PRE-INSTALLATION

Microsoft has a freely available version of SQL server called: Microsoft[®] SQL Server[®] 2008 R2 SP2 - Express Edition which can be downloaded from the link below

http://www.microsoft.com/en-us/download/

Microsoft® SQL Server® 2008 R2 SP2 - Express Edition

Release Date: 7/25/2012

Choose the appropriate 32 or 64 bit installer.

INSTALLATION

Double Click the install file that you have downloaded.

This will extract the required install files and present the following SQL Server Installation Center menu . For this procedure we are going to create a new SQL Server installation, so we will choose the top option, New installation or add features to an existing installation.

1 SQL Server Installation Center	
Planning Installation Maintenance Tools Resources	New installation or add features to an existing installation. Launch a wizard to install SQL Server 2008 R2 in a non-clustered environment or to add features to an existing SQL Server 2008 R2 instance. Upgrade from SQL Server 2000, SQL Server 2005 or SQL Server 2008 Launch a wizard to upgrade SQL Server 2000, SQL Server 2005 or SQL Server 2008 to SQL Server 2008 R2.
Advanced Options	Search for product updates Search Microsoft Update for SQL Server 2008 R2 product updates.
SQL Server 2008 R2	

You will see the following screen now and at various points during the install, this is just telling you that the install is proceeding.

SQL Server 2008 R2
Please wait while SQL Server 2008 R2 Setup processes the current operation.

At this point you may be presented with a 'Rules Check' screen. If all of the Installation rules have been passed the installation will automatically proceed to the next stage, Licence Terms. If any of the rules fail, then you may have to take remedial action, see Microsoft website http://msdn.microsoft.com/en-us/library/cc646015.aspx

Next, you will be presented with the Licence Terms dialog box. Assuming that you accept the licence terms, click the 'I accept' tick box. You also have the option of sending usage data to Microsoft. Click Next to continue.

📸 SQL Server 2008 R2 Setup	
License Terms To install SQL Server 2008 R2, yo	u must accept the Microsoft Software License Terms.
License Terms Setup Support Files	MICROSOFT SOFTWARE LICENSE TERMS MICROSOFT SQL SERVER 2008 R2 EXPRESS WITH TOOLS MICROSOFT SQL SERVER 2008 R2 EXPRESS WITH ADVANCED SERVICES These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft • updates, • supplements, • Internet-based services, and
	✓ I accept the license terms. □ Send feature usage data to Microsoft. Feature usage data includes information about your hardware configuration and how you use SQL Server and its components. See the SQL Server 2008 R2 Privacy Statement for more information. < Back Next >

You will be presented with the Feature Selection dialog next. It is recommended that you install all of the features available in the Feature Selection screen. Select All and then the Next button to continue the install.

MS SQL SERVER 2008 R2 Installation

📸 SQL Server 2008 R2 Setup	distant in the		
Feature Selection Select the Express with Advanced	Services features to install.		
Setup Support Rules Feature Selection Installation Rules Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Error Reporting Installation Configuration Rules Installation Progress Complete	Eeatures: Instance Features Instance Features I	n ic	Description: Server features are instance-aware and have their own registry hives. They support multiple instances on a computer.
	Select <u>A</u> II <u>Unselect AII</u> Shared feature directory: Shared feature directory (<u>x</u> 86):	C:\Program Files\Microsoft Si C:\Program Files (x86)\Micros	
	L	< <u>B</u> ack <u>N</u> ext	> Cancel Help

The next screen is the Instance Configuration dialog , where you can choose the name of your SQL Instance. We recommend keeping the default instance name of SQLEXPRESS .

Then click the Next button to continue.

🍀 SQL Server 2008 R2 Setup					<u>_</u> _×
Instance Configuration Specify the name and instance ID for	or the instance of SQL Serv	ver. Instance ID becom	es part of the installat	ion path.	
Setup Support Rules Feature Selection Installation Rules Instance Configuration Dick Space Requirements Server Configuration Database Engine Configuration Error Reporting Installation Configuration Rules Installation Progress	© Default instance © Named instance: Instance ID: Instance root directory: SQL Server directory: Installed instances:		S	SQL10_50.Lucid5QL	
Complete	Instance Name	Instance ID	Features	Edition	Version
			< <u>B</u> ack	Next > Canc	el Help

Next is the Server Configuration screen.

📸 SQL Server 2008 R2 Setup			-	
Server Configuration				
Specify the service accounts and co	llation configuration.			
Setup Support Rules	Service Accounts Collation			
Feature Selection Installation Rules	Microsoft recommends that yo	u use a separate account for each SQL Se	erver service.	
Instance Configuration	Service	Account Name	Password	Startup Type
Disk Space Requirements	SQL Server Database Engine	NT AUTHORITY\NETWORK SERVICE		Automatic 💌
Server Configuration	SQL Server Browser	NT AUTHORITY\LOCAL SERVICE		Automatic 💌
Database Engine Configuration				
Error Reporting		Use the same acco	ount for all SC) Server services
Installation Configuration Rules				
Installation Progress				
Complete				
		< <u>B</u> ack <u>N</u> ext >	Cancel	Help

There are two services required by SQL Server to run on your server. The first of these is called SQL Server Database Engine, which, by default, is set up to run on the Account: NT AUTHORITY\NETWORK SERVICE. The second service is the SQL Server Browser. This service communicates across the network to let other computers know that the SQL Server instance is up and running. This runs under the Local Service account by default.

The SQL Server Browser Service Startup Type is disabled by default, change this to Automatic.

The next stage is Database Engine Configuration where you can choose the Authentication Mode for SQL Server users.

