



Migrating WebSphere Commerce Using Wizard

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Introduction

WebSphere Commerce is a complex enterprise application system, consisting of the following products:

- WebSphere Commerce Server
- WebSphere Commerce Developer

To reduce downtime and risk, a divide-and-conquer methodology was applied to migrate WebSphere Commerce from release to release. Each product was divided into tiers: a database tier, an application tier, and a Web server tier.

To further minimize downtime and risk, the entire migration project was divided into two phases: a test migration phase and a production migration phase.

The purpose of test migration phase is to learn how the application will be migrated. This allows the migration team to account for any problems when the production migration takes place.

To reduce complexity, the WebSphere Commerce Migration wizard was created to provide users with an easy to understand interface to guide them through the migration process. This paper will guide you through both phases of the WebSphere Commerce Toolkit and WebSphere Commerce Server three-tiered migration process using the Migration wizard.

WebSphere Commerce Migration Wizard

The WebSphere Commerce Migration wizard was created as a tool to guide migration teams through the entire migration process from end-to-end. After the Migration wizard is launched, users are asked to select a product to work with. For mission critical products, users are asked to choose either the test phase or production migration phase. The Migration wizard guides the user through the migration tasks tier by tier in the following order: database, application, and Web server. The migration server and client can run on different operating systems, as long as the client on a host machine with graphic support.

The Migration wizard has a client and a server component. Each component, migration server, and migration client is installed with WebSphere Commerce automatically.

Migrating WebSphere Commerce Toolkit





Step#01 Database Migration

(a) Start the migration server by running the following command.
WC_installDir/bin/wcimServer.bat

The server has completed starting when you see the following message:
Event: WCIM server started with protocol default at port 10,999.

(b) Start the Migration wizard on your client machine by running the following command.
WC_installDir/bin/wcimClient.

Note: If your client is running on a different system than your migration server, use the -
hostname host parameter.

Logon dialog box

For security, the server only accepts one connection. It also requires a user ID and password to sign in to the client. The user ID is "wcimadmin" and the default password is "wcimibm". When you sign on for the first time, you are prompted to change the password.



Figure 2. Instance Migrator

(c)Launch pad

The launch pad asks you to select a product to be migrated. The recommended order of the products to be migrated is:

1. WebSphere Commerce Developer
2. WebSphere Commerce Server
3. WebSphere Commerce Payments

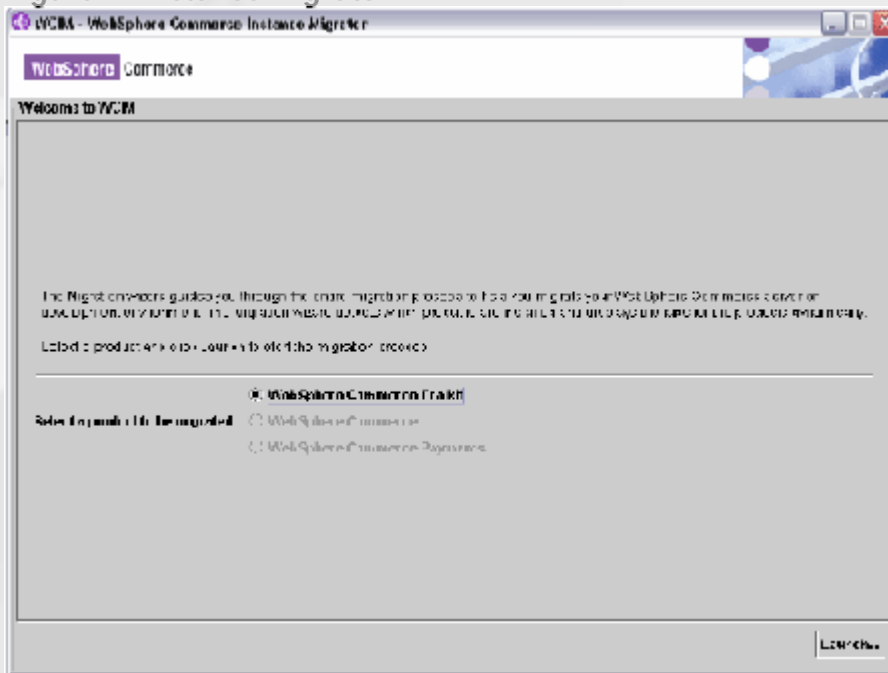
The Migration wizard only allows you to select products that are installed on the system running the migration server.

Select WebSphere Commerce Toolkit and click Launch as shown in Figure 2.

