

WA1694 JBoss Application Server v5.x Administration and Clustering on Windows

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.....	3
Part 4 - Important Ghosting or Imaging Information.....	4
Part 5 - Instructions.....	4
Part 6 - Installing Apache HTTP Server 2.2.14.....	5
Part 7 - Modify File Permissions (Windows Vista, Windows 7, or Windows Server 2008).....	9
Part 8 - Installing MySQL 5.5.9.....	16

Part 1 - Minimum Hardware Requirements

- Pentium 4 – 1.4 GHz or higher
- 2 GB RAM minimum
- 15 GB free on the C drive.
- Ethernet or Token Ring card
- USB port

Part 2 - Minimum Software Requirements

- One of the following Windows versions:
 - Windows XP Professional with SP2
 - Windows Server 2003 with SP2
 - Windows Vista with SP1 (Business, Enterprise, or Ultimate)
 - Windows Server 2008 with SP1
- Internet Explorer 6.0 SP1 or Internet Explorer 7
- Zip file extraction utility
- Java JDK 6.0 Update 20 *
- JBoss Application Server 5.1 *
- Apache Ant 1.7.1 *
- Eclipse Galileo *
- Eclipse Memory Analysis Tool 1.0 Helios *
- MySQL 5.5.9 *
- Apache Web Server 2.2.14 *
- Apache Tomcat Connector 1.2.28 *
- Apache JMeter 2.3.4 *
- Log4j Chainsaw v2 *

* - indicates software provided as part of the courseware.

Part 3 - Software Provided

Number of USB memory sticks that you will receive: **1**

Name of the files containing in the memory sticks (one file per memory stick):

- **WA1694.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

The software for this course can be ghosted.

Part 5 - Instructions

__1. Ensure that a user that is a member of the Administrators group is available for the students to use during class.

__2. From the USB memory stick, extract the **WA1694.ZIP** file to C:\

__3. Review that the following folders were created:

- **C:\LabFiles**
- **C:\Software**
- **C:\Software\Apache**
- **C:\Software\apache-ant-1.7.1**
- **C:\Software\chainsaw**
- **C:\Software\eclipse**
- **C:\Software\jakarta-jmeter-2.3.4**
- **C:\Software\mat**

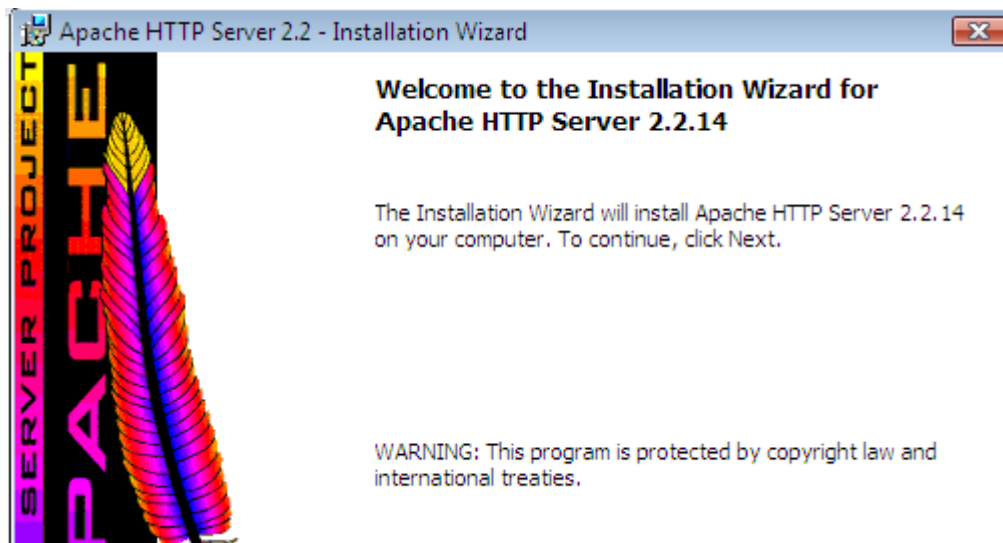
__4. Review that the following files were created:

- **C:\Software\jboss-5.1.0.GA-jdk6.zip**
- **C:\Software\mysql-connector-java-5.1.15-bin.jar**
- **C:\Software\jdk-6u20-windows-i586.exe**
- **C:\Software\mysql-5.5.9-win32.msi**

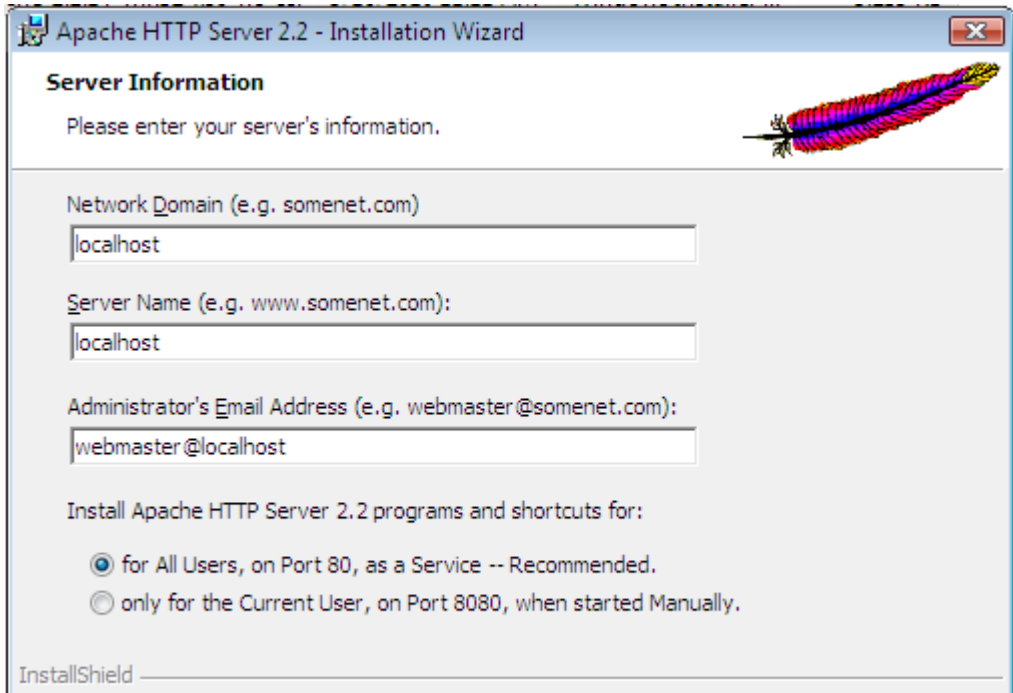
Some of these folders and files will be used during setup and other during the class. Do not delete any of them.

Part 6 - Installing Apache HTTP Server 2.2.14

- __1. Login as the administrative ID created for the class.
- __2. Run **apache_2.2.14-win32-x86-no_ssl.msi** from the **C:\Software\Apache** folder.
- __3. In the Welcome screen, click **Next**.

