

WA2086 Administration of IBM Business Process Manager 8.0 (Advanced Edition)

Classroom Setup Guide

Web Age Solutions Inc.

Table of Contents

Part 1 - Minimum Hardware Requirements	3
Part 2 - Minimum Software Requirements	3
Part 3 - Software Provided.....	4
Part 4 - Important Ghosting or Imaging Information.....	5
Part 5 - Instructions.....	5
Part 6 - Installing Microsoft Visual C++ 2008 Redistributable.....	6
Part 7 - Installing IBM Integration Designer 8.0.....	7
Part 8 - Verification of the installation of IID 8.0.....	11
Part 9 - Installing DB2 Enterprise Server Edition v9.7.....	12
Part 10 - Installing DB2 Enterprise Server Edition v9.7 Fixpack 4.....	20
Part 11 - Installing WebSphere MQ v7.0 Trial.....	26

Part 1 - Minimum Hardware Requirements

- 2.5 GHz Pentium IV
- 3 GB RAM minimum, 4 GB recommended
- 40 GB free in the hard disk
- USB port

Part 2 - Minimum Software Requirements

- One of the following Windows versions:
 - Windows XP Professional with SP3
 - Windows Vista (Business, Enterprise, or Ultimate)
 - Windows 7
- One of the following web browsers **with Adobe Flash Player installed**:
 - Internet Explorer 7 or 8
 - Firefox 3.X
 - Chrome
- Adobe Acrobat Reader
- Zip extraction utility
- IBM Integration Designer 8.0 *
- WebSphere MQ 7.0 Trial *
- DB2 Enterprise Server Edition 9.7 *
- DB2 Enterprise Server Edition 9.7 Fixpack 4 *
- IBM Business Process Manager Advanced 8.0 *
- WebSphere Application Server ND 8.0 Supplements *

* - indicates software provided as part of the courseware.

Part 3 - Software Provided

You will receive the following files:

- **WA2086_1.ZIP**
- **WA2086_2.ZIP**
- **WA2086_3.ZIP**
- **WA2086_4.ZIP**

All other software listed under Minimum Software Requirements is either commercially licensed software that you must provide or software that is freely available off the Internet.

Part 4 - Important Ghosting or Imaging Information

Some of the software installed for this course will not function after changing the computer hostname. As such, cloning or imaging should not be used on a fully installed system.

You can save time by extracting the contents of the USB memory stick to C:\ on a clean OS install (no other software installed) and then imaging that hard drive. After restoring the image to the other computers and changing the hostnames, you can then install the software on each computer individually by following the instructions that are detailed later in this document.

Part 5 - Instructions

__1. Make sure a user that is an administrator on the machine will be available to the students to use during the class.

__2. Login to the machine using this administrative user for the installation of software.

__3. Extract all of the **.ZIP** files to C:\.

__4. Review that the following folders were created:

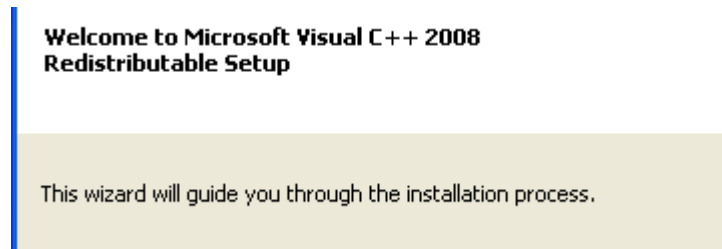
- C:\LabFiles
- C:\Software\BPM_Adv_80
- C:\Software\DB2_9.7
- C:\Software\DB2_9.7_FP4
- C:\Software\IID_8.0
- C:\Software\WAS ND v80\Supplement
- C:\Software\WebSphere MQ v7.0 Trial

__5. Review the following file was created.

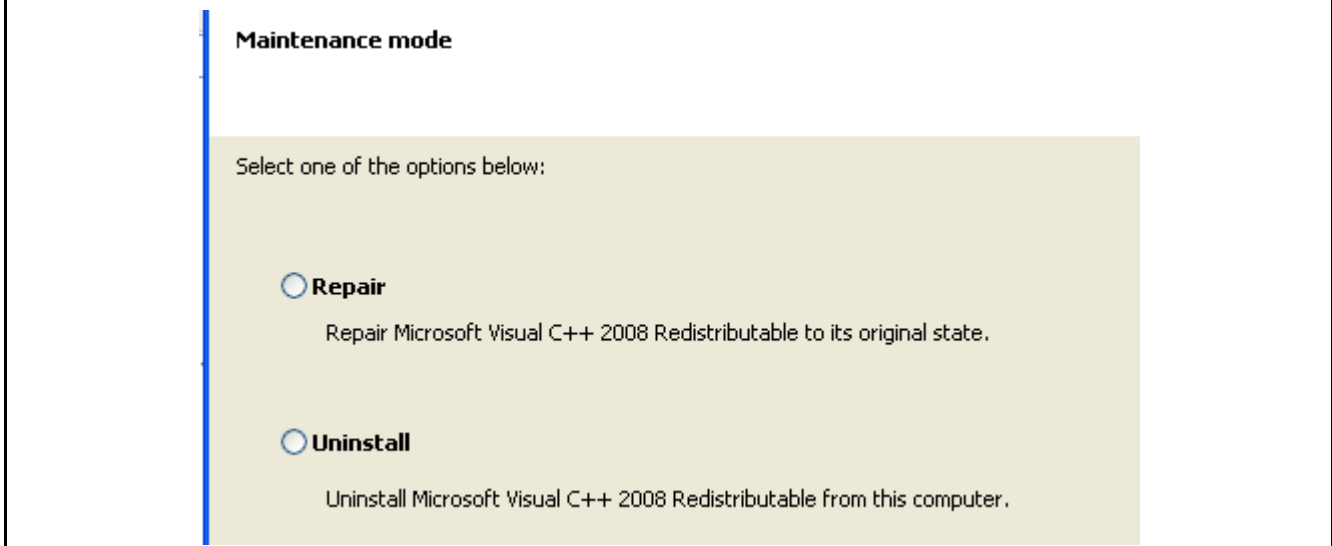
- C:\Software\vcredist_x86.exe

Part 6 - Installing Microsoft Visual C++ 2008 Redistributable

- __1. Execute `vcredist_x86.exe` from `C:\Software\` folder.
- __2. On the first screen click the **Next** button.



Note: If you get the screen below as the first screen of the installation program you do not need to install the software. Click the **Cancel** button and confirm you want to cancel the installation.



- __3. Check the checkbox to accept the license and click the **Install** button.
- __4. Click **Finish** when the message **Setup Complete** appears.

Visual C++ 2008 Redistributable has been installed.

Part 7 - Installing IBM Integration Designer 8.0



Warning: You cannot use ghosting or disk imaging to install this software. You must install the software on each machine separately. Do not change the computer hostname after this software is installed. Also, do not install this software from a network share. It will only function partially if you do.

Approximately time for installation of IID 8.0: 90 minutes

__1. From C:\Software\IID_8.0 run **launchpad.exe**

__2. The Welcome to WebSphere Integration Designer Installation page will open. Change the installation type desired to **'IBM Integration Designer'** (the last option without a test environment and click **Install Selected**. Confirm any Windows security prompts that are presented.

Welcome to IBM Integration Designer Installation

Follow these steps to install an IBM Integration Designer environment.

