulimit message when starting the WebSphere Commerce Configuration Manager client or server. This error message can safely be ignored.

### createsp.log file contains errors

If the createsp.log file contains errors, you may be able to correct these errors by following the procedure in this sections.

The createsp.log file can be found in the following directory:

*WC\_installdir/instances/instance\_name/logs*

where default values for *WC\_installdir* are listed in “Path variables” on page v and *instance\_name* is the name of WebSphere Commerce instance.

If the createsp.log file contains errors, do the following:

1. Ensure the operating system ID that owns the DB2 Universal Database instance belongs to the DB2 fenced user group.

If it does not belong to the group, add it.

2. Restart DB2 Universal Database. For instructions, refer to the DB2 Universal Database documentation.

3. Start a terminal session. Ensure you are using the Korn shell.

4. Change directories to the following:

*WC\_installdir/bin*

5. Run the following commands:

```
./dropsp.db2.sh db_name db_user_ID db_user_password  
./createsp.db2.sh db_name db_user_ID db_user_password dbschema
```

where the variables are defined as follows:

*db\_name*

The name of the WebSphere Commerce database. The default name of the WebSphere Commerce database is `mall`.

*db\_user\_ID*

The operating system ID that owns the DB2 Universal Database instance.

*db\_user\_password*



The password associated with *db\_user\_ID*.

### Creating a WebSphere Commerce instance with a default language other than the WebSphere Commerce installation language

During WebSphere Commerce installation, the language selected for the installation wizard sets the default language used when creating a WebSphere Commerce instance. The creation of an instance with a default language other than the installation language will create an instance populated with data that is invalid for the chosen language.

When creating an instance with a default language other than the installation language, do the following:

1. Open a text editor to edit the following files, depending on the database used for the WebSphere Commerce database:

WebSphere Commerce database type	Files to edit
 DB2	<i>WC_installdir</i> /schema/wcs.schema.ws_m1_db2.input <i>WC_installdir</i> /schema/wcs.schema2.ws_m1_db2.input
 Oracle	<i>WC_installdir</i> /schema/wcs.schema.ws_m1_oracle.input <i>WC_installdir</i> /schema/wcs.schema2.ws_m1_oracle.input

Default values for *WC\_installdir* are listed in “Path variables” 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.”
3. Save your changes and exit the text editor.
4. Create a new WebSphere Commerce instance ensuring you specify the new default language. Instructions for creating a WebSphere Commerce instance are provided in Part 5, “Creating a WebSphere Commerce and a WebSphere Commerce Payments instance,” on page 67.

### 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

## Out of memory error occurs during instance creation

If instance creation fails, you may be receiving a `java.lang.OutOfMemory` exception during instance creation. Check the following log file for a `java.lang.OutOfMemory` exception:

*WC\_installdir*/instances/WCSconfig.log

To correct the out of memory error, do the following:

1. Open the following file in a text editor:

*WC\_installdir*/bin/config\_server.sh

2. Search the file for the following text:

```
if [ $OS_NAME != "OS400" ]; then
    MAX_HEAP=-Xmx256m
fi
```

3. Increase the value for `MAX_HEAP`. For example, change 256 to 512.

4. Save your changes.
5. Create your instance again.

## WebSphere Commerce instance does not start when logged in as a non-root user

Once WebSphere Commerce instance was started as root, you will not be able to start the WebSphere Commerce instance as the non-root user.

In order to again be able to start the WebSphere Commerce instance as the non-root user, do the following:

1. Log in as root and start a terminal session.
2. Stop WebSphere Commerce. For instructions, refer to “Starting or stopping a WebSphere Commerce instance” on page 117.
3. Run the following command:

```
WC_installdir/bin/wc55nonroot.sh
```

Default values for *WC\_installdir* are listed in “Path variables” on page v.

4. Switch to the non-root user ID.
5. Start WebSphere Commerce. For instructions, refer to “Starting or stopping a WebSphere Commerce instance” on page 117.

