

IBM WebSphere Commerce



Migration Guide to Upgrade Your Edition

from Express Edition to Professional or Business Edition

from Professional Edition to Business Edition

Version 5.5

IBM WebSphere Commerce



Migration Guide to Upgrade Your Edition

from Express Edition to Professional or Business Edition

from Professional Edition to Business Edition

Version 5.5

Note:

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 41.

+ **First Edition, First Revision (January 2004).**

+ This edition applies to IBM WebSphere Commerce Version 5.5, on all supported operating systems, and to all subsequent releases and modifications until otherwise indicated in new editions. Make sure you are using the correct edition for the level of the product.

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

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

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

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

© Copyright International Business Machines Corporation 2001, 2003. All rights reserved.

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

Contents

About this book	v
Supported Approaches to Migration	v
Summary of changes	vi
Conventions used in this book	vii
Edition icons	viii
Platform icons	viii
Running database scripts	ix

Chapter 1. Backing up your current assets **1**

Preparing to back up your current WebSphere Commerce 5.5 instance (remote migration only)	1
Preparing to back up your current WebSphere Commerce 5.5 instance (in-place migration only)	2
Backing up your current WebSphere Commerce instances.	2
Running WCIM for backup	3
Package the current enterprise application into a backup directory	5
Saving the WebSphere Application Server configuration (remote migration only)	6
Backing up your current databases	7

Chapter 2. Uninstalling your current edition of WebSphere Commerce 5.5 (in-place migration only) **9**

Uninstalling DB2 UDB Express Edition (Express Edition only)	9
---	---

Chapter 3. Installing WebSphere Commerce 5.5.0.3 **11**

Upgrading from Express Edition	11
Apply DB2 UDB ESE Version 8.1.2 fix pack (in-place and remote migrations)	12
Backing out the conflicting WebSphere Application Server interim fixes	13
Upgrading from Professional Edition	13
Applying WebSphere Commerce 5.5 fix pack 3 (in-place migration).	13

Chapter 4. Migrating your Instances . . **15**

Checking the WebSphere Commerce 5.5 product.xml file (for all migration paths)	15
Pre-instance migration steps (for a remote migration only)	16
Instance migration steps	17

Verifying that WCIM ran successfully	18
Recovering from WCIM failure	18
Restoring the WebSphere Application Server configuration (remote migration only)	19

Chapter 5. Steps after running the WCIM tool **21**

Uninstalling the previous WebSphere Commerce application	21
Deploying the migrated .ear file	21
+ Creating JNDI names for JCA connectors	24
Updating deployed instance XML files (Professional and Business Edition only)	24
Updating file and directory permissions (iSeries only)	25
Copying the trading folder (iSeries only)	25
Customizations in httpd.conf	25
Reconfiguring Web servers	26
Additional IIS configuration	26
Enabling SSL for IBM HTTP Server	26
Enabling WebSphere Application Server EJB Security	27
Copying files with static content to the documentation root directory	27

Chapter 6. Migrating your database . . **29**

Restoring your databases	29
Database migration (required only when migrating to Business Edition)	29
DB2 databases	30
Oracle Databases	31
Preserving your settings	32
Removing case sensitive search.	33
Harmonizing fix pack levels (for remote migrations)	33

Chapter 7. Migrating WebSphere Commerce Payments **35**

In-place migration	35
Backing up the Payments configuration	35
Migrating Payments for an in-place migration	35
Remote migration	36
Backing up the current Payments configuration	37
Migrating Payments for a remote migration	38

Notices **41**

Trademarks	43
----------------------	----

About this book

This document describes the steps to upgrade your current edition of IBM® WebSphere® Commerce 5.5 as follows:

- WebSphere Commerce 5.5 Express Edition to WebSphere Commerce 5.5 Professional Edition
- WebSphere Commerce 5.5 Express Edition to WebSphere Commerce 5.5 Business Edition
- WebSphere Commerce 5.5 Professional Edition to WebSphere Commerce 5.5 Business Edition

Notes:

1. Migration between database management systems are not supported. For example, if you are currently using DB2® UDB, this migration does not support switching to an Oracle DBMS. Conversely, if you are currently using an Oracle DBMS, this migration does not support switching to DB2 UDB.
2. WebSphere Commerce supports an Oracle DBMS on Professional Edition or Business Edition on the following platforms:
 - AIX®
 - Solaris
 - Windows®

If you wish to migrate your previous version of WebSphere Commerce Studio to WebSphere Commerce Studio 5.5, see the *WebSphere Commerce Studio Migration Guide*.

Supported Approaches to Migration

The migration process supports two approaches to the migration:

- Remote migration — a migration process where you install the edition of WebSphere Commerce 5.5 to which you are migrating, on a new machine (the target machine) and transferring and migrating your assets such as the databases and instances on that remote target machine. For example, if you wish to migrate from Express Edition to Professional Edition, you would install Professional Edition on a new machine that is remote from the machine with Express Edition installed (the source machine). You would then transfer the required assets to the remote (target) machine and migrate them to the required level. After appropriate testing of the migrated Professional Edition system to ensure the migration is successful, you can shut down your Express Edition machine (source machine) and bring your migrated Professional Edition system online.

This method has the advantage of reducing downtime during the migration process but it does require additional machine resources.

Important Warning!

If you are upgrading the WebSphere Commerce edition by installing it as a new installation on a remote (target) machine and you do not need to preserve any WebSphere Application Server applications currently running on that machine, you can proceed with the steps in this Guide for remote migration.

If you have pre-existing WebSphere Application Server applications on the remote machine that you do not need to preserve, proceed with the steps in this section for remote migration. If you have WebSphere Application Server applications that need to continue running on your target machine, *do not* proceed with the steps in this Guide as remote migration to an existing WebSphere Application Server instance with other applications is not supported.

The remote migration process uses the `backupConfig` command to save the WebSphere Application Server configuration on the source (local) machine and uses the `restoreConfig` command to restore the configuration on the target machine. Using the WebSphere Application Server `restoreConfig` command will overwrite your existing WebSphere Application Server configuration files on your target machine with the WebSphere Application Server configuration data from the source machine.

- In-place migration — a migration process where you upgrade your current edition of WebSphere Commerce 5.5 to the required edition and migrate your assets such as the databases and instances on the that machine. For example, if you wish to migrate from Express Edition to Professional Edition, you would upgrade your existing Express Edition software stack to that required by Professional Edition on the same machine. You can then migrate the required assets such as databases and instances to the required level for Professional Edition. After appropriate testing of the migrated Professional Edition system to ensure the migration is successful, you can bring your migrated Professional Edition system online.

This method has the advantage of minimizing machine resources (that is, no additional machine resources are required but it does require that you shut down your WebSphere Commerce system for the duration of the migration.

 WebSphere Commerce only supports the remote migration method on the Linux platform.

Summary of changes

This Migration Guide, and any updated versions of this Migration Guide, will be available in the WebSphere Commerce Technical Library Web page (<http://www.ibm.com/software/genservers/commerce/library/>). For additional information for your WebSphere Commerce edition, see the overview pages:

- Business Edition
(<http://www.ibm.com/software/genservers/commerce/wcbe/>)
- Professional Edition
(<http://www.ibm.com/software/genservers/commerce/wcpe/>)
- Express Edition
(<http://www.ibm.com/software/genservers/commerce/express/>)

For additional support information, see the WebSphere Commerce Support site (<http://www.ibm.com/software/genservers/commerce/support/>).

To learn about last-minute changes to the product, see the updated product README file, also available from the above Web site. For instructions on how to install WebSphere Commerce 5.5 and its supported products, see the *WebSphere Commerce Installation Guide* for your operating system.

Any updates to this book will be summarized in this section.

Updates from the last version of this book are identified by revision characters contained in the margin. This book uses the following conventions for revision characters:

- The "+" (plus) character identifies updates that have been made in the current version of this book.

The following table shows the main changes that have been made to this book.

Change	Chapter, section, or page affected
Added in information on creating JNDI names for JCA connectors	"Creating JNDI names for JCA connectors" on page 24

Conventions used in this book


This book uses the following highlighting conventions:



- **Boldface type** indicates commands or graphical user interface (GUI) controls such as names of fields, icons, or menu choices.
- Monospace type indicates examples of text you enter exactly as shown, file names, and directory paths and names.
- *Italic type* is used to emphasize words. Italics also indicate names for which you must substitute the appropriate values for your system. When you see any of the following names, substitute your system value as described:

host_name

The fully qualified host name of your WebSphere Commerce server (for example, `mymachine.mydomain.ibm.com` is fully qualified).

drive

 The letter representing the drive on which you installed the product or component being discussed (for example, C:).

-  For the sake of brevity, the default installation directory names presented in this table and this book do not reference the Program Files portion of the directory. For example, `drive:\WebSphere\CommerceServer55` as opposed to `drive:\Program Files\WebSphere\CommerceServer`. Your actual installation path will normally include Program Files.
-  References to "iSeries™" in the book should be understood to mean the OS/400® operating system running on the iSeries hardware platform, and not the Linux for iSeries operating system.
-





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

Edition icons

This book uses the following icons to represent information or tasks associated with a specific Edition.

 indicates information specific to WebSphere Commerce Business Edition.

 indicates information specific to WebSphere Commerce Professional Edition.

 indicates information specific to WebSphere Commerce Express Edition.


Platform icons


This book uses the following icons to represent information or tasks associated with a specific platform.


 indicates information specific to WebSphere Commerce for the IBM @server[®] iSeries 400[®] (formerly called AS/400[®])

 indicates information specific to WebSphere Commerce for AIX.

 indicates information specific to WebSphere Commerce for Linux.

 indicates information specific to WebSphere Commerce for Solaris Operating Environment software.

 indicates information specific to WebSphere Commerce on the supported UNIX[®] or UNIX-like platforms. This includes the AIX, Solaris, and Linux operating systems.

 indicates information specific to WebSphere Commerce for Windows 2000.

