

IBM WebSphere Digital Media Enabler for
Multiplatforms



Installation and Configuration Guide

Version 54

IBM WebSphere Digital Media Enabler for
Multiplatforms



Installation and Configuration Guide

Version 54

Note

Before using this information and the product it supports, be sure to read the general information under Appendix B, "Notices", on page 59.

Second Edition, Second Revision (June 2003)

This edition applies to IBM WebSphere Digital Media Enabler, Version 5.4 Release 2, Program 5724-E19) and all subsequent releases and modifications until otherwise indicated in new editions.

Government Users Restricted Rights — Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

© **Copyright International Business Machines Corporation 1999, 2003. All rights reserved.**

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

Chapter 1. Welcome to IBM WebSphere®

Digital Media (WDME) Enabler	1
Audience	1
Related publications	1
Conventions used in this book	2
Installation directories	2

Chapter 2. Understanding the WDME architecture

Chapter 2. Understanding the WDME architecture	3
Web server	4
WebSphere Commerce Business Edition or Professional Edition	4
WebSphere Commerce Payments	4
Content Manager system	4
Library server	4
Object server and resource manager	5
Text search server and text information extender (TIE)	5
Enterprise Information Portal (EIP) Client	5
Xerces2 Java Parser	5

Chapter 3. Before you begin

Chapter 3. Before you begin	7
Understanding the prerequisite software	7
WebSphere Commerce software	7
Content Manager software.	7
Prerequisite installation steps	8
Prerequisite installation for Content Manager 7.	8
Verifying the prerequisite installation for Content Manager 7	9
Prerequisite installation for Content Manager 8.	9
Verifying the prerequisite installation for Content Manager 8.	10
Preparing to install WDME	11
Starting the WebSphere Application Server	13
Upgrading the JDBC Applet Server	13
Adding environment variables to the WebSphere Commerce Server - instance application server	14

Chapter 4. Installing WDME

Chapter 4. Installing WDME	17
Launching the installation	17
Providing WebSphere Application Server configuration information	17
Providing WebSphere Commerce configuration information	18
Providing store configuration information	18
Providing data source configuration information	19
Providing Content Manager information.	20
Providing e-mail configuration information.	21
Providing miscellaneous configuration information	21
Providing Internet browser information for Solaris	22
Providing WDME directory information.	22
Verifying the installation	22

Chapter 5. Configuring WDME.

Configuration overview	25
Setting the WDME store profile information	25
Configuring Oracle 9i with Content Manager	26
Creating and loading the content for the WDME search component	26
Prerequisites for the Content Manager search component	26
Defining the WDME data model in Content Manager 7.	27
Defining the WDME data model in Content Manager 8.	29
Loading sample data	30
Starting the WDME Web site	37
Starting Content Manager 7	37
Starting Content Manager 8	38
Starting the WDME servers	38
Starting the delivery daemon	40
Starting the e-mail daemon	41
Starting the upload daemon	41
Accessing the WDME site	42

Chapter 6. Uninstalling Digital Media

Chapter 6. Uninstalling Digital Media	43
Restoring the WebSphere Commerce Enterprise Application	43
Removing the WDME store	43
Removing the sample SAR	44
Removing WDME database tables	44
Removing the WDME installation directory	45

Chapter 7. Using additional WDME stores

Chapter 7. Using additional WDME stores	47
Creating additional stores	47
Using the upload function with additional stores.	47

Chapter 8. Troubleshooting

Chapter 8. Troubleshooting	49
Installing on Solaris	49
Using the upload function with Oracle	49
Delivery function with Oracle	50
Uploading on Solaris	50
Content Manager 7 setup.	50
Content Manager 8 setup.	50
Adding customized Enterprise JavaBeans (EJB) beans and servlets to the WebSphere Commerce enterprise application	51
Assembling new EJB beans into an enterprise application	51
Stopping and removing an enterprise application	53
Importing the new enterprise application	53
Adding WDME servlets to web.xml	54
Setting up WebSphere Commerce Payments for the sample store	54

Appendix A. Log files

Appendix B. Notices 59
Trademarks 60

Glossary 63

Index 65

Chapter 1. Welcome to IBM WebSphere® Digital Media (WDME) Enabler

This installation program automates the following steps:

- Creating and publishing a WDME store through Store Services.
- Creating the WDME database tables with entries for usage pricing and media folders.
- Configuring daemon processes and Web site access. This sets up the background daemon processes for sending e-mail and fulfilling orders for delivery via download.
- Creating a sample Payments configuration.

Audience

This book describes how to install and configure WebSphere Digital Media Enabler for Windows® NT, Windows 2000, AIX®, and Solaris operating systems. It is intended for system administrators or anyone responsible for performing installation and configuration tasks.

This book identifies the prerequisite software requirements, but does not contain instructions on how to install the software. For instructions on installing IBM Content Manager Version 7.1 or 8.1, and WebSphere Commerce Business Edition (WCBE) or WebSphere Commerce Professional Edition Version 5.4, refer to the guides appropriate for your environment:

- *IBM WebSphere Commerce for Windows NT and Windows 2000 Installation Guide for use with a DB2 Universal Database, Version 5.4*
- *IBM WebSphere Commerce for Windows NT and Windows 2000 Installation Guide for use with an Oracle Database, Version 5.4*
- *IBM WebSphere Commerce for Windows NT and Windows 2000 Additional Software Guide, Version 5.4*
- *IBM WebSphere Commerce for AIX Installation Guide for use with a DB2 Universal Database, Version 5.4*
- *IBM WebSphere Commerce for AIX Installation Guide for use with an Oracle Database, Version 5.4*
- *IBM WebSphere Commerce for AIX Additional Software Guide, Version 5.4*
- *IBM Enterprise Information Portal for Multiplatforms, Version 8 Release 1*









Related publications

Additional WebSphere publications include:

- *IBM WebSphere Commerce Fundamentals, Version 5.4*
- *IBM WebSphere Commerce Programmer's Guide, Version 5.4*
- *IBM WebSphere Commerce Quick Beginnings for Windows NT and Windows 2000, Version 5*
- *IBM WebSphere Commerce Quick Beginnings for AIX, Version 5.4*

Conventions used in this book


This document uses the following conventions:

- **Boldface type** indicates commands or graphical user interface (GUI) controls such as names of fields, buttons, or menu choices.
- Monospace type indicates examples of text that you enter exactly as shown as well as file names and directory paths.
- *Italic type* is used for emphasis and for variables for which you substitute your own values.
-  **Windows** indicates information that is specific to WebSphere WDME for the Windows operating environment.
-  **NT** indicates information that is specific to WebSphere WDME for the Windows NT operating environment operating system.
-  **2000** indicates information that is specific to WebSphere WDME for the Windows 2000 operating environment.
-  **UNIX** indicates information that is specific to WebSphere WDME for UNIX®.
-  **AIX** indicates information that is specific to WebSphere WDME for AIX.
-  **Solaris** indicates information that is specific to WebSphere WDME for the Solaris operating environment.
-  **DB2** indicates information that is specific to the DB2 Universal Database™.
-  **Oracle** indicates information that is specific to the Oracle database.

Installation directories

WAS_installdir represents the following default installation path for WebSphere Application Server:

 **NT** *drive:\WebSphere\AppServer*

 **2000** *drive:\Program_Files\WebSphere\AppServer*

 **AIX** */usr/WebSphere/AppServer*

 **Solaris** */opt/WebSphere/AppServer*

Chapter 2. Understanding the WDME architecture

The sample system configuration is composed of four servers which include the front end Web Server residing on the web layer and three back end application systems the WebSphere Commerce Business or Professional Edition system, the WebSphere Commerce Payments server and the Content Manager (CM) system. The web server is separated from the application systems by a firewall system to protect the applications and databases.

There are many options for configuring a WDME site. The sample configuration described in this document illustrates one common configuration. Other possible advanced configurations are described in the WebSphere Commerce document library.

WebSphere Digital Media Enabler Architecture (High Level)

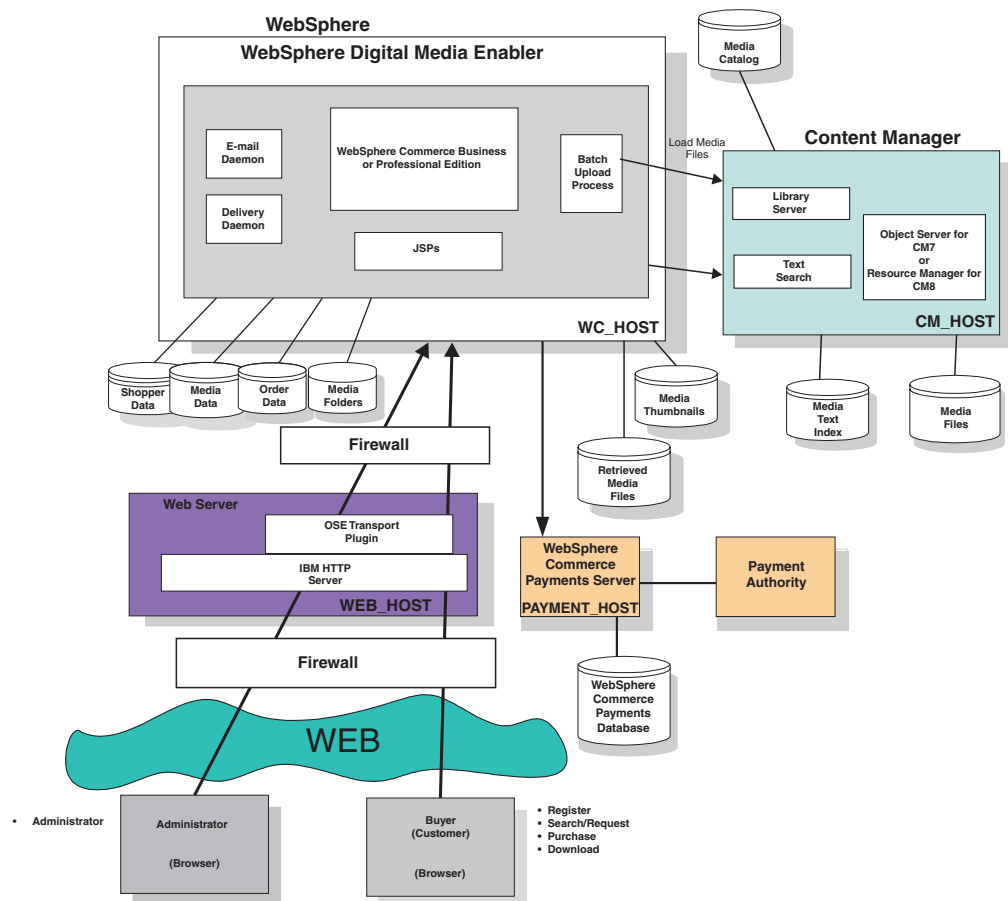


Figure 1. WDME solution architecture

Web server

The web server communicates with the end user browsers and with the back end WebSphere Commerce application server via TCP/IP. The web server communicates with the WebSphere Commerce applications through a WebSphere plug-in used by the HTTP server. The web server resides on a system on the web layer and is separated by a firewall from the WebSphere Commerce system on the data layer.

WebSphere Commerce Business Edition or Professional Edition

The WebSphere Commerce Business or Professional Edition server contains the e-commerce application for the digital stores. This includes the WebSphere 4.0 application server and all of the commerce application components including EJB files, Java™ servlets, and JSP files. It also contains a database with tables containing data about users, products, media folders, and orders. The key application components include:

- Store Services
- Commerce Accelerator
- Commerce Administration Console
- Configuration Manager
- WebSphere Commerce server

WebSphere Commerce Payments

WebSphere Commerce Payments is a protocol-independent payment transaction server that runs on a separate system in the data layer in this sample system. It contains a relational database with information to manage payments. WebSphere Commerce Payments is designed with a core framework into which different payment software components, cassettes, can be plugged in to handle specific electronic payment systems. Typically, WebSphere Commerce Payments runs on a separate system, but may run on the WebSphere Commerce Business or Professional Edition system, if desired.

Content Manager system

Content Manager manages the search, retrieval, and display of all digital content. This includes the media objects, the media metadata, and thumbnails. The Content Manager system is based on a client/server model comprised of one library server, one or more object servers or resource managers, and one or more clients. In addition, a text search server allows users to perform Boolean and free text searches on product metadata. The Content Manager server is accessed from the WDME application through Java APIs that are supplied by the IBM Enterprise Information Portal (EIP).

If you are using Content Manager 8, the text search engine is the DB2 Text Information Extender (TIE).

Library server

The core of the Content Manager infrastructure is the library server which manages the Content Manager catalog information, locates stored objects using a variety of search technologies, provides secure access to objects in the collection, and communicates with the object servers or resource managers.

Object server and resource manager

The library server uses a relational database to manage digital objects and provide data integrity by maintaining index information and controlling access to objects stored on object servers.

The object server is a repository for objects that are stored in the Content Manager system. Applications retrieve objects from the object server through requests that are routed by the library server. The object server efficiently and automatically manages storage resources based upon the storage management entities, such as volumes, that are defined using the Content Manager system Administration program. The object server supports attachment of DASD, Tivoli® Storage Manager (TSM) and other storage devices. For Content Manager 8, the object server is called the resource manager.