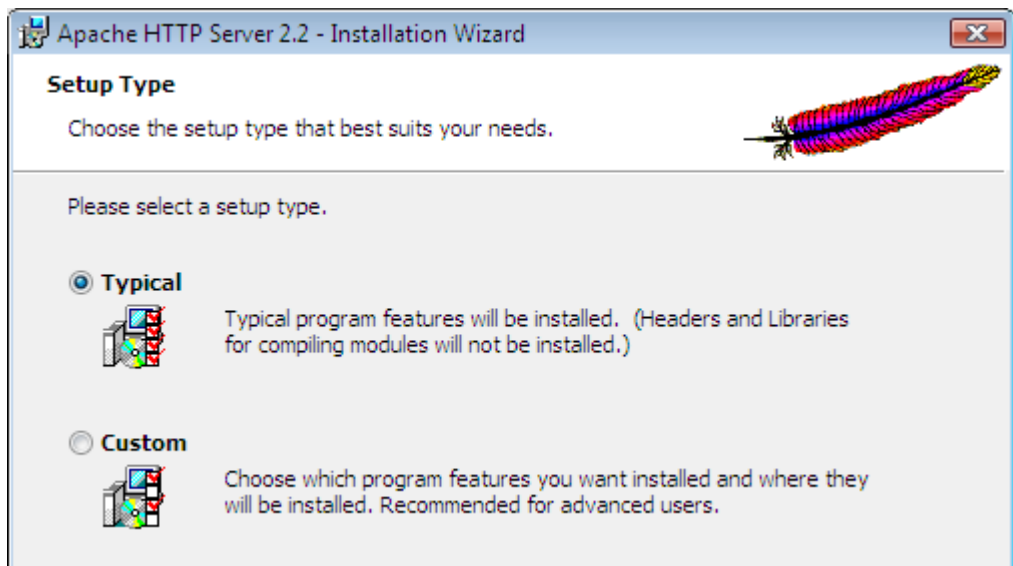


- __4. Accept the License Agreement and click **Next**.
- __5. In the *Read This First* page, click **Next**.
- __6. Enter **localhost** for **Network Domain** and **Server Name**.
- __7. Enter **webmaster@localhost** for **Administrator's E-mail Address** as shown below.

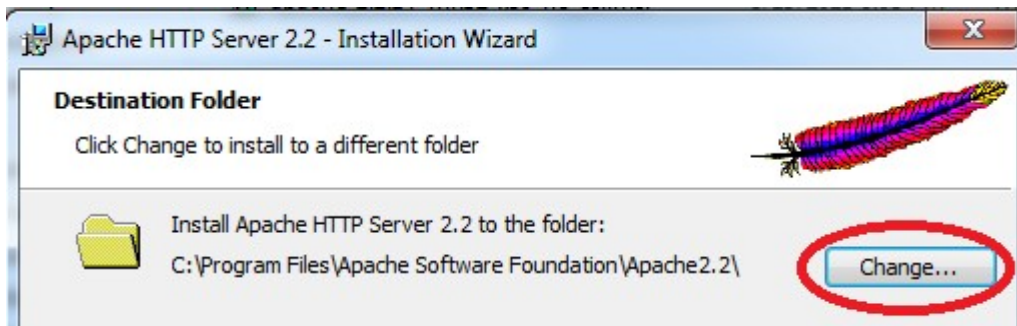


8. Click the **Next** button.

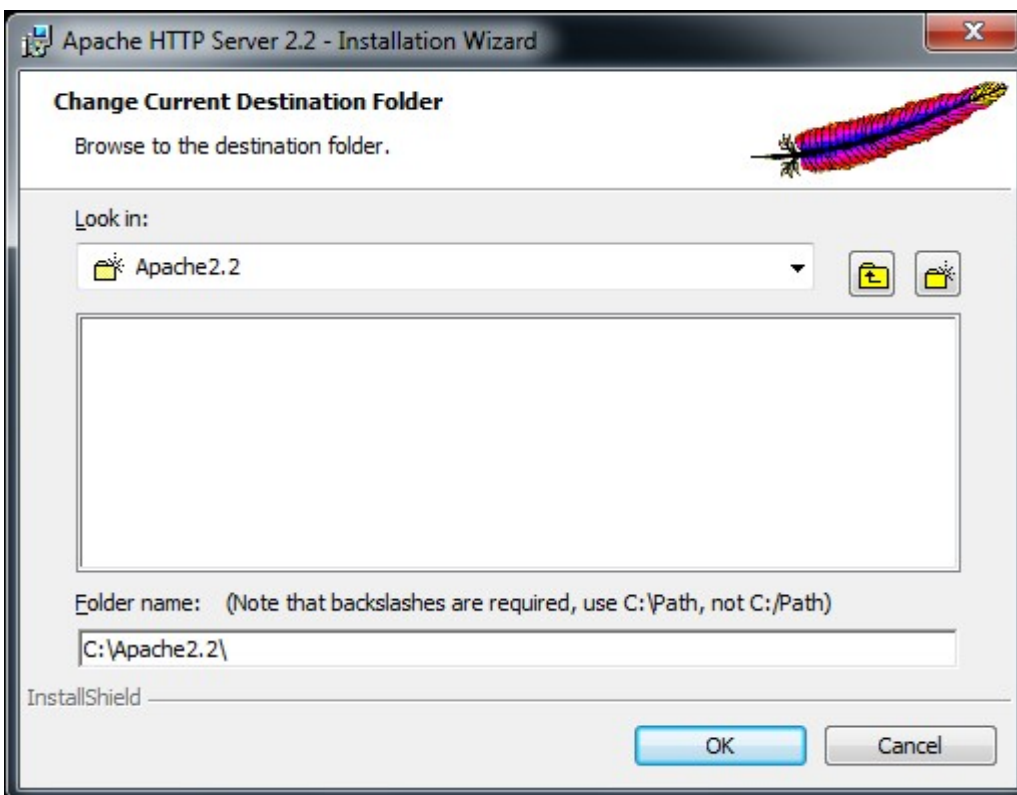
9. Select **Typical** installation and click **Next**.



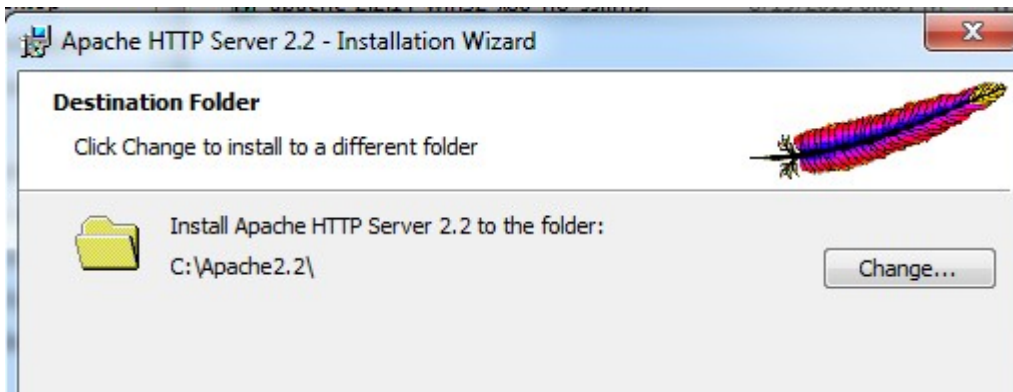
__10. Click the **Change** button to change the destination folder.