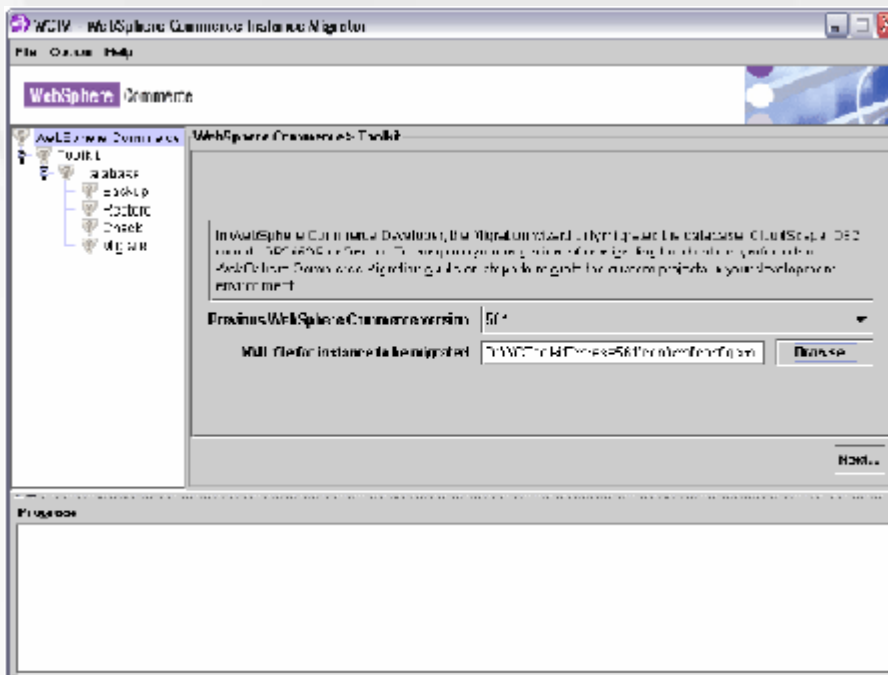




Figure 2. Instance Migrator



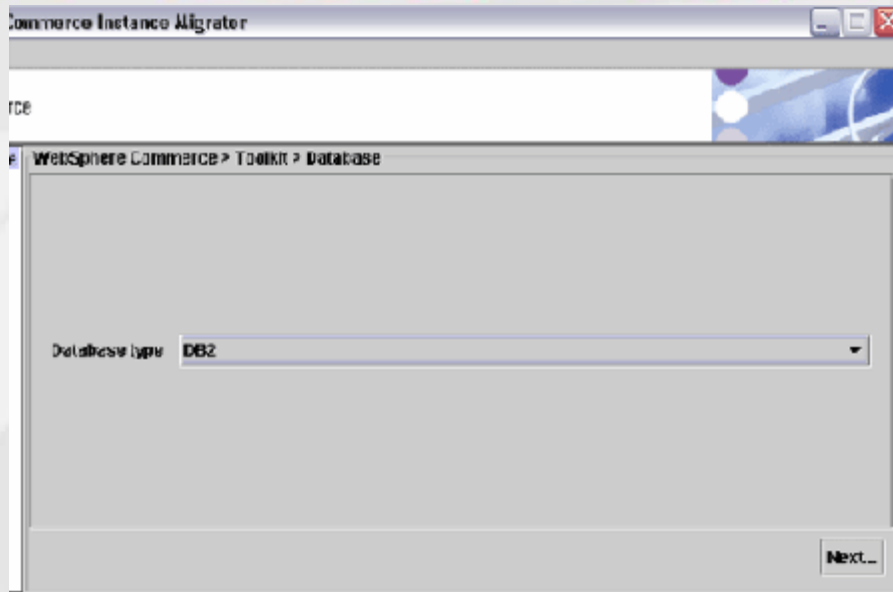
(d) After you have selected the WebSphere Commerce Toolkit product, the panel is displayed as shown in Figure 3. On this panel:



Select from drop down 561 and brows config.xml file from following location
%WCToolkitExpress561_Home%\conf\xml\config.xml
and click Next.

(e) Select a database type and click Next as shown in Figure 5.





(f)select yes for database backup and click next.

(g)select yes for database restore checkup and click next

(h)select no if your database is on local and enter fill text field of Database Name , Database User , Database User Password, and database Schema

Step#02 To Setup Application Assets.

Manually Copy all JSPS , XML , Properties files from WCS5.6.1 to WCS6.0 as shown in following steps.