Text search server and text information extender (TIE)

The text search server allows you to index and search the media objects based on textual descriptions. Some of the functions that the text search engine provides are:

- Boolean and free text searches
- Searching on words or phrases
- Wildcard searches

If you are using Content Manager 8, DB2's TIE is the text search engine. The text information extender allows you to index and search the media objects based on textual descriptions. Some of the functions that the TIE provides are:

- Boolean and free text searches
- Searching on words or phrases
- Wildcard searches
- Fuzzy searches
- Ranked search results

Enterprise Information Portal (EIP) Client

The EIP client resides on the WebSphere Commerce system and is used to access the Content Manager servers. The EIP client code installed for WDME contains the text search client and content manager connector components only. Other types of EIP connectors are not required for WDME and need not be installed. The EIP client is used by the following WDME application components: The MediaSearch and MediaZip servlets use the EIP client to search and retrieve content. The WDME Load Program uses the EIP client to load new content. The delivery daemon uses the EIP client to retrieve high-resolution versions of content to fulfill customer orders. All communications with Content Manager are performed using the EIP Java APIs.

Xerces2 Java Parser

This product includes software developed by the Apache Software Foundation (<http://www.apache.org/>). The Xerces2 Java Parser supports the depchecker which automatically checks for the prerequisite software for the user during installation.



Chapter 3. Before you begin

Understanding the prerequisite software






This section itemizes the software requirements for the WDME Web site. In a single-tiered configuration, the WebSphere Commerce Business or Professional Edition 5.4 and HTTP server run on the same hardware system. In a two-tiered configuration, the HTTP server runs on a separate system.

WebSphere Commerce software

One of the following operating systems:

-  Windows NT Server Version 4.0 with SP 6a
-  Windows 2000 Server Edition or Advanced Server Edition with SP2

With one of the following database systems:



-  DB2 7.2, FP 6, or higher
-  Oracle 9i
-  AIX 5.1
 -  DB2 7.2, FP 6, or higher
 -  Oracle 9i

For both Windows and AIX, an appropriate ZIP program must also be installed for zipping up digital content for delivery.

-  Solaris 8 Operating Environment, Maintenance Level 5 or higher

Note: You can also use the Solaris 7 Operating Environment with the session bridge.

With one of the following database systems:

-  DB2 7.2, FP 6, or higher
-  Oracle 9i
- WebSphere Commerce Business Edition or WebSphere Commerce Professional Edition 5.4.0.3 or 5.4.0.4 including IBM WebSphere Commerce Payments 3.1.3
- WebSphere Application Server 4.0.3 or 4.0.4

Content Manager software

- Content Manager 7.1 library server and object server with EIP 8.1, text search server, text search client
- Or
- Content Manager 8.1 library server and resource manager with EIP 8, text information extender

Prerequisite installation steps

This installation guide assumes that you have successfully installed the WebSphere Commerce Business or Professional Edition 5.4 suite of products, EIP 8.1 and either Content Manager 7.1 or 8.1 on your systems. Follow the instructions provided in the respective installation guides for each. Once the installation has been verified, for example, using the sample WebFashion store, you can proceed to install WDME. Note that Content Manager 7 is *not* supported on Solaris.

The following servers should be started before you begin installing WDME:

- IBM HTTP server
- IBM WebSphere Administration server
- IBM WebSphere Administration Console

Prerequisite installation for Content Manager 7

The prerequisite installation steps for Content Manager 7 are listed below.

1. Install WebSphere Commerce Business or Professional Edition 5.4. (this installs WebSphere Commerce Payments 3.1.3). This includes upgrading to version 5.4.0.3 or 5.4.0.4, creating an instance and verifying the instance creation. If you already have WebSphere Commerce installed, ensure that you are using the correct version and have an instance created.
2. Install Content Manager 7.1 including the library server and object server.
3. Install EIP 8.1 (the text search client and server components). When installing EIP, on the EIP server, set the text server's Content Manager user ID to tsadmin. It is recommended that you install Content Manager on a different system than WebSphere Commerce Business or Professional Edition.
4. Use the Content Manager System Administration program to create the following Content Manager user IDs:



- wasuser
 - wcsorder
 - wcsload
 - tsadmin
 - tsclient
5. On the EIP server, after selecting the EIP 8.1 Development Workstation near the beginning of the installation, select the following components and subcomponents listed in the table. Be sure to deselect any others.



Table 1. EIP components for Windows and AIX

Component	Subcomponent
Administration	Administration database and client
Local connectors	Content Manager 7 connector and relational database connector
Features	Text Search Client
Content Viewers	Content Manager Viewer
Connector Toolkits and Samples	Content Manager 7
Information	N/A

Requirement: For the WDME search component to work properly, the EIP client must be installed on the WebSphere Commerce System.

6. Ensure that you complete the verification steps for EIP client installation on the machine where you have installed WebSphere Commerce before starting the WDME installation.
7. If there are going to be multiple stores, ensure that more than one store license exists by reviewing the license information from the WebSphere Commerce Configuration Console.
8. Ensure that a zip program is loaded on the WebSphere Commerce system (for example, WinZip for Windows or zip/unzip for AIX). This code is used to zip up downloadable files for delivery to customers. The zip program should create a format that can be opened by PC users. One can be downloaded from <http://www.ctan.org/tex-archive/tools/zip/info-zip/>. The zip utility must be a command line utility.

Verifying the prerequisite installation for Content Manager 7

Once the prerequisite software has been installed, verify that each component installed correctly. Follow these steps to verify prerequisite software installation:

1. On the Content Manager machine, verify that an item type can be created on the Content Manager using the Content Manager Administration Console. For example, create an item type named **test**.
2. On the WebSphere Commerce machine, verify that the EIP client on the WebSphere Commerce Business or Professional Edition system can successfully connect to the Content Manager server. You can do this by using any client function such as: **frncmd connect LIBSRVRX** for AIX; **frncmd connect LIBSRVN** for Windows; or by using the Internet Application Toolkit, if installed.
3. On the WebSphere Commerce machine, verify that the EIP text search client can connect to the text search server. For example, enter the command **imllstix —s TM**, assuming TM is the text server name.

Prerequisite installation for Content Manager 8

The following are prerequisite installation steps for Content Manager 8:

1. Install WebSphere Commerce Business or Professional Edition 5.4. This also installs WebSphere Commerce Payments 3.1.3. This includes upgrading to version 5.4.0.3 or 5.4.0.4, creating an instance and verifying the instance creation. If you already have WebSphere Commerce installed, ensure that you are using the correct version and have an instance created.
2. Install Content Manager 8.1 including the library server and resource manager.
3. Install Enterprise Information Portal 8.1.

Recommendation: It is recommended that you install Content Manager on a different system than WebSphere Commerce Business or Professional Edition.

4. Use the Content Manager System Administration program to create the following Content Manager user IDs:



- wasuser
- wcsorder
- wcsload
- tsadmin

- tsclient
5. For EIP installation on your WDME machine, after selecting the EIP 8.1 Development Workstation near the beginning of the installation, select the components and subcomponents listed in the following table. Be sure to deselect any others.



Table 2. EIP components for Windows and AIX

Component	Subcomponent
Administration	Administration database and client
Local connectors	Content Manager 8 connector and relational database connector
Content Viewers	Content Manager Viewer
Connector Toolkits and Samples	Content Manager 8 connector
Information	N/A



Table 3. EIP components for Solaris

Component	Subcomponent
Administration	Administration database and client
Local connectors	Content Manager 8 connector and relational database connector
Content Viewers	Content Manager Viewer
Connector Toolkits and Samples	Content Manager 8 connector
Information	N/A

Requirement: For the WDME search component to work properly, the EIP Client must be installed on the WebSphere Commerce System.

6. Ensure that you carry out the verification steps for the EIP client installation (as described below) on the machine where you have installed WebSphere Commerce before starting the WDME installation.
7. If there is going to be more than one store, ensure that more than one store license exists by examining the license information from the WebSphere Commerce Configuration Console.
8. Ensure that a zip program is loaded on the WebSphere Commerce system (for example, WinZip for Windows or zip/unzip for AIX.) This is used to zip up downloadable files for online delivery to customers. The zip program should create a format that can be opened by PC users. You can download a zip program from <http://www.ctan.org/tex-archive/tools/zip/info-zip/>. The zip utility must be a command line utility.

Verifying the prerequisite installation for Content Manager 8

Once the prerequisite software has been installed, verify that each component installed correctly. Follow these steps to verify prerequisite software installation:

1. Verify that an item type can be created on the Content Manager using the System Administration program. For example, create an item type named **test**.

- Open an EIP Development Window. **Start>Programs>Enterprise Information Portal for Multiplatforms V8.1** or open a command prompt and run `cmbenv81.bat`

- Test the Content Manager connector:

```
cd %CMBROOT%\samples\java\icm
javac SConnectDisconnectICM.java
java SConnectDisconnectICM icm1sdb userID password
```

where `icm1sdb`, `userID`, and `password` are the case-sensitive names of your Content Manager database alias, user ID and password, respectively. If the connection works, confirmation messages display.

- If any of the verifications fail, troubleshoot and fix the problem; otherwise, the subsequent installation steps may fail. It is best to install and verify the success of each component before proceeding.
- Ensure that the WebSphere Application Server admin server on the WDME machine is up and running.
- Ensure that the WebSphere Commerce components were installed correctly by testing that the sample store works. Create a user and check out an order. If a WebSphere Commerce store has already been deployed, ensure that it is operating correctly, if not, ensure that you can log in to WebSphere Commerce Store Services.

Preparing to install WDME

The following are IDs you must know to install WDME. Set these IDs on the Content Manager machine.

Table 4. Windows user IDs

User ID	Description
tsadmin	Text search client user ID, for installing EIP text search client on CM 7
wcdm	Used for everything related to WDME, WebSphere Application Server, and WebSphere Commerce

Table 5. AIX and Solaris user IDs

User ID	Description
tsclient	Text search client user ID, for installing EIP text search client
wasuser	Used for everything related to WDME, WebSphere Application Server, and WebSphere Commerce
wcsload	Used for loading WDME data
wcsorder	Used for order delivery of WDME data and for WDME e-mail application

You must know the following WebSphere Commerce Business or Professional Edition user IDs:

Table 6. WebSphere Commerce Business and Professional Edition user IDs

User ID	Description
wcsadmin	Used for WebSphere Commerce Store Services
webadmin	Used for WebSphere Commerce Configuration Tool

You must know the following Content Manager user IDs:

Table 7. Content Manager user IDs

User ID	Description
tsadmin	User ID used on Content Manager 7 system for the Text Search server
wcdm	Client user ID used by WebSphere Commerce system for WDME search component for Unix
wasuser	Client user ID used by WebSphere Commerce system for WDME search component for Windows
wcsload	Client user ID used by WebSphere Commerce system for loading WDME data
wcsorder	Client user ID used by WebSphere Commerce system for order delivery of WDME data

You must know the following values to configure WDME for all platforms:

Table 8. Miscellaneous values used at WDME installation for Content Manager

Description	Value
Digital Media Store Name	Example: DigitalMedia
Library Server Name	Example: LIBSRVRN or LIBSRVRX
Library Server Port	23788
WAS Port	WebSphere Application Server port number
WAS Host Name	WebSphere Application Server host name
WC Instance Name	Example: demo
WC Database User ID	WebSphere Commerce database user ID
WC Database Password	WebSphere Commerce database password
Index class name	Index class name. (CM 7)
Item type name	Item type name. (CM 8)
Search text index name	Example: DMDEMO (CM 7 only)
Unzip Tool	Example: Winzip32 Unzip

Table 8. Miscellaneous values used at WDME installation for Content Manager (continued)

Description	Value
JAR Program (with path)	Example: Windows <i>drive</i> : \CMBROOT\jdk\bin\jar.exe AIX /usr/java/bin/jar Solaris /opt/java/bin/jar
EIP Client JAR File	Example: Windows <i>drive</i> : \CMBROOT\lib\cmbsdk81.jar AIX /usr/lpp/cmb/lib/cmbsdk81.jar Solaris /opt/IBMcmb/lib/cmbsdk81.jar

Starting the WebSphere Application Server

Windows Do the following prior to starting the WDME installation to prevent the store publishing procedure from failing if you are using WebSphere Application Server 4.0.3 and WebSphere Commerce 5.4.0.3:

1. From the directory:

drive: \WebSphere\AppServer\bin

edit the adminserver.bat file to set the JITC_COMPILEOPT environment variable to:

```
SKIP{com/ibm/wca/MassLoader/Formatter/JDBCFormatter$FormatWorker}{run}
```

2. Stop WebSphere Application Server and restart by using the adminserver.bat instead of using the Windows Service panel.
3. Stop and restart the WebSphere Commerce server.

After WDME is installed, you may start WebSphere Application Server through the Windows Service panel as usual. However, when you want to publish another store, you must start WebSphere Application Server by running the adminserver.bat file. For more information, see the Web address <http://www-1.ibm.com/support/docview.wss?rs=494=swg21054765>

Upgrading the JDBC Applet Server

You must upgrade the default DB2 JDBC Applet Server from 1.0 to 2.0. To upgrade JDBC on the server:

1. Stop the DB2 JDBC Applet Server Service.
2. Start a command line processor and change to the directory:

- **Windows** *drive*: \sql1lib\java12

- **AIX** /home/DB_instance/sql1lib/java12

- **Solaris** /export/home/DB_instance/sql1lib/java12

3. Issue the command:

- **Windows** usejdbc2.bat

- **UNIX** usejdbc2

- Restart the DB2 JDBC Applet Server Service.

Also, ensure that the file db2java.zip in the *DB2HOME/java* directory is the same as the one in *DB2HOME/java12*. If the file is not identical, copy db2java.zip from *DB2HOME/java12* to *DB2HOME/java*.