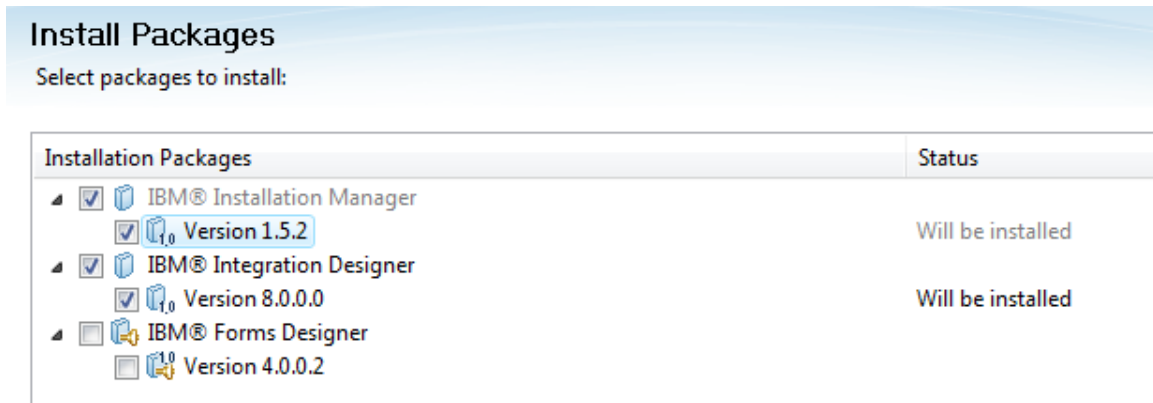
Install as administrative user ([Help me decide](#))

The typical installations provide preselected configurations and determine the environment that will be enabled when IBM Integration Designer starts. You can change the configuration selections during installation or run Installation Manager at a later time to make changes. You can also change your environment at a later time in IBM Integration Designer.

Select one of the following typical installations:

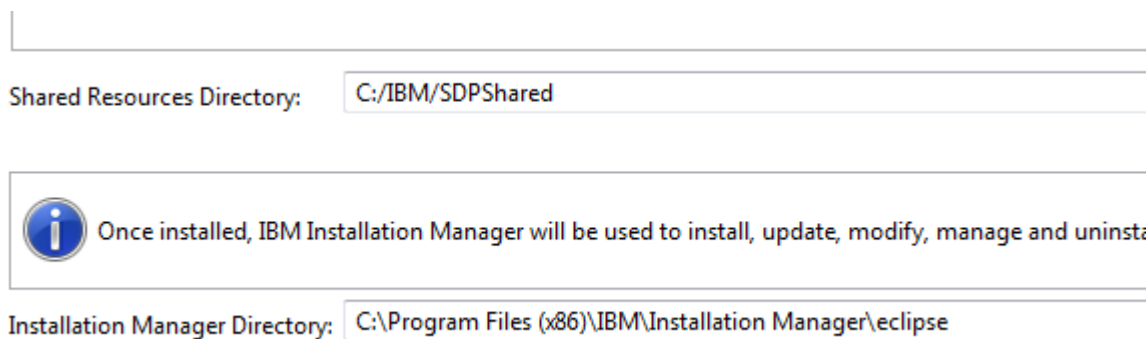
- IBM® Integration Designer for IBM Business Process Manager Advanced - Process Server**
Includes an IBM Process Server test environment, and also supports WebSphere Enterprise Service Bus, and optionally IBM Business Monitor.
 - Start working with the IBM Process Center first
- IBM® Integration Designer for WebSphere Enterprise Service Bus**
Includes a WebSphere Enterprise Service Bus test environment, and optionally IBM Business Monitor.
- IBM® Integration Designer for IBM Business Monitor**
Includes an IBM Business Monitor test environment (Windows only).
- IBM® Integration Designer for WebSphere DataPower**
Test environment not included. The installation will work directly with the WebSphere DataPower Appliance.
- IBM® Integration Designer**
Test environment not included.

3. The **Install Packages** page will open. Leave all the defaults selected as shown below and click **Next**.



4. Accept the license terms and click **Next**.

5. Leave the default directories for the installation and click **Next**.



Note: Your installation directory may be slightly different depending on the version of Windows. Leave the default value even if it differs from that shown above.

__6. Again leave the default directory for the installation and click **Next**.

Install Packages
A package group is a location that contains one or more packages. Some compatible packages can be installed into user interface. Select an existing package group, or create a new one.

Install > Licenses > Location > **Features** > Summary

Use the existing package group
 Create a new package group

Package Group Name	Installation Directory
IBM Integration Designer	C:/IBM/IntegrationDesigner/v8.0

Package Group Name: IBM Integration Designer
Installation Directory: C:/IBM/IntegrationDesigner/v8.0

__7. Click **Next** in the Translations Supported page.

__8. Leave all defaults for Features to install and click **Next**.

Install Packages
Select the features to install.

Install > Licenses > Location > **Features** > Summary

Features

- IBM® Installation Manager 1.5.2
- IBM® Integration Designer 8.0.0.0
 - Tools for developing applications without a local server installation
 - Email, Flat File, FTP and JDBC IBM WebSphere Adapters
 - Additional IBM WebSphere Adapters
 - CICS adapter
 - Domino adapter

__9. Finally click **Install** to start installing the product. This will take some time.

Install Packages
Review the summary information.

Install Licenses Location Features **Summary**

Target Location
Package Group Name: IBM Integration Designer
Installation Directory: C:/IBM/IntegrationDesigner/v8.0
Shared Resources Directory: C:/IBM/SDPShared

Packages

Packages

- IBM® Installation Manager 1.5.2
- IBM® Integration Designer 8.0.0.0
 - Tools for developing applications without a local server installation
 - Email, Flat File, FTP and JDBC IBM WebSphere Adapters
 - Monitor Model editor

__10. Verify that installation completed successfully. Click **Finish**.

The packages are installed. [View Log File](#)

The following package was installed:

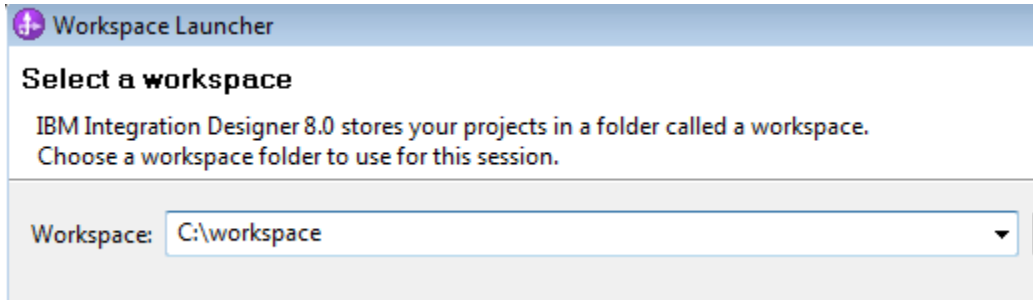
- IBM Integration Designer
 - IBM® Integration Designer 8.0.0.0

__11. Close the Launchpad.

Part 8 - Verification of the installation of IID 8.0

__1. From start menu select: **All Programs > IBM > IBM Integration Designer -> IBM Integration Designer 8.0**

__2. Change the workspace to **C:\workspace** and click **OK**.



__3. If you are prompted by the Windows firewall about blocking a program unblock it.

__4. The Getting started page will open.



__5. Exit the product by selecting **File** → **Exit** from the menu bar.

__6. Close all the open files.

Congratulations! The product has successfully been installed.