__11. Then change the **Folder name** to C:\Apache2.2\ and click **OK**.

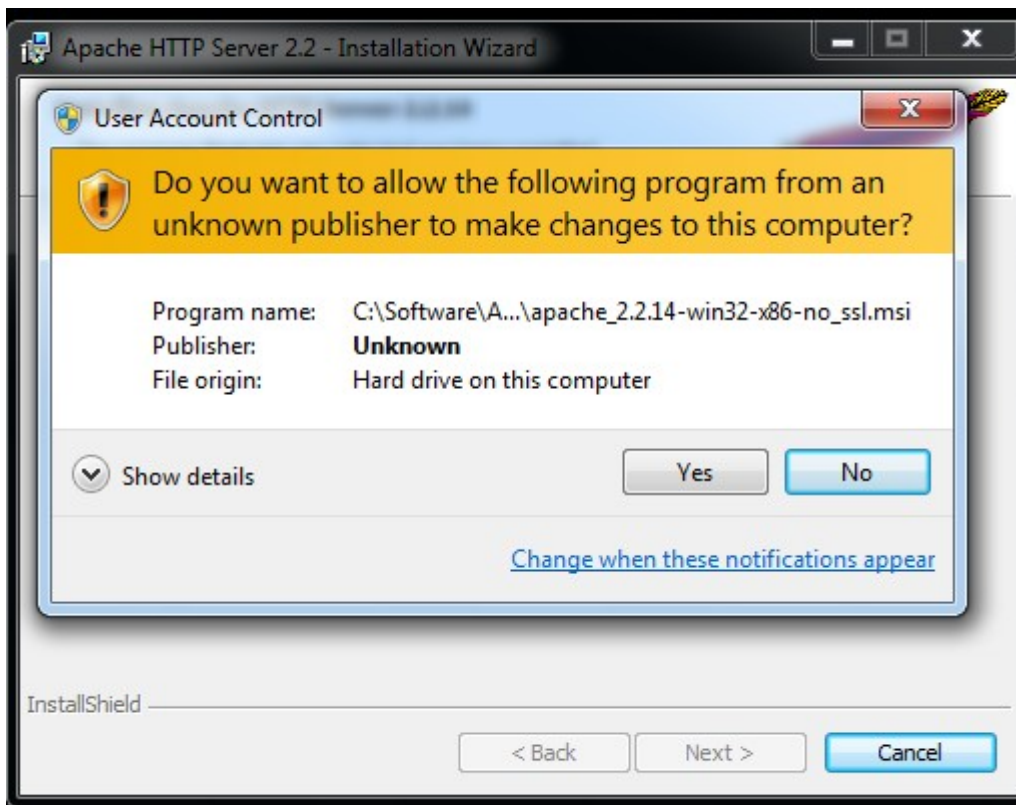


__12. Back in the *Destination Folder* page, confirm the new folder name (C:\Apache2.2\) and click **Next**.

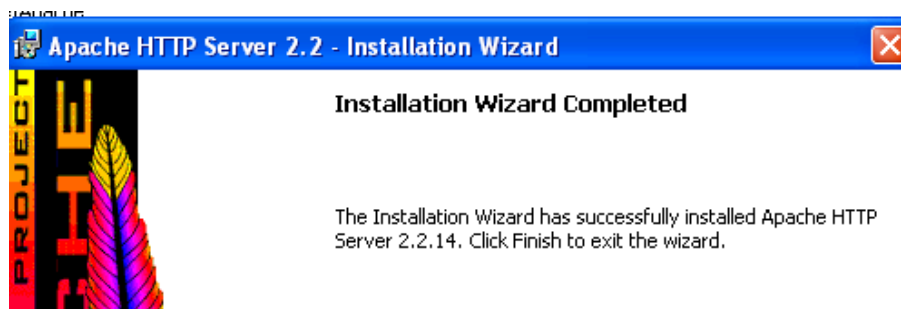


__13. Click **Install** to start the installation.

__14. If prompted by Windows security, click **Yes** to allow the installation to proceed.



__15. When the *Installation Wizard Completed* message appears, click **Finish**.



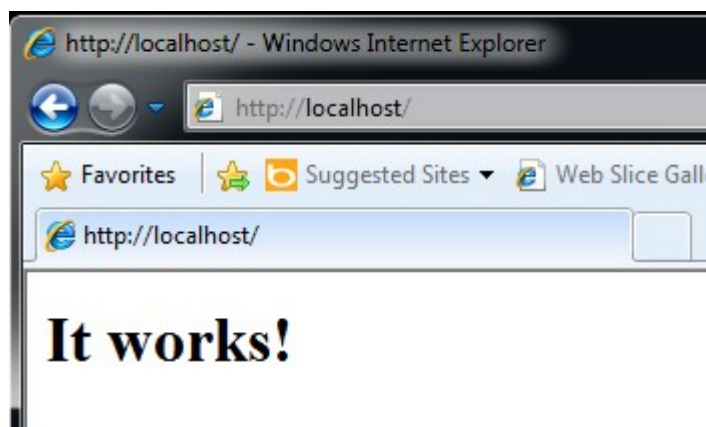
__16. Verify that the Apache Server is running on the task bar of Windows.



__17. Open a browser and type:

http://localhost

__18. Verify you see the message: **It works!**



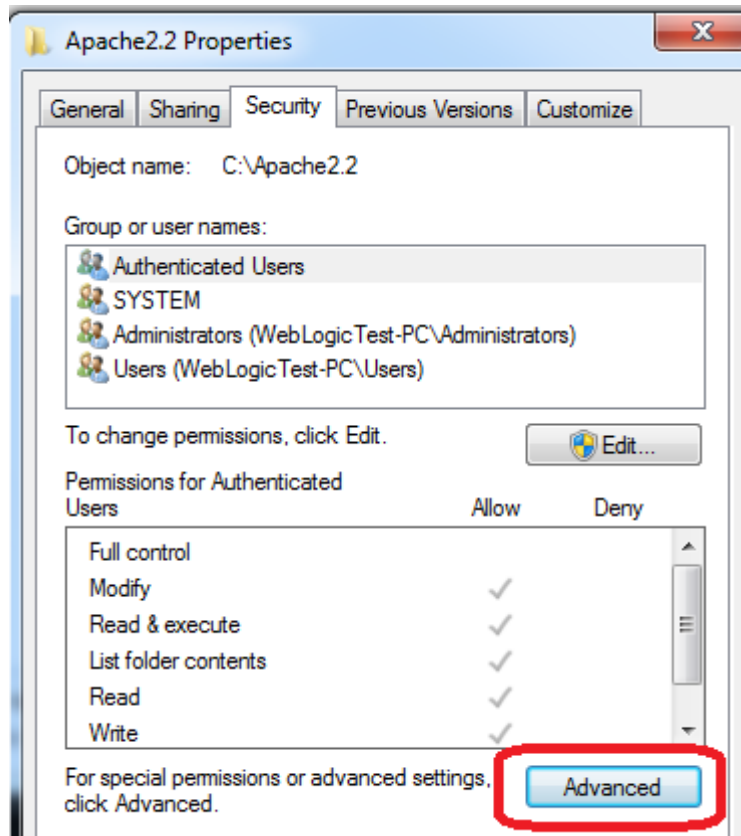
Apache HTTP Server 2.2.14 is installed.