Running database scripts

For iSeries only

400

In many sections throughout this book, you will be required to run scripts against your database. Other occurrences throughout this book refer to this description.

To run scripts against the database using IBM iSeries Access for Windows, V5R2 , do the following:

1. Open the iSeries Navigator.
2. Click on the system corresponding to the iSeries server where the database is located.
3. Expand the **Databases** icon, right-click your database name, and select **Run SQL Scripts**.
4. The **Run SQL Scripts** window appears.
5. In this window, enter the SQL statements or scripts as detailed in this book. Optionally, you can use this window to open and edit a script.

Note: You can set your default schema by clicking the **Connection** menu, and then selecting the **JDBC Setup** submenu.

Chapter 1. Backing up your current assets

Note


This chapter which describes how to back up your current assets applies to all editions and platforms and to both remote and in-place migrations.

Before upgrading your current edition of WebSphere Commerce 5.5, you need to back up your current WebSphere Commerce instances and databases. In order to back up your current instance, you need to run the WCIM tool for backup. Note that WCIM can be used to migrate an existing instance in a *remote* migration or an *in-place* migration. A remote migration requires that you install the Edition to which you are migrating on a different (remote) machine than your current Edition. For an in-place migration, you perform the migration tasks on one machine (where your current Edition resides). For a more detailed description of remote and in-place instance migrations using WCIM, refer to the chapter on “Migrating your Commerce instance configuration” in the base *WebSphere Commerce Migration Guide* for your platform.

Preparing to back up your current WebSphere Commerce 5.5 instance (remote migration only)

For a remote migration backup, you are required to install WebSphere Commerce 5.5.0.3 on the remote (target) machine and copy some files from the target machine to your local (source) WebSphere Commerce machine. These files (listed below) are required in order to use WCIM to back up your current instance. For a remote migration backup, fix pack 3 need not to be installed on the source machine.

You need to install the complete WebSphere Commerce 5.5 system (along with the required supporting software) on the remote (target) machine. That is, you need to install all the base component products such as WebSphere Application Server, the database management system, and the Web server, along with any optional or additional software. Refer to the *WebSphere Commerce Installation Guide* to install WebSphere Commerce 5.5 on the remote machine. You do not need to create an instance other than to validate and test your installation, as you will migrate your current instance using WCIM.

Note:  You do not need to install DB2 for iSeries since it is provided as part of the OS/400 operating system.

You then need to install fix pack WebSphere Commerce 5.5.0.3 which is available from the WebSphere Commerce Support site (<http://www.ibm.com/software/genservers/commerce/support/>). Click on the link for the edition to which you are upgrading (Express Edition or Professional Edition) and see the section **Download**. Download the fix pack for your Edition, and follow the instructions that are provided to install it.

After you have completed the installation of WebSphere Commerce 5.5.0.3 on the remote (target) machine, copy the following files:

- From the `WC55_installdir/lib` on the target (remote) machine to the `WORK_DIR/lib` directory on your source (local) machine:
 - `ConfigManager.jar`

- Utilities.jar
- j2ee.jar
- xerces.jar
- eTillConfig.jar
- From the xml subdirectory under *WC55_installdir* on your target (remote) machine to the xml subdirectory under the temporary working directory (designated by the WORK_DIR environment variable in wcmenv.bat or wcmenv.sh) on your source (local) machine, copy the migration folder.
- If the WebSphere Commerce 5.5 fix pack 3 is not installed on the source (local) machine, copy the following 3 files from the bin subdirectory under *WC55_installdir* in the target machine, into the bin subdirectory in the source machine:

▶ 400

▶ UNIX

- wcm.sh
- wcmenv.sh
- setenv.sh

▶ Windows

- wcm.bat
- wcmenv.bat
- setenv.bat

These files are used when running WCIM for backup in “Backing up your current WebSphere Commerce instances.”

Preparing to back up your current WebSphere Commerce 5.5 instance (in-place migration only)

For an in-place migration, in order to back up your current instance using the WebSphere Commerce Instance Migrator (WCIM) tool, you are required to install WebSphere Commerce 5.5 fix pack 3 (WebSphere Commerce 5.5.0.3) on your current Edition. Backing up and upgrading your current WebSphere Commerce 5.5 instance is supported through the WebSphere Commerce 5.5 fix pack 3.

This fix pack is available from the WebSphere Commerce Support site (<http://www.ibm.com/software/genservers/commerce/support/>). Click on the link for the edition you are currently using and wish to upgrade (Express Edition or Professional Edition) and see the section **Download**. Download the fix pack for your Edition, and follow the instructions that are provided to install it.

Backing up your current WebSphere Commerce instances

The following section describes how to run WCIM to backup your current instances. The section refers to WCIM environment variables. For a detailed description of these variables and for the remote and in-place instance migrations using WCIM, refer to the chapter on “Migrating your Commerce instance configuration” in the base *WebSphere Commerce Migration Guide* for your platform.

Running WCIM for backup

Before running WCIM for migration, you must run WCIM to create a backup of all your current instances and instance-related files:

1. Before running the `wcim.bat` or `wcim.sh` script for backup, update the environment variables in the `wcimenv.bat` or `wcimenv.sh` file to reflect your environment.

The `wcimenv.bat` or `wcimenv.sh` file typically contains the following entries for backup:

Table 1. Contents of `wcimenv.sh` on *iSeries*

```
400
...

WCIM_BACKUP="true"
WCIM_INPLACE="true"
WCIM_MIGRATE_FROM="55up"
DB_TYPE="db2"

export WCIM_BACKUP
export WCIM_INPLACE
export WCIM_MIGRATE_FROM
export DB_TYPE

...

WAS_PATH="WAS50_installdir"
WC_PATH="WC55_installdir"
WEBSERVER_PATH="HTTPServer1326_installdir"
ANT_PATH="WAS50_installdir/lib"
WORK_DIR="WC55_userdir/temp"
MIG_FROM_WAS_INSTANCE="default"
MIG_TO_WAS_INSTANCE="default"
export MIG_FROM_WAS_INSTANCE
export MIG_TO_WAS_INSTANCE
WPM_PATH="Payments_installdir"
export WPM_PATH

...

LOG_FILE="wcimbackup.log"
INSTANCE="instance_name"
PATH=WAS50_installdir/java/jre/bin:$PATH

export WAS_PATH
export WC_PATH
export WEBSERVER_PATH
export ANT_PATH
export WORK_DIR
export LOG_FILE
export INSTANCE
export PATH

...
```

Table 2. Contents of `wcimenv.sh` on Unix platforms

```
UNIX

...

WCIM_BACKUP="true"
WCIM_INPLACE="true"
WCIM_MIGRATE_FROM="55up"
DB_TYPE="db2 | oracle"

export WCIM_BACKUP
export WCIM_INPLACE
export WCIM_MIGRATE_FROM
export DB_TYPE

WAS_PATH="WAS50_installdir"
JAVA_EXE=$WAS_PATH/java/jre/bin/java
WC_PATH="WC55_installdir"
WEBSERVER_PATH="HTTPServer1326_installdir"
ANT_PATH="WAS50_installdir/lib"
WORK_DIR="WC55_installdir/temp"
LOG_FILE="wcimbackup.log"
INSTANCE="instance_name"
PATH=WAS50_installdir/java/jre/bin:$PATH

export WAS_PATH
export WC_PATH
export WEBSERVER_PATH
export ANT_PATH
export WORK_DIR
export LOG_FILE
export INSTANCE
export PATH

...
```

Table 3. Contents of `wcimenv.bat` on Windows

```
Windows

call setenv.bat

SET WCIM_BACKUP=true
SET WCIM_INPLACE=true
SET WCIM_MIGRATE_FROM=55up

SET WAS_PATH=WAS50_installdir
SET WC_PATH=WC55_installdir
SET WEBSERVER_PATH=HTTPServer1326_installdir
SET ANT_PATH=WAS50_installdir\lib
SET WORK_DIR=WC55_installdir\temp
SET LOG_FILE=wcimbackup.log
SET INSTANCE=instance_name
SET DB_TYPE=db2 | oracle
```

Note: When migrating from Professional Edition to Business Edition on the AIX, Solaris, and Windows platforms only, `DB_TYPE` can be either `db2` or `oracle`.

When migrating from Express Edition or when migrating on the iSeries or Linux platforms, DB_TYPE can only be set to db2 since Oracle databases are not supported on those platforms nor are they supported on Express Edition.

Note that the log file set by the LOG_FILE variable gets generated in the logs subdirectory under the working directory (WORK_DIR).

2.

For Unix and Windows platforms

▶ UNIX ▶ Windows Run the wcim script as follows:

▶ UNIX `./wcim.sh [wcimenv_path]`

▶ Windows `./wcim.bat [wcimenv_path]`

where:

- *wcimenv_path* is the path where the `wcimenv.bat` or `wcimenv.sh` is located on your machine. If this file is located in the same directory as `wcimenv.bat` or `wcimenv.sh`, this parameter is not required.

For iSeries only

▶ 400

- a. From an iSeries command line, enter QSH to open a QShell window.
- b. Change to the directory where `wcim.sh` is stored.
- c. Type:

```
wcim.sh [wcimenv_path]
```

where *wcimenv_path* is the path where the `wcimenv.sh` is located on your machine. If this file is located in the same directory as `wcim.sh`, this parameter is not required.

Package the current enterprise application into a backup directory

Expand your WebSphere Commerce 5.5 application to a location of your choice using the EARExpander command available from WebSphere Application Server 5.0. The EARExpander command allows you to expand an EAR file into a directory to run the application in that EAR file. You can type EARExpander with no arguments to learn more about its options.