Part 9 - Installing DB2 Enterprise Server Edition v9.7



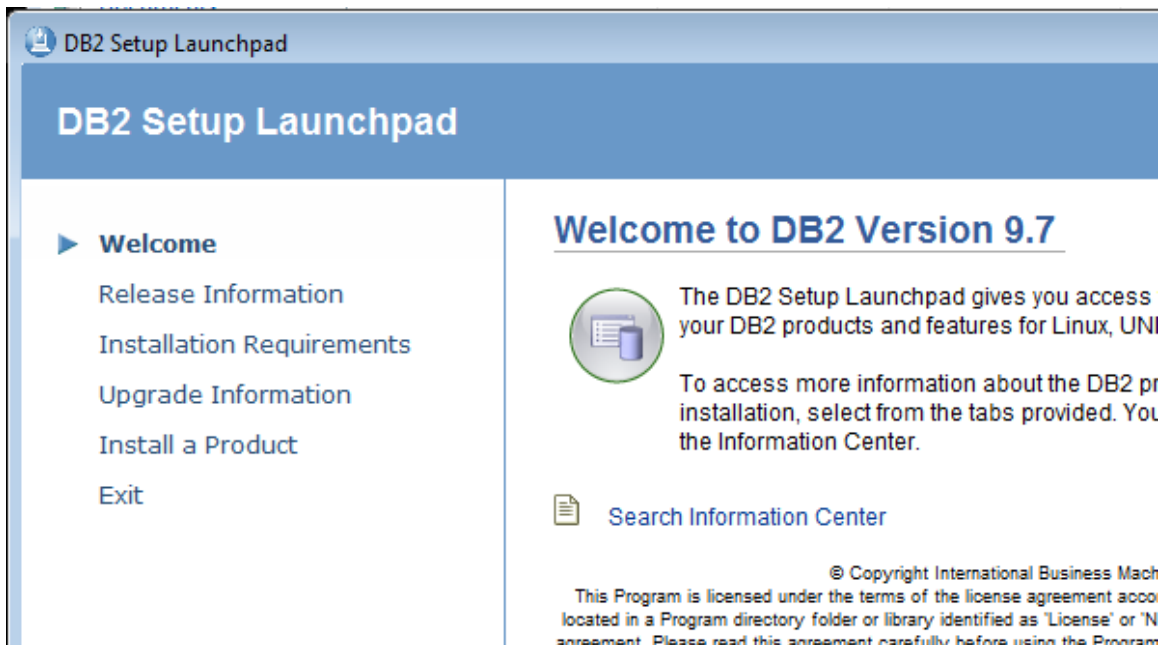
Warning: You cannot use ghosting or disk imaging to install this software. You must install the software on each machine separately. Do not change the computer hostname after this software is installed. Also, do not install this software from a network share. It will only function partially if you do.

Average time to install this software: 20 minutes

__1. Browse to **C:\Software\DB2_9.7\ESE\image** and launch **setup.exe**.

Note: If installing on Windows 7 or Vista you must right-click the **setup.exe** program and select **Run as administrator**. Failure to do so will cause errors during installation that will make the software unusable.

The **DB2 Setup Launchpad** page will appear.



__2. Click **Install a Product**.

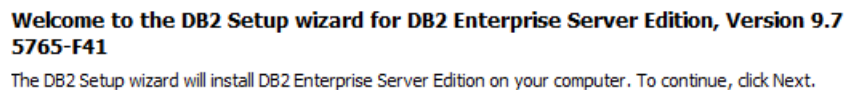
The *Install a Product* page will appear.

__3. Click the **Install New** button underneath the **DB2 Enterprise Server Edition Version 9.7** heading.



Wait a few seconds until the *Welcome to the DB2 Setup wizard for DB2 Enterprise Server Edition, Version 9.7* page appears. You may need to accept running the program in a new window.

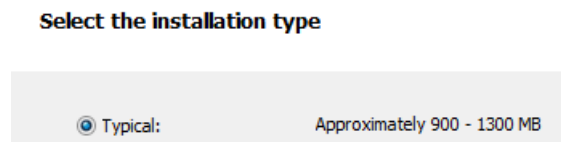
__4. The *Welcome* page will open, click **Next**.



__5. The *Software License Agreement* page will appear. Click the **I accept the terms in the license agreement** radio button and click **Next**.

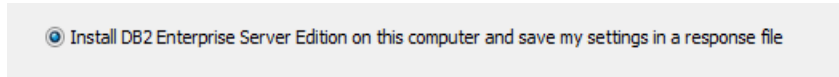
The *Select the installation type* page will appear.

__6. Leave the **Typical** installation option selected and click **Next**.



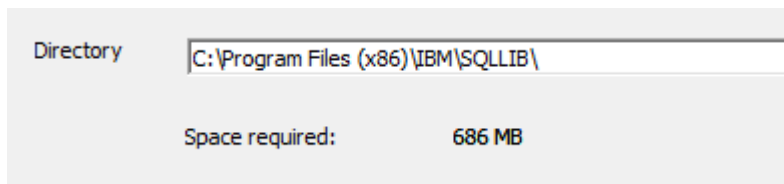
The *Select the installation action, response file creation, or both* page will appear.

__7. Leave **Install DB2 Enterprise Server Edition on this computer and save my settings in a response file** selected and click **Next**.



The *Select the installation folder* page will appear.

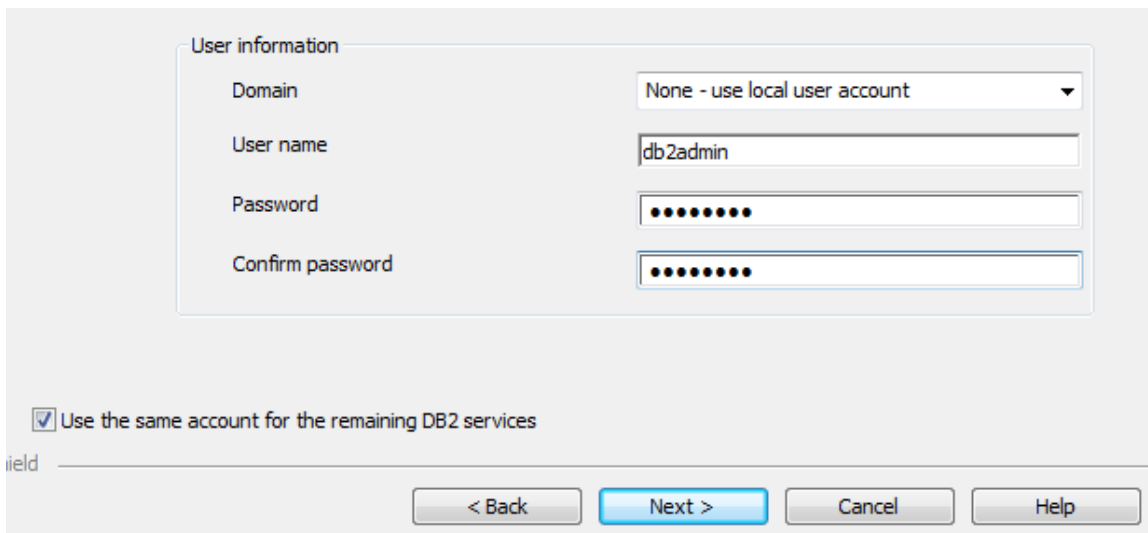
__8. Leave the default directory and click **Next**.



Note: Depending on your version of Windows your installation folder may be slightly different. Do not change the default folder though.

The *Set user information for the DB2 Administration Server* page will appear.

__9. Change the **Password** (and **Confirm Password**) to **db2admin**

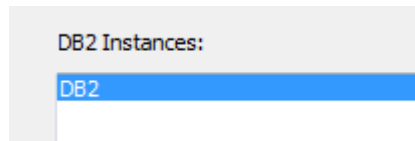


Note: If you can't use this password because of password policies use a password that will satisfy password policies. Make sure to tell the instructor that the DB2 software was installed with a different user and/or password.

__10. Click **Next**.

The *Configure DB2 instances* page will appear.

__11. Leave the defaults and click **Next**.

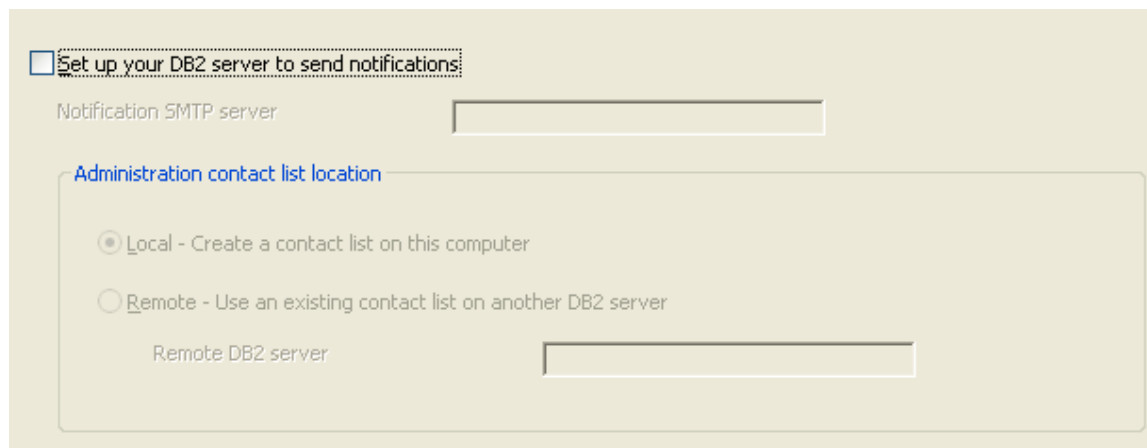


The *Prepare the DB2 tools catalog* page will appear.