Adding environment variables to the WebSphere Commerce Server - instance application server

The environment variables should be set before installation (for all platforms)

To add environment variables to the WebSphere Commerce Server instance application server, do the following:

- Launch the WebSphere Advanced Administrator's Console.
- Expand **WebSphere Administrative Domain**>**Nodes**>*host_name* >**Application Servers**.
- Select **WebSphere Commerce Server - instance_name**.
- With the **General** tab selected, click **Environment**.
- Click **Add** and add the following environment settings (These paths assume the default installation for WebSphere Application Server, DB2 and EIP. If your installation path differs, change these values accordingly.):

 Windows

Table 9. Windows environment variables

Name	Value
CLASSPATH	drive:\websphere\SQLLIB\java\db2java.zip;drive:\Program Files\IBM\Cmgmt;drive:\CMBROOT\lib\cmbsdk81.jar;drive:\CMBROOT\lib\cmb81.jar;drive:\CMBROOT\lib\;drive:\CMBROOT\lib\ xerces.jar;drive:\CMBROOT\lib\cmblog4j81.jar;drive:\CMBROOT\lib\log4j.jar;drive:\WebSphere\AppServer\lib\j2ee.jar;drive:\CMBROOT\lib\cmbwas81.jar
PATH	drive:\Program Files\IBM\Cmgmt;drive:\CMBROOT\;drive:\CMBROOT\dll;drive:\websphere\SQLLIB\bin

Table 10. AIX environment variables

Name	Value
CLASSPATH	/usr/lpp/cmb/cmgmt:/usr/lpp/cmb: /usr/lpp/cmb/lib/cmbwas81.jar:/usr /lpp/cmb/lib/cmb81.jar:/usr/lpp/cmb /lib/cmbcm81.jar:/usr/lpp/cmb/lib/ cmbdb281.jar:/usr/lpp/cmb/lib/ cmbdb2c81.jar:/usr/lpp/cmb/lib/ cmbddc81.jar:/usr/lpp/cmb/lib/ cmbdesc81.jar:/usr/lpp/cmb/lib/ cmbdj81.jar:/usr/lpp/cmb/lib/cmbdj81. jar:/usr/lpp/cmb/lib/cmbdl81.jar/usr /lpp/cmb/lib/cmbdlc81.jar:/usr/lpp/ cmb/lib/cmbfed81.jar:/usr/lpp/cmb/ lib/cmbfedc81.jar:/usr/lpp/cmb/lib/ cmbic81.jar:/usr/lpp/cmb/lib/cmbicc81. jar:/usr/lpp/cmb/lib/cmbicm81.jar: /usr/lpp/cmb/lib/cmbicmup.jar:/usr/ lpp/cmb/lib/cmbipc81.jar:/usr/lpp/cmb /lib/cmbjdb81.jar: /usr/lpp/cmb/lib/cmbjdbcc81.jar:/usr/ lpp/cmb/lib/cmblog4j81.jar:/usr/lpp/cmb /lib/cmbod81.jar: /usr/lpp/cmb/lib/cmbodc81.jar:/usr/lpp /cmb/lib/cmbv4c81.jar:/usr/lpp/cmb/lib/ cmbview81.jar: /usr/lpp/cmb/lib/esclisrv.jar: /usr/ lpp/cmb/lib/essrv.jar:/usr/lpp/cmb/lib /jaas.jar:/usr/lpp/cmb/lib/log4j.jar: /usr/lpp/cmb/lib/sguide.jar: /usr/lpp/cmb/lib/xerces.jar:/usr/lpp/ cmb/lib/cmbSDK81.jar:/usr/lpp/cmb/lib: /usr/lpp/db2_07_01/java12/db2java.zip:/ usr/WebSphere/AppServer/lib/j2ee.jar
PATH	/usr/lpp/db2_07_01/lib:\$PATH

Table 11. Solaris environment variables

Name	Value
CLASSPATH	<pre> /opt/IBMcmb/cmgt:/opt/IBMdb2/V7.1/ java12/db2java.zip:/opt/IBMdb2/V7.1/lib:/opt/IBMdb2/V7.1: /opt/IBMcmb:/opt/IBMcmb/lib/ cmbwas81.jar: /opt/IBMcmb/lib/cmb81.jar:/opt/ IBMcmb/lib/cmbcm81.jar:/opt/IBMcmb /lib/cmbdb281.jar:/opt/IBMcmb/lib/ cmbdb2c81.jar:/opt/IBMcmb/lib/ cmbddc81.jar: /opt/IBMcmb/lib/cmbdesc81.jar: /opt/IBMcmb/lib/cmbdj81.jar:/opt/ IBMcmb/lib/cmbdj81.jar:/opt/IBMcmb /lib/cmbdl81.jar:/opt/IBMcmb/lib/ cmbdlc81.jar:/opt/IBMcmb/lib/cmbfed81. jar:/opt/IBMcmb/lib/cmbfedc81.jar: /opt/IBMcmb/lib/cmbic81.jar: /opt/IBMcmb/lib/cmbicc81.jar:/ opt/IBMcmb/lib/cmbicm81.jar:/opt /IBMcmb/lib/cmbicmup.jar: /opt/IBMcmb/lib/cmbipc81.jar:/opt /IBMcmb/lib/cmbjdb81.jar:/opt/IBMcmb /lib/cmbjdbcc81.jar: /opt/IBMcmb/lib/cmblog4j81.jar:/opt /IBMcmb/lib/cmbod81.jar:/opt/IBMcmb /lib/cmbodc81.jar:/opt/IBMcmb/lib /cmbv4c81.jar:/opt/IBMcmb/lib/cmbview81. jar:/opt/IBMcmb/lib/esclisrv.jar:/opt /IBMcmb/lib/essrv.jar:/opt/IBMcmb/lib /jaas.jar: /opt/IBMcmb/lib/log4j.jar:/opt/IBMcmb /lib/sguide.jar:/opt/IBMcmb/lib/xerces. jar:/opt/IBMcmb/lib/cmbjdk81.jar:/opt /IBMcmb/lib:/opt/WebSphere/AppServer/lib /j2ee.jar </pre>
PATH	<pre> /opt/WebSphere/AppServer/java/sh:/opt /WebSphere/AppServer/java/jre/sh:/opt/ IBMcmb:/opt/IBMcmb/bin:/opt/IBMdb2/V7.1 /lib:\$PATH </pre>

6. Click **OK**.

Chapter 4. Installing WDME

To install WDME, you must do the following:

1. Launch the installation
2. Provide WebSphere Application Server information
3. Provide WebSphere Commerce information
4. Provide store configuration information
5. Provide data source information
6. Provide Content Manager information
7. Provide e-mail
8. Provide miscellaneous configuration information
9. Provide WDME directories

Launching the installation

To launch the installation, do the following:

1. Ensure that WebSphere Commerce Business or Professional Edition, and WebSphere Commerce Payments Application Server and Engine are running.
2. Mount the WDME CD.
3. From the root directory, run the following:

```
Windows setup.exe
```

Log on to WebSphere Application Server as the user under which WebSphere Application Server runs. The default is wasuser.

```
AIX install_AIX
```

```
Solaris install_SUN
```

4. This launches the InstallShield for your operating system. Click **Next**.
5. Click **Next** again.
6. After reading the software license agreement, select **I accept the terms in the license agreement** and click **Next**.

Providing WebSphere Application Server configuration information

To provide WebSphere Application Server information, in the WebSphere Application Server Configuration Information panel, do the following.

Important: The installation program does not verify the accuracy of this information. If you do not provide the correct information, the installation will fail.

1. Type the **WAS hostname**. This is the short TCP/IP hostname of the machine on which you are installing, and should be the same as the node name. Do *not* include the domain name.
2. Type the **WAS domain name**. This is the domain name of the machine on which you are installing.
3. Type the **WAS port number**. The default is 2222. If you changed the default during WebSphere Application Server configuration, ensure that you type the changed port number.

4. Type the **WAS install location**. This should default to the install location on your machine.
5. Select the database management system you use for WebSphere Commerce, either **DB2** or **Oracle**. The default is DB2.
6. Click **Next**.

Providing WebSphere Commerce configuration information

To provide WebSphere Commerce Business or Professional Edition information, do the following.

Important: The installation program does not verify the accuracy of this information. If you do not provide the correct information, the installation will fail.

1. Type the **WC user ID**. The default is wcsadmin.
2. Type your **WC password**.
3. Type the **WC instance name**, for which you wish to create the WDME store. The default is demo.
4. Type the **WC port number**. The default is 8000. *Only* change the default if you have also changed it in WebSphere Commerce.
5. Type the **WC install location**. The default directory is:

▶ NT `drive:\WebSphere\CommerceServer`
▶ 2000 `drive:\Program_Files\WebSphere\CommerceServer`
▶ AIX `/usr/WebSphere/CommerceServer`
▶ Solaris `/opt/WebSphere/CommerceServer`

Click **Browse** to search for the directory.

6. Click **Next**.

Providing store configuration information

To provide the configuration information for your WDME store, do the following.

Important: The installation program does not verify the accuracy of this information. If you do not provide the correct information, the installation will fail.

1. Type the desired **Store name** of your new WDME store.
2. Type the **Store directory**. This is for internal use but should be identical to your store name. A directory is created using this name to hold files that provide functionality to your store. For example, if you specify a directory named myStore, the following will be created:

▶ NT
▶ 2000
▶ AIX
▶ Solaris
`WAS_installdir\installedApps\WC_Enterprise_App_
instance_name.ear\wcstores.war\mystore`

The location of this directory depends on where you installed WebSphere Application Server.

3. Type the **Store member ID**. The store you create is added to an organization. The default is -2000.
4. If you are using WebSphere Commerce Business Edition, type the distinguished **Organization name**. The default is o=Default Organization,o=Root

Organization. You can also create your own organization using the WebSphere Commerce Administration Console. To list the organizations, log on to the WebSphere Commerce Administration Console and click **Access Management>Organizations**. If you create your own organization, you must create it *prior* to installing WDME.

5. Click **Next**.

Providing data source configuration information

To provide data source configuration information, do the following (This information is available in the WebSphere Application Server Administration Console):

1. Type the **Data source URL**. The content of the URL is specified as:

```
jdbc:subprotocol:databaseConnectionInformation
```

The subprotocol identifies which driver to use, and the *databaseName* provides the driver with any required connection information. The default value depends on the DBMS you selected. The default is:

```
DB2 jdbc:db2:MALL
```

This URL uses the DB2 JDBC driver to connect to the local database named MALL. MALL is the default name for the database created during WebSphere Commerce installation.

```
Oracle jdbc:oracle:thin:@xxxx:1521:orcl
```

where *xxxx* is the host name. This URL uses the Oracle JDBC driver to connect to the database *orcl* on the server running at port 1521 on machine *xxxx*.

2. Type the **Data source user ID**. This is a database user ID which has access to the database created by WebSphere Commerce. The default ID is *db2admin*.
3. Type the **Data source user password**. Use your WebSphere Commerce database password.
4. Type the **JDBC driver class name**. The default values depend on whether you are using DB2 or Oracle and should be used *unless* you have installed a third party JDBC driver.

```
DB2 COM.ibm.db2.jdbc.app.DB2Driver
```

```
Oracle oracle.jdbc.driver.OracleDriver
```

5. Type the **Location of JDBC classes**.

```
Windows
```

```
NT DB2 drive:\sqllib\java\db2java.zip
```

```
2000 DB2 drive:\Program_Files\sqllib\java\db2java.zip
```

```
Oracle drive:\Oracle\Ora81\jdbc\lib\classes12.zip
```

```
AIX
```

```
DB2 /home/DBInstance/sqllib/db2java.zip
```

```
Oracle /oracle/u01/app/oracle/product/9.0.1/jdbc/lib/ classes12.zip
```

► Solaris

- ► DB2 /export/DBInstance/sql/lib/db2java.zip
- ► Oracle /opt/oracle/u01/app/oracle/product/9.0.1/jdbc/lib/classes12.zip

6. Type the **Database installation directory**. The default is:

► Windows

- ► DB2 *drive:\SQLLIB*
- ► Oracle *drive:\oracle\ora90*

► AIX

- ► DB2 /usr/lpp/db2_07_01
- ► Oracle /oracle/u01/app/oracle/product/9.0.1

► Solaris

- ► DB2 /opt/IBMdb2/V7.1
- ► Oracle /opt/oracle/u01/app/oracle/product/9.0.1

7. Click **Next**. The installation tests the database connection.

Providing Content Manager information

To provide Content Manager configuration information, do the following:

Note: Use the scroll-bar to display all the fields on this window.

1. From the **CM version** drop-down list, select the version of Content Manager you are using, either **7**, **8**, or **None**. Select **None** to use the session bridge instead of Content Manager.
2. Type the **CM user ID for Searching** used to access the Content Manager system.
3. Type the case-sensitive **CM user password for Searching** used to access the Content Manager system.
4. Type the **CM user ID for Order Processing** used to access the Content Manager system.
5. Type the case-sensitive **CM user password for Order Processing** used to access the Content Manager system.
6. Type the **CM user ID for Uploading** used to access the Content Manager system.
7. Type the case-sensitive **CM user password for Uploading** used to access the Content Manager system.
8. Type the **CM text search server name**. This is for Content Manager 7 only. The default is **TM**.
9. Type the **CM library server name**, for example, **LIBSRVRN** or **LIBSRVRX**. You name this file during Content Manager installation.
10. Type the **CM index class name**. The default is **DMDEMO**.
11. Type the **CMBROOT path**, for example, *drive:\CMBROOT*, where you install the EIP client on the WDME machine. The default is:

► Windows *drive:\CMBROOT*

▶ AIX /usr/lpp/cmb

▶ Solaris /opt/IBMcmb

12. Type the **CMCOMMON path**. This is the directory you specified during installation of EIP 8.1 for files shared by EIP and Content Manager, for example:

▶ NT *drive:\IBM\CMgmt*

▶ 2000 *drive:\Program_Files\IBM\CMgmt*

▶ AIX /usr/lpp/cmb/cmgt

▶ Solaris /opt/IBMcmb/cmgtwhere the EIP configuration files are located.

