JMC Next Generation Web-based Server Install and Setup

This document will discuss the process to install and setup a JMC Next Generation Web-based **Windows Server 2008 R2**. These instructions also work for **Windows Server 2012 and Above**. Windows Server 2012 and above will just look a little different.

Section 1 – Windows Server 2008 R2 Install and Setup

There are many websites that have very good instructions on installing and setting up a Windows 2008 server, so those details will not be in this document, but we will give some tips as you go through it. Below are three links that will help you with that process.

Windows Server 2008 R2 Installation

http://www.petri.co.il/how-to-install-windows-server-2008-step-by-step.htm

Windows Server 2008 R2 Initial Configuration

http://technet.microsoft.com/en-us/library/cc755215.aspx

Our first suggestion is that you get your forward and reverse DNS entries done for this server, both inside and outside DNS, before you start the install process. Make sure you then test the forward and reverse DNS to verify they are working properly. Outside DNS can take some time to propagate out to the internet, so keep that in mind.

Our second suggestion is that you find out the network card that is in your server, and make sure you have the driver for it. You may have to install it after installing Windows 2008 Server.

For the above instruction websites, we would suggest you go to each one, and save each as a pdf file, just in case the websites change, or you don't have access to the internet.

Also, make sure you are logged in as administrator to configure the server.

Windows Server 2008 R2 Installation

The Windows Server 2008 R2 Installation website is very comprehensive, so you should be able to follow easily to get Windows Server 2008 installed. You will then move on to the Windows Server 2008 R2 Initial Configuration Part 1 website and begin the configuration process.

Windows Server 2008 R2 Initial Configuration

The Windows Server 2008 R2 Initial Configuration website is very good also, but there are some tips we would suggest as you go through it.

First when you get to the section on **Configure Networking**, make sure you give the server a static IP. Don't leave the setting at DHCP like it suggests you can do.

Also, in the section where you put in the IP address information for the server, make sure you fully fill in the **IP address**, **Subnet mask**, **Default gateway**, and the **DNS** info below that. The picture only shows partial info.

In the first section on **Update This Server**, we would suggest you set the server to **Never check for updates**. We recommend you do this because if your server is working the way it is supposed to, leave it alone and don't update it. You will want to run Windows Update and fully update the server before putting it into production, though. That way, it has all the current updates before implementing. You don't need to do all the updates yet. We would suggest you wait until you install the other things described below, and then do all the updates at the end.

In the next section on **Customize This Server**, you will start with **Add Roles**. The only role you need to add is **Web Server (IIS)** to run JMC Next Gen. If you want to run other roles also on this server, just check those boxes also. As you go through adding the Web Server role, you will check the box in front of **Web Server (IIS)**, and hit the **Next** button twice. You will then be at the **Role Services** window, and the only one you need to add is **ASP.net**, and when you go to the next screen, you will click on the **Add Required Role Services** button, and then the **Next** button, and then the **Install** button. Lastly, **Close**.

In the **Add Features** section, you will need to add the **.NET Framework 3.5.1 Features** at the top, and then the **Add Required Features** button when it pops up. Then check the **Desktop Experience** a little farther down, and then the **Add Required Features** button when it pops up. Then hit **Next** and **Install**. Then **Close** and **Yes** to restart. After it restarts and does some configuring, click on **Close**, and then restart again.

After the second restart, close the window again, and go down to **Start** and up and over to **Administrative Tools**, and then up to **Server Manager**. Click on **Web Server (IIS)** to the right, and then scroll down to the **Role Services** section. To the right, click on **Add Role Services**, and at the next screen, check the box in front of **HTTP Redirection**, and click on **Next**. Just follow the instructions, and when you are done, restart.

In the **Remote Desktop** section, it will be up to you to decide if you want to manage the server remotely. If so, please choose the very bottom selection **Allow connections only from computers running Remote Desktop with Network Level Authentication (more secure)**.

In the last section on **Configure Windows Firewall**, we would suggest you turn the firewall off until the server is totally configured. This will help you get things configured with fewer issues. Once it is done, you will want turn it back on.

You are now at a point where you should go into **Control Panel:Windows Update**, and fully update the server to the newest of everything. This may take a couple of updates and restarts, so it may take a while.

Windows 2012 Server and Above Setup

After you get the server installed and are ready to setup, you go to **Server Manager** in the dock. Then click on **Add Roles and Features**. Hit **Next** twice and then choose the server at the bottom and hit **Next**.

In the **Web Server (IIS)** section, click on the arrow to the left, and then the arrow to the left of **Web Server.**

Choose all **Common HTTP Features**. In **Health and Diagnostics**, choose **HTTP Logging, Logging Tools, Request Monitor and Tracing.** In **Performace**, choose **Static Content Compression**. In **Security**, choose **Request Filtering** and **Windows Authentication**. In **Application Development**, choose **.NET Extensibility 3.5** and **4.5, ASP.net 3.5** and **4.5, ISAPI Extensions and Filters**.