Part 7 - Modify File Permissions (Windows Vista, Windows 7, or Windows Server 2008)

Note: If installing on Windows Vista, Windows 7, or Windows Server 2008, perform this section. Failure to follow these additional steps will lead to an unusable installation. These steps allow full access to the directories used by the Apache Web Server install. This is required so that students can write to the document root.

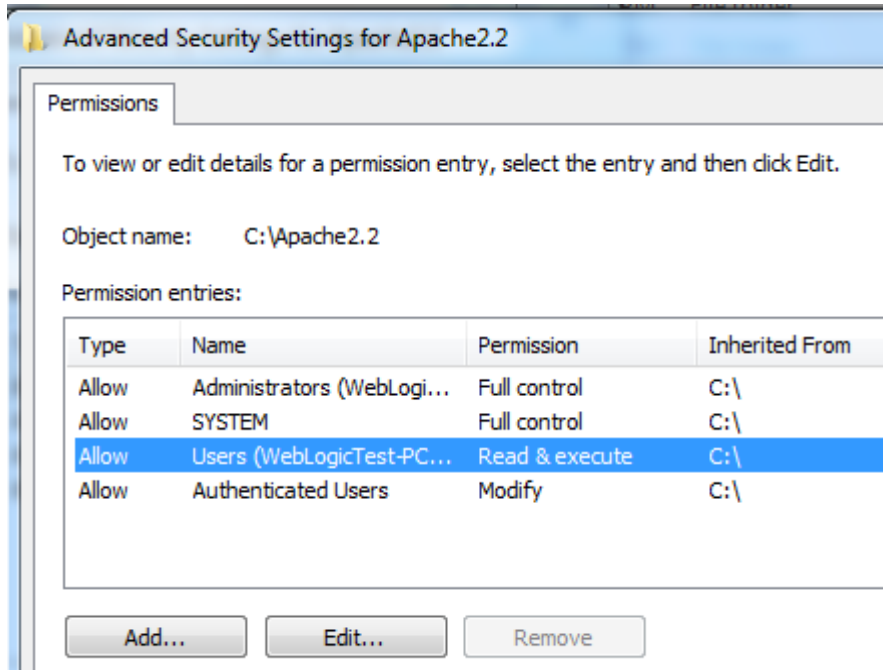
- __1. Open Windows Explorer.
- __2. Right click C:\Apache2.2 and select **Properties**.
- __3. Click the **Security** tab.

__4. Click **Advanced**.



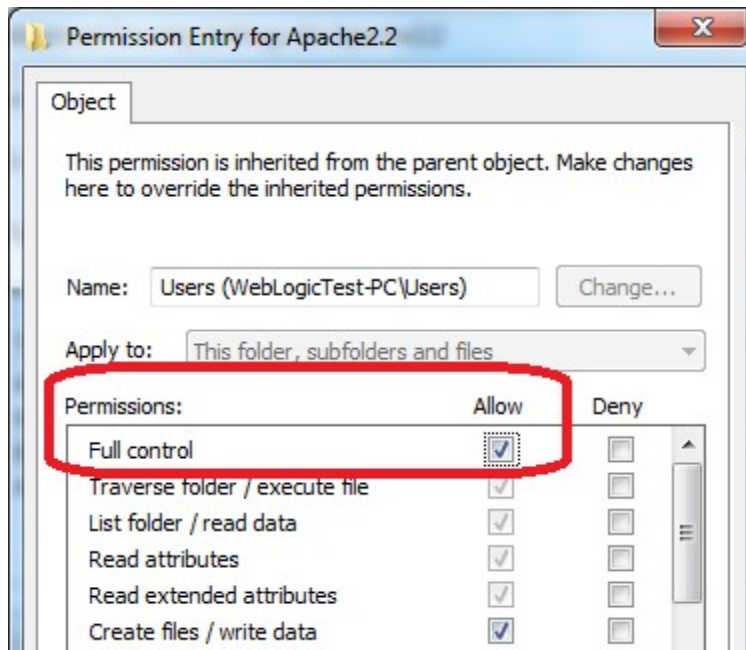
__5. Click **Change Permissions**.