13. Type the **Low resolution part number**. The default is 5.
14. Type the **High resolution part number**. The default is 7.
15. Click Next.

Providing e-mail configuration information

To provide e-mail configuration information, do the following:

1. Type the **SMTP server hostname** including the domain. For example *smtp.mybusiness.com*. If you do not enter a valid hostname, e-mail will not be sent to your customers during order processing.
2. Type the **From e-mail address for user registration**.
3. Type the **From e-mail address for new orders**.
4. Type the **From e-mail address for shipped orders**.
5. Type the **From e-mail address for user subscription**.
6. Type the **From e-mail address for receiving subscription cancellations**.
7. Click Next.

Providing miscellaneous configuration information

To provide miscellaneous configuration information, do the following:

1. Type the **JAVA location**. Click **Browse** to find the JRE directory, for example, *WAS_installdir\java*. The default is to use the JRE installed by WebSphere Application Server. The JRE is an optional component of WebSphere Application Server which you may not have installed. The only JRE level that is supported is 1.3.0. You must specify the root Java directory. The installation program appends bin to the directory in order to find the java and jar commands which must be present.
2. Type the **Zip utility command**. Leave this blank to use the Java zip classes. The zip utility is used for zipping orders before sending. By default, WDME uses the Java API classes zipping orders before sending to the customer. If your customers use a Macintosh to purchase from your store, it is recommended that you specify a different zip program. An example of what you might enter if you are using WinZip follows:

drive:\Program_Files\winzip\wzip.exe -rp -u -x.zip*

WinZip is not supplied with WDME, and to use WinZip you will need the Command Line Support Add-On from the WinZip web site at <http://www.winzip.com>.

3. Type the **Zip file extension**. Typically, the extension of zipped files is zip. However, depending on the zip utility you use, the extension might be different.
4. Click **Next**.

Providing Internet browser information for Solaris

On the Solaris operating environment, you can set up the WDME product registration page to launch automatically by providing the path and file name of your preferred Internet browser. To provide the path and file name of your Internet browser, do the following:

1. Type the **Path and file name of your Internet browser**. The default is `\usr\dt\bin\netscape`
2. Click **Next**.

Providing WDME directory information

To provide WDME directory information, in the Destination Information panel, do the following:

1. Type the **Directory name**. Click **Browse** to find the WDME directory. The default is:

▶ **NT** `drive:\WebSphere\CommerceServer\WCDM`
▶ **2000** `drive:\Program_Files\WebSphere\CommerceServer\WCDM`
▶ **AIX** `/usr/lpp/WebSphere/CommerceServer/WCDM`
▶ **Solaris** `/opt/WebSphere/CommerceServer/WCDM`

2. Click **Next**.

A summary screen displays after the installation has completed.

▶ **Solaris** When the following message displays:

Please manually publish the store and click YES to continue.

do the following:

1. Launch Internet Explorer on a non-Solaris machine.
2. Point your browser to `https://host_name:8000/storeservices`.
3. Log in with your **User name** and **Password**.
4. Select your Store Archive by selecting the checkbox and clicking **Publish**. The login page displays.
5. On the Publish Store Archive page, click **OK**
6. When the publish status reads **Publishing completed successfully**, on the Solaris host machine, click **OK** to continue.



Verifying the installation

You can launch your new store to verify correct installation. To launch your store, do the following:

Also, you can check your store's publish summary and launch your store from WebSphere Commerce store services:

1. Point your browser to `https://host_name:8000/storeservices`.
2. Log in with your **User name** and **Password**.
3. Select your Store Archive by selecting the checkbox and clicking **Publish Summary**. The login page displays.
4. Click **Launch Store**.

Alternatively, you can launch your store quickly and easily with the following file:

-  WCDM\bin\launchStore.bat
-  WCDM/bin/launchStore.sh

Chapter 5. Configuring WDME

This section describes post-installation configuration steps.

Configuration overview

This section describes the following manual configuration steps:

1. **Setting up store profile information:**

In this step you set up store profile information, such as store name, contact information and welcome message, through WebSphere Commerce Store Services.

2. **Configuring Oracle 9i with Content Manager**

In this step you, which you only need for using Oracle 9i with Content Manager, you modify the database URL to recognize Oracle 9i.

3. **Creating and loading content for the WDME search component:**

In this step you perform Content Manager administration tasks to set up an index class or item type and text search index that will contain your digital content. You then load sample digital content which matches the sample product data that was loaded into WebSphere Commerce when the store was created in step 1.

4. **Starting the WDME Web site:**

In this step you start all of the components of the WDME Web site.

5. **Accessing the web site:**

In this step you access the WDME sample Web site through an Internet browser. You can register, search, order, and download sample content.

Setting the WDME store profile information

This chapter describes how to set up a WDME store profile.

Ensure that you are logged in as the user who installed WebSphere Application Server (for example, wasuser) before you complete any of the following steps and that the WebSphere Application Server is started.

To set store profile information, do the following:

1. Log on to the WebSphere Commerce Store Services via the browser.
2. Select the new store archive created by checking the check box associated with it.
3. Click **Store Profile**.
4. Type a store name, for example, **DigitalMedia**.
5. Type a welcome message, for example, *Welcome to store_name* Store.
6. Click **Contact** and type the contact information for the store.
7. If you plan on supporting multiple languages for a store, add the specific language and currencies associated with the language and currency tab on the left pane of the **Store Profile**. Ensure that you add the language-specific information to the **General** and **Contact** tabs.
8. You can also set up the shipping and taxes here. If the information is not yet known, you can set them up later and republish the store database assets.

Refer to the WebSphere Commerce Store Services application for setting up shipping and tax information. For taxes, you will set up your tax jurisdictions and rates. For shipping, you will set up your shipping providers, shipping zones, and rates. You can use the default values for the initial installation and set up your actual values before you go into production.




9. Click **OK**.
10. Ensure that WebSphere Commerce Payments is running before you proceed.
11. Select the checkbox for the store you want to publish and click **Publish**.
12. On the Publish Store Archive page, *deselect* **Publish store file assets** and **Publish store resource bundles**.

Warning: If you do *not* deselect these options, the changes made to the properties files during installation will be erased.

13. Click **OK**.
14. When the publish is complete, click **Publish Summary** to view the status. The **Publishing completed successfully** status typically displays after 5–10 minutes.

Configuring Oracle 9i with Content Manager

If you are using Oracle 9i with Content Manager, make a backup copy of the `OracleConnectionCustomizer.properties` file in the following directory:

-  `drive:\WebSphere\CommerceServer\properties`
-  `/usr/lpp/WebSphere/CommerceServer/properties`
-  `/opt/WebSphere/CommerceServer/properties`

Modify the database URL as follows:

```
DBURL = jdbc:oracle:thin:@host_name:port:
```

Modify this file only after you have successfully created your WebSphere Commerce instance. If you wish to recreate your WebSphere Commerce instance later, restore the original `OracleConnectionCustomizer.properties` file.

Creating and loading the content for the WDME search component

Since all of the servlets and JSP files for searching Content Manager were installed as part of the WDME setup, the only WDME application software to be installed on the Content Manager system is the loader program as described later. If the loader application is to be run on the WebSphere Commerce system, the code should be installed on that system with the EIP client.

Prerequisites for the Content Manager search component

The following are prerequisites for implementing the Content Manager search component:

- Install UDB 7.1 with fix pack 5 or above.
- Microsoft® Visual C++ 6.0.
- Install Content Manager 7.1 (object server, library server, system administration) or 8.1 (resource manager, library server, system administration).
- Install EIP 8.1 (text search server).

Defining the WDME data model in Content Manager 7

This section provides a sample of how to use the loader program with the EIP client to load content into Content Manager. Before loading the content, you must create the Media Commerce index class and text search index for each store. The Content Manager System Administration client will be used to define the index class. Use the text client command `imlcrix` to create the text index. For example, issue:

```
imlcrix -s TM -x DMDEMO -t LING -p c:\cmbroot\ts\dlinst\data\dmdemo -pw
c:\cmbroot\ts\dlinst\data\work\dmdemo imlcrix -s TM -x DMDEMO -t LING -p
/home/cm/tsadmin/ts/dlinst/data/dmdemo -pw
/home/cm/tsadmin/ts/dlinst/work/dmdemo
```

This example names the index class for the WDME store to **DMDEMO**.

1. The following sample metadata is required for each media object and is contained in the WDME index class. This is the installed, default data model. New installations redefine the specific metadata fields as part of the standard customization tasks. Many of the descriptor fields (image type, keywords, and so forth) are also defined in the text object so that they can be used to further qualify the text search results. All searches are performed using the text search engine. The Content Manager multi-search capability (parametric plus text search) is not used for Internet searches to achieve best performance.

Some descriptor fields may have more than one value. In the index class, all values for a descriptor are concatenated for easy and efficient retrieval and display. In the text search engine, each field value is defined separately to facilitate accurate searching. One index class is loaded and contains the columns as listed below. Because of their size, the keywords and description will be stored as parts (files) associated with the row, rather than within the row itself. These two fields are also text searchable. Descriptions and keywords are displayed in the detail view page.

2. Run the batch file or shell script named `wcdmctrattr`s from the following directory to create the attributes of the table listed below in Content Manager:



`WAS_installdir\installedApps\WC_Enterprise_App_
instance_name.ear\wcstores.war\store_directory\setup\tools`

3. Add these attributes to the index class in the same order that they are listed below. After creating the index class or item type, add a unique index to the table composed of the image number.

Table 12. DMDEMO index class attributes

Column name	Column description	Description
imageDesc	VarChar(32)	Tape title
cameraElement	Varchar(50)	Camera element
imagePhotClass	VarChar(20)	Classification applied to this clip
imageKeywords	Varchar(32)	Keywords also moved to keywords file
TCIn	VarChar(11)	Time code start
TCOut	VarChar(11)	Time code end
duration	VarChar(11)	Duration of clip
FBDTapeNo	Varchar(20)	Tape Number
clipNumber	VarChar(25)	Clip number

Table 12. DMDEMO index class attributes (continued)

Column name	Column description	Description
clipCatalogType	VarChar(25)	Catalog type
clipFootageDate	VarChar(25)	Date associated with footage
age	Varchar(100)	Age(s) of people in clip
imageCreateTime	TimeStamp	Date/time clip was put in Content Manager
imageModTime	TimeStamp	Date/time the clip was last modified
era	VarChar(25)	Era of clip, for example, Contemporary
imageStatus	Char(1)	Clip Status
imageRestricts	Char(1)	"Y" if there are restrictions on clip usage
timePeriod	VarChar(200)	Time period of clip, for example, 1930s
imageID (unique key)	VarChar(8)	Numeric clip unique identifier (seq.assign)
imageRelease	VarChar(8)	Release codes
imageHighRAvail	Char(1)	"Y" if hi-res is available "D" if site has film "N" if film has not been sent
imageCaption	VarChar(100)	Video caption
imageColor	VarChar(50)	Clip color (B & W, color, tinted)
imageLDeleteFlg	Char(1)	Logical Delete Fl
audio	VarChar(25)	Audio
cameraSpeed	VarChar(50)	Camera Speed
composition	VarChar(100)	Composition
category	VarChar(200)	Category
subcategory	VarChar(500)	Subcategory
intExt	VarChar(50)	Interior/exterior
timeOfDay	VarChar (50)	Time of day, for example dawn or dusk
productType	VarChar(100)	Product type
imageSize	VarChar(100)	Image size
fileSize	VarChar(100)	File size
compression	VarChar(100)	Compression
clipPrice	VarChar(10)	CD SKU number
Reserved1	VarChar(10)	Starting Storyboard number
Reserved2	VarChar(10)	Ending Storyboard number
Reserved3	VarChar(32)	Reserved
Reserved4	VarChar(32)	Reserved
clippricehi	VarChar(10)	High resolution price
clippricelo	VarChar(10)	Low resolution price
cdsku	VarChar(10)	CD SKU

- Use System Administration to configure the text index, for example, **DMDEMO**. Define the text index as **LINGUISTIC**.

Defining the WDME data model in Content Manager 8

This section provides a sample of how to use the loader program with the EIP client to load content into Content Manager.

The following sample metadata is required for each media object and is contained in the WDME item type. This is the installed default data model. New installations redefine the specific metadata fields as part of the standard customization tasks. Many of the descriptor fields (image type, keywords, and so forth) also are defined in the text object so that they can be used to further qualify the text search results. All searches will be performed using the text search engine. The Content Manager multi-search capability (parametric plus text search) is not used for Internet searches to achieve best performance.

Some descriptor fields may have more than one value. In the item type, all values for a descriptor are concatenated for easy and efficient retrieval and display. In the text search engine, each field value is defined separately to facilitate accurate searching. One item type is loaded and contains the columns as listed below. Because of their size, the keywords and description are stored as parts (files) associated with the row, rather than within the row itself. These two fields are also text searchable. Descriptions and keywords are displayed in the detail view page.