(a) copy your "storeName" folder from
%WCToolkitExpress561_Home%\workspace\Stores\Web Content and paste it into
%WCToolkitEE60_Home%\workspace\Stores\Web Content

(b) copy xml file's folder named as "your_StoreName" from
%WCToolkitExpress561_Home%\workspace\Stores\Web Content\WEB-INF\xml\tools\stores
and paste it into
%WCToolkitEE60_Home%\workspace\Stores\Web Content\WEB-INF\xml\tools\stores

(c) copy properties file's folder named as "your_StoreName" from
%WCToolkitExpress561_Home%\workspace\Stores\Web Content\WEB-INF\classes and
paste it into %WCToolkitEE60_Home%\workspace\Stores\Web Content\WEB-INF\classes

(d) copy all the library files from %WCToolkitExpress561_Home%\workspace\Stores\Web Content\WEB-INF\lib and paste it into %WCToolkitEE60_Home%\workspace\Stores\Web Content\WEB-INF\lib

(e) In WCToolkitEE60 replace

```
<%@taglib uri="http://java.sun.com/jsp/jstl/fmt" prefix="fmt" %>  
and  
<%@taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
```

With following tag library scriptlet in all JSPS pages of "your_StoreName"





```
<%@taglib uri="http://java.sun.com/jstl/fmt" prefix="fmt" %>  
<%@taglib uri="http://java.sun.com/jstl/core" prefix="c" %>
```

Migrating WebSphere Commerce

(a) Start the migration server by running the following command.

WC_installDir/bin/wcimServer.bat

The server has completed starting when you see the following message:

Event: WCIM server started with protocol default at port 10,999.

(b) Start the Migration wizard on your client machine by running the following command.

WC_installDir/bin/wcimClient.

Note: If your client is running on a different system than your migration server, use the - hostname host parameter.

Logon dialog box

For security, the server only accepts one connection. It also requires a user ID and password to sign in to the client. The user ID is "wcimadmin" and the default password is "wcimibm". When you sign on for the first time, you are prompted to change the password.



Figure 1. Logon dialog

(c)Launch pad

The launch pad asks you to select a product to be migrated. The recommended order of the products to be migrated is:

1. WebSphere Commerce Developer
2. WebSphere Commerce Server
3. WebSphere Commerce Payments

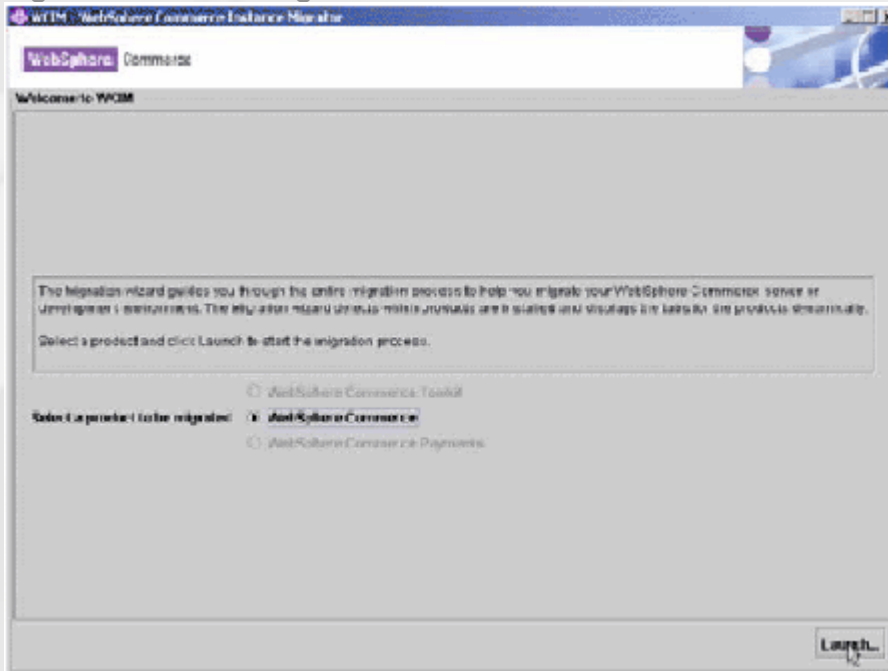
The Migration wizard only allows you to select products that are installed on the system running the migration server.

Select WebSphere Commerce and click Launch as shown in Figure2.





