

# How to Install SQL Server 2008

# A Step by Step guide to installing SQL Server 2008 simply and successfully with no prior knowledge

Developers and system administrators will find this installation guide useful, as will seasoned DBAs. It will teach you the basics required for a typical, problem-free installation of SQL Server 2008, allowing you to add other components later if you wish.

#### Remember to install the .Net Framework 3.5

Before you start the installation, you'll need to install the .Net 3.5 Framework. This comes pre-installed on Windows 2008 Server, but for earlier versions of Windows, you'll need to install it first. This is a straightforward pre-requisite and is usually included as part of the SQL Server 2008 installation. However, if you don't know how to do this, or for some reason you need to download it, check out the guide <u>Installing</u>.<u>Net Framework 3.5 for SQL Server 2008</u>, also on SQL Server Club.

Once this Framework in installed you can commence the installation of SQL Server 2008.

#### **STEP 1 : Copy the installation files**

First off I'd recommend you copy the entire directory structure from the SQL Server 2008 installation disc to the C: drive of the machine you are going to install it on.

Although this means you need to grab a cup of coffee whilst it's copying, this has three advantages:

- It makes the installation process much faster than running it from CD/DVD once it gets started.
- It allows you to easily add or remove components later, without having to hunt around for the CD/DVD.
- If your media is damaged and a file won't copy, you get to find out now, rather than halfway through the installation.

Here's what my system looks like after the copy:

🗁 C:∖SQL 2008	
File Edit View Favorites Tools	Help
🕞 Back 🝷 💮 👻 🏂 🗊	Y 🔎 Search 📂 Folders 🛛 🎹 🗸
Address 🗁 C:\SQL 2008	
	Name 🔺
File and Folder Tasks 🛛 🎽	<pre>@en_sql_server_2008_developer_x86_x64_ia64_dvd_x14-88839.iso</pre>
	强 autorun.inf
Other Places 🕆	🕋 MediaInfo.xml
<ul> <li>Local Disk (C:)</li> <li>My Documents</li> <li>My Computer</li> <li>My Network Places</li> </ul>	Microsoft.VC80.CRT.manifest msvcr80.dll Readme.htm setup.exe setup.rll x86

#### **STEP 2 : Setup.exe**

Double click on the setup.exe file. After a few seconds a dialog box appears:

SQL Server 2008

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

This will disappear from the screen and then the main installation page appears:



# **STEP 3 : SQL Server Installation Center**

Click on the Installation hyperlink on the left hand side of the screen:

🍀 SQL Server Installation Center		
Planning Installation	•	Hardware an View the hari
Maintenahee Tools	4	Security Doci View the seci
Resources Advanced	4	Online Relea: View the late
Options	Ŷ	System Conf Launch a too
	F	Install Upgra

### **STEP 4 : SQL Server Installation Center**

🍀 SQL Server Installation Center	
Planning	New SQL Server stand-alone installation or add features to an existing installation
Installation	Launch a wizard to install SQL Server 2008 in a non-clustered environment on a ad existing SQL Server 2008 instance.
Maintenance	
Tools	New SQL Server failover cluster installation
1003	Launch a wizard to install a single-node SQL Server 2008 failover cluster.
Resources	
Advanced	Add node to a SQL Server failover cluster
	😴 💵 Launch a wizard to add a node to an existing SQL Server 2008 failover cluster.
Options	
	Weight and the second secon

Click on the "**New Server stand-alone installation**" link on the right side of the screen:

The following dialog appears on the screen whilst the install program prepares for installation:

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

After a minute or so (the timing will vary according to your system), the following screen appears:

🚼 SQL Server 2008 Setup	
Setup Support Rules	
Setup Support Rules identify problem before Setup can continue.	s that might occur when you install SQL Server Setup support files. Failures must be corrected
Setup Support Rules	Operation completed. Passed: 6. Failed 0. Warning 0. Skipped 0. Show details >> <u>View detailed report</u>

#### STEP 5 (optional) :

If any checks have failed, click on the **Show details** button or "**View detailed report link**" to find out the cause, correct it, then click on the Re-run button to perform the checks again.