__6. Select the **Users** entry (**add one if not present**).

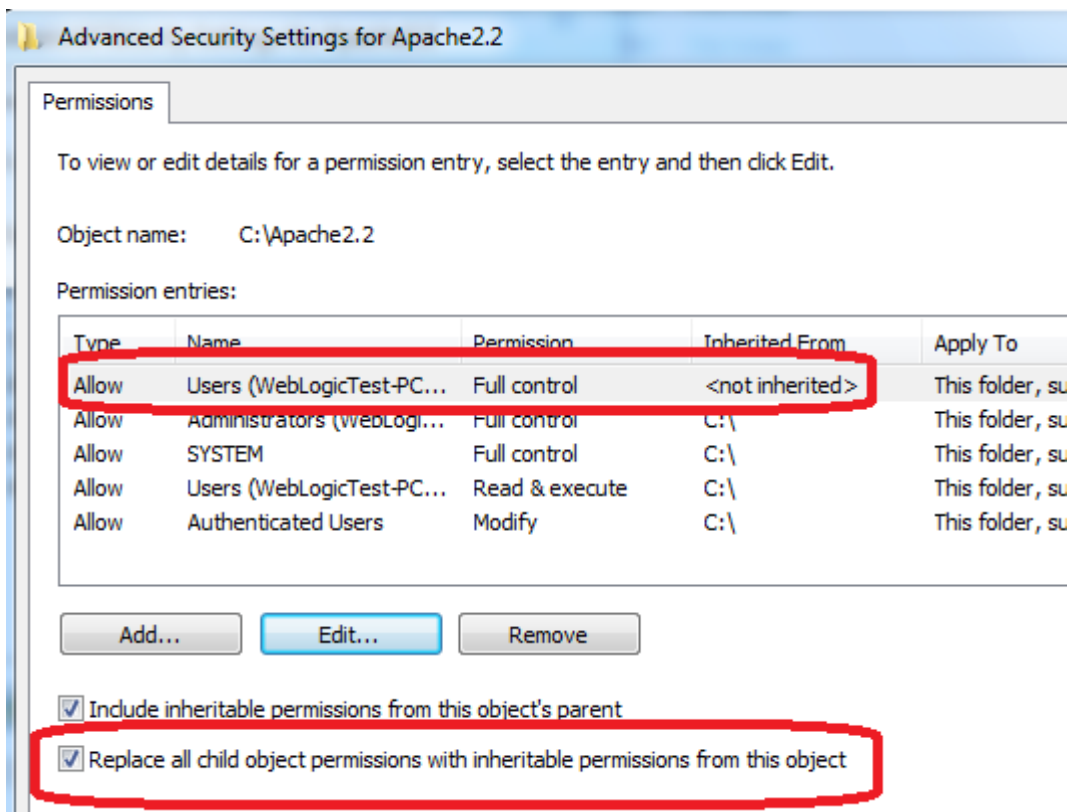


__7. Click **Edit...**

__8. Check the **Allow** checkbox to the right of **Full Control** and click **OK**.

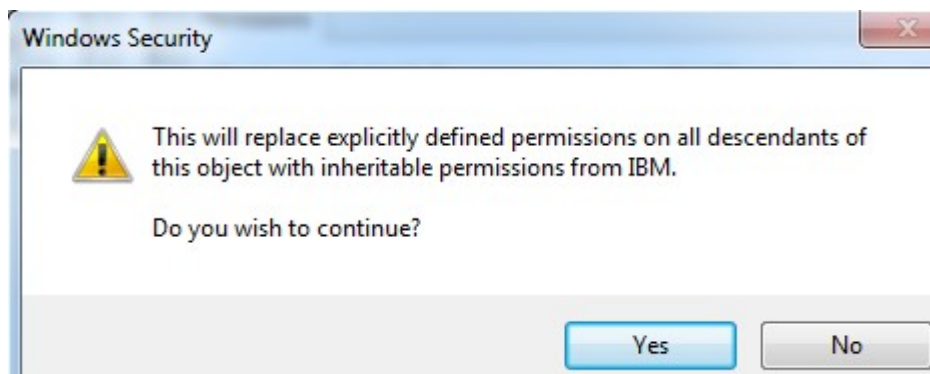


__9. Select the checkbox for **Replace all child permissions with inheritable permissions from this objects** and then click **OK**.

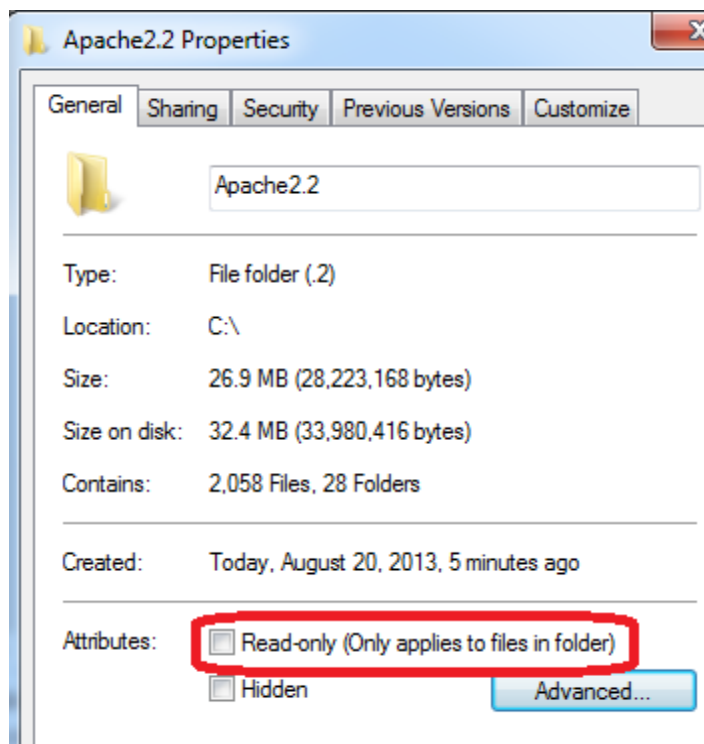


__10. Click **OK** to continue.

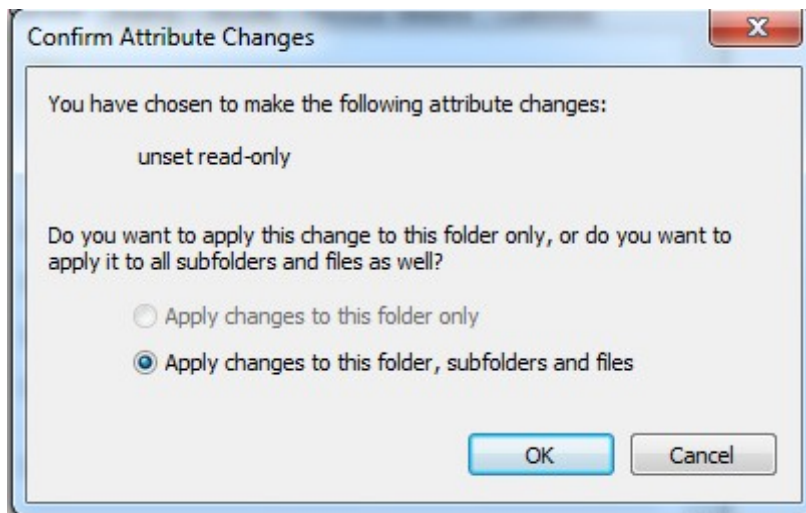
__11. A *Windows Security* dialog will open. Click **Yes**.



- __12. Wait until Windows finishes updating security.
- __13. Back in the *Advanced Security Settings* dialog, click **OK**.
- __14. Back in the *Apache2.2 Properties* dialog, click **OK**.
- __15. Right click C:**Apache2.2** and select **Properties**.
- __16. Uncheck the **Read-only** checkbox so files can be written to the directory.



- __17. Click **OK**.
- __18. In the *Confirm Attribute Changes* dialog, click **OK**, so the change will be applied to this folder, subfolder, and any files.



- __19. Restart the computer and log in with the user that the student will use to do the labs.
 - __20. Make sure the user has full access to the **C:\Apache2.2\conf** and **C:\Apache2.2\htdocs** folders.
- Congratulations, file permissions have been configured appropriately for the Apache Web Server.