Important: For Unix, you must be logged in as wcsload to perform these steps.

```
WAS_installdir\installedApps\WC_Enterprise_App_
instance_name.ear\wcstores.war\store_directory\setup\tools
```

Run the batch file or shell script named wcdmSetupICM to create the attributes for the Content Manager table below, where *lib_server* is the CM library server name, *user_id* is the CM administrator ID, *password* is the CM administrator password, and *item_type* is the CM item type. This file is in the following directory:



```
WAS_installdir\installedApps\WC_Enterprise_App_
instance_name.ear\wcstores.war\store_directory\setup\tools
```

Table 13. DMDEMO item type attributes

Column name	Column description	Description
imageDesc	VarChar(32)	Tape title
cameraElement	Varchar(50)	Camera element
imagePhotClass	VarChar(20)	Classification applied to this clip
imageKeywords	Varchar(32)	Keywords also moved to keywords file
TCIn	VarChar(11)	Time code start
TCOut	VarChar(11)	Time code end
duration	VarChar(11)	Duration of clip
FBDTapeNo	Varchar(20)	Tape Number
clipNumber	VarChar(25)	Clip number
clipCatalogType	VarChar(25)	Catalog type
clipFootageDate	VarChar(25)	Date associated with footage
age	Varchar(100)	Age(s) of people in clip

Table 13. DMDEMO item type attributes (continued)

Column name	Column description	Description
imageCreateTime	TimeStamp	Date/time clip was put in Content Manager
imageModTime	TimeStamp	Date/time the clip was last modified
era	VarChar(25)	Era of clip, for example, Contemporary
imageStatus	Char(1)	Clip Status
imageRestricts	Char(1)	"Y" if there are restrictions on clip usage
timePeriod	VarChar(200)	Time period of clip, for example, 1930s
imageID (unique key)	VarChar(8)	Numeric clip unique identifier (seq.assign)
imageRelease	VarChar(8)	Release codes
imageHighRAvail	Char(1)	"Y" if hi-res is available "D" if site has film "N" if film has not been sent
imageCaption	VarChar(100)	Video caption
imageColor	VarChar(50)	Clip color (B & W, color, tinted)
imageLDeleteFlg	Char(1)	Logical Delete Fl
audio	VarChar(25)	Audio
cameraSpeed	VarChar(50)	Camera Speed
composition	VarChar(100)	Composition
category	VarChar(200)	Category
subcategory	VarChar(500)	Subcategory
intExt	VarChar(50)	Interior/exterior
timeOfDay	VarChar (50)	Time of day, for example dawn or dusk
productType	VarChar(100)	Product type
imageSize	VarChar(100)	Image size
fileSize	VarChar(100)	File size
compression	VarChar(100)	Compression
clipPrice	VarChar(10)	CD SKU number
Reserved1	VarChar(10)	Starting Storyboard number
Reserved2	VarChar(10)	Ending Storyboard number
Reserved3	VarChar(32)	Reserved
Reserved4	VarChar(32)	Reserved
clippricehi	VarChar(10)	High resolution price
clippricelo	VarChar(10)	Low resolution price
cdsku	VarChar(10)	CD SKU

Loading sample data

Sample content can be loaded into Content Manager by executing the batch load program with the loader command script. To load the sample data, `demodata.txt`, the loader command script assumes that the user ID and password `wcdm/wcdm` has been defined and the text server name/index is named `DMDEMO`. The loader

program is executed from the WebSphere Commerce system. Also check `parms.txt` in the directory

`Windows` `AIX` `Solaris`
`WASInstallDir\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\store_directory\custom_mass_loader`

to ensure that the parameters for user ID, item type, library server or object server name, and text index name match your installation.

1. Prepare to run the load program.

`Windows`

- a. Open a command prompt.
- b. `cd WAS_installDir\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\store_directory\custom_mass_loader`

`AIX` `Solaris`

- a. Open a terminal window.
 - b. `su - wasload`
 - c. `cd WAS_installDir/installedApps/WC_Enterprise_App_instance_name.ear/wcstores.war/store_directory/custom_mass_loader`
2. Verify that the load parameters match your installation.

Edit the file `parms.txt` and verify the values for the Library Server name, index class or item type name, text index name, and commerce thumbnail path.

Ensure that the variable `SERVER_TYPE` is set to the following:

- Content Manager 7.1 DL
- Content Manager 8.1 ICM

If the default values do not match your site's values, modify them as needed. The thumbnail path is the directory where the thumbnails will be loaded for access by the Web server. This is typically in:

`WAS_installDir/installedApps/WC_Enterprise_App_instance_name.ear/wcstores.war/store_directory/common/webobjects/thumbnails`

3. If your installation is not in English, run the part generator:

- `Windows` `cmgen.bat demodata.txt`
- `UNIX` `cmgen.sh demodata.txt`

Verify that the part generator was successful and that no errors occurred. Check the `cmgen.out` file in the `upload/logs` subdirectory for errors.

4. Run the load script.

- `Windows` `cmload.bat demodata.txt`

This command must be executed under a user ID that has properly been set up as a Content Manager client and whose environment references the required classpaths.

- `UNIX` `cmload.sh demodata.txt`

This command must be executed under a user ID that has properly been set up as a Content Manager client and whose environment references the required classpaths.

5. Verify that the load was successful and that no errors occurred. Check the `demodata.txt.log` and `demodata.txt.out` files for any errors.
6. After loading the content, copy the thumbnails copied from the thumbnails directory on the loading system to the thumbnails directory on the web server

system unless the loader is set up to load them directly to the HTTP server directory. You must have write permission to complete this step. These files are in the following directory:

```
WAS_installdir/installedApps/WC_Enterprise_App_instance_name.ear/wcstores.war/  
store_directory/common/webobjects/thumbnails
```



Loading content from an external repository

This section describes the steps for loading new digital content into the WDME site when content is contained in an external content repository. You will then need to propagate the information about the content into the WebSphere Commerce Product database tables. The tables are described in the *WebSphere Digital Media Enabler Administration Guide*.

Before loading the WebSphere Commerce tables you must extract the product information from the content repository and format the input into the WebSphere Commerce load process.

Converting the XML or ASCII delimited input for loading: First, you must convert the input into a format accepted by the load process using the following process.

Windows

1. Open a command prompt.
2. Change to the loader directory. For example   :

```
WAS_installdir\installedApps\WC_Enterprise_App_instance_name.ear\  
wcstores.war\store_directory\custom_mass_loader
```
3. Copy the XML file or ASCII delimited input file to the directory.
4. Verify that the `digitalmediaload.properties` file contains the field definitions for your specific data model.
5. Verify that the `convert.bat` script refers to the correct directories. By default, it assumes that a subdirectory named `"locale\text\"` exists beneath the `"custom_mass_loader"` directory, and that the input thumbnails are in a subdirectory named `"images\5k\"`.
6. Run the program to convert the ASCII delimited file into the Loader format by executing the convert batch file in the following way:



```
convert.bat input_file starting_image_ID
```

For example:

```
convert.bat metadata.txt 85001
```

7. Check the output log file to see if any failures occurred. If so, correct the problem and repeat the above step until there are no errors.
8. Record the highest number image ID generated.
This must be used to determine the next set of numbers to use.

UNIX

1. Log in as **wcsload**.
2. Change to the loader directory. For example   :

```
WAS_installdir/installedApps/WC_Enterprise_App_instance_name.ear/  
wcstores.war/store_directory/custom_mass_loader
```
3. Copy the ASCII delimited input file to this directory.

4. Verify that the `parms.txt` file refers to the correct server, index class or item type, text index, and user names.
5. Ensure that all the content is available in the staging directories.
6. Verify that the `digitalmediaload.properties` file contains the field definitions for your specific data model.
7. Verify that the `convert.bat` script refers to the correct directories. By default, it assumes that a subdirectory named `locale\text\` exists beneath the `custom_mass_loader` directory, and that the input thumbnails are in a subdirectory named `images\5k\`
8. Run the program to convert the XML or ASCII delimited file into the loader format by executing the `convert` shell script as follows:

```
./convert.sh input_file starting_imageID
```

For example:

```
./convert.sh metadata.txt 85001
```

9. Check the output log file to see if any failures occurred. If so, correct the problem and rerun if necessary.
10. Record the highest number image ID generated. This must be used to determine the next set of numbers to use.

Converting the intermediate load file to WebSphere Commerce XML format

Convert the intermediate data file into an XML format understood by WebSphere Commerce if it has not already been done. A catalog entry will be generated for each digital asset and each unique orderable item for the asset. This step is only necessary once per data file.

Follow the steps below to set up and generate WebSphere Commerce files from the intermediate data file. These steps are only done once per store.

Windows

1. Open a command prompt:
2. Change to the WDME loading directory. For example `NT 2000` :

```
WAS_installldir\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\store_directory\custom_mass_loader
```
3. If the values within the file `setenv.bat`:

For example `NT` :

```
WAS_installldir\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\store_directory\custom_mass_loader\setenv.bat
```

have not previously been set, set these values now. Ensure that they match your site values. In particular, ensure that
`CM_TXT_SRCH_INDX_NM=Content_Manager_item_type`

4. Verify the field mappings from input columns to WebSphere Commerce product table contents. For example, the sample `digitalmediaload.properties` file maps from the Content Manager column named `imageDescription` to the WebSphere Commerce product column named `longdescription`.
5. Generate a WebSphere Commerce load file (this assumes that the load file has already been created from the ASCII delimited input file). Generate the WebSphere Commerce load file by executing the script as follows:

```
wcsdatagen.bat run_type language input_data_file
```


The run type can be one of the following:

- Only—only one language is to be loaded
- First—this is the first language (base language) to be loaded
- Next—this is the next language to be loaded
- Last—this is the last language to be loaded

For example   :

```
wcsdatagen.bat only locale metadata_c.txt
```

The following file is generated: metadata_c_catalog.txt. Review this file to verify that it has been correctly generated.

1. Open a terminal window.
2. Run the following command:

```
su - wcsload
```
3. Change to the WDME loading directory. For example:

```
WAS_installdir/installedApps/WC_Enterprise_App_instance_name.ear/  
wcstores.war/store_directory/custom_mass_loader
```
4. If the values within the file setenv.sh for example:

```
WAS_installdir/installedApps/WC_Enterprise_App_instance_name.ear/  
wcstores.war/store_directory/custom_mass_loader/setenv.sh
```

have not previously been set, set these values so that they match your site values.

5. Verify the field mappings from Content Manager columns to the WebSphere Commerce product table contents. For example, the sample digitalmediaload.properties file maps from the Content Manager column named imageDescription to the product column named longdescription.
6. Generate a WebSphere Commerce load file (this assumes that the load file has been created from the ASCII delimited input file). Generate the WebSphere Commerce load file by executing the shell script as follows:

```
./wcsdatagen.sh run_type language input_data_file
```

The run type can be one of the following:

- Only—only one language is to be loaded
- First—this is the first language (base language) to be loaded
- Next—this is the next language to be loaded
- Last—this is the last language is to be loaded

For example:

```
./wcsdatagen.sh only locale metadata_c.txt
```

The following file is generated: metadata_c_catalog.txt. Review this file to verify that it has been correctly generated.


Loading the converted XML data

Load the converted data into the corresponding store in WebSphere Commerce as follows.

Note:

Steps 1–6 below apply to any type of data being loaded for WDME.

First, perform the following procedure once to set up the loading environment:

1. Change to the directory where the modules for loading data reside. For example  :
`WAS_install_dir\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\store_directory\custom_mass_loader`
2. If the values within the file `setenv.bat` or `setenv.sh` have not previously been set, set these values now.
3. Query the table `STOREENT` to get the value for `MEMBER_ID` associated with the current store.
4. Change to the `dtd` subdirectory.
5. Edit the following required fields in `DBLoadMacros.dtd` file:
 - `MEMBER_ID`
Use the value for column `MEMBER_ID` in table `STOREENT`.
 - `STORE_ID`
Use the value for column `STORE_ID` in table `STORE` (Map with the column `MEMBER_ID` associated with the current store; also see table `STOREENT`).
 - `CATALOG_ID`
Use the value for column `CATALOG_ID` in table `STORECAT` (Map with the column `STOREENT_ID` associated with the current store).
 - `CATGROUP_ID`
Use the value for column `CATGROUP_ID` in table `STORECGRP` (Map with the column `STOREENT_ID` associated with the current store).
 - `FFMCENTER_ID`
Use the value for column `FFMCENTER_ID` in table `FFMCENTER_ID` (Map with the column `MEMBER_ID` associated with the current store).
 - `TRADEPOSCN_ID`
Use the value from column `TRADEPOSCN_ID` in table `TRADEPOSCN` (Map with the column `MEMBER_ID` associated with the current store).
 - `VENDOR_ID`
Use the value from column `VENDOR_ID` in table `VENDOR` (Map with the column `MEMBER_ID` associated with the current store).

Note: Use the DB2 Command Center or a command prompt to query (using SQL statements) the WebSphere Commerce database (mall, for example) to acquire the above information. For Oracle, use the SQL*Plus Worksheet to execute the needed queries.

6. In the file `DBLoadMacros.dtd`, edit any other fields if needed.
7. Determine the database name (mall, for example), user ID (db2admin, for example), and password (db2admin, for example) to be used in the next steps.
8. Create the XML files to be imported into WebSphere Commerce tables using the `IDResolve` command.
9. Edit the command file `wcsIdResolve.bat` or `wcsIdResolve.sh` to make sure that the default values match your site. The classpath must include the correct JDBC driver for DB2 or Oracle. When using Oracle, you must specify the Oracle connection properties file for the `-customizer` parameter as shown in the following example:

```
-customizer d:\Websphere\CommerceServer\properties\  
OracleConnectionCustomizer.properties
```

A sample script containing the path for the Oracle JDBC driver and
-customizer parameter is located in `idresolve_ora.bat`.