#### **STEP 6 : Product key**

If all checks have passed, **click on the OK** button. After a few moments, the option to select the edition and to enter the licence key (or "product key") will appear. Note that the product key box may already be populated, depending on which edition you have. Don't enter the product key we've shown here, it won't work on your system!:

🍀 SQL Server 2008 Setup	
Product Key Specify the edition of SQL Server 200	08 to install.
Product Key License Terms Setup Support Files	Specify a free edition of SQL Server or provide a SQL Server product key to validate this insta 2008. Enter the 25-character key from the Microsoft certificate of authenticity or product pact specify Enterprise Evaluation, the instance will be activated with a 180-day expiration. To upge edition to another edition, run the Edition Upgrade Wizard. Specify a free edition: Enterprise Evaluation Enter the product key: ABCDE-12345-FGHIJ-67890-KLMNO

#### **STEP 7 : Licence Terms**

**Enter the product key** into the box, or choose the free edition if you're evaluating SQL Server 2008, and **click on the Next button**:

Product Key	
License Terms	MICROSOFT SOFTWARE LICENSE TERMS
Secup Support Hies	MICROSOFT SQL SERVER 2008 DEVELOPER ED
	These license terms are an agreement between Microsoft Corporation (or based live, one of its affiliates) and you. Please read them. They apply to the softwar above, which includes the media on which you received it, if any. The terms als Microsoft
	updates,
	supplements,
	Internet-based services, and
	support services
	for this software, unless other terms accompany those items. If so, those terms
	BY USING THE SOFTWARE, YOU ACCEPT THESE TERMS. IF YOU DO NOT AC DO NOT USE THE SOFTWARE. INSTEAD, RETURN IT TO THE RETAILER FOR CREDIT. If you cannot obtain a refund there, contact Microsoft or the Microsoft
	I accept the license terms.

# Click in the **"I accept the license terms" check box**, then **click on the Next button** again.

# **STEP 8 : Setup Support Files**

The following screen appears; **click on the Install button**:

Product Key	The following components are	e required for SQL Server Setup:
License Terms	Feature Name	Status
Setup Support Files	Setup Support Files	
		3

The following screen will appear whilst Windows Installer prepares itself for the installation. This will take a short while:

🍀 SQL Server 2008 Setup	N						
Setup Support Files	k}						
Click Install to install Setup Support fil	les. To install or update SQL Server 21	008, these files are required.					
Product Key	The following components are required for SQL Server Setup:						
License Terms	Feature Name Status						
Setup Support Files	Setup Support Files	In Progress					
	Performing Windows Installer action	ns.					

After 30 seconds or so the dialog appears again:



# **STEP 9 : Setup Support Rules**

If all is well, the following screen appears:

🎲 SQL Server 2008 Setup	
Setup Support Rules	
Setup Support Rules identify problem: before Setup can continue.	s that might occur when you install SQL Server Setup support files. Failures must be corrected
Setup Support Rules Feature Selection Disk Space Requirements Error and Usage Reporting Installation Rules Ready to Install Installation Progress Complete	Operation completed. Passed: 10. Failed 0. Warning 0. Skipped 1. Show details >> View detailed report

Click on the **Next** button again.

#### **STEP 10 : Feature Selection**

#### Select the features you want to install.

At a minimum, the following are useful (I'd argue essential), but what you need will depend on your needs:

#### 🍀 SQL Server 2008 Setup Feature Selection Select the Developer features to install. For clustered installations, only Database Engine Services and Analysis Services can be clustered. Features: Description: Setup Support Rules Feature Selection Instance Features Server features are in Database Engine Services have their own registr Instance Configuration support multiple instar SQL Server Replication Disk Space Requirements 2 Full-Text Search Server Configuration Analysis Services Database Engine Configuration Reporting Services Error and Usage Reporting Shared Features Business Intelligence Development Studio Installation Rules Client Tools Connectivity Ready to Install Integration Services Installation Progress Client Tools Backwards Compatibility Client Tools SDK Complete SQL Server Books Online Management Tools - Basic Management Tools - Complete SQL Client Connectivity SDK Microsoft Sync Framework Redistributable Features Select All Unselect All C:\Program Files\Microsoft SQL Server\ Shared feature directory: < Back Next > Cano

Click on the **Next** button.

# STEP 11 : Instance Configuration

After a short while the following screen appears:

🊼 SQL Server 2008 Setup						<u> </u>
Instance Configuration Specify the name and instance ID for	or the SQL Server instance.					
Setup Support Rules Product Key License Terms Feature Selection <b>Instance Configuration</b> Disk Space Requirements Server Configuration Database Engine Configuration Error and Usage Reporting Installation Rules	Default instance     Named instance:     Instance ID:     Instance root directory:     SQL Server directory:     Installed instances:	MSSQLSERVER MSSQLSERVER C:\Program Files\Mic C:\Program Files\Mic	rosoft SQL Server\ rosoft SQL Server\MSS	QL10.MSSQLSERVE	R	1
Ready to Install Installation Progress Complete	Instance	Features	Edition	Version	Instance ID	
			< Back	Next >	Cancel H	

For most installations, keep the default settings. Click on the **Next** button.