Part 8 - Installing MySQL 5.5.9

__1. From C:\Software, launch **mysql-5.5.9-win32.msi**

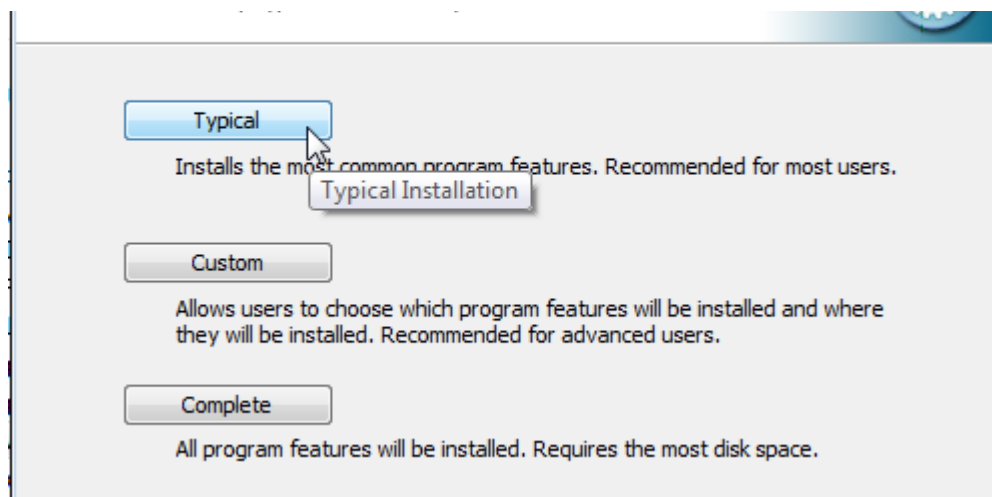
The **Setup Wizard** window will launch.



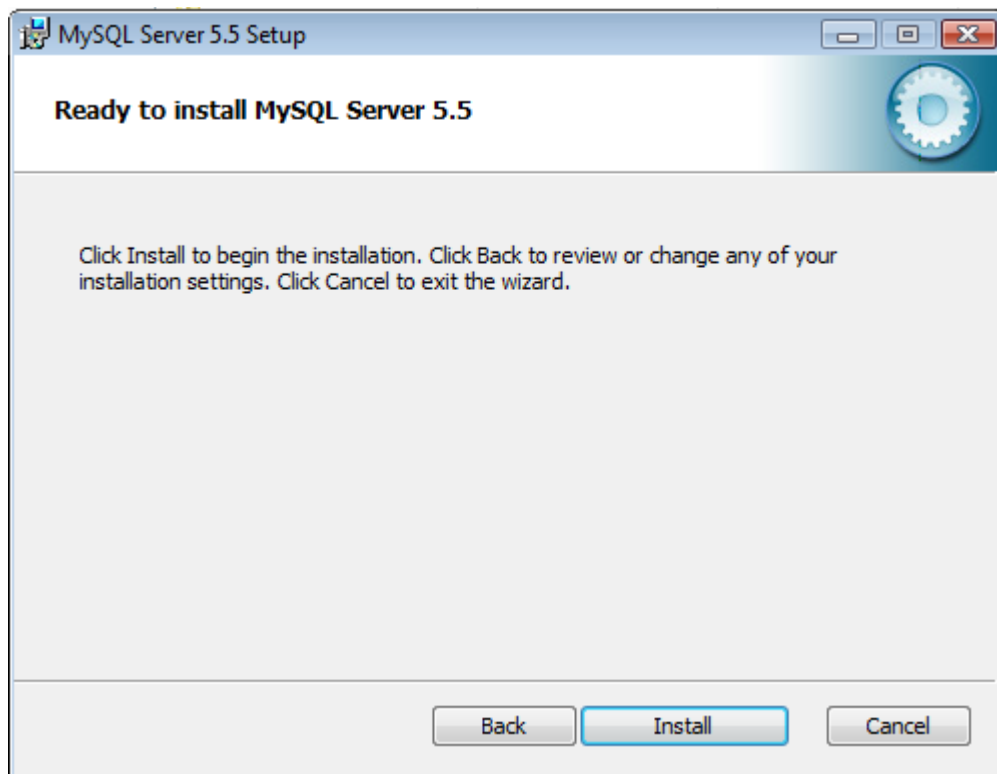
__2. Click **Next**.

__3. Accept the license and click the **Next** button.

__4. In the **Setup Type** window click the **Typical** button.



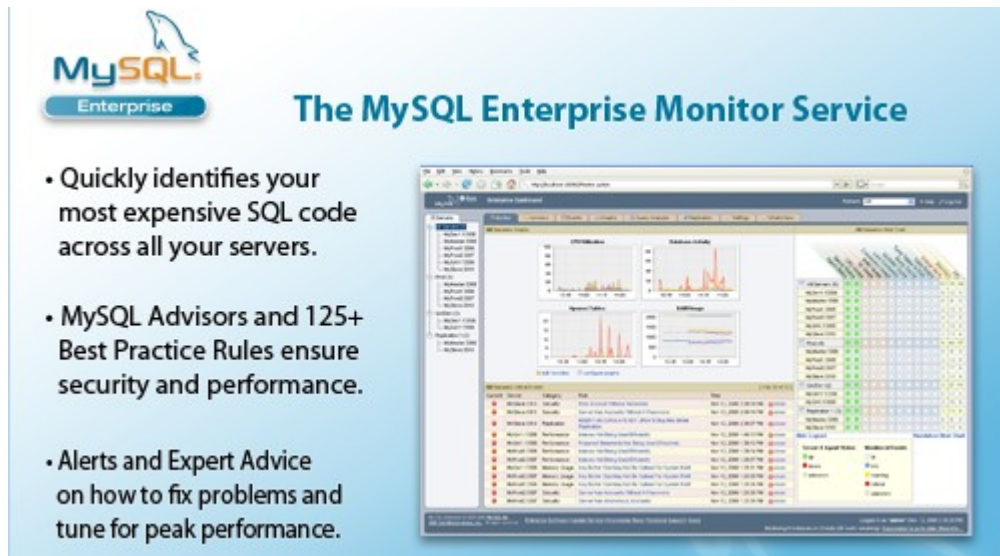
__5. Click **Install**. If prompted by Windows security allow the installation to continue.