In **Management Tools**, choose **IIS Management Console** and **IIS Management Scripts & Tools**.

Then click on **Next**, and you will go to **Features**. In **.NET Framework 3.5 Features**, choose **.NET Framework 3.5** and **HTTP Activation**. In **.NET Framework 4.5 Features**, choose **.NET Framework 4.5** and **ASP.net 4.5**.

Click **Next**, then **Install** and Restart if needed.

As you go through this document and see where it tells you to to go to the **Start** menu and over to **Administrative Tools**, that is only for **Windows Server 2008**. For **Windows Server 2012**, and above, you will just go to the **Server Manager** app in the dock, and you will find these same apps in the pull-down menus there.

More Suggestions

We have some more suggestions that are more personal preference, so you can take them or leave them.

The first is to go into Internet Explorer, and disable **Protected Mode**. Do this by going to **Tools:Internet Options:Security**, and uncheck the box in front of **Enable Protected Mode** for all 4 zones you see. This will allow you to do things you need to do with fewer issues. You can turn it back on and adjust it when the server is configured.

While you are there, also enable **Java Scripting** in **Tools:Internet Options:Security**. Make sure you are in the **Internet** zone up above, click on the **Custom Level** button, and then scroll down until you see the **Scripting** section. Select the **Enable** radio button for **Active Scripting**. Then scroll up until you see the section on **Downloads**, and **Enable** the section named **File download**. Then click on **OK**, and then **Yes**, if it asks. I also had to go into the **Restricted** and **Trusted** zones, and make sure **Active Scripting** and **Downloads** are **Enabled** for **File download**. It will still ask you to add it to the trusted list, but it then allowed me to download stuff when that was set.

We would also suggest that you download either Firefox or Chrome to do your Internet work. They seem to allow you to do things without jumping through all the hoops.

Section 2 – Creating Local webjmc User On the Server and Setting Privileges

We now need to create a local user on the server named **webjmc** which will run the JMC Web application we will install later. Make sure to create this user as a local user no matter if this server will be part of a domain or not.

First, go to the **Start** menu, and up and over to **Administrative Tools**, and then choose **Server Manager**. Then click on the **+** next to **Configuration**, and the **+** next to **Local Users and Groups**. Then highlight the **Users** folder.
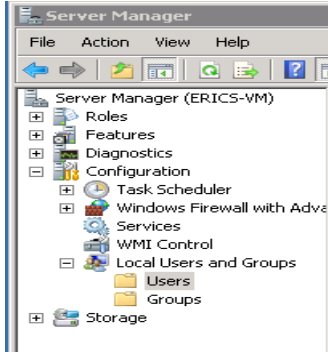
Now go up to the **Action** menu at the top, and choose **New User...** and fill in as you see below. Make sure you use a good, secure password, and then click **Create**. Whatever password you use here, we would suggest you use this same password later on for the **webjmc** user you will create in **MySQL Workbench**. Then you only have to remember one password.
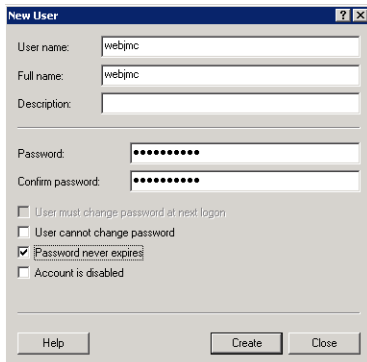
Now **right-click** on the **webjmc** user in the middle section and go down to **Properties**. At the next screen, click on the **Member Of** tab at the top, and then **Add…** towards the bottom.
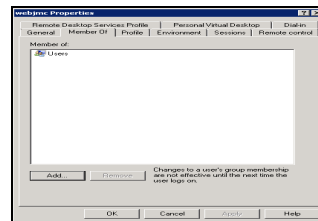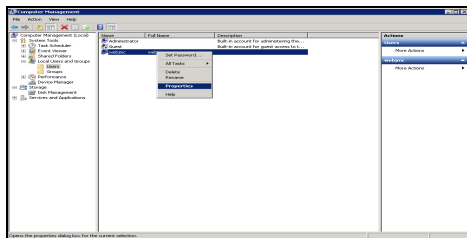
At this screen, type in **Administrators** in the bottom field, and click on **OK**. You are now back to the previous screen, and **Administrators** is now in the Member of field, so click on **Apply**, and then on **OK**.
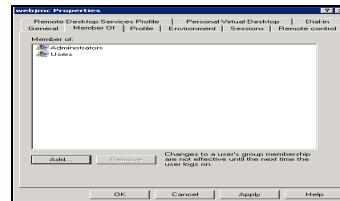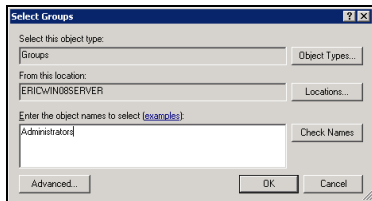
That's it. The **webjmc** user is now part of the Administrators group, so you can get out of **Server Manager** by clicking on the X in the upper right corner.