Figure2. Instance Migrator



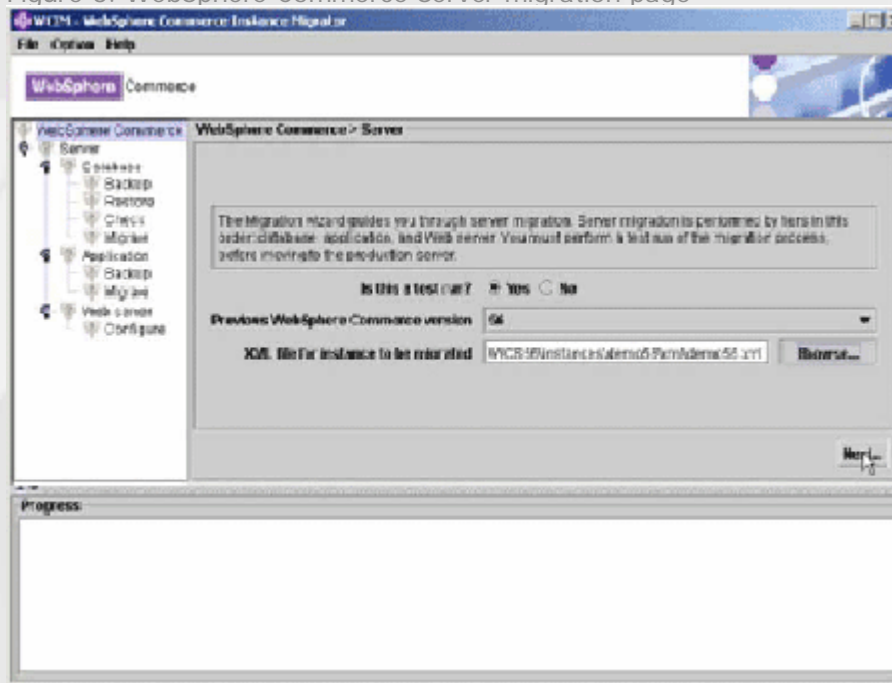
After you have selected the WebSphere Commerce Server product, the panel is displayed as shown in Figure 3. On this panel:

1. Select No for the production migration phase.
2. Select the version from which you are migrating.
3. Browse or type the path to the <instance_name>.xml file for the WebSphere Commerce instance to be migrated. The Migration wizard reads the values needed for migration from the instance configuration file instead of asking you for that information.
4. After entering the correct information, click Next.





Figure 3. WebSphere Commerce Server migration page



Database Migration

The Migration wizard guides you through the following database migration tasks:

1. Back up
2. Restore
3. Check
4. Migrate

The supported database types for WebSphere Commerce Server are:

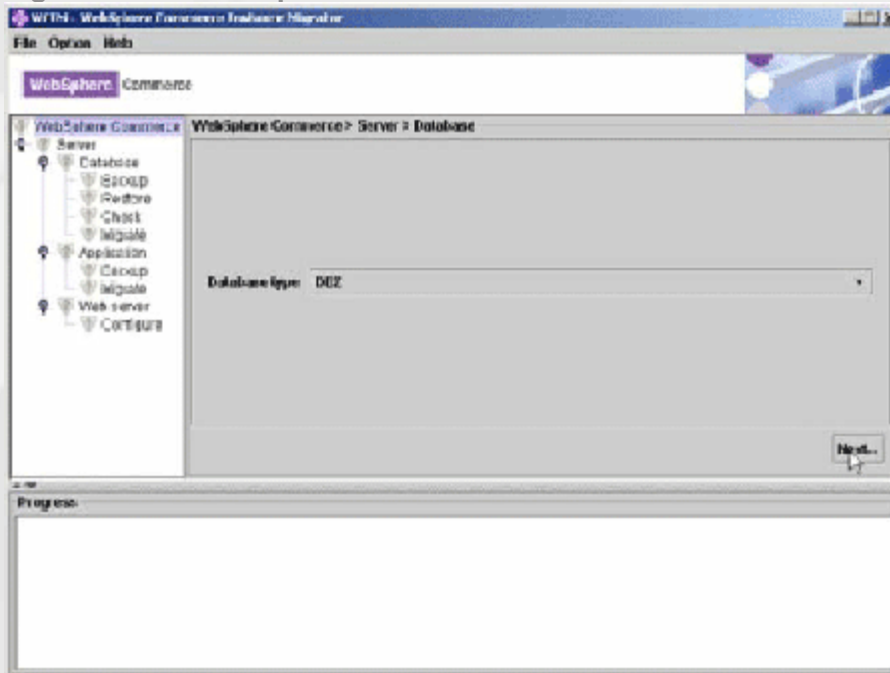
- DB2®
- DB2 390
- DB2 400
- Oracle®

Select a database type and click Next as shown in Figure 5.