## Viewing port conflicts in the log

Attempting to start your WebSphere Commerce instance may result in the following message:

```
EJB6121: Application server did not start
```

Check the `SystemOut.log` file found in the following directory:

```
WAS_installdir/logs/WC_instance_name
```

where *instance\_name* is the name of the WebSphere Commerce instance that failed to start.

The `SystemOut.log` may indicate a port that is already in use. The message will be similar to:

```
SRVE0146E: Failed to Start Transport on host, port xxxx.
```

The likely cause of this message is that the port is already in use. Please ensure that no other applications are using this port and restart the server.

---

## WebSphere Commerce Payments instance problems and limitations

### Remote WebSphere Commerce Payments instance does not work

If a remote WebSphere Commerce Payments instance does not work, the WebSphere Commerce Payments instance may be configured incorrectly.

To check the configuration of WebSphere Commerce Payments, do the following:

1. On the WebSphere Commerce node, open the following file in a text editor:

```
WC_installdir/instances/WC_instance_name/xml/  
WC_instance_name.xml
```

where *WC\_instance\_name* is the name of the WebSphere Commerce instance.

Default values for *WC\_installdir* are listed in “Path variables” on page 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” 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 Chapter 21, “WebSphere Commerce tasks,” on page 117.

## 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” 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 69.
2. Under **WebSphere Commerce**, expand your *hostname*.
3. Expand **Payments** → **Instance List** → *payments\_instance\_name* → **Instance Properties**.
4. Click on the **Webserver** tab.
5. Update the desired ports.
6. Click **Apply** to apply your changes.

**Note:** All Payments ports should be changed through the Configuration Manager, as stated in Chapter 13, “Before you create or modify an instance with Configuration Manager,” on page 69 and not through the WebSphere Application Server Administration Console. This ensures that all properties and files are updated with the same information.

## WebSphere Commerce Payments instance does not start when logged in as a non-root user

Once the WebSphere Commerce Payments instance was started as root, you will not be able to start the WebSphere Commerce Payments instance as the non-root user.

In order to again be able to start the WebSphere Commerce Payments instance as the non-root user, do the following:

1. Log in as root and start a terminal session.
2. Stop WebSphere Commerce Payments. For instructions, refer to “Starting or stopping a WebSphere Commerce Payments instance” on page 117.
3. Delete the following directory:

```
WAS_installdir/logs/instance_name_Commerce_Payments_Server/
```

where *instance\_name* is the name of the WebSphere Commerce Payments instance.

Default values for *WAS\_installdir* are listed in “Path variables” on page v.

4. Run the following command:

```
WC_installdir/bin/wc55nonroot.sh
```

Default values for *WC\_installdir* are listed in “Path variables” on page v.

5. Switch to the non-root user ID.
6. Start WebSphere Commerce Payments. For instructions, refer to “Starting or stopping a WebSphere Commerce Payments instance” on page 117.

---

## WebSphere Application Server problems and limitations

### addNode.sh command returns out of memory error

When federating application server nodes into a deployment manager cell, the `addNode.sh` command may return an out of memory error. If this occurs, do the following:

1. Ensure that the `addNode.sh` command is not running.
2. Log on as root.
3. Open the following file in a text editor:

*WAS\_installdir*/bin/addNode.sh

4. In the text file, find the following line of text:  
"\$JAVA\_HOME"/bin/java \  
-Xmx512m \  
5. Insert the following line of text below the "\$JAVA\_HOME"/bin/java \  
-Xmx512m \  
6. Save the changes and exit the text editor.  
7. Run the addNode.sh command.

## **removeNode.sh command returns out of memory error**

When federating application server nodes into a deployment manager cell, the `removeNode.sh` command may return an out of memory error. If this occurs, do the following:

1. Ensure that the `removeNode.sh` command is not running.
2. Log on as root.
3. Open the following file in a text editor:  
*WAS\_installdir*/bin/removeNode.sh
4. In the text file, find the following line of text:  
"\$JAVA\_HOME"/bin/java \  
5. Insert the following line of text below the "\$JAVA\_HOME"/bin/java \  
-Xmx512m \  
6. Save the changes and exit the text editor.  
7. Run the `removeNode.sh` command.