__12. Leave the defaults and click **Next**.

The *Set up notifications* page will appear.

__13. Uncheck **Set up your DB2 server to send notifications**.



__14. Click **Next**.

The *Enable operating system security for DB2 objects* page will appear.

__15. Uncheck **Enable operating system security**.

Enable operating system security

Information on the DB2 administrators group and DB2 users group is available by clicking Help.

DB2 administrators group

Domain: None - use local group

Group name: DB2ADMNS

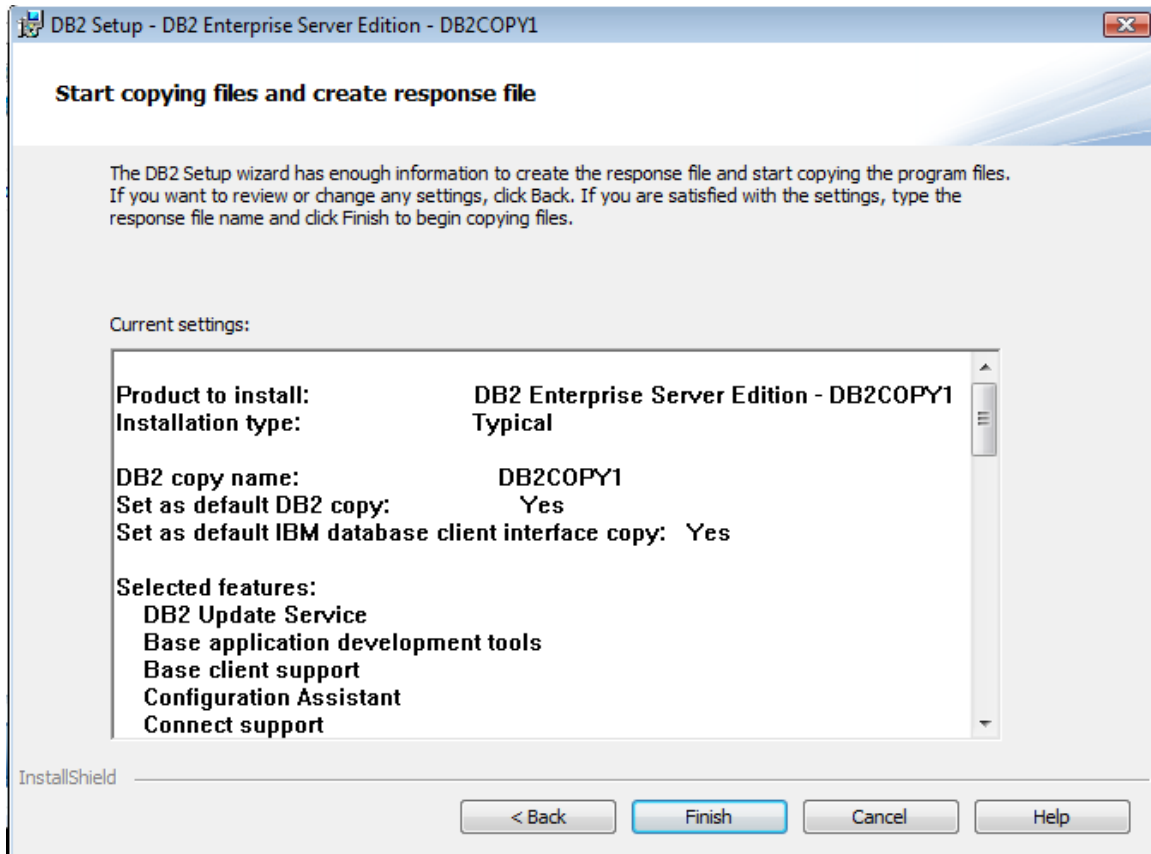
DB2 users group

Domain: None - use local group

Group name: DB2USERS

__16. Click **Next**.

The *Start copying files and create response file* page will appear.



__17. Click **Finish** and DB2 will begin installing. This will take some time.

Eventually, the *Setup is complete* page will appear.



__18. Click **Next**.

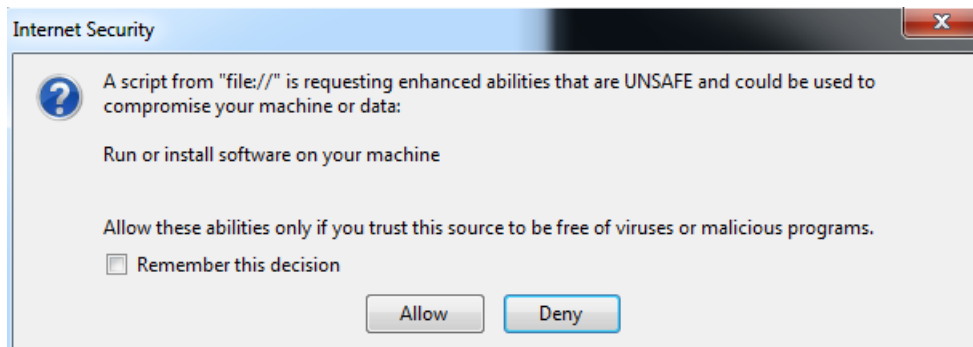
The *Install additional products* page will appear.

__19. Click **Finish**.

The *Welcome to First Steps for DB2 Database for Linux, UNIX, and Windows* page may appear.

__20. If the *DB2 First Steps* dialog appears then close it, we don't need the first steps for the class.

__21. If the *Internet Security* dialog opens many times, click **Deny**.



__22. Restart the computer. This will make sure the various DB2 software and services are installed and running.

__23. Login as the administrative user you used to install DB2.

__24. Select **Start** → **Programs** → **IBM DB2** → **DB2COPY1 (Default)** → **General Administration Tools** → **Control Center**.

__25. Select **Cancel** on the prompt that appears at startup.

__26. After making sure the Control Center started without errors select **Control Center** → **Exit**.

DB2 Enterprise Server Edition v9.7 installation is completed.

Part 10 - Installing DB2 Enterprise Server Edition v9.7 Fixpack 4



Warning: You cannot use ghosting or disk imaging to install this software. You must install the software on each machine separately. Do not change the computer hostname after this software is installed. Also, do not install this software from a network share. It will only function partially if you do.

Average time to install this software: 20 minutes

__1. Select **Start** → **Control Panel**.

__2. Go into the **Administrative Tools** group of the control panel.

Note: In Windows Vista/2008/7 you may have to go into **System and Maintenance** before you can go into the '**Administrative Tools**' group.

__3. Open the **Services** list by double clicking the icon. Accept any Windows security prompts that are presented.

__4. Find and stop all of the DB2 services by right clicking them and selecting **Stop**. This includes the 'DB2DAS' service.

	Cryptographic Services	Provides to...	Started	Automatic
	DB2 - DB2COPY1 - DB2-0	Allows appli...		Automatic
	DB2 Governor (DB2COPY1)	Collects stat...		Manual
	DB2 License Server (DB2COPY1)	Monitors D...		Manual
	DB2 Management Service (DB2COPY1)	Manages D...		Automatic
	DB2 Remote Command Server (DB2COPY...	Supports re...		Automatic
	DB2DAS - DB2DAS00	Supports lo...		Automatic
	DCOM Server Process Launcher	Provides lau...	Started	Automatic

__5. Close the services once all DB2 services are stopped.

__6. Browse to **C:\Software\DB2_9.7_FP4UNIVERSAL** and launch **setup.exe**.

Note: If installing on Windows Vista/7 you must right-click the **setup.exe** program and select **Run as administrator**. Failure to do so will cause errors during installation that will make the software unusable.