#### **STEP 12 : Disk Space Requirements**

This screen just tells you if you have sufficient disk space on the drive you're installing to, and what's going to be installed where.



Click on Next.

#### **STEP 13 : Server Configuration**

This step allows you to set up the service accounts that will be used to run SQL Server. If you have created Windows NT or Active Directory accounts for use with services, use these.

If not, then just to get the installation up and working, use the built-in Network Service account for all three services listed (this account does not require a password).

This allows SQL Server to start up after installation. However, it can be easily changed later to another account through the Services applet (Control Panel -> Administrator Tools -> Services):

🍀 SQL Server 2008 Setup				
Server Configuration				
Setup Support Rules Product Key License Terms	Service Accounts Collation	use a separate account for each SQL	Server service.	
Feature Selection	Service	Account Name	Password	Startup Type
Instance Configuration	SQL Server Agent	NT AUTHORITY\NETWORK SERVICE	:	Automatic 🗾
Disk Space Requirements	SQL Server Database Engine	NT AUTHORITY\NETWORK SERVICE		Automatic 📃
Installation Progress Complete	These services will be configure older Windows versions the use Help.	ed automatically where possible to use er will need to specify a low privilege (	a low privilege a account. For mor	account. On some re information, click
	Service	Account Name	Password	Startup Type
	SQL Server Browser	NT AUTHORITY\LOCAL S		Automatic 🗾
		< <u>B</u> ack	Next >	Cancel Help

In addition, remember to change the **Startup Type** to **Automatic**, for all three services. This automatically starts the SQL Server database engine, SQL Agent and SQL Browser services when the server is re-booted.

The first service runs the SQL Server database engines executable process. The other two services allow scheduled jobs to run after installation (and after a re-boot), and allow the SQL Server to be found by clients on the network.

Do not worry about changing the collation tab, unless there is a specific requirement for anything other than the default collation sequence. Finally, Click on **Next.** 

### STEP 14 : Database Engine Configuration – Account Provision

Database Engine Config	juration	
Specify Database Engine authentica	tion security mode, administrators and data directories.	
Setup Support Rules Product Key License Terms Feature Selection Instance Configuration Disk Space Requirements Server Configuration <b>Database Engine Configuration</b> Error and Usage Reporting Installation Rules Ready to Install Installation Progress Complete	Account Provisioning       Data Directories       FILESTREAM         Specify the authentication mode and administrators for the Database         Authentication Mode            • <u>Windows authentication mode</u> • <u>Mixed Mode (SQL Server authentication and Windows authentication Built-in SQL Server system administrator account</u> Enter password:              Specify SQL Server administrators	se Engine. stion)
Complete	Jim Bloggs (Jim Bloggs)       Add <u>Current User</u> <u>A</u> dd	SQL Server administrators have unrestricted access to the Database Engine.

×

This screen allows you to set up database engine security.

Change the **Authentication Mode** to **Mixed Mode** unless you are **certain** you only need Windows-only authentication.

• Many third party applications rely on SQL Server logins to operate correctly, so if you are setting up a server for a third party application, rather than one developed in-house, enabling Mixed Mode authentication is a good idea.

If you pick Mixed Mode security, you must also enter a password for the sysadmin account (sa).

Enter and confirm a secure password for the sa account and keep it somewhere safe. Do not give it to any one you do not want to have access to the SQL Server.

Note that you MUST also provide a Windows NT account on the local machine as a SQL Server administrator. If you do not want Windows system administrators to be able walk up to the box and login to SQL Server, create a new, local, dummy Windows user and add this account instead. Otherwise, add in the local administrator account, or your own Windows account on the domain in which the SQL Server will reside.

# STEP 15 : Database Engine Configuration – Data Directories

Click on the **Data Directories** tab.