From the bin subdirectory under *WAS50_installdir*, run the EARExpander command as follows:

▶ 400 ▶ UNIX

```
./EARExpander.sh -ear expanded_ear_dir/application_name.ear  
-operationDir WAS50_installdir/installedApps/node_name/application_name.ear  
-operation collapse
```

► Windows

```
EARExpander.bat -ear expanded_ear_dir\application_name.ear  
-operationDir WAS50_installdir\installedApps\node_name\application_name.ear  
-operation collapse
```

In the above:

- *expanded_ear_dir* is a directory where the expanded ear file gets created (for example, C:\temp\ear\after_expander (on Windows) or /temp/ear/after_expander on iSeries or Unix).
- *application_name.ear*, is the WebSphere Commerce application ear file that is being expanded (for example, WC_demo.ear)
- *node_name* is the WebSphere Application Server machine name for WebSphere Application Server Network Deployment.

The expanded ear file will contain the published store information, while ear files that are exported through the WebSphere Application Server Administration Console will not. Therefore, it is necessary that you run the EARExpander command.

For more information on the EARExpander command and its options, see the topic "EARExpander command" in the WebSphere Application Server 5.0 Information Center (<http://www.ibm.com/software/webservers/appserv/infocenter.html>).

Saving the WebSphere Application Server configuration (remote migration only)

If you are performing a remote migration, you need to run the WebSphere Application Server backupConfig command to preserve your current WebSphere Application Server configuration information.

Run the backupConfig command in the WebSphere Application Server 5.0 bin subdirectory. For example, in the bin subdirectory under *WAS50_installdir* run the backupConfig command as follows:

- ► 400 First add *RWX Authority for QEJBSVR user to the *WORK_DIR* directory, then run:
./backupConfig *WORK_DIR*/WebSphereConfig.zip *WAS_Instance*
- ► UNIX ./backupConfig.sh *WORK_DIR*/WebSphereConfig.zip
- ► Windows backupConfig.bat *WORK_DIR*/WebSphereConfig.zip

where:

- *WORK_DIR* is the same as the setting of the WORK_DIR variable in the wcmenv.sh or wcmenv.bat file
- ► 400 *WAS_Instance* is the name of your WebSphere Application Server instance.

The backupConfig command is a utility to back up the configuration of your node to a file. By default, all servers on the node stop before the backup is made so that partially synchronized information is not saved. For information on the backupConfig command and its options, see the topic "backupConfig command" in the WebSphere Application Server 5.0 Information Center (<http://www.ibm.com/software/webservers/appserv/infocenter.html>).

Backing up your current databases

You must also backup your Commerce and Payments databases prior to upgrading to a new Edition of WebSphere Commerce 5.5. For detailed steps on backing up your databases, see the section “Backing up your databases” in the chapter on “Backing up WebSphere Commerce” in the base *WebSphere Commerce Migration Guide* for your platform.

Chapter 2. Uninstalling your current edition of WebSphere Commerce 5.5 (in-place migration only)




This step only applies to an in-place migration. It is not required for a remote migration, since in a remote migration you install the Edition to which you are migrating on a separate machine. If you are performing a remote migration, go to Chapter 3, “Installing WebSphere Commerce 5.5.0.3,” on page 11.


For an in-place migration, you need to uninstall your current edition of WebSphere Commerce 5.5. Note that you need to uninstall all WebSphere Commerce components such as WebSphere Commerce, WebSphere Commerce Payments, and the WebSphere Commerce Configuration Manager server. You will install the edition to which you wish to upgrade in Chapter 3, “Installing WebSphere Commerce 5.5.0.3,” on page 11.

Important

Do not uninstall any supporting software such as WebSphere Application Server 5.0. For the detailed steps to uninstall your current edition of WebSphere Commerce 5.5, see the appendix on “Uninstalling WebSphere Commerce components” in the *WebSphere Commerce Installation Guide* for your platform.

Uninstalling DB2 UDB Express Edition (Express Edition only)

Note:  This section is not applicable to the iSeries platform.

 When upgrading from the Express Edition, you do need to additionally uninstall DB2 UDB Express Edition Version 8.1.2. Both Professional Edition and Business Edition require DB2 UDB Enterprise Server Edition. Version 8.1.1 is packaged with either WebSphere Commerce 5.5 Professional Edition or Business Edition. When you install either of these editions in Chapter 3, “Installing WebSphere Commerce 5.5.0.3,” on page 11, you will need to install DB2 UDB Enterprise Edition Version 8.1.1 and apply DB2 UDB Fix Pak 2 as discussed in “Apply DB2 UDB ESE Version 8.1.2 fix pack (in-place and remote migrations)” on page 12.

Chapter 3. Installing WebSphere Commerce 5.5.0.3

You need to install the Edition of WebSphere Commerce 5.5 to which you are upgrading.

Upgrading from Express Edition




► Express

If you are migrating from Express Edition, install one of the following editions of WebSphere Commerce 5.5 as required:

- Professional Edition
- Business Edition.

For a remote migration, you should already have installed the complete WebSphere Commerce 5.5 system (along with the required supporting software) on the remote (target) machine as described in “Preparing to back up your current WebSphere Commerce 5.5 instance (remote migration only)” on page 1.

For an in-place migration, you need to install:

-   DB2 UDB Enterprise Server Edition (ESE) 8.1.2 (Note that Version 8.1.1 is supplied with WebSphere Commerce 5.5 Professional Edition or Business Edition and will be installed by the WebSphere Commerce 5.5 installer automatically.)
-  This not applicable to iSeries.
- WebSphere Commerce 5.5 Professional Edition or Business Edition (as required).

Important

- ▶ 400 For iSeries, you need to install all WebSphere Application Server 5.0.2 group PTFs and WebSphere Application Server 5.0.2 post PTFs.

- ▶ UNIX ▶ Windows

For an in-place migration from Express Edition, installing WebSphere Commerce 5.5 on WebSphere Application Server 5.0.2 will install WebSphere Application Server interim fixes that will cause mismatched libraries and code. WebSphere Application Server interim fixes are intended only for Version 5.0.0. Not all interim fixes are required for higher versions of WebSphere Application Server.

Turn off the interim fix installation by launching the WebSphere Commerce 5.5 installer from a command prompt with a command line parameter to disable the interim fix installation:

```
▶ AIX setup_aix -W FixPackSequence.active=false
```

```
▶ Solaris setup_solaris -W FixPackSequence.active=false
```

```
▶ Windows setup.exe -W FixPackSequence.active=false
```

There are required interim fixes that need to be installed after WebSphere Commerce is installed. Download the GUI version of the WebSphere Application Server Update Installer from the following Web site:

http://www.ibm.com/support/docview.wss?rs=180&context=SSEQTP&q=updateinstaller&uid=swg24001908&loc=en_US&cs=utf-8&lang=en

For WebSphere Application Server 5.0.2, install the following interim fixes manually:

- PQ75634
- CM cumulative
- Plugin cumulative

Download interim fixes from the following Web site:

http://www.ibm.com/support/all_download_drivers.html

If you inadvertently apply the interim fixes packaged with WebSphere Commerce 5.5, you will need to follow the steps in “Backing out the conflicting WebSphere Application Server interim fixes” on page 13 to uninstall them in order to start WebSphere Application Server.

Refer to the *WebSphere Commerce Installation Guide* for your platform to install WebSphere Commerce 5.5 and DB2 UDB ESE 8.1 (for an in-place migration).

Apply DB2 UDB ESE Version 8.1.2 fix pack (in-place and remote migrations)

- ▶ 400 This step is not required for iSeries.

For both in-place and remote migrations from Express Edition, you need to upgrade DB2 UDB ESE 8.1.1 to the DB2 UDB ESE 8.1.2 level by applying DB2 fix

pack 2 for Version 8.1. Otherwise, you will experience problems completing a shopping flow for your migrated store. You can obtain the fix pack for your platform from the following Web site:

<http://www.ibm.com/cgi-bin/db2www/data/db2/udb/winos2unix/support/v8fphist.d2w/report>

Select the “Regular FixPak ” for your platform and follow the instructions provided with the fix pack to install it.

Backing out the conflicting WebSphere Application Server interim fixes

▶ 400 This section is not applicable to iSeries.

If the WebSphere Commerce 5.5 installer has already applied interim fixes on WebSphere Application Server 5.0.1 or greater, they can be backed out by following the instructions below:

1. Back out all the WebSphere Application Server 5.0 interim fixes that are applied by the WebSphere Commerce installer using the WebSphere Application Server Update Installer. Back the fixes out as a group (all at once) or you will see conflicts with uninstalling the following fixes:
 - WAS_Engine_02-07-2003_5.0.0_cumulative_Fix_efix
 - WAS_Security_02-24-2003_5.0.0_cumulative_Fix.jar
2. For WebSphere Application Server 5.0.2, reinstall the above interim fixes manually.
3. Manually enable and configure SSL for the Web server in order to use it with WebSphere Commerce.

Upgrading from Professional Edition

▶ Professional

If you are migrating from Professional Edition, install WebSphere Commerce 5.5 Business Edition:

For a remote migration, you should already have installed the complete WebSphere Commerce 5.5 system (along with the required supporting software) on the remote (target) machine as described in “Preparing to back up your current WebSphere Commerce 5.5 instance (remote migration only)” on page 1.

For an in-place migration, you need to install WebSphere Commerce 5.5 Business Edition only, since all the supporting software components (such as WebSphere Application Server, the database management system, and so on) should already be at the correct level for Business Edition. Refer to the *WebSphere Commerce Installation Guide* to install WebSphere Commerce 5.5.

Applying WebSphere Commerce 5.5 fix pack 3 (in-place migration)

Upgrading your current edition of WebSphere Commerce 5.5 is supported through WebSphere Commerce 5.5 fix pack 3 (WebSphere Commerce 5.5.0.3). In order to migrate your current instance using the WebSphere Commerce Instance Migrator (WCIM) tool, you are required to install fix pack 3 on your upgraded WebSphere Commerce 5.5 edition (either Professional Edition or Business Edition).

This fix pack is available from the WebSphere Commerce Support site (<http://www.ibm.com/software/genservers/commerce/support/>). Click on the link for the edition you currently have installed (Professional Edition or Business Edition) and see the section **Download**. Download the fix pack for your Edition, and follow the instructions that are provided to install it. You should not proceed with the migration steps in this document (such as migrating your instances or databases) without installing this fix pack.