The **DB2 Setup Launchpad** page will appear.



__7. Click **Install a Product**.

The *Install a Product* page will appear.

8. **Scroll down** and click the **Work with Existing** button underneath the **DB2 Enterprise Server Edition Version 9.7 Fix Pack 4** heading. Make sure NOT to select what is likely the first button for 'DB2 Advanced Enterprise Server Edition'.



DB2 Enterprise Server Edition Version 9.7 Fix Pack 4

DB2 Enterprise Server Edition is designed to meet the data server needs c
It can be deployed on Linux, UNIX, or Windows servers of any size, from on

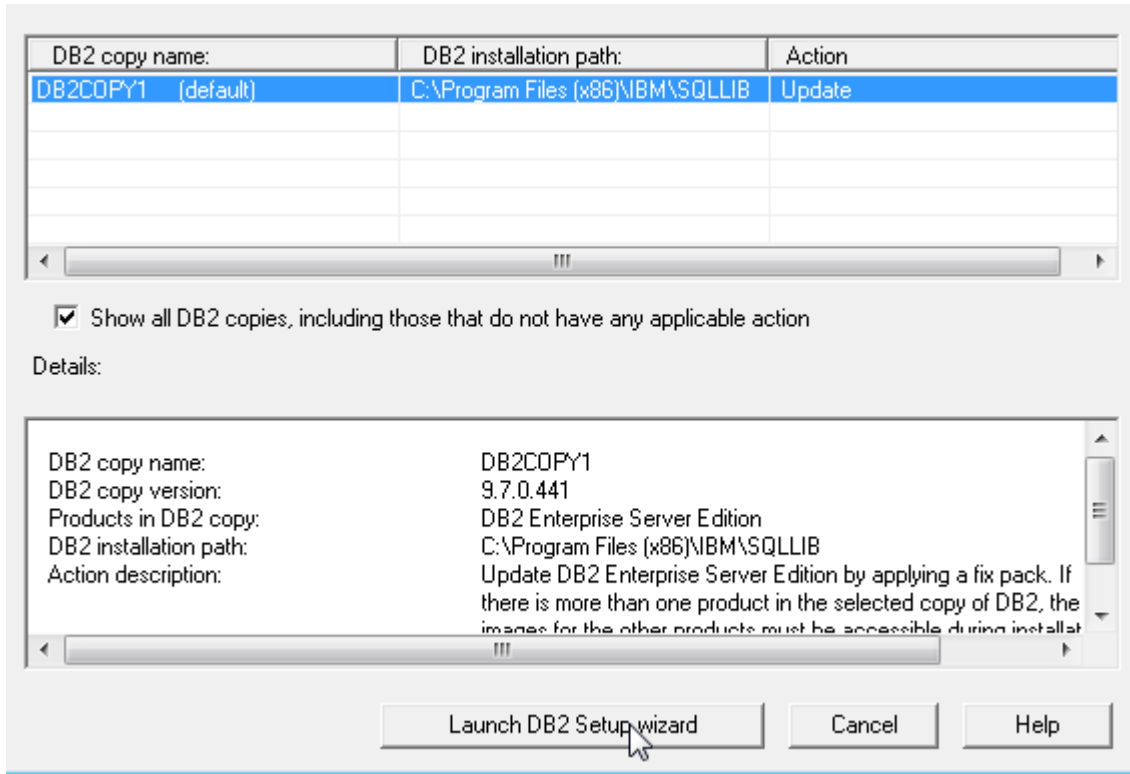
DB2 Enterprise Server Edition is an ideal foundation for building on demar
such as multi-terabyte size data warehouses, or high performing 24x7 avai
processing business solutions, or Web-based solutions. DB2 Enterprise
native XML data store and delivers flexible access to XML data using XQue
reporting tools.

Optional features for DB2 Enterprise Server Edition are available that provi
capabilities in areas such as database partitioning, compression, perform
and security. For more information, see <http://www.ibm.com/db2>.



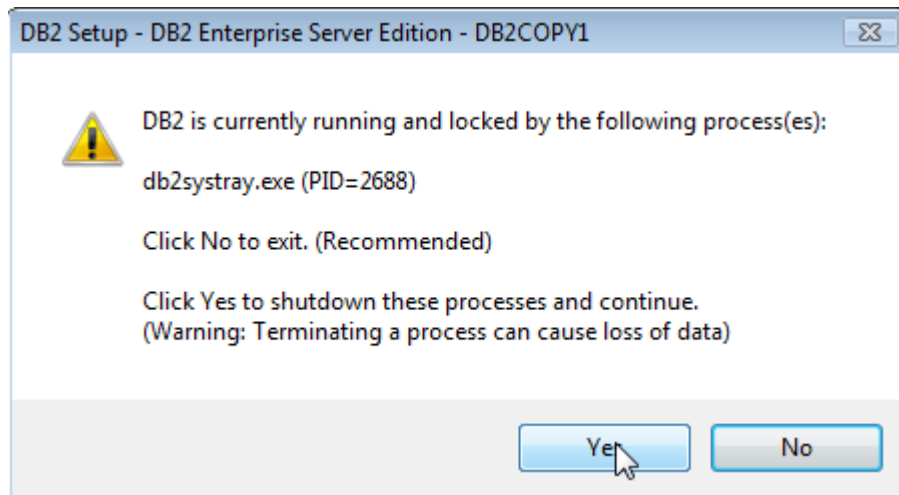
DB2 Workgroup Server Edition Version 9.7 Fix Pack 4

9. In the *Work with an Existing DB2 Copy* window that appears leave the DB2 installation selected and press the **Launch DB2 setup wizard** button.



Wait a few seconds until the *Welcome to the DB2 Setup wizard for DB2 Enterprise Server Edition, Version 9.7* page appears.

10. If prompted about running DB2 processes click **Yes** to shutdown the processes.



__11. Uncheck **Enable operating system security**.

Enable operating system security

Information on the DB2 administrators group and DB2 users group is available by clicking Help.

DB2 administrators group

Domain: ___NotSet___

Group name: DB2ADMNS

DB2 users group

Domain: ___NotSet___

Group name: DB2USERS

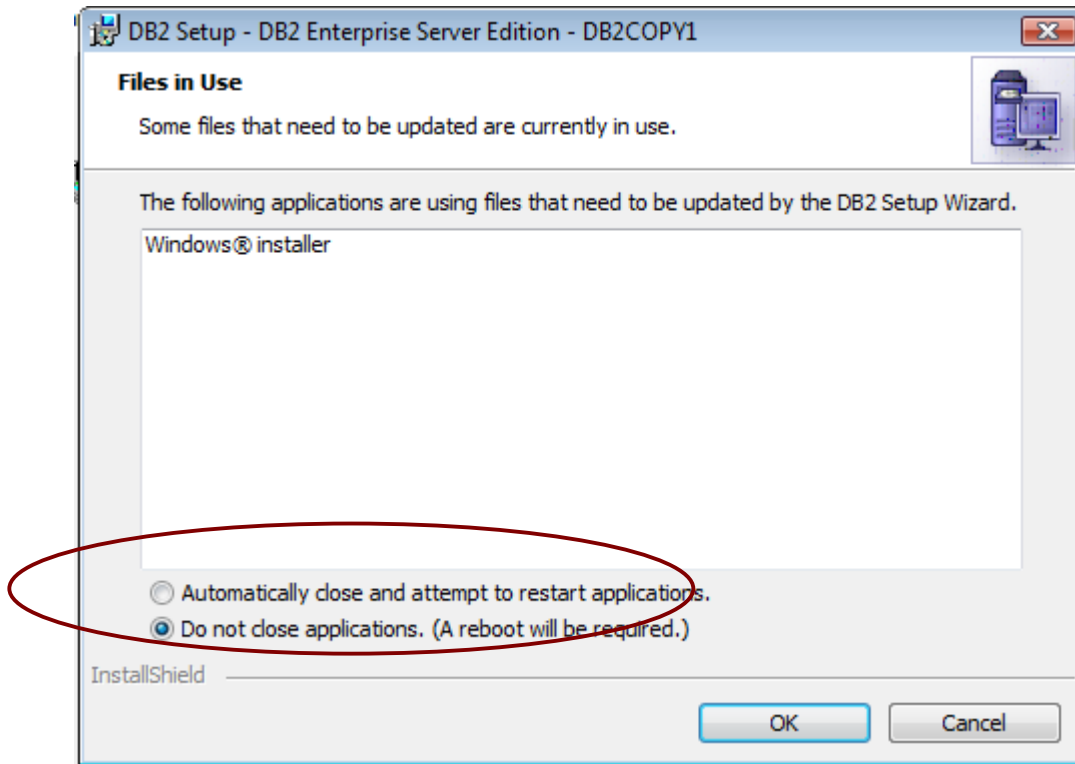
__12. Click **Next**.