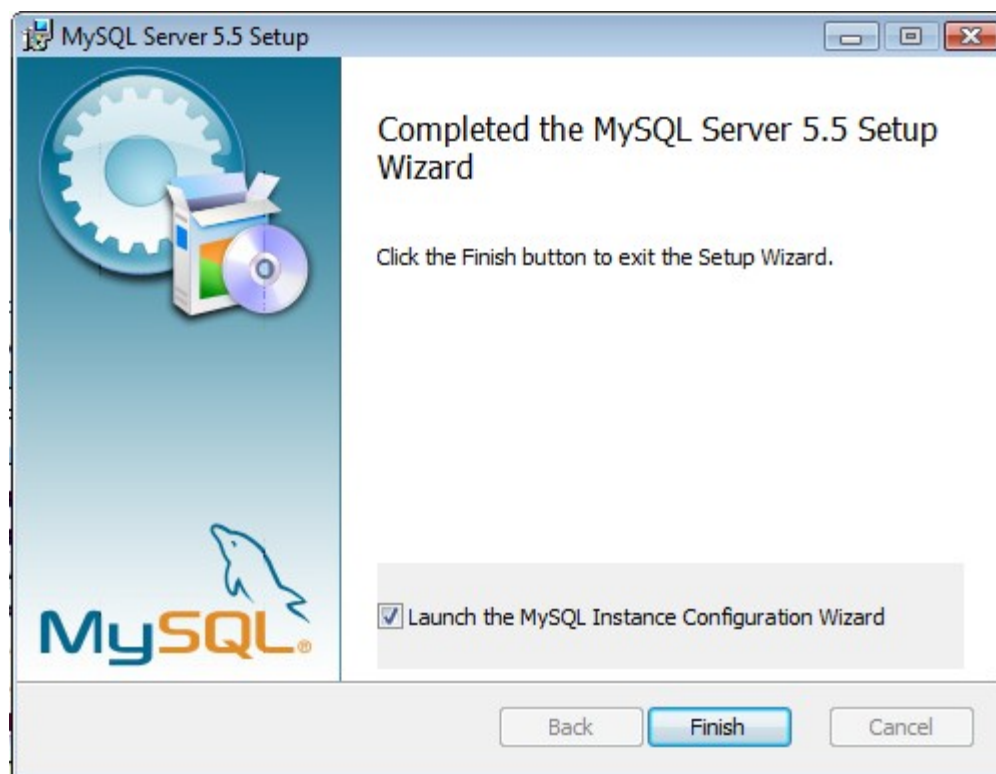
__6. The installation will start and the **MySQL Enterprise** window will appear. Click **Next**.



__7. The **MySQL Enterprise Monitor Service** window will appear. Click **Next**.

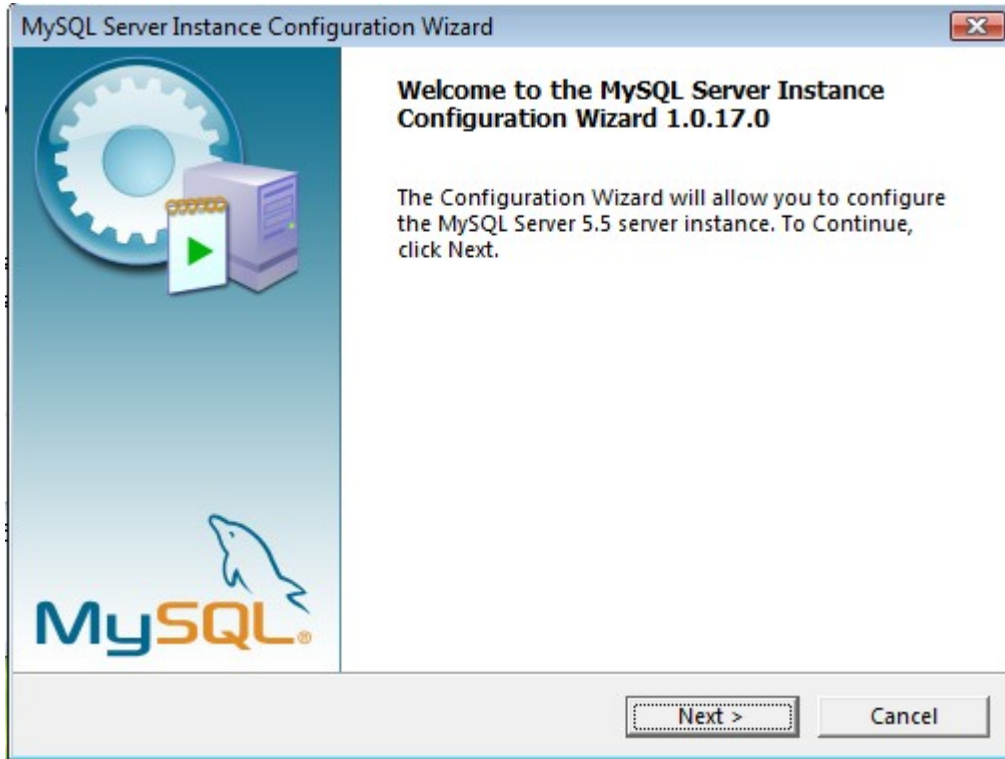


__8. The **Wizard Completed** window will appear. Make sure the **Launch the MySQL Instance Configuration Wizard** option is checked and click **Finish**. If prompted by Windows security allow the program to launch.

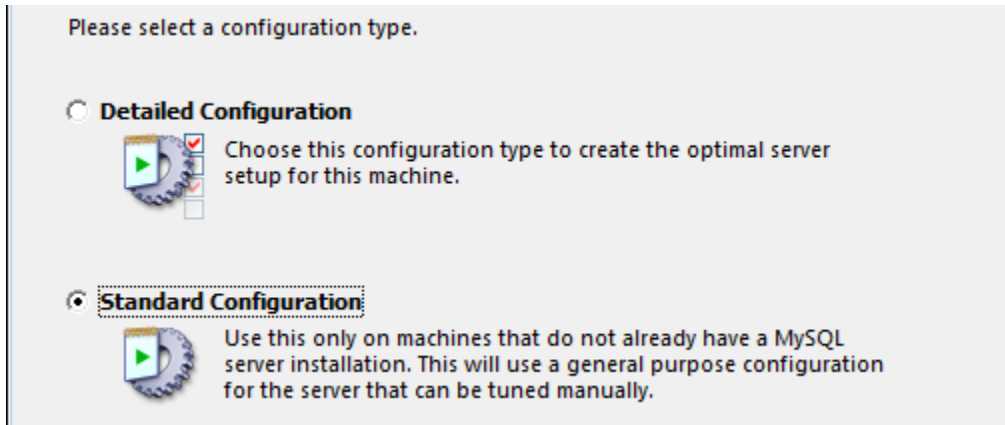


__9. The **MySQL Server Instance Configuration Wizard** window will appear. Click **Next**.

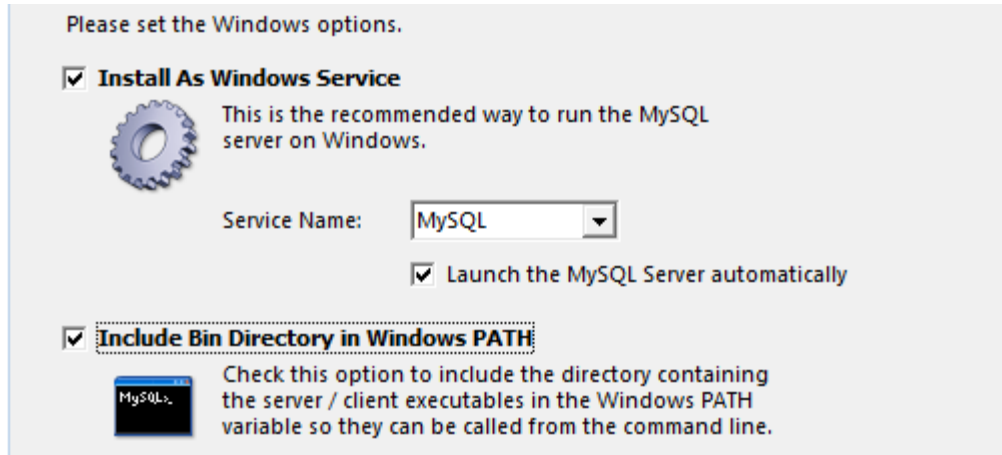
Note: If the wizard does not appear select **Start** → **Programs** → **MySQL** → **MySQL Server 5.5** → **MySQL Server Instance Config Wizard**. If prompted by Windows security allow the program to execute.