10. Execute the ID Resolve script as follows to resolve variables with values set in `DBLoadMacro.dtd` and create the XML files:

Windows

```
wcsIdResolve.bat database_name db_user db_password input_file
```

For example:

```
wcsIdResolve.bat mall db2admin db2admin metadata_c_catalog.txt
```

AIX Solaris

```
./wcsIdResolve.sh database_name db_user db_password input_file
```

For example:

```
./wcsIdResolve.sh mall db2admin db2admin metadata_c_catalog.txt
```

11. Examine the generated log file `metadata_c_catalog.txt.out` for any errors. Make sure that you see the message `ID Resolver resolved all Identifiers` near the end of each log file.
12. Load the data using the XML files created above into the WebSphere Commerce tables by running the following command:

Windows

```
wcsload.bat database_name db_user db_password input_file
```

For example:

```
wcsload.bat mall db2admin db2admin metadata_c_catalog.txt.xml
```

AIX Solaris

```
./wcsload.sh database_name db_user db_password input_file
```

For example:

```
./wcsload.sh mall db2admin db2admin metadata_c_catalog.txt.xml
```

13. Examine the log file `metadata_c_catalog.txt.xml.log` for any errors. Check to see that no records failed by looking for the messages in the log file. Here is a sample fragment from a log file after a successful run:
2002.03.14 13:03:47.883 java.lang.Class run MassLoader
Number of records committed: 4008.
2002.03.14 13:03:47.883 java.lang.Class run MassLoader
Number of records failed: 0.
Data load is complete.

For further verification beyond the log file, you can do any of the following:

- Use the WebSphere Commerce Accelerator to verify that the products have been loaded correctly.
- Display the product in the lightbox or shopping cart.
- Use SQL to query the tables and verify that the data is in the tables.

Starting the WDME Web site

Once all of the installation steps have been completed, ensure that all of the servers are started before accessing the WDME site.

Starting Content Manager 7

To start Content Manager 7, you must start the following:

- Object server
- Library server
- Text search server

Starting the object server

To start the object server, do the following:

Windows

1. Go to the **start** menu >**settings>control panel> services**.
2. Locate the service named - **CM Object Server** (*object server name*).
3. Click **Start**.

AIX Solaris

1. su - osadmin
2. Start with the command `frnstart.obj`

Starting the library server

To start the library server, do the following:

Windows

1. Go to the **start** menu -> **settings->control panel-> services**.
2. Locate the service named - **CM Library Server** (*<library server name>*).
3. Click **Start**.

AIX Solaris

1. su - lsadmin
2. Start with the command `frnstart.lib`

Starting the text search server

To start the text search server, do the following:

Windows

1. Go to the **start** menu -> **settings->control panel-> services**
2. Locate the service named - **Text Search Server**
3. Click **Start**.

AIX Solaris

1. su - tsadmin
2. Start the text search server with the command `imlss start dlinst`

Starting Content Manager 8

To start Content Manager 8, you only need to start the DB2 text information extender. To start the text information extender, do the following:

Windows

1. Open a command prompt.
2. Assuming that `d:\sql11ib` is the location where you installed DB2.
d:
cd \sql11ib\bin
db2text start

AIX

1. Log on to the DB2 instance owner user ID.
2. `db2text start`

Starting the WDME servers

To start the WDME servers, you must start the following:

- IBM HTTP server
- IBM WebSphere Administration server
- IBM WebSphere Administration Console

Starting the IBM HTTP server

This server is typically started when the system is booted. For HTTP servers other than the IBM HTTP server, refer to the appropriate product documentation.

Windows

1. Go to the **start** menu -> **settings->control panel-> services**.
2. Locate the service named - **IBM HTTP Server**.
3. Click **Start**.

AIX

1. Log in to the HTTP server system (*web_host_name*) as **root**.
2. `cd /usr/HTTPServer/bin`
3. Start the server `./apachectl start`

Solaris

1. Log in to the HTTP server system (*web_host_name*) as **root**.
2. `cd /opt/HTTPServer/bin`
3. Start the server `./apachectl start`

Starting IBM WebSphere Administration server

To start the IBM WebSphere Administration server, do the following:

Windows

1. Go to the **start** menu -> **settings->control panel-> services**.
2. Locate the service named - **IBM WS AdminServer**.
3. Click **Start**.

AIX Solaris

1. Log in as **root** and ensure that DB2 is running.
2. `su - wasuser`
3. `DISPLAY=fully_qualified_host_name:0.0`
4. `export DISPLAY`
5. `cd WAS_installdir/bin`
6. `./startupServer.sh &`
7. Check the `WAS_installdir/logs/tracefile` to ensure that WebSphere Application Server started successfully.

Starting IBM WebSphere Administrative Console

To start the IBM WebSphere Administration Console, do the following:

Windows

1. Start the WebSphere Administration Console by going to the **start** menu -> **programs**-> **IBM WebSphere**-> **Application Server V4.0**-> **Administrator's Console**.
2. Open the branch for the node name (for example, *wc_host_name*)
3. Right click **WebSphere Commerce Server** and click **Start**. This also starts the Application Server.

AIX

1. Open a terminal window.
2. `su - wasuser`
3. `DISPLAY=fully_qualified_host_name:0.0`
4. `export DISPLAY`
5. `cd WAS_installdir/bin`
6. `./adminclient.sh machine_name port`

Solaris

1. Open a terminal window.
2. `su - wasuser`
3. `DISPLAY=fully_qualified_host_name:0.0` (example: `DISPLAY=mps.ibm.us.ibm.com:0.0`)
4. `export DISPLAY`
5. `cd WAS_installdir/bin`
6. Enter `./adminclient.sh machine_name port`

Starting the Application Server

To start the WebSphere Commerce Business or Professional Edition Application Server, do the following:

Windows AIX Solaris

1. Launch the WebSphere Commerce Administration Console.
2. Open the branch for the node name, for example, *wc_host_name*
3. Expand **Application Servers**.
4. Right click **WebSphere Commerce Server** -*instance_name*.
5. Click **Start**.

Starting WebSphere Commerce Payments

You must start WebSphere Commerce Payments to process orders. If WebSphere Commerce Payments is not started, no credit card information will be available.

1. Start the WebSphere Commerce Payments Application Server using the WebSphere Administration Console.

Windows AIX Solaris

- a. Open the branch for the node name, for example, *wc_host_name*
 - b. Expand Application Servers.
 - c. Right click **WebSphere Payment Manager** and click **Start**.
2. Start the WebSphere Commerce Payments engine:

Windows

- a. Open a command prompt.
- b. IBMPayServer
- c. Enter your WebSphere Commerce Payments password.

AIX

- a. Open a terminal window.
- b. su - wasuser
- c. DISPLAY=*fully_qualified_host_name*:0.0
- d. export DISPLAY
- e. cd /usr/lpp/PaymentManager
- f. ./IBMPayServer

Solaris

- a. Open a terminal window.
- b. su - wasuser
- c. DISPLAY=*fully_qualified_host_name*:0.0
- d. export DISPLAY
- e. cd /opt/PaymentManager
- f. ./IBMPayServer

You are prompted to enter your WebSphere Commerce Payments password. This is the password you specified to use when connecting to the database.

Starting the delivery daemon

To download digital content and receive e-mail, the delivery, e-mail and upload daemon processes must be started. The WDME system can run without these, but e-mail and downloads will not be sent.

Windows

1. Open a command prompt.
2. cd *WAS_installdir*\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\store_directory\delivery
3. Edit DeliveryAction.txt to ensure Action=YES
4. Enter the command runDelivery.bat

AIX Solaris

1. Log in as wcsorder.
2. `cd WAS_installdir/installedApps/ WC_Enterprise_App_instance_name.ear /wcstores.war/store_directory/delivery`
3. Edit DeliveryAction.txt to ensure Action=YES
4. `nohup runDelivery.sh &`

Starting the e-mail daemon

To start the e-mail daemon, do the following:

Windows

1. Open a command prompt.
2. `cd WAS_installdir\installedApps\WC_Enterprise_App_instance_name.ear \wcstores.war\store_directory\email`
3. Edit EmailAction.txt to ensure "Action=YES"
4. `runEmail.bat`

AIX

1. Log in as wcsorder.
2. `cd WAS_installdir/installedApps/WC_Enterprise_App_instance_name.ear/ wcstores.war/ store_directory/email`
3. `nohup runEmail.sh &`

Solaris

1. Log in as wcsuser.
2. `cd WAS_installdir/installedApps/WC_Enterprise_App_instance_name.ear/wcstores.war/store_directory /email`
3. `nohup runEmail.sh &`

Starting the upload daemon

To start the upload daemon, do the following:

Windows

1. Open a command prompt.
2. `cd WAS_installdir\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\store_directory\custom_mass_loader`
3. Edit uploadprocessaction.txt to ensure Action=YES.
4. `upload.bat YES`

AIX



Solaris

1. Log in as wcsload.
2. `cd WAS_installdir/installedApps/WC_Enterprise_App_instance_name.ear/ wcstores.war/store_directory/custom_mass_loader`
3. Edit uploadprocessaction.txt to ensure Action=YES
4. Enter the command `nohup upload.sh YES &`

Accessing the WDME site

1. Ensure the following services are started:
 - IBM HTTP Server
 - IBM DB2
 - IBM WebSphere Application Server Administration Server
2. Use the WebSphere Application Server Administration Console to ensure the following application servers are started:
 - WebSphere Commerce Business or Professional Edition Application Server
 - WDME Application Server, for example, **DigitalMedia Server** in WebSphere Application Server
3. Launch the WDME store by doing the following:

-  From the **Start** menu select **Programs>IBM Digital Media Enabler 5.4.2>Launch Store**.



-   In a browser type the Web address of the login page created for the current store, for example:

```
https://host_name/webapp/wcs/stores/servlet/DigitalMediaCommonView?  
langId=language_ID&storeId=store_number  
&catalogId=catalog_number&include=home
```

You can determine what the WebSphere Commerce storeID, catalogID, and langID variables are from the parameters.jsp file in the following directory:

```
WAS_install_dir\installedApps\WC_Enterprise_App_demo.ear\wcstores.war\  
store_directory\include
```

Alternatively, you can launch your store quickly and easily with the following file:

-  WCDM\bin\launchStore.bat
-  WCDM/bin/launchStore.sh

Chapter 6. Uninstalling Digital Media

To uninstall WDME, you will do the following:

1. Restore the WebSphere Commerce Enterprise Application
2. Remove the WDME store
3. Remove the sample SAR
4. Remove the WDME database tables
5. Remove the WDME installation directory




Restoring the WebSphere Commerce Enterprise Application

As part of the WDME installation, an archive is made of the WebSphere Commerce Enterprise application. The `wcdmrestoreapp` tool replaces the WDME-modified enterprise application with the archive of the original WebSphere Commerce enterprise application. When you restore the WebSphere Commerce enterprise application, the store directories are removed. **All store directories are removed, including those from stores created after the installation of WDME!** If you do not restore the application you must remove the following directories:




```
\WebSphere\AppServer\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\store_directory  
\WebSphere\AppServer\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\WEB-INF\classes\store_directory
```

To restore the original WebSphere Commerce enterprise application:

1. Change to the directory:

-  `\WebSphere\CommerceServer\WCDM\bin`
-  `/usr/WebSphere/CommerceServer/WCDM/bin`
-  `/opt/WebSphere/CommerceServer/WCDM/bin`




2. Issue the command:

-  `wcdmrestoreapp.bat instance_name drive:\WebSphere\CommerceServer\WCDM\ears\originalEar outputfile.xml`
-  `wcdmrestoreapp.sh instance_name /usr/WebSphere/CommerceServer/WCDM/ears/originalEar outputfile.xml`
-  `wcdmrestoreapp.sh instance_name /opt/WebSphere/CommerceServer/WCDM/ears/originalEar outputfile.xml`

Removing the WDME store

To remove the store you must remove the store archive, the store directories and the database assets of the WebSphere Commerce database. To remove the store archive, do the following:

1. Change to the following directory:

-  `\WebSphere\CommerceServer\instances\instance_name\sar`
-  `/usr/WebSphere/CommerceServer/instances/instance_name/sar`
-  `/opt/WebSphere/CommerceServer/instances/instance_name/sar`

2. Issue the command:

- **Windows** `del store_directory*`
- **UNIX** `rm store_directory*`

Reminder: When you restore the WebSphere Commerce enterprise application, the store directories are removed. All store directories are removed, including those from stores created after the installation of WDME.

To remove the database assets, enter the following command:

```
dbclean -object store -type specified -db db_name -loglevel 2 -name store_ID -dbuser db_user -dbpasswd db_password
```

For example:

```
dbclean -object store -type specified -db Mall -loglevel 2 -name 10001 -dbuser db2admin -dbpasswd passwd0rd
```

Removing the sample SAR

To remove the sample SAR:

- **Windows**
 1. Open a command prompt.
 2. `cd drive:\WebSphere\CommerceServer\samplestores\DigitalMedia`
 3. `del *.*`
 4. `cd ..`
 5. `rd DigitalMedia`
- **AIX**
 1. `cd /usr/WebSphere/CommerceServer/samplestores`
 2. `rm -rf DigitalMedia`
- **Solaris**
 1. `cd /opt/WebSphere/CommerceServer/samplestores`
 2. `rm -rf DigitalMedia`

Removing WDME database tables

To remove the WDME database tables:

- **DB2**
 1. Open a DB2 command line processor.
 2. `quit`
 3. Change to the bin directory under the WDME installation directory.
 4. `db2 Connect to WC_database_name`
 5. `db2 -tvf cleanwcdmdb.sql`
- **Oracle**
 1. Change to the bin directory under the WDME installation directory.
 2. Launch `sqlplus`.
 3. `Connect to WC_database_user_ID/WC_database_password;`
 4. `@cleanwcdmdb.sql;`

Removing the WDME installation directory

Do the following to remove the WDME installation directory from your system:



- **Windows** From the Windows Explorer, delete the *WDME_installdir* directory.
- **UNIX** From the root directory `rm -rf WDME_installdir`

Chapter 7. Using additional WDME stores

The following are required tasks for using additional Digital Media stores.