__13. The *Resuming the DB2...* message will appear, click **Next** again and the DB2 fixpack will begin installing. This will take some time.

Resuming the DB2 Setup wizard for DB2 Enterprise Server Edition

The DB2 Setup wizard will complete the installation of DB2 Enterprise Server Edition on your computer. To continue, click Next.

__14. If prompted about some files needing to be updated are in use select the '**Do not close applications**' option and click the **OK** button.



Eventually, the *Setup is complete* page will appear.

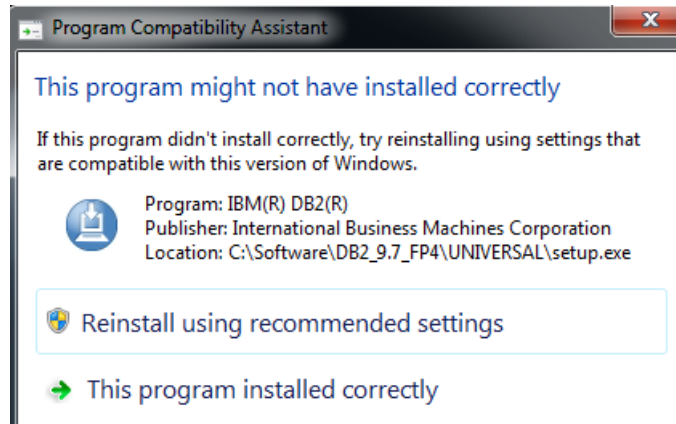


__15. Click **Next**.

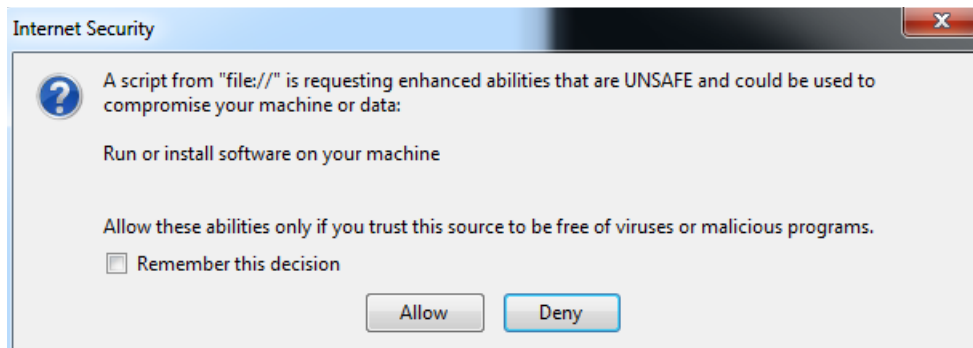
The *Install additional products* page will appear.

__16. Click **Finish**.

__17. If the *Program compatibility assistant* dialog appears, click **This program installed correctly**.



__18. If the *Internet Security* dialog open many times, click **Deny**.



__19. If the DB2 First Steps window appears close it.

__20. Restart the computer.

__21. If the DB2 First Steps window appears after rebooting and logging in you can close it.

DB2 Enterprise Server Edition v9.7 Fixpack 4 installation is completed.

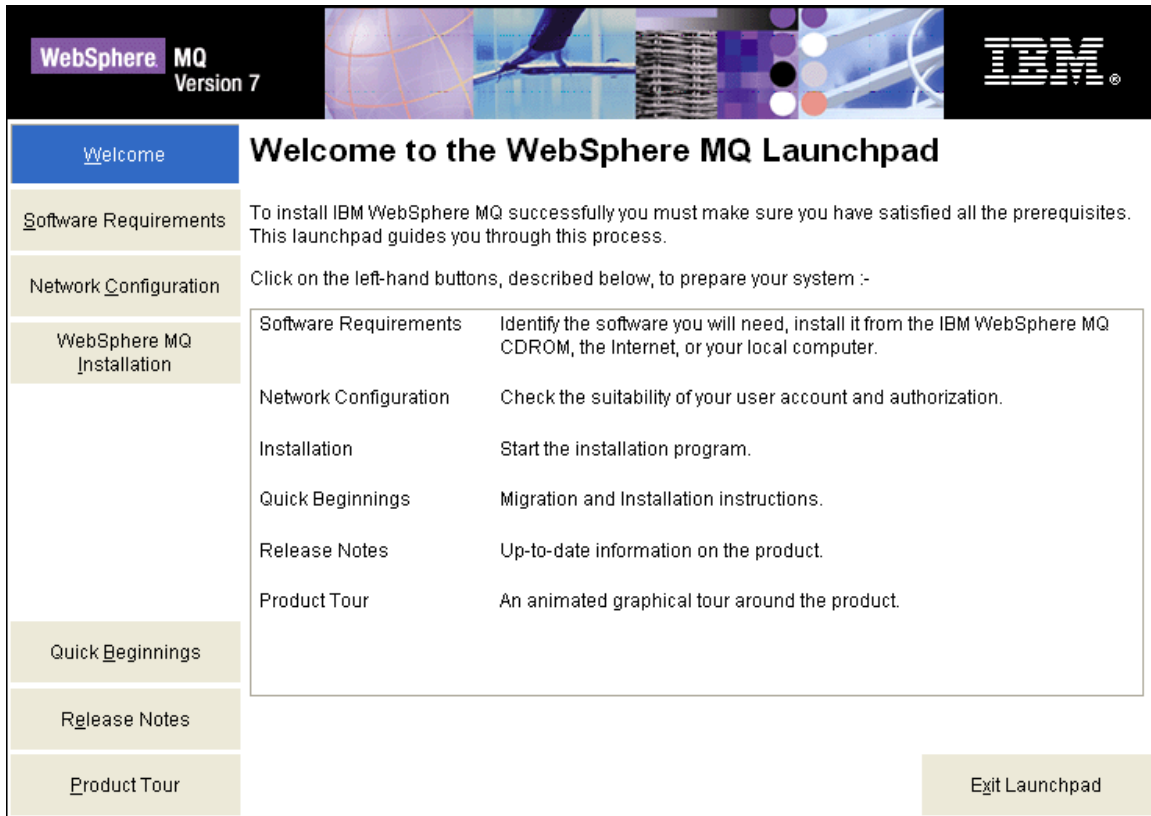
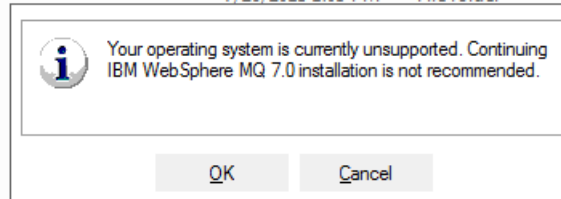
Part 11 - Installing WebSphere MQ v7.0 Trial

Note: This is a trial version and should not be installed more than 60 days before the class.