__10. In the Instance Configuration window, select **Standard Configuration**. Click **Next**.



__11. When presented with the **Windows options**, check the option for **Include Bin Directory in Windows PATH**. Click **Next**.




Please set the Windows options.

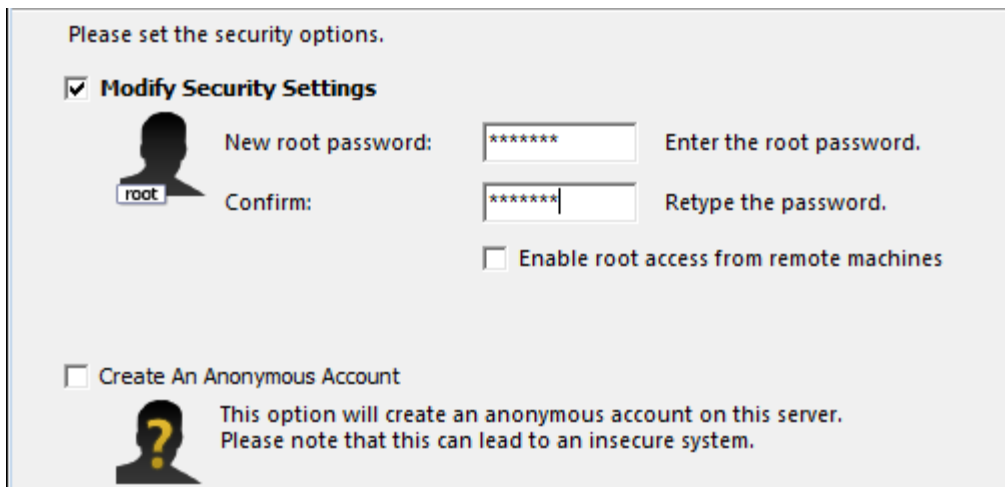
Install As Windows Service
 This is the recommended way to run the MySQL server on Windows.

Service Name:

Launch the MySQL Server automatically


Include Bin Directory in Windows PATH
 Check this option to include the directory containing the server / client executables in the Windows PATH variable so they can be called from the command line.

__12. The Security options window will appear. For the **New root password** and **Confirm** fields, enter **root123** and then click **Next**.




Please set the security options.

Modify Security Settings

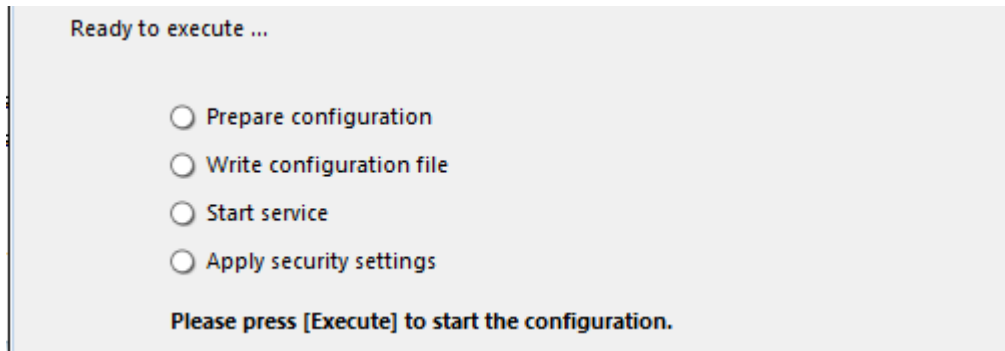
 New root password: Enter the root password.

Confirm: Retype the password.

Enable root access from remote machines

Create An Anonymous Account
 This option will create an anonymous account on this server. Please note that this can lead to an insecure system.

__13. The Ready to Execute window will appear. Click **Execute**.



Ready to execute ...

Prepare configuration

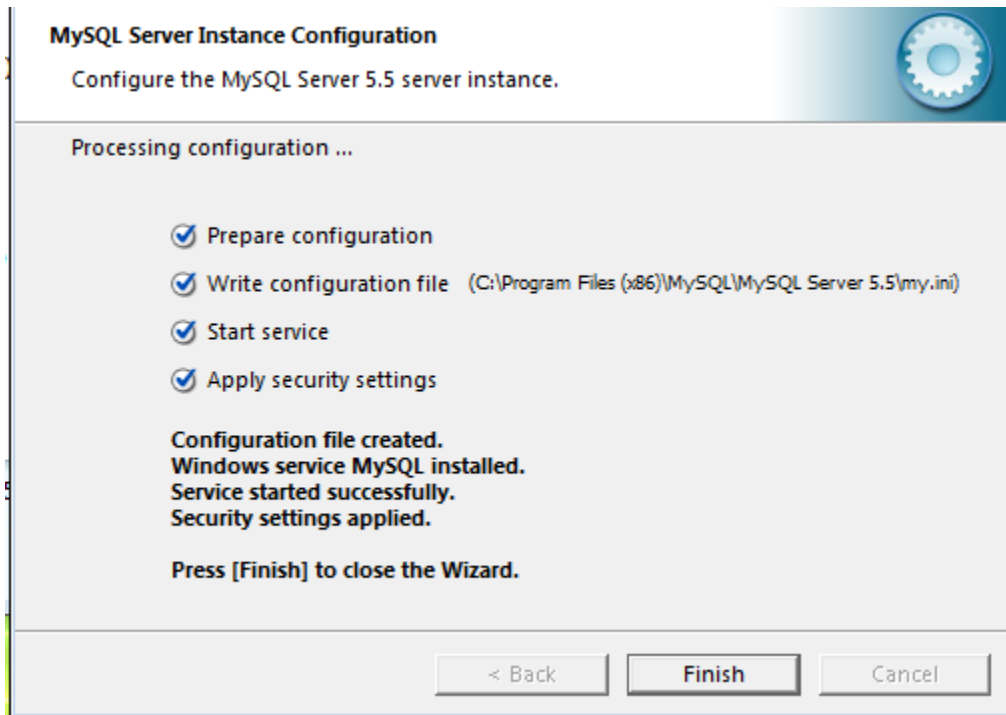
Write configuration file

Start service

Apply security settings

Please press [Execute] to start the configuration.

__14. The database will configure. This will take a moment. Eventually, you should see the following:



__15. Click **Finish**.

MySQL has been installed.

Congratulations. The installation of WA1694 JBoss Application Server v5.x Administration and Clustering on Windows has been completed.