---

## Appendix B. Uninstalling WebSphere Commerce components

WebSphere Commerce components must be uninstalled in the reverse order from which they were installed. Uninstall WebSphere Commerce components in the following order:

1. WebSphere Commerce, WebSphere Commerce Payments, and the WebSphere Commerce Configuration Manager server and client

These components should be removed from all nodes on which they are installed before uninstalling any other components.

2. WebSphere Application Server
3. Web server
4. Database

---

### Uninstalling WebSphere Commerce, WebSphere Commerce Payments, or the WebSphere Commerce Configuration Manager client

To uninstall WebSphere Commerce, WebSphere Commerce Payments, or the WebSphere Commerce Configuration Manager client from a node, do the following:

1. Stop WebSphere Commerce as described in “Starting or stopping a WebSphere Commerce instance” on page 117.
2. Stop WebSphere Commerce Payments as described in “Starting or stopping a WebSphere Commerce Payments instance” on page 117.
3. Delete any WebSphere Commerce instances following the instructions provided in “Deleting a WebSphere Commerce instance” on page 118.
4. Delete any WebSphere Commerce Payments instances following the instructions provided in “Deleting a WebSphere Commerce Payments instance” on page 120.
5. If you have created or customized any files in the *WC\_installdir* directory or its subdirectories, and you wish to retain them, back them up to a directory that is not used by any WebSphere Commerce component.

Default values for *WC\_installdir* are listed in “Path variables” on page v.

6. While logged in as root, start the uninstallation wizard by issuing one of the following commands, depending on your operating system:

```
WC_installdir/_uninst/uninstall_aix.jar  
 AIX  
or  
WC_installdir/_uninst/uninstall_aix.jar -console  
WC_installdir/_uninst/uninstall_solaris.jar  
 Solaris  
or  
WC_installdir/_uninst/uninstall_solaris.jar -console
```

Default values for *WC\_installdir* are listed in “Path variables” on page v.

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.

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

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

7. Complete the uninstallation wizard by following the prompts.  
Wait for the uninstallation wizard to complete before continuing.
8. If the `WC_installdir` directory still exists on the node, remove it.  
Default values for `WC_installdir` are listed in “Path variables” on page v.

Repeat the instructions on each node where you have WebSphere Commerce, WebSphere Commerce Payments, or the WebSphere Commerce Configuration Manager client installed.

---

## Uninstalling WebSphere Application Server

For information on uninstalling WebSphere Application Server, refer to *IBM WebSphere Application Server Version 5 Getting Started*. This publication is available through the WebSphere Application Server library:

<http://www.ibm.com/software/webservers/appserv/was/library/>

---

## Uninstalling WebSphere Application Server Network Deployment

WebSphere Application Server must be uninstalled from the WebSphere Commerce and WebSphere Commerce Payments nodes.

For information on uninstalling WebSphere Application Server Network Deployment, refer to *IBM WebSphere Application Server Network Deployment Version 5 Getting Started*. This publication is available through the WebSphere Application Server library:

<http://www.ibm.com/software/webservers/appserv/was/library/>

---

## Uninstalling IBM HTTP Server

If IBM HTTP Server is installed on the same node as WebSphere Application Server, IBM HTTP Server will be uninstalled automatically when you uninstall WebSphere Application Server.

For information on uninstalling IBM HTTP Server, refer to the IBM HTTP Server V1.3.26 powered by Apache Installation file available through the following URL:

<http://www.ibm.com/software/webservers/httservers/library.html>

---

## Uninstalling DB2 Universal Database

For information on uninstalling DB2 Universal Database, refer to *IBM DB2 Universal Database Installation and Configuration Supplement*. This publication is available through the DB2 Universal Database library:

[http://www.ibm.com/cgi-bin/db2www/data/db2/udb/winos2unix/support/v8pubs.d2w/en\\_main](http://www.ibm.com/cgi-bin/db2www/data/db2/udb/winos2unix/support/v8pubs.d2w/en_main)

**Note:** The DB2 Universal Database CD provided with WebSphere Commerce contains a .tar file. To follow the instructions in the DB2 Universal Database documentation, you must untar the contents of the CD to a temporary location. Run any commands that are to be run from the DB2 Universal Database CD from this temporary location instead. After uninstalling DB2 Universal Database, delete the temporary location.