🚼 SQL Server 2008 Setup			
Database Engine Config	uration		
Specify Database Engine authenticat	tion security mode, administrators ar	nd data directories.	
Setup Support Rules Product Key License Terms	Account Provisioning Data	a Directories FILESTREAM	
Feature Selection Instance Configuration	System database directory:	C:\Program Files\Microsoft SQL Server\MSSQL10.MSSQLSERVER\MSSQL\Data	
Disk Space Requirements Server Configuration	User database directory:	D:\Data	
Database Engine Configuration Error and Usage Reporting	Temp DB directory:	T:\TempDB	
Installation Rules Ready to Install	Temp DB log directory:	T:\TempDB	
Installation Progress Complete	Bac <u>k</u> up directory:	K:\SQLBackups	
		< <u>B</u> ack Cancel	Help

Change the directories to specify which drives in your system will be used for the various types of database files.

Generally it's advisable to put the User database directory and User log directory on separate physical drives for performance, but it will depend on how Windows has been configured and how many disk drives you have available.

If you are installing on a single drive laptop or desktop, then simply specify: **Data root directory** C:\Program Files\Microsoft SQL Server

C:\Program
C:\Data
C:\Logs
C:\TempDB
C:\TempDB
C:\Backups

Do not click on the **FILESTREAM** tab unless you know you need to change these options, as it is not generally required for most installations, but can easily be changed by using sp\_configure 'filestream\_access\_level', '<level>'after SQL Server has been installed. **Click on Next**.

#### STEP 16 : Error Usage Reporting

This screen simply asks if you want to send error information to Microsoft and can safely be skipped if you do not want to share any information.



Click boxes if you want to help Microsoft help you. Click on **Next** again...

### **STEP 16 : Installation Rules**

This screen simply checks if there are any processes or other installations running which will stop the installation of SQL Server 2008.



Click on **Next** again – you're almost ready to install:

#### STEP 17 : Ready to Install

This screen summarises what you are about to install and gives you a last chance to cancel or change anything that's wrongly configured:



Check that what's being installed is what you want and then click on **Install** when you're sure you want to start the installation process:

# **Installation Progress**

SQL Server 2008 will now install. How long it takes depends on the speed of your machine, what load it's under, the installation media (CD is slower) and what you've chosen to install.

🚼 SQL Server 2008 Setup	
Installation Progress	
Setup Support Rules Product Key License Terms Feature Selection Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Error and Usage Reporting Installation Rules Ready to Install <b>Installation Progress</b> Complete	Scheduling package installation.
	Next > Cancel Help

# ...More Installation Progress

🍀 SQL Server 2008 Setup	
Installation Progress	
Setup Support Rules Product Key License Terms Feature Selection Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Error and Usage Reporting Installation Rules Ready to Install <b>Installation Progress</b> Complete	Performing Windows Installer actions. Install_sql_engine_core_shared_Cpu32_Action : InstallFiles. Copying new files
	Next > Cancel Help

... and Finally Finally, the installation will complete:

🚼 SQL Server 2008 Setup		
Installation Progress		
Setup Support Rules Product Key License Terms Feature Selection Instance Configuration	Setup process complete	
Disk Space Requirements	Feature Name	Status
Server Configuration	Database Engine Services	Success
Database Engine Configuration	Client Tools Connectivity	Success
Error and Usage Reporting	Management Tools - Complete	Success
Installation Rules	Management Tools - Basic	Success
Installation Progress Complete	SQL Server Books Online	Success
		Next > Cancel Help

...and the following dialog box will appear:

Compute	r restart required	×
į	One or more affected files have operations pending. You must restart your computer to complete this process.	
i a	ОК	

# Click on OK, the machine will NOT reboot.

The following will appear:



# ...followed by:

🙀 SQL Server 2008 Setup		
Installation Progress		
Setup Support Rules	Setup process complete	
Product Key		
License Terms		
Feature Selection		
Disk Space Requirements	Feature Name	Status
Server Configuration	📀 Database Engine Services	Success
Database Engine Configuration	Client Tools Connectivity	Success
Error and Usage Reporting	Management Tools - Complete	Success
Installation Rules	Management Tools - Basic	Success
Ready to Install	SQL Server Books Online	Success
Installation Progress		
Complete		
		Next > Cancel Help

Click on the Next button again...