Section 3 – Downloading MySQL Server and Accessories

Now that you have the Windows 2008 server set up, we now need to download and install MySQL server and some accessories to go with it. The four items we are going to download and install are **MySQL Community Server with MySQL Workbench**, **Microsoft .NET Framework4 Client Profile**, and **Microsoft Visual C++ 2010 Redistributable Package (x86)**.

Here is the link to the **5.7.21** version of **MySQL Community Server**. It also has the **6.x** version of **MySQL Workbench** with it.

https://dev.mysql.com/downloads/file/?id=474803

Now let's download the **Microsoft .NET Framework4 Client Profile**. In your browser, let's go to

http://www.microsoft.com/download/en/details.aspx?displaylang=en&id=17113

Then click on the **Download** button.

At the next screen, don't choose anything. Just click **Next**. You are now at a **Save** window where you can choose where to save the download, so do that.

The last thing to download is **Microsoft Visual C++ 2010 Redistributable Package (x86)**, so in your browser, let's go to

http://www.microsoft.com/download/en/details.aspx?id=5555

Then click on the **Download** button.

At the next screen, don't choose anything. Just click **Next**. You are now at a **Save** window where you can choose where to save the download, so do that. Now, either minimize your browser, or close out of it.

Section 4 – Installing MySQL Server and Accessories

Now that you have downloaded the MySQL Server and accessories, we need to install them.

First, let's install **Microsoft .NET Framework4 Client Profile**, so navigate to where you downloaded it, and double-click on the installer, and at the first screen click **Run**.

At the next screen, check the box and accept the terms and conditions, and click on **Install**. You may get a **Repair** choice at this point instead of an **Install** choice, so choose **Repair** and then **Restart** when it is done. If you do get the **Install** choice, it will go through the install process, and when it is finished, click **Finish**.
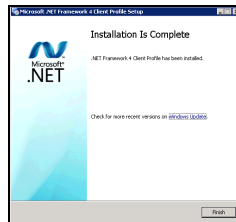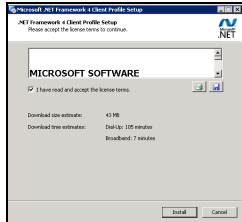
Now, let's install **Microsoft Visual C++ 2010 Redistributable Package (x86)**. Again, navigate to where you downloaded the installer, and double-click on it. At the first screen, click on **Run**.

At the next screen, check the box and accept the terms and conditions, and click on **Install**.

It will go through the install process, and when it is finished, click **Finish**.
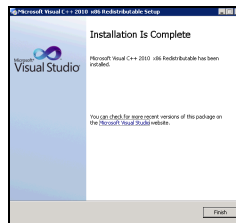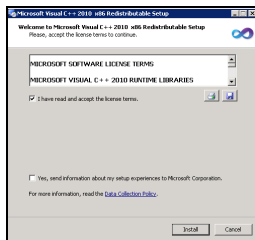
Now, let's install **MySQL Community Server**. Navigate to wherever you downloaded the MySQL Server installer, and double-click on it. At the first screen, click on **Next**. At the next screen, accept the license agreement, and click on **Next**.
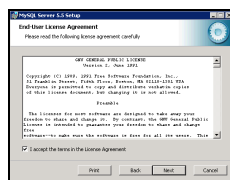