Note: For a remote migration scenario, you only have install fix pack 3 on your remote (target) machine which you should already have completed as described in “Preparing to back up your current WebSphere Commerce 5.5 instance (remote migration only)” on page 1; you do not require fix pack 3 on your current (source) machine.

Chapter 4. Migrating your Instances

Before running WCIM for migration, you should have run WCIM to create a backup of your all your current instances and instance-related files as described in Chapter 1, “Backing up your current assets,” on page 1.

Note: Do not attempt to migrate your database until you have completed the steps to migrate your instance in this chapter as well as the steps in Chapter 5, “Steps after running the WCIM tool,” on page 21. The steps to migrate your database are described in Chapter 6, “Migrating your database,” on page 29.

Checking the WebSphere Commerce 5.5 product.xml file (for all migration paths)

For all migration paths, you should check the <migrationFrom> section of the product.xml file of the machine to which you are migrating. Ensure that all the values are properly set for your migration path prior to migrating your instance with the WCIM utility.


In a remote migration scenario, you need to populate the <migrationfrom> section of the product.xml file on the target machine with values from the <migrationfrom> section of the product.xml file on the source machine. For example, for a migration from Express Edition or Professional Edition to Business Edition, you need to populate the product.xml file on the Business Edition machine. If the <migrationfrom> section is blank, you will receive the following message when you run the instance migration: "Error: Edition attribute in product.xml is empty. Please fill in correct value".

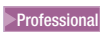
The product.xml file is located in the xml subdirectory under the *WC55_installdir* directory. Verify that the values are correctly set in the <migrationFrom> section in the product.xml file as follows. The <migrationFrom> section specifies information for your previous machine, from where you are migrating.

```
<migrationFrom>
  <edition>
    <name>name</name>
  </edition>
  <version>5</version>
  <release>5</release>
  <modification>0</modification>
  <fixpak>fixpak</fixpak>
  <path>path</path>
  <altpath>alt_path</altpath>
</migrationFrom>
```

In the above:

- *name* is one of:

Exp  If you are migrating from WebSphere Commerce Express Edition

Pro  If you are migrating from WebSphere Commerce Professional Edition

- The version of WebSphere Commerce is 5. It is the only possible value for this migration.

- The release of WebSphere Commerce is 5. It is the only possible value for this migration.
- The value of *mod* is one of:
 - 0 WebSphere Commerce 5.5.0.0
 - 0 WebSphere Commerce 5.5.0.1
 - 0 WebSphere Commerce 5.5.0.2
 - 0 WebSphere Commerce 5.5.0.3
- *fixpak* is one of:
 - 0 If you are migrating from WebSphere Commerce 5.5.0.0
 - 1 If you are migrating from WebSphere Commerce 5.5.0.1
 - 2 If you are migrating from WebSphere Commerce 5.5.0.2
 - 3 If you are migrating from WebSphere Commerce 5.5.0.3
- *path* is the installation path for the WebSphere Commerce 5.5 from which you are migrating.
- *alt_path* is the full or long installation path for the WebSphere Commerce 5.5 system from which you are migrating.

Note: This is only used on Windows systems. On non-Windows platforms, this can either be the same value as *path* or be left blank.



To check your current release, use the following SQL query against the site table:

```
select * from SITE
```

View the results for the PRODUCTVERSION column to determine your release level.

Pre-instance migration steps (for a remote migration only)

If you are upgrading your edition using the remote migration method, follow the steps in this section. If you are performing an in-place migration, go to “Instance migration steps” on page 17.

- Before running the *wcim.bat* or *wcim.sh* script on your remote WebSphere Commerce 5.5 machine (the machine with the edition to which you are migrating), search all the files in the *wcbackup55.zip* package for all occurrences of the previous machine’s (the machine from which you are migrating) node name, IP address, and domain. Replace these occurrences with the remote machine’s (the machine with the edition to which you are migrating) node name, IP address, and domain name respectively.
You should check for the node name, IP address, and domain in all files in the *wcbackup55.zip* package except for the Web server configuration file, for example, *httd.conf* if you are using IBM HTTP Server. The Web Server configuration file is not migrated by WCIM so you need not update it.
- Ensure that the *WCIM_INPLACE* variable is, in fact, set to true when performing a remote migration.
- Copy the exported *WC_Enterprise_App_instance_name.ear* (referenced in step “Package the current enterprise application into a backup directory” on page 5) into the migration working directory specified by *WORK_DIR* in the *wcimenv.bat* or *wcimenv.sh* file, on the remote machine.

Proceed to “Instance migration steps.”

Instance migration steps

Proceed with the instance migration as follows:

1. Before running the `wcim.bat` or `wcim.sh` script for migration, update the environment variables in the `wcimenv.bat` or `wcimenv.sh` file to reflect that you are performing a migration instead of a back up. Change the `WCIM_BACKUP` environment variable from `true` to `false` relative to when you ran `WCIM` for backup. Also ensure you set the `WCIM_MIGRATE_FROM` to `55up` (to indicate that you are upgrading Version 5.5):

```
400 UNIX
...
WCIM_BACKUP=false.
...
WCIM_MIGRATE_FROM=55up
...
```

```
Windows
...
SET WCIM_BACKUP=false
...
SET WCIM_MIGRATE_FROM=55up
...
```



Note that the log file set by the `LOG_FILE` variable gets generated in the `logs` subdirectory under the working directory (`WORK_DIR`).

2. Ensure the exported `WC_Enterprise_App_instance_name.ear` (referenced in step “Package the current enterprise application into a backup directory” on page 5) is available in the migration working directory specified by `WORK_DIR` in the `wcimenv.bat` or `wcimenv.sh` file.
3. From an iSeries command line, enter `QSH` to open a QShell window.
4. From a command line, switch to the directory where `wcim.sh` or `wcim.bat` is stored.
5. Run the `wcim` script as follows:

```
400 wcim.sh [wcimenv_path] [PM_password]
UNIX ./wcim.sh [wcimenv_path] [PM_database_password]
Windows ./wcim.bat [wcimenv_path] [PM_database_password]
```

where:

- `wcimenv_path` is the path where the `wcimenv.bat` or `wcimenv.sh` is located on your machine. If this file is located in the same directory as `wcimenv.bat` or `wcimenv.sh`, this parameter is not required.
- `PM_password` is the WebSphere Commerce Payments instance password and is only used when migrating a WebSphere Commerce Payments instance.
- `db_userid` and `db_password` are the valid user ID and password for the relational database. These parameters are only required if, after instance migration, the relational database will be on a remote system from the migrated Payments instance.

-   `PM_database_password` is the WebSphere Commerce Payments database password and is only used when migrating a WebSphere Commerce Payments instance.

Note: If you are using the `PM_database_password` parameter, you have to specify the `wcimenv` path even if it is in the current directory; in this case use `."` to specify the current directory.

Verifying that WCIM ran successfully

WCIM generates a log file as specified in the `wcimenv.sh` or `wcimenv.bat` file by the `LOG_FILE=` or `SET LOG_FILE=` directive. For example, for `LOG_FILE=wcimmigration.log`, the log file `wcimmigration.log` gets generated in the `logs` subdirectory under the directory specified by the `WORK_DIR` environment variable.

To verify that WCIM ran successfully, search for the following statement in the WCIM log file:

Info: Instance migration is completed successfully.

WCIM also generates an `instanceXmlMigration.log` migration log file in the `logs` subdirectory under the `WORK_DIR` directory. Search for the following statements in the `instanceXmlMigration.log` file:



Info: WebSphere Commerce instance configuration migrated successfully.


Info: WebServer configuration migrated successfully.

Note: The above messages relate only to the instance migration using WCIM. In addition, you must migrate your database from your current level to that of the desired WebSphere Commerce 5.5 Edition in Chapter 6, “Migrating your database,” on page 29.

Recovering from WCIM failure

If WCIM fails for some reason, inspect the logs for the potential problem and make any fixes that are required. You can also consult the Troubleshooting section of the *WebSphere Commerce Migration Guide* for any potential problems and fixes that are known. Otherwise, you should restore your system from previous backups and carefully review the steps in this section and redo the instance migration.

  Note that for problems associated with instance XML migration, you can simply fix any problems and rerun the WCIM migration. For Web server migration, since WCIM only migrates a local IBM HTTP Server, you need to delete `httpd.conf`, and rename `httpd.conf.old` to `httpd.conf` before rerunning the WCIM migration (if the migration had already modified the `httpd.conf` file).

 Note that for problems associated with instance XML migration, you can simply fix any problems and rerun the WCIM migration. For Web server migration, since WCIM only migrates a local IBM HTTP Server, you need to delete `httpd.conf`, before rerunning the WCIM migration (if the `httpd.conf` file already exists).



If you receive the following message during instance migration using WCIM, you will need to isolate the ANT statement that is failing and then take appropriate action:

Event: MethodId: invokeAnt - executing ant task:postmigrationcopy
Error: Ant task has failed. Please check the log file.

1. Check the `wcimbackup.log` (if you are running WCIM for back up) or `wcimmigration.log` (if you are running WCIM for migration) for an error string or message. These log files get generated in the `logs` subdirectory under the working directory specified by `WORK_DIR` for the string "Error:" when you run WCIM. An example of an error message is as follows:

```
Event: MethodId: invokeAnt - executing ant task:postmigrationcopy  
Error: Ant task has failed. Please check the log file.
```

2. Refer to the `Debug:` statement immediately before the `Event:` or `Error:` statement. For example:

```
Debug: java -classpath classpath -buildfile ... migratejps
```

3. Run the Java™ command referenced by the `Debug:` statement at a command prompt while in your Java Runtime environment location on your machine:

```
▶ 400 QIBM/ProdData/Java400/jdk13/bin  
▶ UNIX WAS50_installdir/java/jre/bin  
▶ Windows WAS50_installdir\java\jre\bin
```

The error message will be displayed.

4. Take appropriate action based on the error message.
5. When you have resolved the error message, rerun WCIM.

Restoring the WebSphere Application Server configuration (remote migration only)

Important Warning!