__1. Login as a user with local administrative rights.

2. Run **Setup.exe** from the **C:\Software\WebSphere MQ v7.0 Trial** folder. The **WebSphere MQ Launchpad** should open up.

If you are working with Windows 7, right click the file and select Run As Administrator.

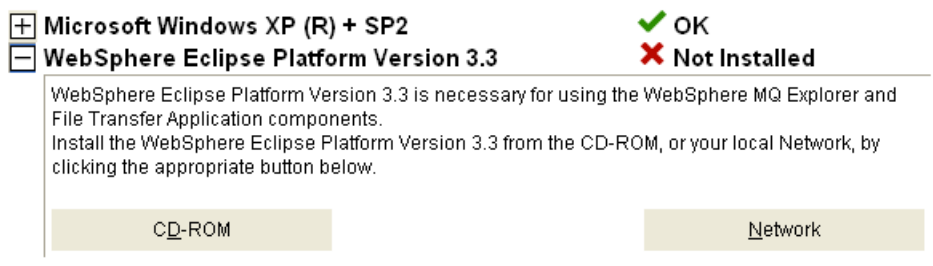


3. Click on **Software Requirements** in the navigation bar.

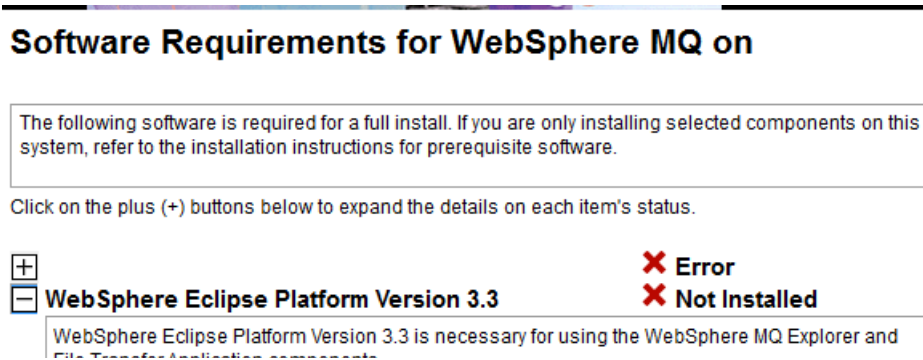
4. You should see a red **X** and the **Not Installed** message next to **WebSphere Eclipse Platform Version 3.3**

5. To install **WebSphere Eclipse Platform Version 3.3**, expand it by clicking on the + sign next to it.

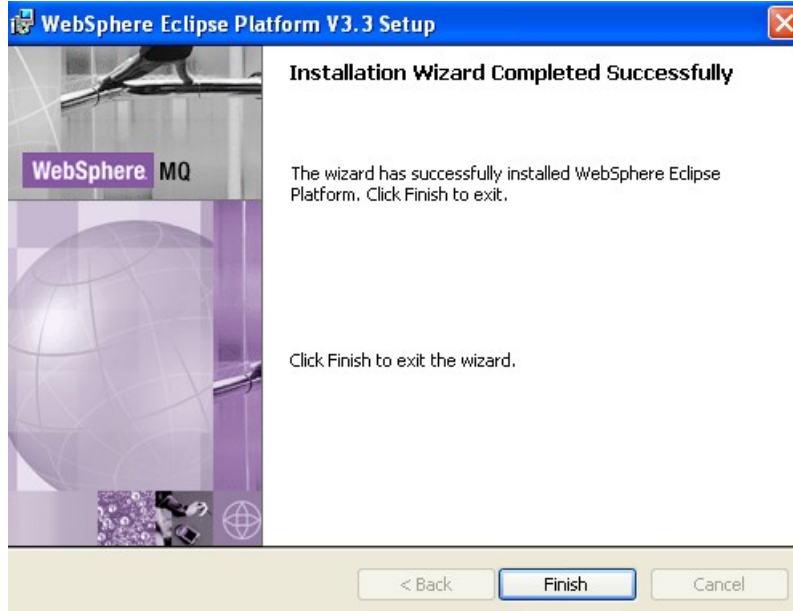
6. Click on the **CD-ROM** button.



On Windows 7 will be shown an empty line as OS.



- __7. Leave **English** selected in the **Select Setup Language** pop-up window and click **OK**.
- __8. Click **Next** in the **Welcome** window.
- __9. Accept the license agreement and press the **Next** button.
- __10. Leave the default destination folder and click **Next**.
- __11. In the **Ready to Install WebSphere Eclipse Platform** window click **Install**.
- __12. The installation will take a few minutes. Once it is complete press the **Finish** button.



__13. Now that you've installed the pre-requisite software for installing WebSphere MQ, click the Refresh button on the software requirements page of the WebSphere MQ Launchpad. It should show that all software requirements are satisfied.

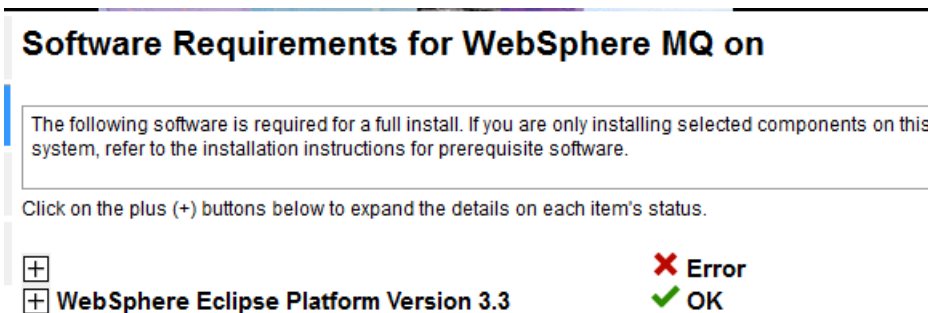
Software Requirements for WebSphere MQ on Windows XP

The following software is required for a full install. If you are only installing selected components on this system, refer to the installation instructions for prerequisite software.

Click on the plus (+) buttons below to expand the details on each item's status.

- Microsoft Windows XP (R) + SP2 ✔ OK
- WebSphere Eclipse Platform Version 3.3 ✔ OK

On Windows 7 still will be shown an empty line as OS.




__14. Now proceed to installing WebSphere MQ by clicking on WebSphere MQ Installation on the left menu.

On Windows 7 will be shown an empty line as OS.

WebSphere MQ Installation

Pre-Installation Status

Software Requirements:

 The following software has either not been detected on this system, or does not meet the required version. View the Software Requirements panel for further details.

1)

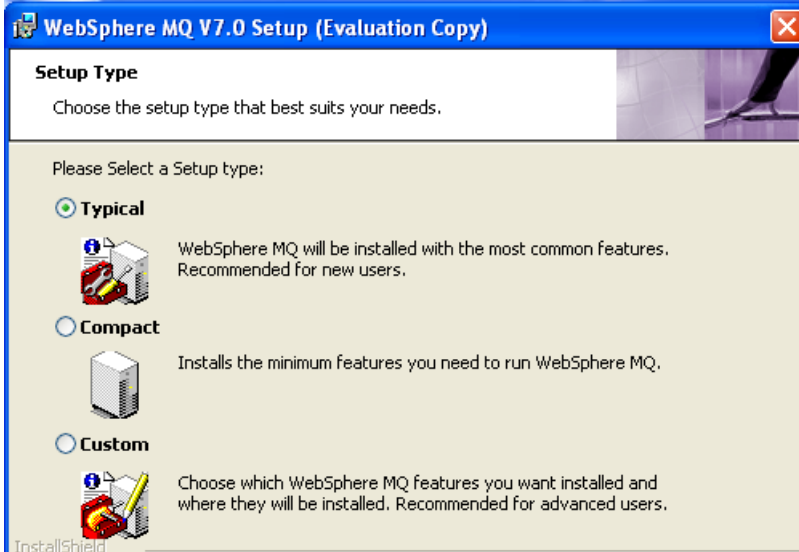
__15. Click on the **Launch IBM WebSphere MQ Installer** button.