Creating additional stores

After you have fully installed and configured WDME at least once, you can create a new store if necessary. Typically, this would be done through WebSphere Commerce Store Services, however, doing so with WDME would result in the properties files directories pointing to the old store and would require manual updates to the `DBLoadMacros.dtd` file.

1. Open a command prompt.
2. Do the following to set the environment variable:
 -  `set WCDM_INSTALL_OPTION=STOREONLY`
 -  `export WCDM_INSTALL_OPTION=STOREONLY`
3. Run the WDME installation again. This creates a store archive, replaces the `DigitalMedia.sar` sample store archive, and publishes the store.

Using the upload function with additional stores

The upload function can only be configured to work for one store at a time. If you create another store, and want to use the upload function, you must do the following:

1. You must approve and finish uploading all media for the initial store before uploading to your new store.
2. Edit the file
`WAS_installdir/WC_Installed_Apps_instance_name.ear/lib/digitalmediaload.properties`
3. Change the store directory name in the path specified for the variable `WCDM.MASSLOADERDIR` to the name of the new store.
4. Restart the application server: WebSphere Commerce Server - *instance_name*

Repeat this procedure whenever you want the upload function to work for a different store.

Chapter 8. Troubleshooting

This describes the following troubleshooting areas:

- Installing on Solaris
- Using the upload function with Oracle
- Using the delivery function with Oracle
- Uploading on Solaris
- Content Manager 7 setup
- Content Manager 8 setup
- Adding customized Enterprise JavaBeans beans
- Setting up WebSphere Commerce Payments



Installing on Solaris

When installing on Solaris with a Double-Byte Character Set, it is recommended that you do *not* resize the installation panels. Doing so may cause the subsequent panels to be blank and require that you stop and restart the installation.




Using the upload function with Oracle

Upload function with Oracle If you are using Oracle with Content Manager and are experiencing problems with the upload function, do the following:

1. Open the following script:

-  `setenv.bat`
-  `setenv.sh`

from the following directory:

- 
`WAS_installdir\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\store_directory\custom_mass_loader`
- 
`drive:\Program_Files\WebSphere\AppServer\installedApps\WC_Enterprise_App_instance_name\ear\wcstores.war\store_directory\custom_mass_loader`
- 
`/usr/WebSphere/AppServer/installedApps/WC_Enterprise_App_instance_name.ear/wcstores.war/store_directory/custom_mass_loader`
- 
`/opt/WebSphere/AppServer/installedApps/WC_Enterprise_App_instance_name.ear/wcstores.war/store_directory/custom_mass_loader`

2. Change the DB2_JDBC_PATH statement to
`DB2_JDBC_PATH=DB2_HOME/sql/lib/java/db2java.zip`

Delivery function with Oracle

Delivery function with Oracle If you are using Oracle with Content Manager and are experiencing problems with the delivery function, ensure that `DB2_home/sql1lib/java/db2java.zip` is in the classpath for the `runDelivery.bat` on Windows or `runDelivery.sh` on Unix.

Uploading on Solaris

If you are experiencing problems with upload on Solaris, set the system environment setting `export DISPLAY=:0.0` prior to starting your WebSphere Commerce Server application server.

Content Manager 7 setup

If Content Manager 7 is not working, try the following:

1. Ensure that the type of library server in the file `digitalmedia.properties` is specified. Ensure that the `WCDM.LIBRARYSERVERTYPE` variable is set to `DL`. The `digitalmedia.properties` file is in the following directory:

Windows AIX Solaris

`WAS_installdir\installedApps\WC_Enterprise_App_instance_name.ear\WAS\lib`

2. Ensure that the name of the index class in `dmstoreconfig_locale.properties` in the following directory is specified:

Windows

`WAS_installdir/installedApps/WC_Enterprise.App_instance_name.ear/wcstores.war/WEB_INF/classes/store_directory`

AIX

`WAS_installdir\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\store_directory`

Solaris

`WAS_installdir\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\store_directory`

3. Ensure that the `WCDMCMBASEINDEXCLASS` and `WCDMCMINDEXCLASS` variables are set to the name of the index class. The default value is `DMDEMO`.

Content Manager 8 setup

If Content Manager 8 is not working, do the following:

1. Ensure that the type of library server in the file `digitalmedia.properties` is specified. Ensure that the `WCDM.LIBRARYSERVERTYPE` variable is set to `ICM`. The `digitalmedia.properties` file is in the following directory:

Windows AIX Solaris

`WAS_installdir\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\store_directory\setup\WAS\lib`

2. Ensure that the name of the item type in the file `dmstoreconfig_locale.properties` is specified. Ensure that the `WCDMCMBASEINDEXCLASS` and `WCDMCMINDEXCLASS` variables are set to the name of the item type. The default value is `DMDEMO`.

Adding customized Enterprise JavaBeans (EJB) beans and servlets to the WebSphere Commerce enterprise application

If the installation fails at the point of importing the WebSphere Commerce application, you can add customized EJB beans and servlets to the WebSphere Commerce enterprise application by doing the following:

1. Assemble new EJB beans into an enterprise application
2. Stop and remove an enterprise application
3. Import the new enterprise application
4. Add WDME servlets to web.xml

Assembling new EJB beans into an enterprise application

This section describes how to use the Application Assembly Tool to assemble new enterprise beans into an existing enterprise application. For the UNIX environment it is advisable to increase the memory heap size value in the `assembly.sh` file to avoid running out of memory when saving new or modified `.ear` files.

This file is located in the following directory:

```
UNIX WAS_installdir/bin
```

To increase the memory heap size, modify the following line:

```
$JAVA_HOME/jre/bin/java so that it appears as follows: $JAVA_HOME/jre/bin/java -mx512M
```

In this step, you open the `.ear` file in your enterprise application that was created in the previous step. Once it is open inside that tool, do the following to add the new entity bean to the enterprise application:

1. Import the EJB group containing the new session bean. The JAR file for the new EJB group will be stored within the EJB module section of the enterprise application.
2. Add the implementation JAR file to the application. This JAR file will be stored within the files section of the enterprise application.

Task details follow:

1. Open the WebSphere Application Server Administration Console.
2. From the **Tools** menu, select **Application Assembly Tool**. If a welcome window opens, select **Cancel** to close that window.
3. Open the enterprise application upon which you are going to work, by doing the following:
 - a. From the **File** menu, select **Open**.
 - b. In the **File name** field, enter:

```
Windows
```




```
drive:\WebSphere\CommerceServer\WCDM\ears\originalEar
```

```
AIX
```

```
/usr/WebSphere/CommerceServer/WCDM/ears/originalEar
```

```
Solaris
```

```
/opt/WebSphere/CommerceServer/WCDM/ears/originalEar
```

- c. Click **Open**. Wait for the application to open before continuing to the next steps. This takes several minutes.
4. Right-click **EJB Modules** and select **Import**.
5. In the **File name** field, type the path  :
`WAS_installdir\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\store_directory\setup\WAS\digitalmedia.ear`
6. Click **Open**, and select both the EJB Modules (DigitalMediaEJB and DigitalMediaUsagEJB) in the Confirm values window. Click **OK**. Click **OK** twice to accept both the selected EJB modules.
7. Once the DigitalMediaEJB.jar and DigitalMediaUsageEJB.jar files are imported, expand the EJB module node and scroll to the DigitalMediaEJB group and select this group. Information about this group is shown in the pane on the right. In the **classpath** field for the new enterprise beans, make sure that the lib/DigitalMediaCommon.jar and lib/wcsejbimpl.jar are included. If not, add them and click **Apply**.
8. Add the implementation JAR file for your EJB group to the application, by doing the following:
 - a. Right click the **Files** node for your WebSphere Commerce enterprise application and select **Add Files**. The **Files** node for the enterprise application is near the bottom of the hierarchical tree. There are other files nodes for components within the enterprise application, but you must select the files node for the whole application.
 - b. In the Add Files window, click **Browse**.
 - c. Change to the directory  :
`WAS_installdir\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\store_directory\setup`
 - d. With the WebSphere Application Server directory highlighted, click **Select**.
 - e. In the **Add Files** window, the contents of the directory are displayed. Highlight the **lib** directory on the left panel. The contents of the lib directory are displayed in the pane on the right.
 - f. In the pane on the right, select the DigitalMediaCommon.jar, digitalmediaload.properties and digitalmedia.properties files and click **Add**. These files display in the Selected Files window as lib/DigitalMediaCommon.jar and lib/digitalmedia.properties.
 - g. Click **OK**.
9. Add the WDME servlets.
 - a. Expand the **Web Modules** in the left panel and navigate to WebSphere Commerce Stores Web Components. Right-click **Web Components** and select **Import**.
 - b. Click the **browse** button and navigate to enter the path  :
`WAS_installdir\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\store_directory\setup\WAS\digitalmedia.ear`
10. Select the **DigitalMedia Web** from the top left pane. Select all servlets from the top right pane and click **Add** and **OK**.
11. From the **File** menu, select **Save**. This takes several minutes. Wait for confirmation.
12. Exit the Application Assembly Tool.

After this step has completed, you have created a new enterprise application that contains all of the previous logic as well as the WDME business logic. This is all contained in the newly modified `WC_Enterprise_App_instance_name.ear` file.

Stopping and removing an enterprise application

This section describes how to use the WebSphere Application Server Administration Console to stop and remove an enterprise application that is running.

To stop and then remove your enterprise application, do the following:

1. Open the **WebSphere Application Server Administration Console**>**WebSphere Administrative Domain**>**Nodes**>*nodeName* (where *nodeName* is the name of your node)>**Application Servers**.
2. Right click your WebSphere Commerce application server; for example, right-click the **WebSphere Commerce Server - instance_name** and select **Stop**.
3. In the left pane, expand **Enterprise Applications**.
4. Right click your WebSphere Commerce application; for example, right-click the **WebSphere Commerce Enterprise Application - instance_name** and select **Stop**.
5. Right click your WebSphere Commerce application; for example, right-click the **WebSphere Commerce Enterprise Application - instance_name** (or *instance_name* –**WebSphere Commerce Enterprise Application**) application and select **Remove**.

Note: Ensure that you are removing the WebSphere Commerce enterprise application and *not* the WebSphere Commerce Application server.

6. When prompted to indicate if the application should be exported, select **No**.
7. When prompted to indicate if the application should be removed, select **Yes**.
8. Close the WebSphere Application Server Administration Console.
9. Verify that the file `WC_Enterprise_Application_instance_name.ear` is deleted from the `installedApps` directory.

Importing the new enterprise application

This section describes how to use the XMLConfig command line utility to import an enterprise application.

To import the new enterprise application, invoke the XMLConfig tool to import the enterprise application into WebSphere Application Server by entering the following command:

```
Windows xmlConfig -import OutputFile.xml -adminNodeName WAS_host_name
```

```
AIX WAS_installdir/bin/XMLConfig.sh -import  
/usr/WebSphere/CommerceServer/WCDM/ears/originalEar/OutputFile.xml  
-adminNodeName WAS_host_name -nameServiceHost WAS_host_name  
-nameServicePort wasAdminPort
```

```
Solaris WAS_installdir/bin/XMLConfig.sh -import  
/opt/WebSphere/CommerceServer/WCDM/ears/originalEar/OutputFile.xml  
-adminNodeName WAS_host_name -nameServiceHost WAS_host_name  
-nameServicePort wasAdminPort
```

where

- `WAS_host_name` is the name of the node in the WebSphere Application Server that contains your current enterprise application
- `OutputFile.xml` is the XML file that describes all of your EJB beans. This file is created during installation.
- `wasAdminPort` is the WebSphere Application Server administration port.

Note: If the import is unsuccessful, ensure that all `application-server-full-name` specification instances in your `OutputFile.xml` file are contained in one single line. If this spans more than one line, bring it back to one line for all the instances in this `OutputFile.xml` and rerun the import.

Adding WDME servlets to web.xml

In the file `web.xml`, add the WDME servlet mappings, provided in the `sampleweb.xml`, immediately after the WDME servlet definitions. The `web.xml` file is located in the directory  :

`WAS_installdir\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\WEB-INF`

The `sampleweb.xml` file is located in  :

`WAS_installdir\installedApps\WC_Enterprise_App_instance_name.ear\wcstores.war\store_directory\setup\WAS`

Configuring WDME: In this step, you configure the Digital Media application for your site. You set up directory paths and customize property files and add the customized EJB files and servlets to the WebSphere Commerce enterprise application. You deploy the customized EJB files and servlets into the WebSphere environment. The following are tasks involved in adding the customized EJB files and servlets to WebSphere Commerce. These tasks are detailed in the *IBM WebSphere Commerce Programmer's Guide* which can be found at: <ftp://ftp.software.ibm.com/software/websphere/commerce/54/en/ProgrammersGuide.pdf>


- Exporting the current WebSphere Commerce enterprise application
- Assembling new EJB beans and servlets into an enterprise application
- Stopping and removing an enterprise application
- Importing an enterprise application
- Starting an enterprise application
- Adding new WDME servlets to `web.xml`

Setting up WebSphere Commerce Payments for the sample store

This step is only necessary if the Payments was *not* running during the WDME installation. Before starting the WebSphere Commerce Payments Application Server, ensure that the WebSphere Commerce Admin Server is up and that the WebSphere Commerce Payments Application server is started. To set up WebSphere Commerce Payments for the sample store, you must create a merchant, authorize a cassette, create an account and create a brand. For information on other Payments setup tasks, refer to the WebSphere Commerce Payments documentation.