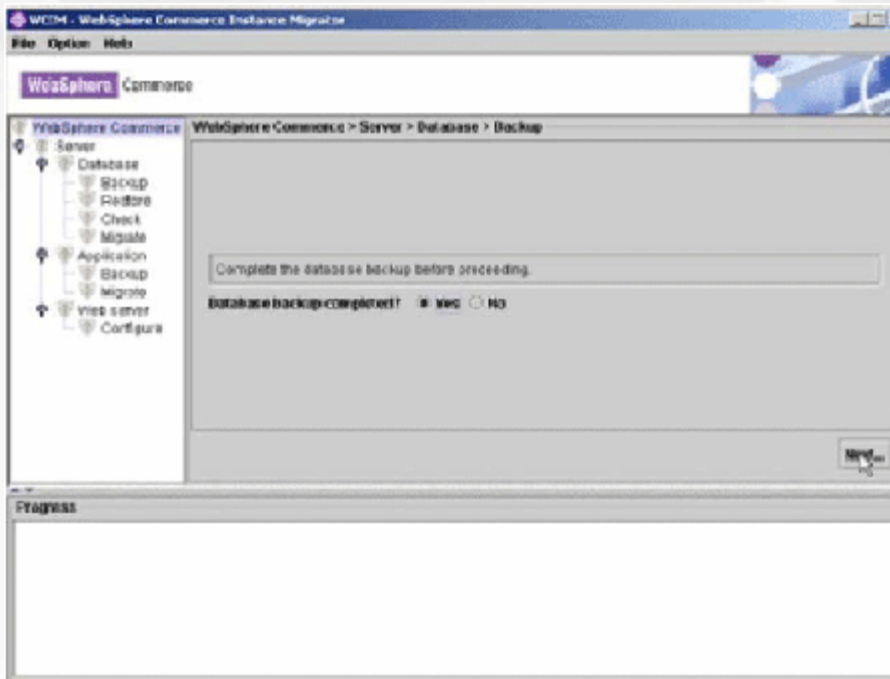
Figure 5. Database panel



Backup step

The Migration wizard does not back up the database for you. It is important that you back up your database before performing any actions against it.

By backing up the database, you can easily recover the data if needed during the migration process. Once you have completed your database backup, select **Yes** and click **Next**.

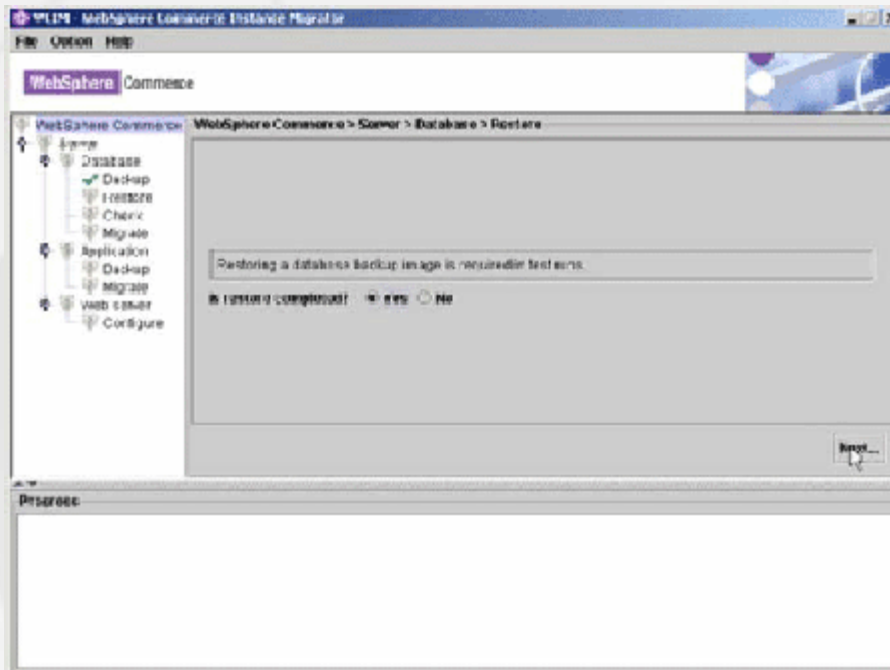


Restore Step





The Migration wizard does not restore the database for you. The Migration wizard migrates the restored copy of the database so that it does not disturb your production servers. In the production migration phase, you do not have to restore the database because you have shut down your production site and can choose to migrate the original database.



Check step

The Migration wizard checks the integrity of the database by running the pre-migration checker utility on the database to be migrated. If problems are found, you are prompted to check the log file generated by the database pre-migration checker to correct all of the reported errors or warnings.