Select installation language.

Launch IBM WebSphere MQ Installer

__16. Accept the license agreement and press the **Next** button.

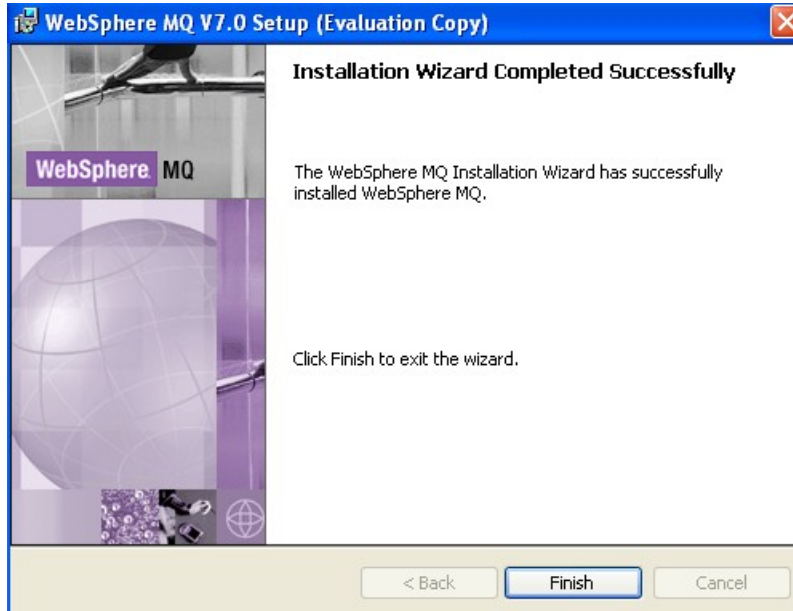
__17. Leave **Typical** selected and click **Next**.



The screenshot shows the 'WebSphere MQ V7.0 Setup (Evaluation Copy)' window. It has a blue title bar and a close button. The main content area is titled 'Setup Type' and contains the instruction 'Choose the setup type that best suits your needs.' Below this, it says 'Please Select a Setup type:' and lists three options: 'Typical' (selected with a radio button), 'Compact', and 'Custom'. Each option has an icon and a description. The 'Typical' option is described as 'WebSphere MQ will be installed with the most common features. Recommended for new users.' The 'Compact' option is described as 'Installs the minimum features you need to run WebSphere MQ.' The 'Custom' option is described as 'Choose which WebSphere MQ features you want installed and where they will be installed. Recommended for advanced users.' The 'InstallShield' logo is visible in the bottom left corner.

__18. Click the **Install** button to begin the installation.

__19. The installation will take several minutes. Once it is complete press the **Finish** button.



__20. The installation program will open up the **Welcome to the Prepare WebSphere MQ Wizard** window. Click **Cancel**.

__21. Confirm that you want to cancel the wizard by clicking the **OK** button.

__22. Open the Windows Control Panel by selecting **Start -> Control Panel** or **Start -> Settings -> Control Panel** depending on your Windows version.

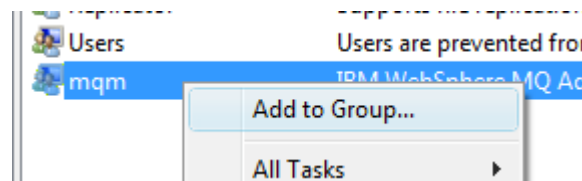
__23. If you are using Windows XP, Vista, or 7 switch to the "Classic View" by clicking the link on the left side of the Control Panel.

__24. Double click the **Administrative Tools** group to open this category.

__25. Double click the **Computer Management** icon to open it. Confirm the security prompt if it appears.

__26. On the left expand **System Tools** → **Local Users and Groups** and select **Groups**.

__27. Right click the 'mqm' group and select 'Add to Group'.

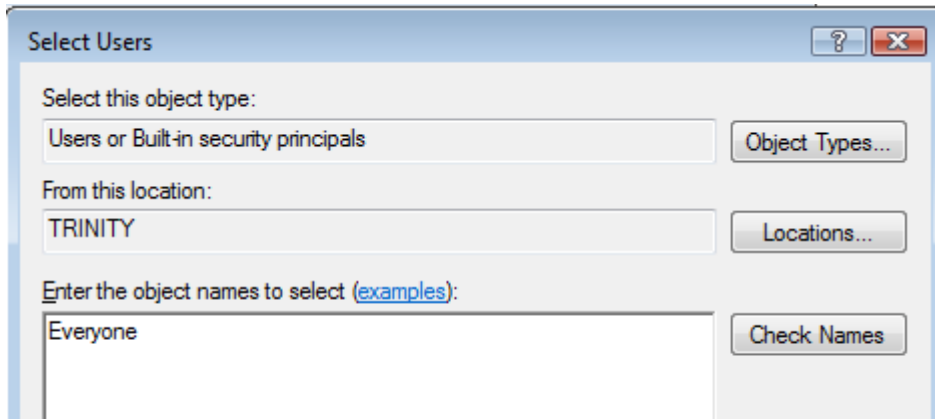


Note: If the steps vary slightly depending on your version of Windows perform whatever steps are

necessary to accomplish the goal of adding users to the 'mqm' group.

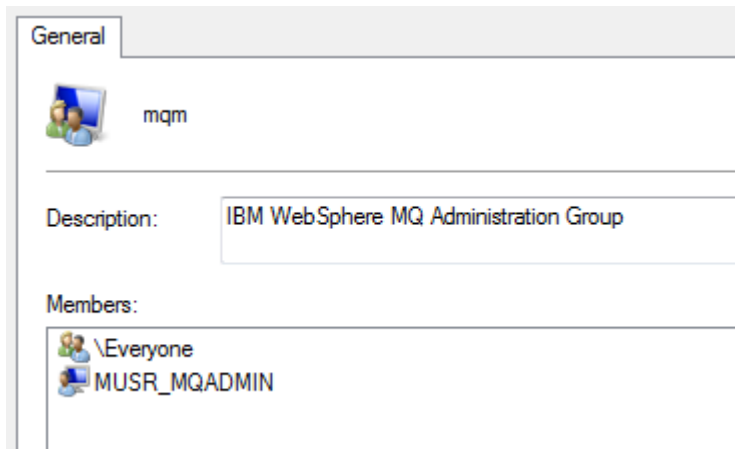
__28. On the dialog that appears click the '**Add**' button.

__29. On the dialog to add to the group enter a value of '**Everyone**' and click the **OK** button.



Note: Normally you would probably not grant access to everyone to the 'mqm' group. You might only need to add the user that runs the WebSphere servers. We are doing this only because it is the easiest way to configure the security we will need for labs.

__30. Make sure the special group 'Everyone' is listed in the members of the 'mqm' group and click the **OK** button.



__31. Close the computer management tool.

__32. Restart the computer.

Installation verification of WebSphere MQ v7.0 Trial

__1. Login as the same user you used to install WebSphere MQ.

__2. You should see an icon in your system tray with a green icon which indicates that WebSphere MQ is running.



Note: If you are installing to Windows Vista\7 you may not see this icon.

__3. To verify the installation was successful, open a command prompt by selecting Start → Programs → Accessories → Command Prompt.

__4. Enter the following command:

```
crtmqm TESTQM
```

__5. You should see the following message. If you get an error that the command is not recognized you have not rebooted the machine after installation.

```
CA Command Prompt
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Student>crtmqm TESTQM
There are 90 days left in the trial period for this copy of WebSphere MQ.
WebSphere MQ queue manager created.
Creating or replacing default objects for TESTQM.
Default objects statistics : 61 created. 0 replaced. 0 failed.
Completing setup.
Setup completed.

C:\Documents and Settings\Student>_
```

__6. Close the command prompt window.

You have successfully installed WebSphere MQ v7.0 Trial.

Congratulations. The installation for this course has been completed.