Choose **Typical** and then **Install**. When it is done, click on **Next** and then **Next** again, and **Finish**.
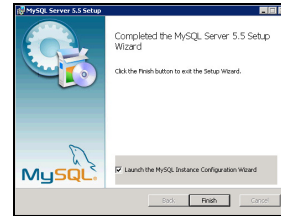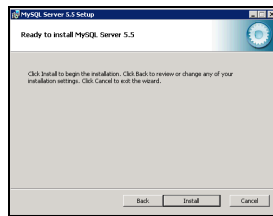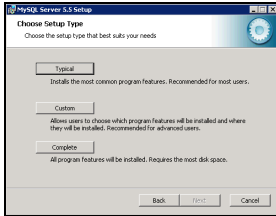
This launches the next phase of installation, so at the first screen, click on **Next**. Then choose **Detailed Configuration** and **Next**. Choose **Server Machine** and **Next**. Choose **Transactional Database Only** and **Next**.
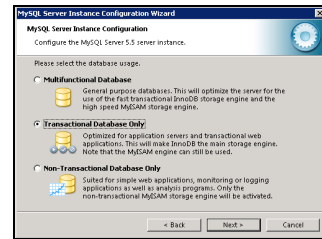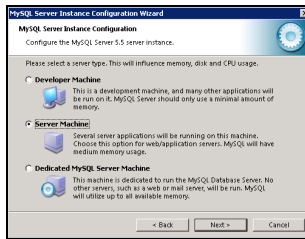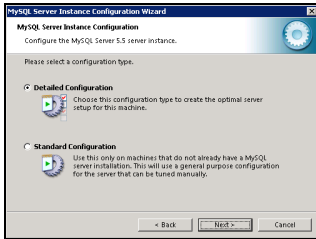
Don't change anything on the next screen. Just click on **Next**. Choose **Online Transaction Processing (OLTP)** and **Next.** Don't change anything on the next screen. Just click on **Next**.
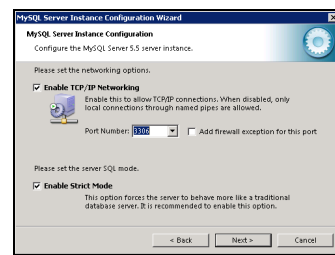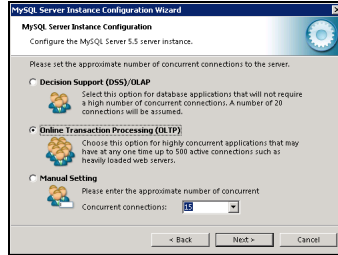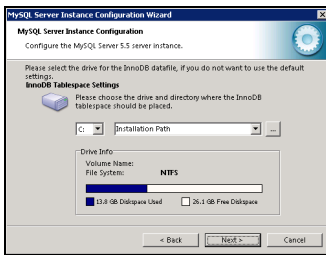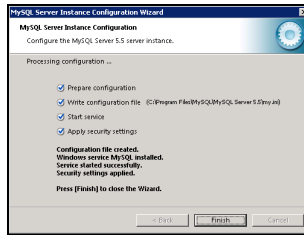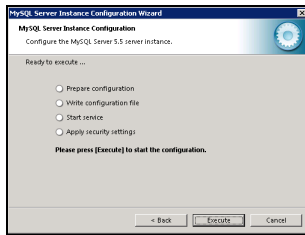

Don't change anything on the next screen. Just click on **Next**. Make sure **Install as Windows Service** is checked, and then click on **Next**. Put in a good, secure password and confirm it, and then click on **Next**. This is the root password for the MySQL Server, so make sure you write down this password for later use.
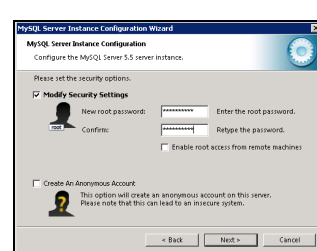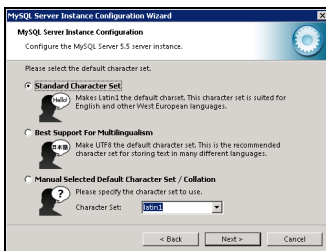
Click on **Execute**. If the process seems to stall at the **Start service** process, click on the X in the upper right corner, and it should move forward.

At the last screen, click on **Finish**.

Now, let's install the **MySQL Workbench**. Navigate to where you downloaded the installer, and double-click on it. At the first screen, click on **Next**. At the next screen, don't change anything. Just click on **Next**.

At the next screen, choose **Complete** and **Next**. At the next screen, click on **Install**.
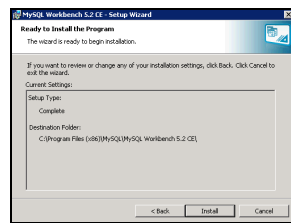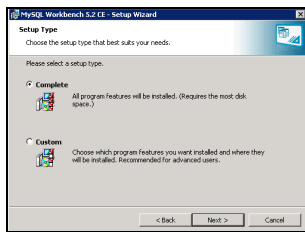
At the last screen, **uncheck** the box in front of **Launch MySQL Workbench now**, and then click **Finish**. We need to install **JMC Web** before we run and configure MySQL Workbench.
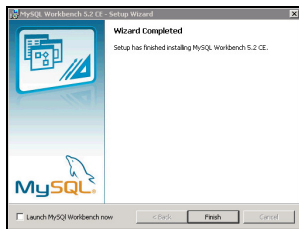
You are now done doing everything you can do until you get your data back from JMC to import into your JMC Web server. Once you have your data back, you can go to the next set of instructions entitled **JMCWebServerInstall**. You can, however, read through those instructions to get an idea of how things are going to go. They are posted on the JMC documentation site at http://jmcinc.com/resources/documentation in the **Instructional** tab to the right.