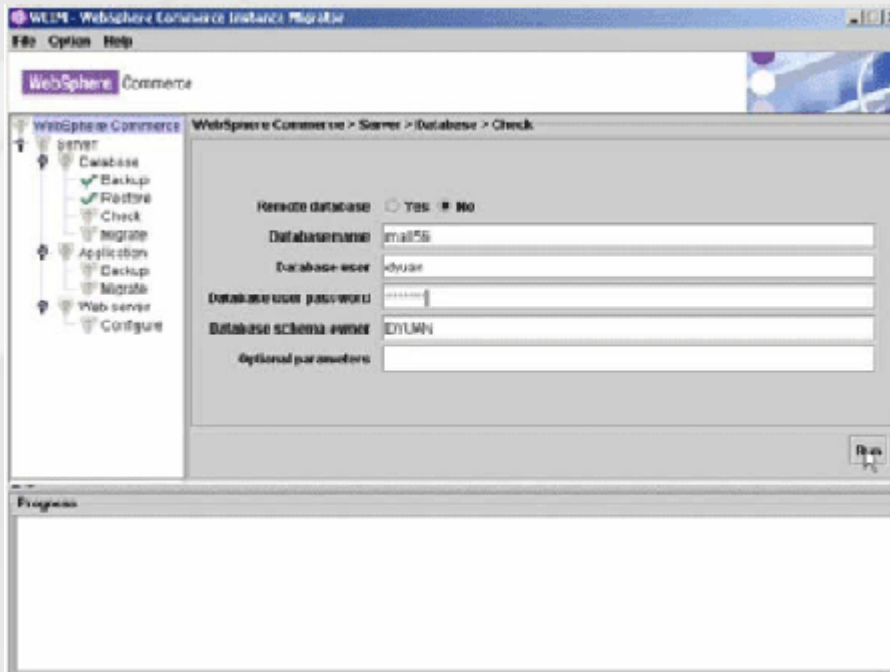
The input fields for database checking or migration varies depending on the database type you selected before. Default values are populated based on the information retrieved from the <instance_name>.xml.

1. Review and fill in the input fields and click **Run**.





Figure 8. Check panel



If there is any issue in database that would cause the migration to fail in next step then dialog box display message of check log file.

The Migration wizard re-displays the database check input panel. The status of the database Check step will be unsuccessful. Fix the data in the database following the recommendations in the log file generated on the host. If check step completed successfully then you get dialog box with message "WCIM completed the job(s) successfully".

Migrate step

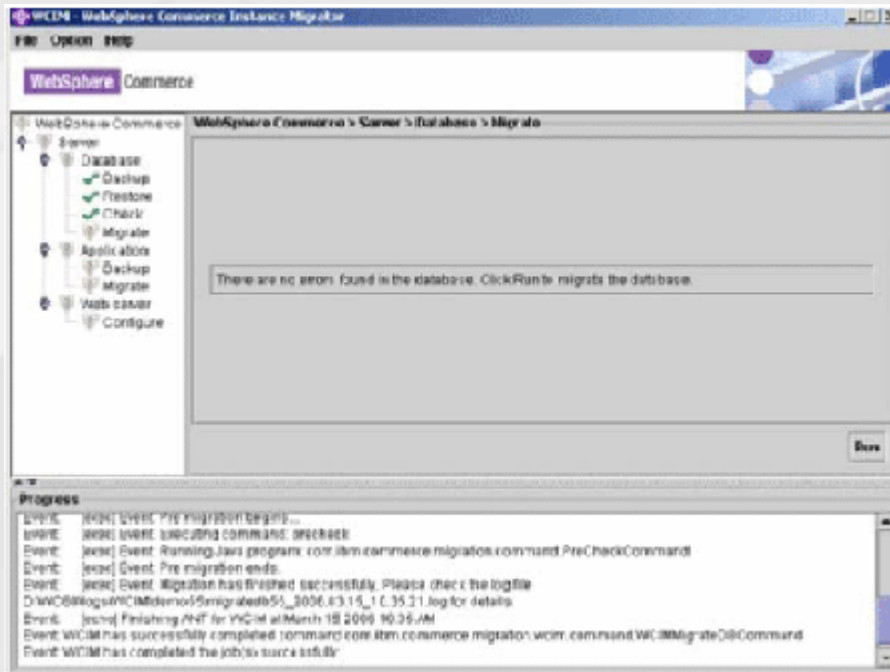
The Migration wizard migrates the database after it has passed pre-migration checking. Your database schema is migrated to the target release and your custom tables remains untouched in the migrated database.

Click **Run** to migrate the database as shown in Figure 14.





Figure 14. Migrate panel



After the completion of migration it show message on progress window "Event Migration have finished successfully"

Application Migration

After the database tier is migrated successfully, the Migration wizard guides you through the process to migrate the application tier.