#### **STEP 18 : Installation Complete**

The following screen appears:

🏶 SQL Server 2008 Setup	
Complete Your SQL Server 2008 installation	completed successfully.
Setup Support Rules Product Key License Terms Feature Selection Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Error and Usage Reporting Installation Rules Ready to Install	Summary log file has been saved to the following location:         C:\Program Files\Microsoft SQL_Server\100\Setup Bootstrap\Loq\20090317_103055         \Summary_4GBL03269_20090317_103055.txt         Information about the Setup operation or possible next steps:         Image: Your SQL Server 2008 installation completed successfully.
Complete	Supplemental Information: 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, see the Microsoft Update Web site <a href="http://go.microsoft.com/fwlink/?LinkId=108409">http://go.microsoft.com/fwlink/?LinkId=108409</a> > Reporting Services The Reporting Services installation options that you specified in Setup determine whether additional configuration is required before you can access the report server. If you installed the default configuration, the report server
	Close Help

It may be worth clicking on the installation log at the top of the screen to check everything's gone as expected. Not that this is MUCH smaller than the usual SQL Server installation log files of old.

Finally, **click on the Close button**. The following dialog will appear:

SQL Server 2008 Setup	×
You must restart the computer to complete SQL Server :	Setup.
ОК	

Click on OK – your server will NOT re-boot at this point.

The dialog box will disappear and you will be returned to the Installation Center:



**Click on the Close button** (the "x'') in the top right of the screen.

Finally, manually reboot your machine to complete the SQL Server 2008 installation.

#### Top Tips :

#### How to check that SQL Server 2008 has installed correctly

Here are a short number of post-installation checks which are useful to perform after re-booting your new SQL Server. You don't have to run these, and there are other ways to check, but they are very useful for non-DBAs to be sure that the installation is basically sound and a connection can be made to the new SQL Server before handing it over to someone else.

#### Check 1: Has the SQL Server Service Started?

Check SQL Server 2008 has started.

age				···· ··- ···· ··· · · · · · · · · · · ·
SQL Server (MSSQLSERVER)	Provides storage, processing and controlled access of data,	Started	Automatic	NT AUTHORITY\NETWORK SERVICE
🏶 SQL Server Agent (MSSQLSERVER)	Executes jobs, monitors SQL Server, fires alerts, and allows	Started	Automatic	NT AUTHORITY\NETWORK SERVICE
🆓 SQL Server Browser	Provides SQL Server connection information to client comput	Started	Automatic	NT AUTHORITY\LOCAL SERVICE
🆓 SQL Server VSS Writer	Provides the interface to backup/restore Microsoft SQL serv	Started	Automatic	Local System
ABA	the second se			· · · - ·

#### Check 2: Does Management Studio Work?

Check Management Studio works by firing it up.

<b>G</b>	Microsoft SQL Server 2008	m	Analysis Services	₽
Image: A start of the start	Microsoft Visual SourceSafe	<b></b>	Configuration Tools	►
6	Microsoft Visual Studio 6.0	6	Documentation and Tutorials	►
Contraction	Microsoft Visual Studio 2005	6	Performance Tools	►
Contraction	Microsoft Visual Studio .NET 2003	<b>9</b> 20	SQL Server Management Studio 2008	
Control	Mobiliti Network Unplugged	0	SQL Server Books Online	
6	Mozilla Firefox	<b></b>	Integration Services	►
Control	MP3 to WMA WAV Converter	2	Import and Export Data (32-bit)	
Image: A start of the start	Netscape •	5	SQL Server Management Studio	
-		To be	- P(1	_



### **Click on NO** when you see this dialog box:

Microsoft SQL Server Management Studio									
?	You can import customized user settings from SQL Server 2005 Management Studio. Be aware that some SQL Server 2008 default settings might be changed after you import your customized user settings. Do you want to import your customized user settings from SQL Server 2005 Management Studio?								
<b>B</b>	Yes No Cancel	]							

🛃 Connect to Serve		×
Microsoft*	Server 2008	
Server type:	Database Engine	-
Server name:	NEWSQLSERVER	•
Authentication:	SQL Server Authentication	•
Login:	sa	•
Password:	*****	
	Remember password	
Conne	Cancel Help	Options >>

# Check 3: Can you run a basic query against the new SQL Server?

Check SQL Server works by running a simple query from Management Studio:

Object Expl	orer	<b>-</b> ₽×
Connect 🕶	🛃 🔩 = 🝸 🛃 📓	
= [	Connect	00 - sa)
Œ	Disconnect	
•	Register	
Ð	New Query	
÷	Activity Monitor	
	Start	
	Stop	
	Pause	
	Resume	
	Restart	
	Policies •	
	Facets	
	Start PowerShell	
	Reports •	
	Refresh	
	Properties	

Enter the query shown below and hit F5 to run it:



#### Check 4: Is SQL Server Agent Running?

Check SQL Server Agent is running for scheduled jobs. There should be a green arrow next to the SQL Server Agent database symbol (it's small, you might have to look hard):



#### Check 5: Can SQL Server be seen from the Network?

Check that the new SQL Server can be seen from another SQL Server on the same domain by running isql -L (or osql -L):

Servers:
CREDITCARD
HUMANRESOURCES
NETADMINDB
NETADMINDB\TEST
NEWSQLSERVER
TIMESHEETDB
C:\>_

If you can't see the new SQL Server in this list, check that the SQL Server Browser service is started on the machine where you have just installed SQL Server.