If you are upgrading the WebSphere Commerce edition by installing it as a new installation on a remote (target) machine and you do not need to preserve any WebSphere Application Server applications currently running on that machine, you can proceed with the steps in this Guide for remote migration.

If you have pre-existing WebSphere Application Server applications on the remote machine that you do not need to preserve, proceed with the steps in this section for remote migration. If you have WebSphere Application Server applications that need to continue running on your target machine, *do not* proceed with the steps in this section as remote migration to an existing WebSphere Application Server instance with other applications is not supported.

The remote migration process uses the `backupConfig` command to save the WebSphere Application Server configuration on the source (local) machine and uses the `restoreConfig` command to restore the configuration on the target machine. Using the WebSphere Application Server `restoreConfig` command will overwrite your existing WebSphere Application Server configuration files on your target machine with the WebSphere Application Server configuration data from the source machine.

```
▶ 400 Furthermore, the WebSphere Application Server instance name must be preserved — that is, the same name used on the source machine must be used on the target machine.
```

On the target machine, ensure that you have installed WebSphere Commerce 5.5 fix pack 3, and then complete the following:

1. Copy the `WebSphereConfig_yyyy-mm-dd.zip` file from your source machine to the `bin` subdirectory under `WAS50_installdir` in the target machine. This `.zip` file was created when you ran the `backupConfig` command in “Saving the WebSphere Application Server configuration (remote migration only)” on page 6.
2. From the `bin` subdirectory under `WAS50_installdir`, run the `restoreConfig` command to restore the previous WebSphere Application Server configuration. For example:

```
▶ 400 restoreConfig WebSphereConfig.zip -instance WAS_instance
```

```
▶ UNIX ./restoreConfig.sh WebSphereConfig_yyyy-mm-dd.zip
```

```
▶ Windows restoreConfig.bat WebSphereConfig_yyyy-mm-dd.zip
```

For information on the `restoreConfig` command and its options, see the topic “`restoreConfig` command” in the WebSphere Application Server 5.0 Information Center (<http://www.ibm.com/software/webservers/appserv/infocenter.html>).

3. Update the occurrences of the host name and node name of the source machine from which you are migrating to that of the target machine to which you are migrating as follows:

- a. In the files in the `config` subdirectory of WebSphere Application Server, replace all occurrences of the host name and node name for the source machine to that of the remote target machine.

- b. Rename the following directory to the cell name of the remote target machine to which you are migrating:

```
▶ 400 WAS50_userdir/config/cells/cell_name
```

```
▶ UNIX WAS50_installdir/config/cells/cell_name
```

```
▶ Windows WAS50_installdir\config\cells\cell_name
```

- c. Rename the following directory to the cell name of the remote target machine to which you are migrating:

```
▶ 400 WAS50_userdir/config/cells/cell_name/nodes/node_name
```

```
▶ UNIX WAS50_installdir/config/cells/cell_name/nodes/node_name
```

```
▶ Windows WAS50_installdir\config\cells\cell_name\nodes\node_name
```


Note: ▶ 400 On iSeries, `WAS50_userdir` normally refers to `/Qibm/UserData/WebAS5/base/`.

- d. ▶ 400 You need to assign `*RX` authority for the `QTMHTTP` user for the following subdirectories or files:

- `WAS50_installdir/Config`
- `WAS50_installdir/Config/cells`
- `WAS50_installdir/Config/cells/plugin-cfg.xml`

Chapter 5. Steps after running the WCIM tool

The following sections describe remaining tasks to complete after you have migrated your instance using WCIM but before running the database migration script.

 400 If you are using a non-default WebSphere Application Server instance, ensure that the instance is started so that you can access the WebSphere Application Server Administration Console for that instance.

Uninstalling the previous WebSphere Commerce application

Before deploying the migrate .ear file, uninstall the previous WebSphere Commerce application in WebSphere Application Server Administrative Console (since it gets restored by the restoreConfig command).

Logon to the WebSphere Application Server Administration Console. Click on **Applications** —> **Enterprise Applications**. Select your instance and click **Uninstall**.

Deploying the migrated .ear file

After you have migrated your instance using WCIM, you need to deploy the migrated .ear file as follows:  

1. Logon again to the WebSphere Application Server Administration Console.
2. Click on *node_name* —> **Applications** —> **Install new application**. If your browser is local on your machine, select **Local path**, and enter the path to the migrated .ear file (for example, *WCIM_work_dir/migrate/WC_instance_name.ear*) and click **Next**.
3. Select **Default bindings for EJB 1.1 CMPS** (not the **Generate Default Bindings** check box at the top) and enter the JNDI name, database user name, database password, and verify the password in the section "EJB1.1 CMP bindings" of this panel, then click **Next**. (For example, **JNDI name**: jdbc/WebSphere Commerce DB2 Datasource *WC_instance_name*, **username**: db2admin (for Windows) or db2inst1 (for Unix systems), **password**: db2admin (for Windows) or db2inst1 (for Unix systems))
4. The Install New Application page displays. Complete the following steps:
 - a. In the **Step 1** panel, accept the default configuration and click **Next**.
 - b. In the **Step 2** panel, accept the default configuration and click **Next**.
 - c. In the **Step 3** panel, if the JNDI name field is blank, add in the JNDI name for your application in the field, otherwise accept the default configuration. Click **Next**.
 - d. In the **Step 4** panel, select all the listed EJBs, and choose the JNDI name such as *node_name*:jdbc/WebSphere Commerce DB2 Datasource *WC_instance_name* from the "Specify existing resource jndi name" drop down list. Click **Apply**, then **Next**.
 - e. In the **Step 5** panel, accept the default configuration and click **Next**.
 - f. In the **Step 6** panel, check and if necessary, map the virtual host for Web modules similar to:

commerceAccelerator
 VH_instance_name_tools
 OrganizationAdministration
 VH_instance_name_Orgadmin
 SiteAdministration
 VH_instance_name_Admin
 Stores VH_instance_name

- g. In order to deploy to the migrated application server *WC_instance_name* instead of the server1 default server:
 In the **Step 7: Map modules to application servers** panel, select all modules by checking the check-box besides **Module** and select the migrated server (for example, *WC_demo*). Click **Apply**.
 If you accept the default configuration, the migrated .ear file gets deployed on the server1 application server.
- h. Click **Next** for the remaining windows.
- i. Click **Finish**, and wait until you receive the update successful message.
5. In the WebSphere Application Server 5.0 Administration Console, click on *node_name* —> **Environment** —> **Update Web server plugin** —> **OK**. Ensure the update successful message appears.
6. Save your changes.
7. Change the Classloader mode and WAR Classloader policy:
 - a. Expand **Applications**
 - b. Click **Enterprise Applications**
 - c. Click on application prefaced by *WC_*
 - d. Change ClassLoader Mode to **PARENT_LAST**
 - e. Change WAR Classloader Policy to Application
 - f. Click **OK**
 - g. Save your changes
8. Restart WebSphere Application Server.



▶ 400


1. Logon to the WebSphere Application Server Administration Console.
2. Click on **Applications** —> **Install new application**. Since the .ear file on your iSeries machine, select **Server**, and enter the path to the migrated .ear file (for example, *WCIM_work_dir/migrate/my_instance_name.ear*) and click **Next**.
3. Select **Default bindings for EJB 1.1 CMPS** (not the **Generate Default Bindings** check box at the top) and enter the JNDI name, database user name, database password, and verify the password in the section "*EJB1.1 CMP bindings*" of this panel, then click **Next**. (For example, **JNDI name:** *jdbc/WC_instance_name* WebSphere Commerce DB2 Datasource, **username:** *db2admin*, **password:** *db2admin*)
4. Accept the default values until you reach the Step 3 panel by clicking the **Next** button.
5. In the Step 3 panel:
 - a. Expand **Apply Multiple Mappings**
 - b. Select **EJB Module**
 - c. Provide your user name and password and click **Apply**
 - d. Select **EJB Module**
 - e. In **Specify existing Resource JNDI name** select the JNDI name for the Application Server Name.

- f. Click **Apply** for the JNDI name and click **Next**.
6. In the Step 4 panel:
 - a. Select all the listed EJB files
 - b. Choose the JNDI name (*node_name*: jdbc/WC_*instance_name* WebSphere Commerce DB2 Datasource from the **Specify existing resource jndi name**) drop down list. Click **Apply**, and then **Next**.
7. Accept the default values until you reach the Step 6 panel by clicking the **Next** button.
8. In the Step 6 panel, map the virtual host for Web modules similar to:
 - commerceAccelerator
 VH_*instance_name*_tools
 - OrganizationAdministration
 VH_*instance_name*_Orgadmin
 - SiteAdministration
 VH_*instance_name*_Admin
 - Stores VH_*instance_name*

Press **Next**.

9. In the Step 7 panel:
 - a. Select all modules
 - b. Select the WebSphere Commerce server (long format name) in **Clusters and Servers** and click **Apply**
 - c. Accept the default configuration and click **Next** for the remaining windows.
10. Click **Finish**, and wait until you receive the update successful message.
11. Click on *node_name* —> **Environment** —> **Update Web server plugin** —> **OK**. Ensure the update successful message appears.
12. Save your changes.
13. Change the Classloader mode and WAR Classloader policy:
 - a. Expand **Applications**
 - b. Click **Enterprise Applications**
 - c. Click on application prefaced by WC_
 - d. Change ClassLoader Mode to **PARENT_LAST**
 - e. Change WAR Classloader Policy to Application
 - f. Click **OK**
 - g. Save your changes
14. Restart WebSphere Application Server.

  For more information on deploying your applications using the WebSphere Application Server 5.0 Administration Console, see the topic "Deploying and managing applications" in the WebSphere Application Server 5.0 Information Center (<http://www.ibm.com/software/webservers/appserv/infocenter.html>).