The Migration wizard guides you through the following application migration tasks:

1. Backup
2. Migration

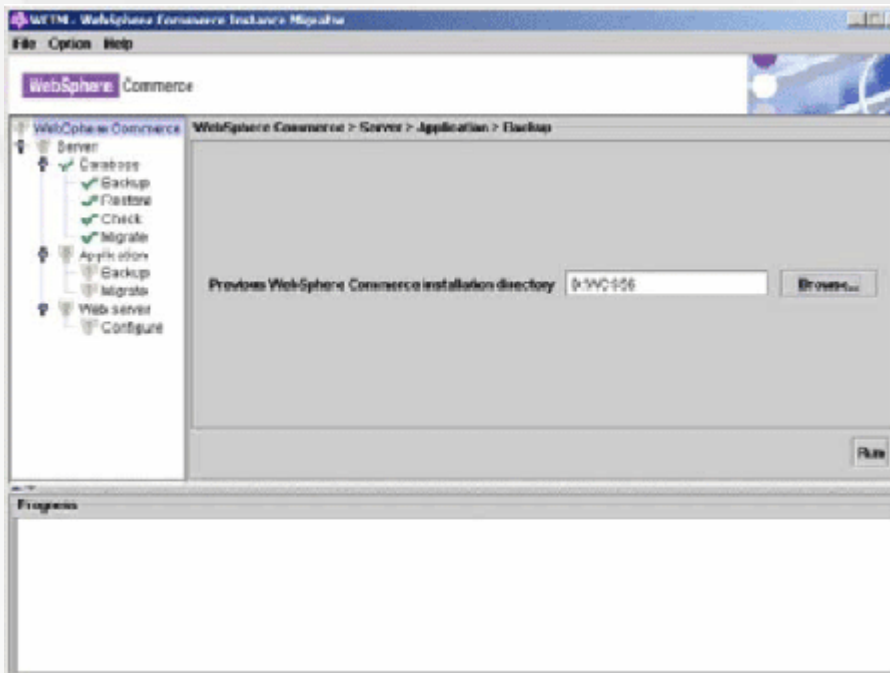
Backup

1. Select **Yes** or **No** to indicate whether the previous and current versions of WebSphere Commerce are installed on the same or different host machines.
2. Select a new Web server: IBM HTTP Server, Internet Information Server, or SunOne Web Server.
3. Select **Yes** or **No** to indicate whether the new Web server is local or remote to the application.
4. Click **Next**.





5. Click **Run** to backup the Enterprise Application (EAR) and other file assets for the instance to be migrated.



- 6- Select **Yes** after the backup files are transferred.
- 7- Click **Next**.





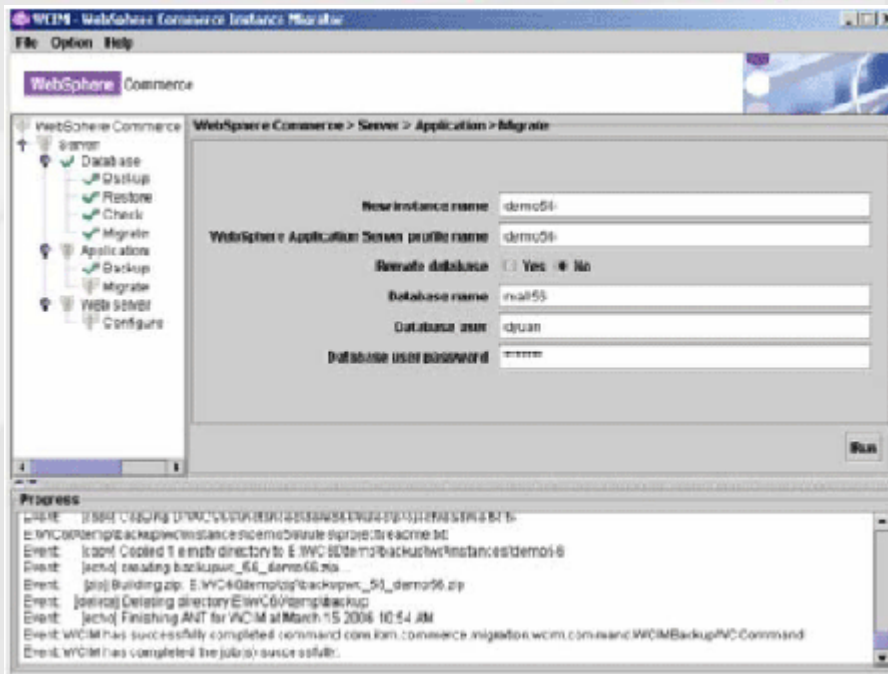
Migrate step

The Migration wizard allows you to change the name of the WebSphere Commerce instance in the application migration step. After migration, the application is deployed automatically in a new WebSphere Application Server profile. Any customizations to the administrative tools are lost during migration.

Fill in the new WebSphere Commerce instance name and WebSphere Application Server profile name. The Migration wizard creates a profile and migrates the instance into it with the new name. At application runtime, database access is needed. To facilitate the database access, a DataSource is created in the WebSphere Application Server. To create the DataSource, information about the database is required during the application migration. If you did not restart the migration server after migrating the database, you are not prompted for this information since the server already has the information. If you did restart the server after performing the database migration step, you are prompted for the database information.