1 SQL Server 2008 R2 Setup			
Database Engine Configu Specify Database Engine authentic	ation security mode, administr	rators and data directories. ta Directories FILESTREAM	
Feature Selection Installation Rules Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Error Reporting Installation Configuration Rules Installation Progress Complete	Specify the authenticatio Authentication Mode — <u>W</u> indows authentication <u>M</u> ixed Mode (SQL Sensitive Specify the password for <u>Enter password</u> :	ntication mode and administrators for the Database Engine. bde	
	DOMAIMADMINISTRATOR Add <u>C</u> urrent User	<u>A</u> dd <u>R</u> emove < <u>B</u> ack <u>N</u> ext >	SQL Server administrators have unrestricted access to the Database Engine.

Mixed Mode, so it is important to click on the radio button adjacent to this option (see Figure 8). To complete this panel, please choose a strong password for the System administrator (sa) account for this SQL Server and enter it on the screen. This password you've just created will be needed again later to properly setup or restore databases.

If you now want to add other users to the list of System administrators you can do this on the same screen .

Click Next to continue.

At the next screen Error Reporting you can learn more about how you can maintain and update your SQL Server in the future. There is also a tick box which will allow you to send Windows and SQL Server error reports to Microsoft.



Click Next to continue.

The installation will now copy and install various files. You will be presented with the Installation Progress screen.



You will then be	presented with the Installation Complete windo	ow.
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📸 SQL Server 2008 R2 Setup		x
Complete Your SQL Server 2008 R2 installa	tion completed successfully.	
Setup Support Rules Feature Selection Installation Rules Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Error Reporting Installation Configuration Rules Installation Progress Complete	Summary log file has been saved to the following location: <u>C:\Program Files\Microsoft SQL Server\100\Setup Bootstrap\Log\20110823 154030</u> <u>\Summary frodowin764 20110823 154030.bt</u> <u>Information about the Setup operation or possible next steps:</u> Vour SQL Server 2008 R2 installation completed successfully.	
	<u>Supplemental Information:</u> The following notes apply to this release of SQL Server only. Microsoft Update For information about how to use Microsoft Update to identify updates for SQL Server 2008 R2, see the Microsoft Update Web site at <u>http://go.microsoft.com/fwlink/?LinkId=108409</u> . Samples	4 III >
	Close Help	

You are now at the end of the installation. In the figure you can see there is a web link to useful information for Updates. The base install of SQL Server is now complete, so you can click on the Close button.

CONFIGURING THE DATABASE ENGINE SQL Server Configuration Manager

This tool is installed onto the computer's All Programs menu and is used to enable SQL services and protocols. Find it from the Programs listing under the group called Microsoft SQL Server 2008 R2.



Having launched the tool you will see the two services: SQL Server and SQL Server Browser need to be enabled and to be running.

Sql Server Configuration Manager				State of Sta		
File Action View Help						
🗢 🔿 🖄 🙆 🔒						
SQL Server Configuration Manager (Local)	Name	State	Start Mode	Log On As	Process ID	Service Type
SQL Server Services	SQL Server (SQLEXPRESS)	Running	Automatic	NT AUTHORITY\NETWORKSERVICE	1440	SQL Server
 ↓ SQL Server Network Configuration (32bit) ▶ ⊕ SQL Native Client 10.0 Configuration (32bit) 		Stopped	Other (Boot, Syste	NT AUTHORITY\NETWORKSERVICE	0	SQL Agent
 ▶ SQL Server Network Configuration (S2Dif) ▲ SQL Server Network Configuration ■ Protocols for SQLEXPRESS ▶ ■ SQL Native Client 10.0 Configuration 	SQL Server Browser	Running	Automatic	NT AUTHORITYLOCALSERVICE	1532	
	·					

If you first look at the settings for SQL Server 2008 Services, both the SQL Server Browser and the SQL Server services for the database instance are not enabled by default after installation.

They can be started or stopped or otherwise configured by right-mouse clicking over them. The figure shows that both services have been configured to run automatically when the computer is started.

To Stop, Start or Restart a service, right mouse click on the item under the column header 'State' and use the context menu which appears to Stop, Start or Restart the service.

Next, check that the protocols are enabled. It is recommended that you enable TCP/IP and Named Pipes for both the SQL Server instance) and the SQL Native Client 10.0. Note: If you have installed SQL Server 64 bit edition, there will be two SQL Native Clients installed, a 32 bit and the default 64 bit.

 Sql Server Configuration Manager File Action View Help ← →		
 SQL Server Configuration Manager (Local) SQL Server Services SQL Server Network Configuration Protocols for SQLEXPRESS SQL Native Client 10.0 Configuration Client Protocols Aliases 	Protocol Name Shared Memory Named Pipes TCP/IP	Status Enabled Enabled Disabled

Sql Server Configuration Manager File Action View Help	_		
 ← → 2 ☑ ☑ ⇒ 2 ☑ SQL Server Configuration Manager (Local) 	Name	Order	Enabled
 SQL Server Services SQL Server Network Configuration Protocols for SQLEXPRESS SQL Native Client 10.0 Configuration Client Protocols Aliases 	រិធិ៍ Shared Memory រិធិ៍ TCP/IP រិធិ៍ Named Pipes រិធិ៍ VIA	1 2 3	Enabled Enabled Enabled Disabled

After changing the protocols, restart both SQL Server and SQL Server Browser services as explained above.

Finally, you will need to make some changes to your firewall to allow SQL Server to communicate with client machines, see Microsoft page <u>http://msdn.microsoft.com/en-us/library/ms175043.aspx</u> for further information on making firewall rule-set modifications.