---

## Appendix C. Where to find more information

More information about the WebSphere Commerce system and its components is available from a variety of sources in different formats. The following sections indicate what information is available and how to access it.

---

### WebSphere Commerce information

The following are the sources of WebSphere Commerce information:

- WebSphere Commerce online help
- WebSphere Commerce technical library

#### WebSphere Commerce online help

The WebSphere Commerce online information is your primary source of information for customizing, administering, and reconfiguring WebSphere Commerce. After you have installed WebSphere Commerce, you can access topics in the online information by visiting the following URL:

`https://host_name:8000/wche1p/`

where *host\_name* is the fully qualified TCP/IP host name of the machine on which WebSphere Commerce is installed.

#### WebSphere Commerce technical library

The WebSphere Commerce technical library is available at the following URL:

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

A copy of this book, and any updated versions of this book, are available as PDF files from the Library section of the WebSphere Commerce Web site. In addition, new and updated documentation may also be available from the WebSphere Commerce technical library Web site.

---

### WebSphere Commerce Payments information

Help for WebSphere Commerce Payments is available by clicking the following help icon:



This help icon displays on the WebSphere Commerce Payments user interface within the WebSphere Commerce Administration Console and WebSphere Commerce Accelerator and in the standalone WebSphere Commerce Payments user interface at the following URL:

`http://host_name:http_port/webapp/PaymentManager`

or

`https://host_name:ssl_port/webapp/PaymentManager`

Where the variables are defined as follows:

*host\_name*

The fully qualified TCP/IP host name of the Web server associated with WebSphere Commerce Payments.

*http\_port*

The HTTP port used by WebSphere Commerce Payments. The default HTTP port is 5432.

*ssl\_port*

The SSL port used by WebSphere Commerce Payments. The default SSL port is 5433.

If WebSphere Commerce Payments is SSL-enabled, you can use either URL. If IWebSphere Commerce Payments is not SSL-enabled, you can only use the non-secure URL (http).

Help is also available at the following URL:

`http://host_name:http_port/webapp/PaymentManager/language/docenter.html`

or

`https://host_name:ssl_port/webapp/PaymentManager/language/docenter.html`

Where the variables are defined as follows:

*host\_name*

The fully qualified TCP/IP host name of the Web server associated with WebSphere Commerce Payments.

*http\_port*

The HTTP port used by WebSphere Commerce Payments. The default HTTP port is 5432.

*ssl\_port*

The SSL port used by WebSphere Commerce Payments. The default SSL port is 5433.

*language*

A language code for the language in which the help page will be displayed. It is two letters for most languages. The language codes are as follows:

Language	Code
German	de
English	en
Spanish	es
French	fr
Italian	it
Japanese	ja
Korean	ko
Brazilian Portuguese	pt
Simplified Chinese	zh
Traditional Chinese	zh_TW

More information about WebSphere Commerce Payments and the Payments Cassettes is available at the WebSphere Commerce Technical Library:

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

---

## IBM HTTP Server information

IBM HTTP Server information is available at the IBM HTTP Server Web site:

<http://www.ibm.com/software/webservers/httpservers/>

The documents are in HTML format, PDF files, or both.

---

## WebSphere Application Server information

WebSphere Application Server information is available at the WebSphere Application Server InfoCenter:

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

---

## DB2 Universal Database information

The HTML documentation files are available under the `/doc/locale/html` subdirectory, where *locale* is the language code for your locale (for example, *en* for American English). Any documentation that is not available in a national language is shown in English.

For a complete list of the available DB2 documentation, and how to view or print it, refer to the *DB2 Quick Beginnings for UNIX* book. Additional DB2 information is available at the DB2 Technical Library:

<http://www.ibm.com/software/data/db2/library/>

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## Other IBM publications

You can purchase copies of most IBM publications from your IBM authorized dealer or marketing representative.





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