1. Click **Run** to start the application migration.





2. After the WebSphere Commerce application is migrated successfully, read the message dialog carefully and record the port number for WebSphere Application Server Administrative Console.

WebServer Migration

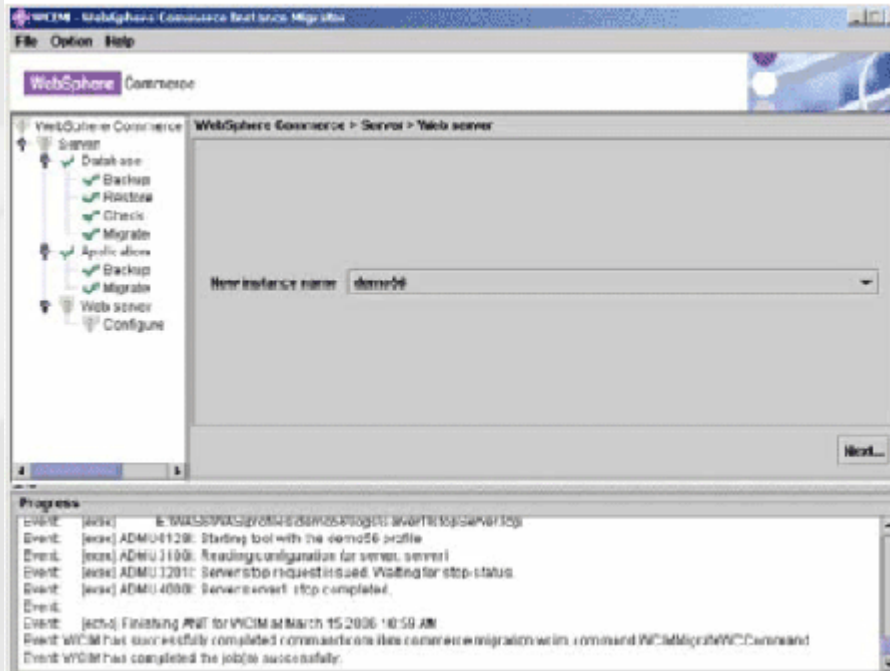
After the application tier migration is completed successfully, the Migration wizard guides you through the Web server tier migration.

Configuration step

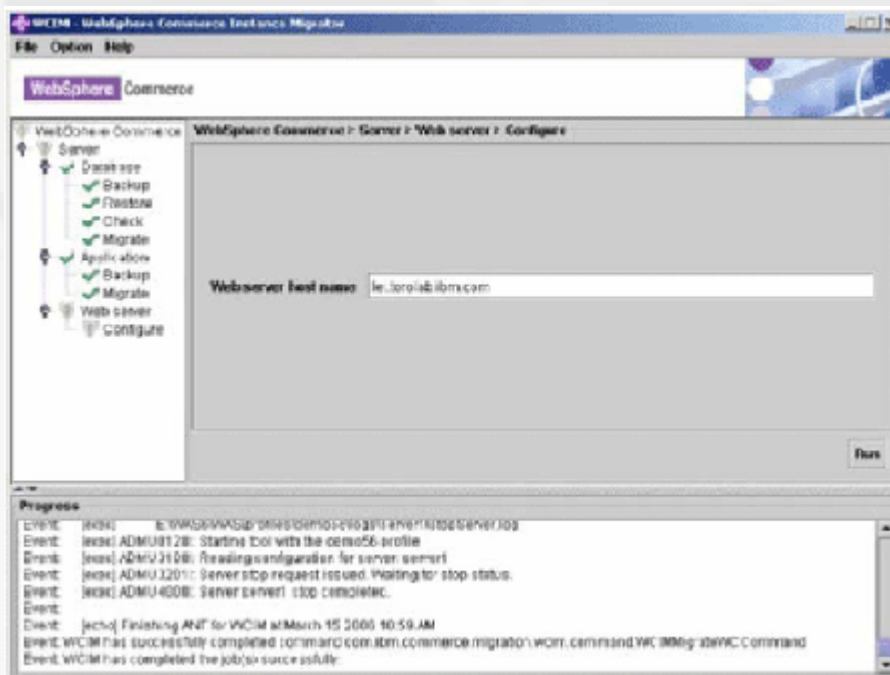
The Migration wizard configures a Web server for the migrated application. In the production migration phase, you can use any Web server host name. Typically, you use the same host name as the original instance during this phase.

1. Click **Next**.





2. Click **Run** to migrate the Web server tier.



A summary page is displayed after migration on all three tiers is completed successfully.

3. Click **Finish** to close the Migration wizard.