To set up WebSphere Commerce Payments for the sample store, do the following:

1. Ensure that the Payment Engine is started.

 Change directory to `drive:\IBM\Payments`. Enter the command:
`IBMPayServer`

► **2000** Change directory to `drive:\Program_Files\IBM\Payments`. Enter the command: `IBMPayServer`

► **AIX** Change directory to `/usr/lpp/PaymentManager`. Enter the command: `./IBMPayServer`

► **Solaris** Change directory to `/opt/PaymentManager`. Enter the command `./IBMPayserver`

2. Open an Internet Explorer window and go to `http://host_name/webapp/PaymentManager`
3. Type your WebSphere Commerce Payments user ID. The default is `wcsadmin`.
4. Type your corresponding WebSphere Commerce Payments password and click **Logon**.
5. Do the following to create a merchant and authorize a cassette:
 - a. From the navigation frame click **Merchant Settings>Add a Merchant**.
 - b. Get your WDME store ID, `STOREENT_ID`, from a DB2 command line using the following SQL statement:


```
select store_id from store where directory='storeNname'
```

 where `store_name` is the case-sensitive name of your store. Use this ID for the merchant name and number fields below.
 Complete the following merchant settings for the sample store:

Table 14. Merchant fields

Field name	Description
Merchant name	This is the same as the <code>STOREENT_ID</code> .
Merchant number	This is the merchant number, and the name, which is the <code>STOREENT_ID</code> for the store being set up. This is a number that WDME uses.
Authorized cassettes	Ensure that the box for the OfflineCard cassette is checked. Checking this box authorizes the merchant to use this payment cassette.

- c. Click **Create Merchant**.
6. To create an account from the Payments user interface:
 - a. From the navigation frame click **Merchant Settings**.
 - b. From the Merchant Settings page, click the OfflineCard Cassette icon for the newly created store.
 - c. From the OfflineCard Cassette page, click **Accounts>Add an Account**.
 - d. Complete the following account settings for the sample store:

Table 15. Account fields

Field name	Description
Account name	This is the <code>STOREENT_ID</code> with the three-letter currency appended. This is the default currency of the locale of your WDME machine.
Account number	This is the <code>STOREENT_ID</code> with the default three-number currency code appended.

- e. Click **Create Account**.
7. To set up a brand, do the following:
 - a. From the OfflineCard Cassette Accounts page, click the account name.

- b. Click **Brands> Add a Brand**.
- c. In the **Brand Name** field, type a brand name, such as VISA.
- d. In the **Brand Name** field, type a brand such as Visa.
- e. Click **Create Brand**.

Appendix A. Log files

This appendix is to assist you with troubleshooting when you contact your IBM support representative. The WDME log files are in the following directory:

 `drive:\WebSphere\CommerceServer\WCDM\logs`

 `/usr/WebSphere/CommerceServer/WCDM/logs`

 `/opt/WebSphere/CommerceServer/WCDM/logs`

Table 16. WDME log files

Description	Name
Product registration tool.	prt.log
Publish the store.	publishStore.log
Assemble the final EAR file.	wcdmAssembly.log
Create the database tables.	wcdmCreateTables.log
Create the EAR file. Collapses the directory into a file.	wcdmExportIntEar.log
Export of the intermediate application. During installation this is the second of three XML files. It contains the original application and the published WDME store.	wcdmExportIntXML.log
Create the EAR file.	wcdmExportOrigEar.log
Export XML of the original WebSphere Commerce application.	wcdmExportOrigXML.log
Comprehensive installation.	wcdmInstall.log
Restore the WebSphere Commerce application with WDME modifications included.	wcdmRestore.log
Uninstall.	wcdmUnInstall.log
Unzip for sample images.	wcdmunzip.log

Appendix B. Notices

This information was developed for products and services offered in the U.S.A. IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation
Licensing
2-31 Roppongi 3-chome, Minato-ku
Tokyo 106, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this publication to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligations to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation
Department TL3B/Building 503
P.O. Box 12195
3039 Cornwallis Road
RTP, NC 27709-2195
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this information and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement, or any equivalent agreement between us.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Trademarks

The following terms are trademarks of the IBM Corporation in the United States or other countries or both:

- AIX
- DB2
- IBM
- DB2 Universal Database
- WebSphere

Lotus Domino Go Webserver is a trademark of Lotus Development Corporation in the United States or other countries or both.

Tivoli, Tivoli Enterprise Console, Tivoli Global Enterprise Manager, and Tivoli Ready are trademarks of Tivoli Systems, Inc. in the United States, or other countries, or both.

ActionMedia, LANDesk, MMX, Pentium and ProShare are trademarks of Intel Corporation in the United States and/or other countries.

C-bus is a trademark of Corollary, Inc. in the United States and/or other countries.

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and/or other countries.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States and/or other countries.

PC Direct is a trademark of Ziff Communications Company in the United States and/or other countries and is used by IBM Corporation under license.

UNIX is a registered trademark in the United States and/or other countries licensed exclusively through X/Open Company Limited.

Other company, product, and service names may be trademarks or service marks of others.

Glossary

A

account. An account is a relationship between the merchant and the financial institution which processes transactions for that merchant. There can be multiple accounts for each payment cassette.

B

batch. (1) A collection of payment transactions, such as captures, credits, capture reversals, and credit reversals, processed as a group. A batch is submitted as a single unit to the Acquirer's financial system. Business guidelines regarding the use of batch processing are developed by credit acquiring institutions. Merchants also establish policies that align with these guidelines. (2) Within IBM® e-commerce, one of the fundamental WebSphere Commerce Payments objects is the Batch. A Batch is an object with which Payment and Credit objects are associated. Transfer of funds is to occur when the batch is closed.

brand. Within IBM e-commerce, the Cassette object for all of the WebSphere Commerce Payments cassettes (for example, Cassette for VisaNet and OfflineCard Cassette). Each financial transaction for a WebSphere Commerce Payments cassette is associated with a particular brand (for example, MasterCard or VISA). Each account with a financial institution can be configured to support one or more brands.

C

cassette. (1) In e-commerce, a software component consisting of a collection of Java classes and interfaces that can be easily installed into other software components involved in e-commerce to extend the function of these components. (2) In IBM e-commerce, a WebSphere Commerce Payments concept. The WebSphere Commerce Payments provides a framework that can support many different forms of payment. WebSphere Commerce Payments cassettes are written by IBM or third-party vendors to support different payment protocols (such as, VisaNet and BankServACH) within the WebSphere Commerce Payments framework. Thus, WebSphere Commerce Payments is an extensible product that can support additional protocols.

D

document. An *item* that can be stored, retrieved, and exchanged among Content Manager systems and users as a separate unit. It can be any multimedia digital

object. A single document can include varied types of content including, for example, text, images, and spreadsheets.

E

EAR file. An Enterprise Archive file represents a J2EE application that can be deployed in a WebSphere application server. EAR files are standard Java archive files and have the file extension .ear.

F

financial institution. (1) An establishment responsible for facilitating customer-initiated transactions or transmissions of funds for the extension of credit or the custody, loan, exchange, or issuance of money, such as a bank or its designate. (2) Within IBM e-commerce, banks, building societies, and credit unions are examples of financial institutions. An institution that provides financial services.

folder. A container used to organize *objects* which can be other folders or *documents*.

I

include (INC) files. A text file that contains declarations that are used by a group of functions, programs, or users.

index class. In Content Manager Version 7, a template for defining and later locating like items, consisting of a root component, zero or more child components, and a classification. Index class is called *item type* in Content Manager Version 8.

item. In Content Manager, generic term for an instance of an *item type*. For example, an item might be a *folder*, document, video, or image. Generic term for the smallest unit of information that Enterprise Information Portal administers.

item type. In Content Manager Version 8, a template for defining and later locating like items, consisting of a root component, zero or more child components, and a classification.

J

JavaServer Pages (JSP). A server-side scripting technology that enables you to embed Java code within static Web pages (HTML files) and to execute the Java code when the page is served.

L

library server. The component of a Content Manager system that stores, manages, and handles queries on *items*.

M

merchant. A seller of goods, services, and/or other information who accepts payment for these items electronically. The merchant may also provide electronic selling services and/or electronic delivery of items for sale. The merchant supervises the overall store objectives and management, in addition to tracking the store sales.

O

object. Any digital content that a user can store, retrieve, and manipulate as a single unit; for example, JPEG images, MP3 audio, AVI audio, and a text block from a book.

object server. (1) The component of a Content Manager Version 7 system that manages *objects*. These objects are referred to by *items* stored on the *library server*. (2) The object server is called the *resource manager* in Content Manager Version 8.

P

part. See *object*.

payment. A payment is a request by the merchant to the financial institution to approve all or part of an order. In many cases, all the money authorized for collection by the order will be collected in a single payment. Some payment systems may allow the money authorized in one order (that is, one set of payment instructions) to be collected in multiple payments, depending on the business model.

payment cassette. A cassette that implements an electronic payment protocol.

R

resource manager. The component of a Content Manager Version 8 system that manages *objects*. These objects are referred to by *items* stored on the *library server*.

S

session bridge. A customizable feature in WebSphere Commerce for Digital Media that enables the use of a content management system other than IBM Content Manager.

SAR file format. In WebSphere Commerce, SAR (store archive) is a platform-independent file format that aggregates many files into one. A store archive is a compressed file that contains all the assets (including file assets and database information) necessary to create a store. Publishing the store archive to a WebSphere Commerce server creates an operational store.

W

WAR file. A Web Archive (WAR) file is a Java archive file used to store one or more of the following: servlets; JavaServer Pages (JSP) files; utility classes; static documents (such as HTML files, images and sound); client-side applets, beans and classes; descriptive meta-information. Its standard file extension is *.war*. WAR files are used to package Web modules.

X

XML. A standard metalanguage for defining markup languages that was derived from and is a subset of SGML. XML omits the more complex and less-used parts of SGML and makes it much easier to write applications to handle document types, to author and manage structured information, and to transmit and share structured information across diverse computing systems. XML is defined by the World Wide Web Consortium (W3C).

Index

A

Administration 10
AIX and Solaris user IDs 11
ASCII 32

B

brand 54

C

connector 11
Connector Toolkits 10
connectors, Local 10
Content Manager 4
Content Manager system software 7
Content Manager user IDs 12
Content Viewers 10

D

data model 29
database user ID 19
DB2 Command Center 35
db2admin 19
DBLoadMacros.dtd 35
demodata.txt 30
digitalmediaload.properties 33
DMDEMO index class attributes 27
DMDEMO item type attributes 29

E

EIP Client 10
EIP components for Solaris 10
EIP components for Windows and
AIX 8, 10
EJB modules 52
enterprise beans 51
Enterprise Information Portal (EIP)
Client 5
external repository 32

F

firewall 4

I

IDResolve 35
imlcrix 27

L

Library server 4
Loading content 32
Local connectors 10

Log files 57

M

memory heap size 51
metadata_c_catalog.txt.xml.log 36
Miscellaneous values used at WDME
installation for Content Manager 12

N

Notices 59

O

Object server 5
OfflineCard Cassette 55
Organization Name 18

P

parms.txt 31, 33
prerequisite software 7
publish 26

R

resource manager 5
run type 34

S

sample data 30
sampleweb.xml 54
servlets 52
session bridge 7, 20
setenv.sh 34
shipping 25
single-tiered configuration 7
Solaris 7 7
store ID 55
Store Member ID 18

T

taxes 25
Text information extender 5
Text search server 5
thumbnail 31
Toolkits, Connector 10
trademarks 60
two-tiered configuration 7

V

Viewers, Content 10

W

wcsadmin 55
WDME log files 57
web.xml 51, 54
WebFashion 8
WebSphere Application Server port
number 17
WebSphere Application
Server_installdir 2
WebSphere Commerce Administration
Console 19
WebSphere Commerce Business and
Professional Edition user IDs 11
WebSphere Commerce instance name 18
WebSphere Commerce Payments 4, 40,
54
WebSphere Commerce Payments account
settings 55
WebSphere Commerce Payments
merchant settings 55
WebSphere Commerce port number 18
Windows user IDs 11
WinZip 9, 21

X

Xerces2 Java Parser 5
XML 32

Z

zip/unzip 9

Readers' Comments — We'd Like to Hear from You

IBM WebSphere Digital Media Enabler for Multiplatforms
Installation and Configuration Guide
Version 5.4

Overall, how satisfied are you with the information in this book?

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Overall satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How satisfied are you that the information in this book is:

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Accurate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Complete	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easy to find	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easy to understand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Well organized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Applicable to your tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please tell us how we can improve this book:

Thank you for your responses. May we contact you? Yes No

When you send comments to IBM, you grant IBM a nonexclusive right to use or distribute your comments in any way it believes appropriate without incurring any obligation to you.

Name

Address

Company or Organization

Phone No.



Fold and Tape

Please do not staple

Fold and Tape



NO POSTAGE
NECESSARY
IF MAILED IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 40 ARMONK, NEW YORK

POSTAGE WILL BE PAID BY ADDRESSEE

IBM Corporation
Software Reengineering
Department G71A / Bldg 503
P.O. Box 12195
Research Triangle Park, NC
27709-9990



Fold and Tape

Please do not staple

Fold and Tape



Printed in U.S.A.