# Check 6: Has the TCP/IP network protocol library been enabled on the server?

If the browser service is started but you still cannot connect to the server, click on **Start ->Programs -> SQL Server 2008 -> SQL Server Configuration Manager** (on the server where SQL Server's just been installed)

IC Da	Open Office Document	·	1.0000000000000000000000000000000000000	• 1	$\checkmark$	rindono nodia nayor		
		Ē	Microsoft SQL Server 2008			Analysis Services	►	1
(?)	Get Connected	Image: A start of the start	Microsoft Visual SourceSafe	F	in	Configuration Tools	Þ	🚡 SQL Server Configuration Manager 💦 📐
		6	Microsoft Visual Studio 6.0	×		Documentation and Tutorials	►	📋 SQL Server Error and Usage Reporting
<b>i</b>	Programs 🕨	6	Microsoft Visual Studio 2005	۲I		Performance Tools	►	髋 SQL Server Installation Center
	Documents		Microsoft Visual Studio .NET 2003	×	æ	SQL Server Management Studio 2008		Reporting Services Configuration Manager
	bocamones .		and determined of the second sec			cold billion		

The SQL Server Configuration Manager window opens. Click on the **SQL Server Network Configuration** node and expand it.

In the example below, we have MSSQLSERVER (a base instance of SQL Server), and SQLEXPRESS showing as installed.

#### If in doubt, click on Protocols for MSSQLSERVER.

🚡 Sql Server Configuration Manager			<u> </u>
File Action View Help			
🕵 SQL Server Configuration Manager (Local)	Protocol Name	Status	
SQL Server Services	🕉 Shared Memory	Enabled	
SQL Server Network Configuration	To Named Pipes	Disabled	
Protocols for MODQLDERVER	TCP/IP	Disabled	
SQL Native Client 10.0 Configuration	AIV	Disabled 1/5	

In the above screenshot, the TCP/IP network protocol library is disabled. We need to enable it in order that remote servers can talk to the newly installed SQL Server.

• A word of explanation : In *most* installations, Named Pipes can be ignored, unless there is a requirement for it. In virtually all environments, VIA can also be ignored as this protocol requires a special network card. Shared memory is the "local" protocol that SQL Server uses when talking to a client application on the same server as itself, for example when SQL Server Management Studio connects to it. It is usually best to leave this enabled. You will need the TCP/IP protocol enabled if you need to connect to your new SQL Server from a remote client or another server via TCP/IP, which is what most networks use.

If it shows as **DISABLED** (above), **double click on the TCP/IP protocol line**, and the following window will appear:

TCP/IP Properties	? ×					
Protocol IP Addresses						
General						
Enabled	Yes					
Keep Alive	Yes					
Listen All	No K					
Enabled						
Enable or disable TCP/IP protocol for this server instance						
OK Cance	Apply Help					

**Ensure** that **Enabled is set to Yes**, and click on OK. The following warning will appear:

Warning	×
i)	Any changes made will be saved; however, they will not take effect until the service is stopped and restarted.
	OK

Click on OK, and you will be returned to the Configuration Manager window, where TCP/IP will now be shown as enabled:

🚡 Sql Server Configuration Manager			<u>_                                    </u>			
File Action View Help						
		k				
🕵 SQL Server Configuration Manager (Local)	Protocol Name	Status				
SQL Server Services	🕉 Shared Memory	Enabled				
SQL Server Network Configuration	🖗 Named Pipes	Disabled				
- Protocols for MOSQUSERVER	TCP/IP	Enabled				
SQL Native Client 10.0 Configuration	AIV	Disabled				

Go back to the Services applet, and re-start the MSSQLSERVER service so that the TCP/IP protocol can be used to connect to your new SQL Server.

Then try to connect to it again from a remote machine.

If you have experienced problems with the previous connectivity tests, you should now be able to repeat at least some of them successfully.

End of Article