 For more information on deploying your applications using the WebSphere Application Server 5.0 see the WebSphere Application Server 5.0 for iSeries site <http://www.ibm.com/servers/eserver/iseries/software/websphere/wsappserver/>

+ Creating JNDI names for JCA connectors

+ The JNDI names of all JCA connectors are created during the installation of the
 + EAR. When an existing EAR or instance is migrated, these names are not created.
 + For example, the JNDI name for JMS Connection is "eis/JCAJMS". It is the name
 + found under the resource adapters under the EAR configuration.

+ To add in the JNDI names for the JCA connectors, do the following:

- + 1. Open the WebSphere Application Server Administration Console and logon.
- + 2. On the left hand panel, click **Applications** -> **Enterprise Applications** ->
 + *WC_instance_name*.
- + 3. At the bottom of the page, click **Connector Modules** -> *Connector Module*
 + *Name* -> **Resource Adapter**
- + 4. At the bottom of the page, click **J2C Connection Factories** -> **New**
- + 5. Use the following table to enter:
 - + • The name in the **Name** field.
 - + • The JNDI name in the **JNDI Name** field.
 - + • The description in the **Name** field.

+ Connector Module Name	+ Name	+ JNDI name	+ Description
+ Enablement- + JCAEmailConnector.rar	+ Enablement- + JCAEmailConnector.rar	+ eis/JCAEmail	+ <i>WC_instance_name</i> .JCA EMail Connector
+ Enablement- + JCACrossWorldsConnector.rar	+ Enablement- + JCACrossWorldsConnector.rar	+ eis/CWConnectionFactory	+ <i>WC_instance_name</i> .IBM CrossWorlds Resource Adapter for InterChange Server
+ Enablement- + JCAFileConnector.rar	+ Enablement- + JCAFileConnector.rar	+ eis/JCAFile	+ <i>WC_instance_name</i> .JCA File Connector
+ Enablement- + JCAJMSConnector.rar	+ Enablement- + JCAJMSConnector.rar	+ eis/JCAJMS	+ <i>WC_instance_name</i> .JCA JMS Connector
+ Enablement- + JCASampleConnector.rar	+ Enablement- + JCASampleConnector.rar	+ eis/JCASample	+ <i>WC_instance_name</i> .Sample Connector

- + 6. Select **None** for the Authentication Preference.
- + 7. 8. Click **OK** at the bottom of the page.
- + 8. 9. Click the newly created **JCA Connection Factories** again and modify the
 + connection pool properties by clicking **Connection Pool** at the bottom of the
 + page.
- + 9. 10. Update **Max Connection** to be 30 and click **OK** twice to return back to **J2C**
 + **Connection Factories** page.
- + 10. 11. Save the configuration by clicking **Save** on the top menu and click **OK** to
 + confirm saving the configuration on the next page.
- + 11. 10. Repeat steps 3 through 10 above for each connector module name in the
 + table above.
- + 12. 12. Restart WebSphere Commerce.

Updating deployed instance XML files (Professional and Business Edition only)

This section applies only if you are migrating from Professional Edition. If you are migrating from Express Edition, you can skip this section.

For your migrated WebSphere Commerce instances, update the instance XML files to the WebSphere Commerce 5.5.0.3 level by running the following steps. If you have more than one WebSphere Commerce instance, use only one of your instance names for the variable `instance_name`. The script will update all existing instances.

1.  Switch to the WebSphere Commerce non-root user ID. This ID was created before installing WebSphere Commerce.

Ensure that this user has the authority to run the `config_ant` command.

2. Navigate to the `bin` directory under `WC55_installdir`.
3. Run the following command:

```
 
./config_ant.sh -buildfile WC55_installdir/xml/config/updateInstances.xml
-DupdateCEP=no -Duninstall=no -DinstName=instance_name
```

```

config_ant.bat -buildfile WC55_installdir\xml\config\updateInstances.xml
-DupdateCEP=no -Duninstall=no -DinstName=instance_name
```

Updating file and directory permissions (iSeries only)



After you have run the `WCIM` and `wcimWasConfig.jacl` scripts, you need to run the following script to change the permission on the files and directories for the migrated `.ear` file:

1. Log in to QSH.
2. Run the following script from the `WC55_installdir/bin` directory:

```
chgaut_ieseries_ear.sh cell_name wc_instance was_instance
```

For example, from the `WC55_installdir/bin` directory run:

```
chgaut_ieseries_ear.sh TORASCSD demo default
```


Copying the trading folder (iSeries only)





On the target machine, copy the trading folder from the `WC55_installdir/xml` directory to the `WC55_userdir/instances/WC_instancename/xml` directory. For example: Copy `P:\ProdData\CommerceServer55\xml\trading` to `P:\UserData\CommerceServer55\instances\myinstance\xml\trading`

Customizations in httpd.conf

During the instance migration, `WCIM` reads the Web server configuration information from the previous `instance.xml` file and reconfigures the WebSphere Commerce 5.5 `httpd.conf` file from WebSphere Application Server 5.0 installation with that information.

 Any customized configurations in the previous version of the native iSeries HTTP configuration file are not migrated since these configurations are out of the scope of the `WCIM`. If you have customized your configurations, you will have to migrate the customized configurations manually after instance and Web server migration.




Note: For a remote migration scenario, if you wish to use SSL encryption, you have to enable SSL for the HTTP server on the target machine.

  Any customized configurations in the previous version of the `httpd.conf` file that are not specific to a WebSphere Commerce instance, are not migrated since these configurations are out of the scope of the WCIM. Note that WCIM will back up the existing `httpd.conf` file as `httpd.conf.backup` before overwriting it.

Reconfiguring Web servers


In order to reconfigure your Web servers, follow the Web server installation section in the *WebSphere Commerce Installation Guide*. Complete the necessary preconfiguration steps in that section. Some additional user configuration is required in WebSphere Commerce 5.5 to configure any remote Web Server including IBM HTTP Server.

Additional user configuration is also required for the following Web servers regardless if they are local or remote:

-   Sun ONE (formerly called iPlanet)
-  Internet Information Server (IIS)

To perform this additional configuration, log on to Configuration Manager after migration and complete the necessary fields on the Web server panel to configure the Web server. Click on **Apply** on the panel to configure the Web server. For information on configuring panels in Configuration Manager, see the chapter on configuring WebSphere Commerce instances in the *WebSphere Commerce Installation Guide*.

Additional IIS configuration

 For an IIS Web server, after you have deployed the migrated EAR file in WebSphere Application Server, you need add the WebSphere Commerce administrative tools ports, 8002 and 8004, to the IIS tools:

1. Click **Start** —> **Programs** —> **Administrative Tools** —> **Internet Services Manager** and right-click **Default Web Site**.
2. Select **Properties** —> **Advanced**. On the Web Site page, click **Add**.
3. On the Multiple SSL Identities panel, add ports 8002 and 8004 in the SSL Port field.

For a remote IIS configuration, reconfiguring the Web server will generate a `IISAddAliasInstance.js` file in the `WC55_install_dir\bin` directory. Copy this file over into any directory on the remote IIS machine and run the script by entering the following in a command prompt:

```
cscript IISAddAliasInstance.js
```

Enabling SSL for IBM HTTP Server

If you do not have SSL enabled on your system, and you wish to use SSL encryption, you should re-enable it.

To enable SSL for production purposes, refer to the chapter "Enabling SSL for production with IBM HTTP Server" in the *WebSphere Commerce Security Guide*.

AIX **Solaris** **Windows** Note that when you upgrade your Web server during the software upgrade process for an in-place migration, you may no longer have SSL enabled even though it was previously enabled. For a remote migration where you complete a new installation of WebSphere Commerce 5.5, the installation enables SSL on your Web server by default.

Linux For a remote migration where you complete a new installation of WebSphere Commerce 5.5, the installation enables SSL on your Web server by default.

Enabling WebSphere Application Server EJB Security

If you had WebSphere Application Server EJB Security enabled in your previous system, you need to re-enable it for your migrated system. See the section "Enabling WebSphere Application Server security" in the *WebSphere Commerce Security Guide* for the steps to redeploy the EJB security.

Note any additional machine recommendations for EJB Security in the *WebSphere Commerce Security Guide*.

Copying files with static content to the documentation root directory



This steps in this section are only required if you change your Web server machine during the course of the migration. If your Web server remains on the same machine during migration (which is generally the case for an in-place migration) , you can skip this section.

To migrate Web assets that are not located under the WebSphere Commerce WAR directory, you need to copy files with static content (such as image and HTML files) to the document root directory.

Copy all files with static content in the following directory:

400 `WC55_userdir/instances/instance_name/web`

UNIX `WC55_installdir/instances/instance_name/web`

Windows `WC55_installdir\instances\instance_name\web`

to the web subdirectory under `WC55_installdir`.

Chapter 6. Migrating your database

Important

If you are migrating from Express Edition to Professional Edition, you only need to restore your previous database as described in “Restoring your databases.” You do not need to perform the steps in “Database migration (required only when migrating to Business Edition)” since your schema should already be at the correct level for Professional Edition.

Restoring your databases

If you are upgrading from Express Edition using the in-place method or if you switch your database server machine during the course of the migration (that is, you reinstall the DB2 server to a different machine), you need to restore the databases that you backed up in “Backing up your current databases” on page 7.

- **Express** If you are upgrading Express Edition to Professional or Business Edition, restore the databases on a machine where DB2 ESE 8.1.2 is installed.
- **Professional** If you are upgrading Professional Edition to Business Edition, you need to ensure that the databases you are migrating are catalogued. If you switch your database server machine during the course of the migration (that is, you reinstall the DB2 server to a different machine), you need to restore your databases to that machine.

For the steps to restore a database, see the section on restoring databases in the chapter on “Backing up WebSphere Commerce” in the *WebSphere Commerce Migration Guide* for your platform or consult the product information for your database (DB2 UDB or Oracle9i).

Database migration (required only when migrating to Business Edition)

Important

This section only applies if you are migrating from either Express Edition to Business Edition or Professional Edition to Business Edition. You may skip this section if you are migrating from Express Edition to Professional Edition since your schema should already be at the correct level for Professional Edition.

Before migrating the database, ensure that the user who runs the database migration script has the authority to access the files in the *WC55_installdir* directory.

Notes:

1. **400** Before running any database migration procedure, you must sign on to your iSeries machine with your instance profile that has *SECOFR authority. Use the following command:

```
CHGUSRPRF USRPRF() USRCLS(*SECOFR) SPCAUT(*USRCLS)
```

Then sign back on with this profile. After migration is complete, you should return the user profile to its original state:

```
CHGUSRPRF USRPRF() USRCLS(*USER) SPCAUT(*NONE)
```

2. **UNIX** For DB2 databases running on UNIX systems, databases are normally cataloged as *Rdatabase_name* by default. For example, MALL will be cataloged as RMALL by default). To avoid problems when running the database migration script for remote databases, you need to do the following:
 - a. In the `migratedb.sh` script, update the following line:
`db2 connect to $database`

to:
`db2 connect to $database user $user using $password`
 - b. When you run `migratedb.sh`, the database name should be *Rdata_base_name*, for example, RMALL
3. **Windows** When you run the migration script, always run it in a new Command window. If you run the migration script many times in the same Command window, you may receive “input command too long” errors when you run the script. In this case, run the script in a new Command window.

DB2 databases

The following steps show you how to run the migration script for DB2 databases:

- ___ 1. **400** From an iSeries command line, open a QShell window by running the STRQSH command.

UNIX Open a command prompt window.

Windows Open a DB2 command window.

- ___ 2. **UNIX** If you are running WebSphere Application Server as the root user, switch to the DB2 instance user ID for your database (for example, `db2inst1`):

```
su - db2_instance_user_id
```

If you are running WebSphere Application Server as the non-root user, switch to the WebSphere Application Server user ID (for example, `wasuser`):

```
su - WAS_user
```

Ensure that the user ID that runs the data migration script (that is, `db2inst1` or `wasuser`) has sufficient authority to run the script.

- ___ 3. Switch to the `bin` subdirectory under the `WC55_installdir` directory.
- ___ 4. Run the database migration script as follows:

400 **UNIX**









```
migratedb55.sh db2 db_name db_user_id password instance_name [schema_owner]
```

Windows

```
migratedb55.bat db2 db_name db_user_id password instance_name [schema_owner]
```

where:

- `db2` specifies that you are migrating a DB2 database.
- `db_name` is the:
 - **400** relational database name on which your WebSphere Commerce schema resides. Ensure that it exists in the list returned from the `WRKRDBDIRE` command.

-   WebSphere Commerce 5.5 database that you are migrating, (for example, mall).
- *db_user_id* is the:
 -  instance user profile of the WebSphere Commerce 5.5 database that you are migrating. This should be the same as your schema name.
 -   *db_user_id* is the user ID to connect to the WebSphere Commerce 5.5 database that you are migrating (for example, mydbuser).
- *password* is the
 -  password for the instance user profile of the WebSphere Commerce 5.5 database that you are migrating.
 -   password for the user ID to connect to the WebSphere Commerce 5.5 database that you are migrating (for example, mypasswd).
- *instance_name* is the name of your WebSphere Commerce 5.5 instance with which your database is associated (for example, demo).
- *schema_owner* is the database schema owner user ID for DB2 databases. This parameter is optional. If you use this parameter, you must enter it in uppercase characters.

After you run the database migration script, you should check the log files.



Oracle Databases

Important

Migration of Oracle databases is only applicable if you are upgrading from Professional Edition on the AIX, Solaris, or Windows platforms. Migration for Oracle databases is not applicable if you are migrating from Express Edition, or are using the iSeries or Linux Professional Edition to Business Edition. You may skip this section if you are migrating from Express Edition to Professional Edition since your schema should be at the correct level for Professional Edition.

The following steps show you how to run the migration script for Oracle databases:

1.   If you are running WebSphere Application Server as the root user, ensure you are logged in as the Oracle instance user ID. If you are running WebSphere Application Server as the non-root user, switch to the WebSphere Application Server user ID (for example, wasuser):
`su - WAS_user`
2. Switch to the bin subdirectory under the *WC55_installdir* installation directory.
3. Run the database migration script as follows:

```
migratedb55.sh oracle db_name db_user_id password instance_name
host_name port
```

► Windows

```
migratedb55.bat oracle db_name db_user_id password instance_name  
host_name port
```

where:

- *oracle* specifies that you are migrating an Oracle database.
- *db_name* is the name of the WebSphere Commerce 5.5 database that you are migrating, (for example, mall).
- *db_user_id* is the user ID to connect to the WebSphere Commerce 5.5 database that you are migrating (for example, mydbuser).
- *password* is the password for the user ID to connect to the WebSphere Commerce 5.5 database that you are migrating (for example, mypasswd).
- *instance_name* is the name of your WebSphere Commerce 5.5 instance with which your database is associated (for example, demo).
- *host_name* is the fully qualified host name of your machine, for example, myhost.montreal.ca).
- *port_number* is the Oracle listener port number. Typically, this is port 1521 by default.

After you run the database migration script, you should check the log files.

Preserving your settings

The database migration script preserves any customer data entries in the URLREG, CMDREG and VIEWREG tables that are different from the default WebSphere Commerce bootstrap data on the upgraded edition. The migration log file will display the these differences.

For example, when migrating to Business Edition from either Professional Edition or Express Edition, you will see the following entry in the migration log file:

```
[2003.10.28 11:25:50] Info: The row in the urlreg_new: storeent_id = 0,  
url = UserRegistrationAdd, interfacename =  
com.ibm.commerce.ubf.commands.BusinessFlowUrlEventCmd  
[2003.10.28 11:25:50] Info: The row in the urlreg : storeent_id = 0,  
url = UserRegistrationAdd, interfacename =  
com.ibm.commerce.usermanagement.commands.UserRegistrationAddCmd
```

Note that the above example has been split to fit on the page.

In the above example, the default mapping for user registration approval is to the BusinessFlowUrlEventCmd command in Business Edition. In Professional Edition or Express Edition, the mapping is to the UserRegistrationAdd command. Basically, this is informing you about a feature in Business Edition that did not exist in Professional or Express. If you want to make use of the user registration approval in the Business Edition, you will need to change the UserRegistrationAdd command in the URLREG table to map it to the new BusinessFlowUrlEventCmd interface and add a few new JSP pages to your user registration flow. To make use of the new command, see the sections on “Approvals” in the WebSphere Commerce Production and Development online help. If you do not wish to make use of the Business Edition user registration approval feature, you do not have to change anything.

Removing case sensitive search

In WebSphere Commerce 5.5.0.3, the new implementation to uniquely identify organizational entities is to ensure that the distinguished names stored for organizational entities in the database are always stored in lower case. If your distinguished names are not in lower case, you will run into problems when searching for distinguished names. The new implementation also improves the performance of finders on this organizational entities. The migration script to convert to lower case is for existing customers with organizational entities in their current database.

You must run the script to convert your distinguished names to lower case. For detailed information on running the script for your platform, see the section “Performance improvement by removing case sensitive search” in the *WebSphere Commerce Installation Guide* for WebSphere Commerce 5.5.0.3 (fix pack 3).

Harmonizing fix pack levels (for remote migrations)

For a remote migration, if the source machine is at a lower fix pack level than the target machine, you have to run the updatedb script to bring your migrated schema to the fix pack level of target machine.

Before you run the updatedb script, you have to update the BE.product file or Pro.product file (located in *WC_instance_ear_path/properties/version*), and change the version number to the same level as the source machine. After you run the updatedb script, you have to change the version number back to the level on target machine in the BE.product file or Pro.product file (located in *WC_instance_ear_path/properties/version*).

For details regarding how to run the updatedb script, please see the *WebSphere Commerce Installation Guide* for WebSphere Commerce 5.5.0.3 (fix pack 3) on the target machine.

Chapter 7. Migrating WebSphere Commerce Payments

The following are the high-level steps to migrate WebSphere Commerce Payments from:

- Express Edition to either Professional Edition or Business Edition
- Professional Edition to Business Edition.

In-place migration

The following are the migration steps if you are performing an in-place migration.

Backing up the Payments configuration

Back up the following Payments-related assets:

1. The Payments database for the Payments instance migration. Note that data migration is not required, however it is recommended that you back up your database in any event. See the section “Backing up your databases” in the chapter on “Backing up WebSphere Commerce” in the *WebSphere Commerce Migration Guide* for your platform for information on backing up databases.
2. The following directories:
 - ▶ **400** `WC55_userdir/instances/Payments_instance_name` and `WC55_userdir/payment/instances/Payments_instance_name`
 - ▶ **UNIX** `WC55_installdir/instances/Payments_instance_name` and `WC55_installdir/payment/instances/Payments_instance_name`
 - ▶ **Windows** `WC55_installdir\instances\Payments_instance_name` and `WC55_installdir\payment\instances\Payments_instance_name`
3. The Web server configuration file (`httpd.conf` for IBM HTTP Server) and the `wcs_instances` file.

Migrating Payments for an in-place migration

Assuming that you have backed up your assets as described in “Backing up the Payments configuration,” migrate your Payments assets as follows:

1. Uninstall WebSphere Commerce 5.5 Express Edition or Professional Edition from your machine. See Chapter 2, “Uninstalling your current edition of WebSphere Commerce 5.5 (in-place migration only),” on page 9 for more information.
2. Install the WebSphere Commerce 5.5 edition to which you are migrating (either Professional Edition or Business Edition) on the same drive where the previous WebSphere Commerce 5.5 edition (either Express Edition or Professional Edition) was installed. Ensure that you install the new edition with the same directory structure as the previous edition. See Chapter 3, “Installing WebSphere Commerce 5.5.0.3,” on page 11 for more information.
3. Modify the current `wcs_instances` file to add the lines to reference the Payments instance. For example, ensure that you add an entry similar to the item in bold below:

```
[log]
logFileLoc=../instances/WCSconfig.log
logLevel=NORMAL
logAppend=false
[migration]
```

```

instMigrateRequired=false
[instance]
instance_name;local=WC55_install/instances/instance_name/xml/instance_name.xml;global=
[wpm_instance]
Payments_instance_name;local=WC55_install\instances\Payments_instance_name\xml\
Payments_instance_name.xml

```

Refer to the wcs_instances file that you backed up previously; you need to duplicate the Payments instance entry in the new wcs_instances file.

4. After the instance migration, you need to manually add in the following Payments-related sections into the Web server configuration file. (Refer to the httpd.conf file that you backed up previously). Note that this example is provided for the Windows platform. Other platforms will contain similar sections:

```

.....
Listen 5432
Listen 5433
##### IBM WebSphere Payments (Do not edit this section) #####
<VirtualHost your_host_name:5433>
SSLEnable>
SSLClientAuth 0
ServerName your_host_name
DocumentRoot "C:\WebSphere\IBMHttpServer\htdocs\en_US"
</VirtualHost>
<VirtualHost your_host_name:5432>
ServerName your_host_name
DocumentRoot "C:\WebSphere\IBMHttpServer\htdocs\en_US"
</VirtualHost>
##### IBM WebSphere Payments (Do not edit this section) #####

```

5. Start up your migrated Payments instance.

Remote migration

Important Warning!

If you are upgrading the WebSphere Commerce edition by installing it as a new installation on a remote (target) machine and you do not need to preserve any WebSphere Application Server applications currently running on that machine, you can proceed with the steps in this section for remote migration.

If you have pre-existing WebSphere Application Server applications on the remote machine that you do not need to preserve, proceed with the steps in this section for remote migration. If you have WebSphere Application Server applications that need to continue running on your target machine, *do not* proceed with the steps in this section as remote migration to an existing WebSphere Application Server instance with other applications is not supported.

The remote migration process uses the backupConfig command to save the WebSphere Application Server configuration on the source (local) machine and uses the restoreConfig command to restore the configuration on the target machine. Using the WebSphere Application Server restoreConfig command will overwrite your existing WebSphere Application Server configuration files on your target machine with the WebSphere Application Server configuration data from the source machine.

The following are the migration steps if you are performing a remote migration.

Backing up the current Payments configuration

On the machine from which you are migrating Payments:

1. Back up the database for WebSphere Commerce Payments. For information on backing up databases, see the section “Backing up your databases” in the chapter on “Backing up WebSphere Commerce”, in the *WebSphere Commerce Migration Guide* for your platform .


2. Run the WebSphere Application Server backupConfig command in the WebSphere Application Server 5.0 bin subdirectory, to back up the current WebSphere Application Server configuration information. For example, in the bin subdirectory under the *WAS50_installdir* directory run the following commands:

-   `./backupConfig.sh`
-  `backupConfig.bat`

The backupConfig command is a simple utility to back up the configuration of your node to a file. By default, all servers on the node stop before the backup is made so that partially synchronized information is not saved. For information on the backupConfig command and its options, see the topic “backupConfig command” in the WebSphere Application Server 5.0 Information Center (<http://www.ibm.com/software/webservers/appserv/infocenter.html>).

3. Export the .ear file for WebSphere Commerce Payments using the EARExpander command. For information on this command, see “Package the current enterprise application into a backup directory” on page 5 or refer to the topic “EARExpander command” in the WebSphere Application Server 5.0 Information Center (<http://www.ibm.com/software/webservers/appserv/infocenter.html>).

```
  ./EARExpander.sh -ear expanded_ear_dir/application_name.ear  
-operationDir WAS50_installdir/installedApps/node_name/application_name.ear  
-operation collapse
```


```
 EARExpander.bat -ear expanded_ear_dir\application_name.ear  
-operationDir WAS50_installdir\installedApps\node_name\application_name.ear  
-operation collapse
```


In the above:

- *expanded_ear_dir* is a directory where the expanded ear file gets created (for example, `C:\temp\ear\after_expander` (on Windows) or `/temp/ear/after_expander` on iSeries or Unix platforms).
- *application_name.ear*, is the WebSphere Commerce application ear file that is being expanded (for example, `WC_demo.ear`)
- *node_name* is the WebSphere Application Server machine name for WebSphere Application Server Network Deployment.

4. Back up the instance directories:

```
 WC55_userdir/instances/Payments_instance_name and  
WC55_userdir/payment/instances/Payments_instance_name
```

```
 WC55_installdir/instances/Payments_instance_name and  
WC55_installdir/payment/instances/Payments_instance_name
```

```
 WC55_installdir\instances\Payments_instance_name and  
WC55_installdir\payment\instances\Payments_instance_name
```

5. Backup the files: `wcs_instances` and `httpd.conf`

Migrating Payments for a remote migration

Migrate your Payments assets for a remote migration as follows:

1. Install the WebSphere Commerce 5.5 edition to which you are migrating (either Professional Edition or Business Edition) as required on the remote machine. Ensure that you install the new edition with the same directory structure as the previous edition. Refer to the *WebSphere Commerce Installation Guide* for the detailed steps on installing WebSphere Commerce 5.5.
2. Restore the database for WebSphere Commerce Payments that you backed up in step 1 on page 37. For information on restoring databases, see “Restoring your databases” on page 29.
3. Copy the `WebSphereConfig_yyyy-mm-dd.zip` file from your local machine to the remote WebSphere Commerce 5.5 machine, into the `bin` subdirectory under `WAS50_installdir`.
4. From the `bin` subdirectory under `WAS50_installdir`, run the `restoreConfig` command to restore the previous WebSphere Application Server configuration. For example:

```
400 UNIX
./restoreConfig.sh WebSphereConfig_yyyy-mm-dd.zip
```

```
Windows
restoreConfig.bat WebSphereConfig_yyyy-mm-dd.zip
```

For information on the `restoreConfig` command and its options, see the topic “`restoreConfig` command” in the WebSphere Application Server 5.0 Information Center (<http://www.ibm.com/software/webservers/appserv/infocenter.html>).

Note: See the warning about using the `restoreConfig` command in 36.

5. Update the occurrences of the host name and node name of the machine from which you are migrating to that of the machine to which you are migrating as follows:
 - a. In the files in the `config` subdirectory of WebSphere Application Server, replace all occurrences of the host name and node name for the previous machine from which you are migrating to that of the remote machine to which you are migrating .
 - b. Rename the `WAS50_installdir/config/cells/cell_name` (`WAS50_installdir\config\cells\cell_name` for Windows) directory to the cell name of the remote machine to which you are migrating.
 - c. Rename the `WAS50_installdir/config/cells/cell_name/nodes/node_name` (`WAS50_installdir\config\cells\cell_name\nodes\node_name` for Windows) directory to the node name of the remote server machine.
6. Uninstall the previous WebSphere Commerce Payments application in WebSphere Application Server Administrative Console (since it gets restored by the `restoreConfig` command).
7. Deploy the `.ear` file that you backed up, onto the WebSphere Commerce Payments server (for example, `wpm_Commerce_Payments_Server`). For information on deploying a `.ear` file, see “Deploying the migrated `.ear` file” on page 21.
8. Restore the directories you backed up in step 4 on page 37.
9. Search for all occurrences of the previous machine’s host name and IP address in the files in the above two directories and update them according to the

values for the remote machine to which you are migrating. For example, update the host name and IP address in the files `Payments_instance_name.xml` and `PaymentsInstance.properties`.

10. Modify the `wcs_instances` file to add the following line for Payments:

> 400

```
Payments_instance_name;local=WC55_userdir/instances/Payments_instance_name/  
xml/Payments_instance_name.xml
```

> UNIX

```
Payments_instance_name;local=WC55_installdir/instances/Payments_instance_name/  
xml/Payments_instance_name.xml
```

> Windows

```
Payments_instance_name;local=WC55_installdir\instances\Payments_instance_name\  
xml\Payments_instance_name.xml
```

For reference, see the `wcs_instances` file that you backed up in step 5 on page 37.

11. You need to manually add in the following Payments-related sections to the `httpd.conf` file. (For reference, see your backed up `httpd.conf` file). Note that this example is provided for the Windows platform. Other platforms will contain similar sections:

```
.....  
Listen 5432  
Listen 5433  
##### IBM WebSphere Payments (Do not edit this section) #####  
<VirtualHost your_host_name:5433>  
SSLEnable>  
SSLClientAuth 0  
ServerName your_host_name  
DocumentRoot "C:\WebSphere\IBMHttpServer\htdocs\en_US"  
</VirtualHost>  
<VirtualHost your_host_name:5432>  
ServerName your_host_name  
DocumentRoot "C:\WebSphere\IBMHttpServer\htdocs\en_US"  
</VirtualHost>  
##### End of IBM WebSphere Payments (Do not edit this section) #####  
.....
```

12. From the WebSphere Application Server Administrative Console, start the WebSphere Commerce Payments server.
13. From the command line, start `IBMPayserver`.

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.

Any reference to an IBM licensed program in this publication is not intended to state or imply that only IBM's licensed program may be used. Any functionally equivalent product, program, or service that does not infringe any of IBM's intellectual property rights may be used instead of the IBM product, program, or service. Evaluation and verification of operation in conjunction with other products, except those expressly designated by IBM, is the user's responsibility.

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 information 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 obligation 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 Canada Ltd.
Office of the Lab Director
8200 Warden Avenue
Markham, Ontario
L6G 1C7
Canada

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 document 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.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurement may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

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.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information is for planning purposes only. The information herein is subject to change before the products described become available.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the

names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

Credit card images, trademarks and trade names provided in this product should be used only by merchants authorized by the credit card mark's owner to accept payment via that credit card.

Trademarks

The IBM logo and the following terms are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both:

- 400
- AIX
- AS/400
- DB2
- @server
- IBM
- iSeries
- OS/400
- WebSphere

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

Java, JavaBeans and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc.

UNIX is a registered trademark of The Open Group in the United States and other countries.

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



Printed in USA