

SQL 2008 Express Installation

Quick Reference Guide

SQL 2008 Express Installation

This guide will walk through the steps necessary to install SQL 2008 Express.

B.A.S.I.S. versions 5.12.### and above may require a database engine to be installed prior to installing the B.A.S.I.S. application.

The SQL Express database engine will be installed manually in this guide.

An optional section will cover the manual configuration of the SQL Server engine for a B.A.S.I.S. installation.

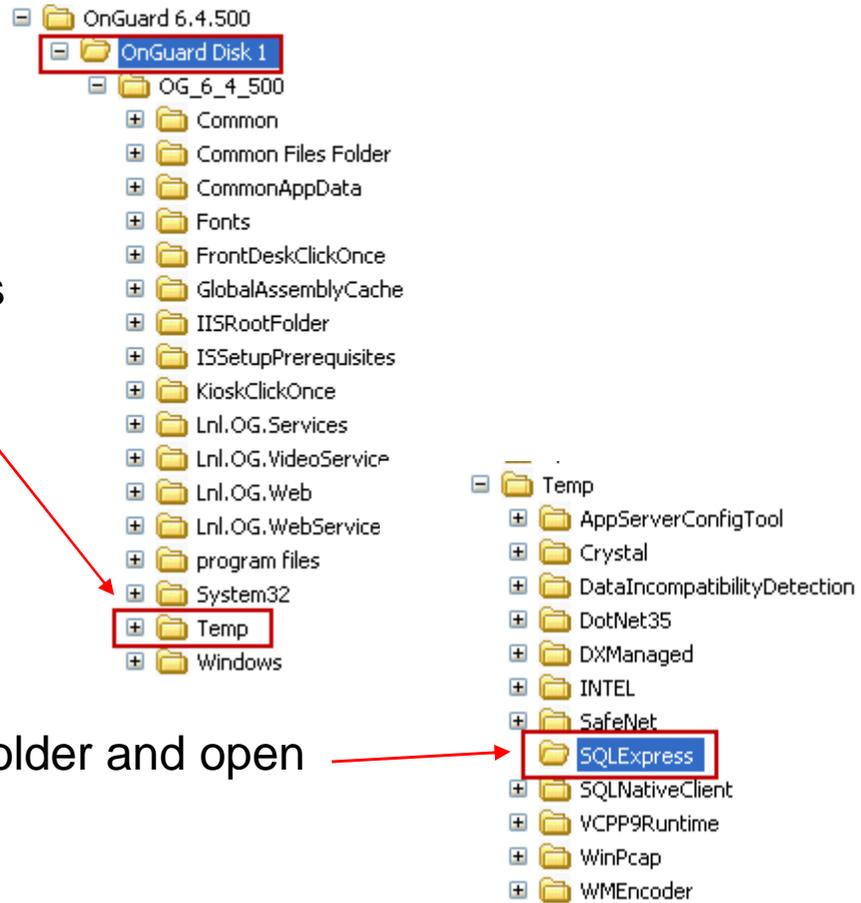
Installation Checklist

- Confirm PC meets current specifications
- Confirm OS meets current specifications
- Disk 2 will provide OS specifications automatically
- Disk 2 contains some of the necessary prerequisites
- Disk 2 will be used to install the SQL Management Tools after the SQL database engine has been installed
- Installation prerequisites-
 - Microsoft. Net Framework 3.5 SP1
 - Microsoft Windows Installer 4.5 or later
 - Microsoft Windows PowerShell 1.0 (Required for SQL Tools)
- Download all necessary prerequisites from MS download site

Installation Checklist

- Install SQL 2008 Express database engine
- SQL 2008 database engine found on Disk 1
- SQL 2008 Express Management Tools found on Disk 2

- Insert Installation Disk 1
- Cancel auto run if necessary
- Navigate to Disk 1 using Windows
- Select "Temp" folder and open

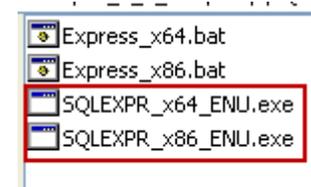
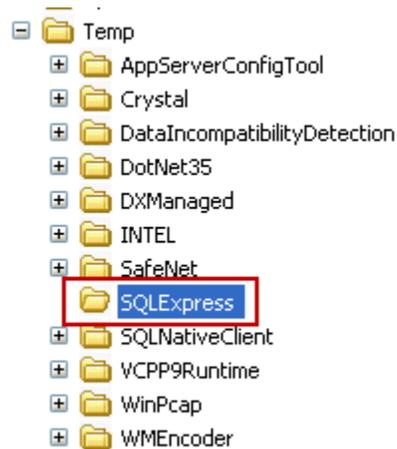


Select SQLExpress folder and open

From the SQL Express folder, select the processor version of the operating system

This example will use the SQLEXP_x86_ENU.exe

Double click to launch the installation



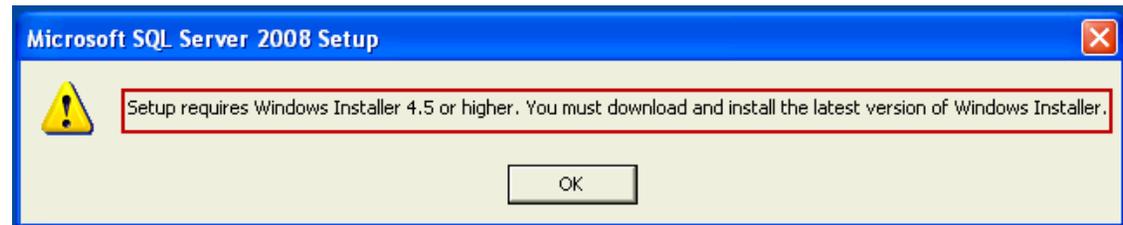
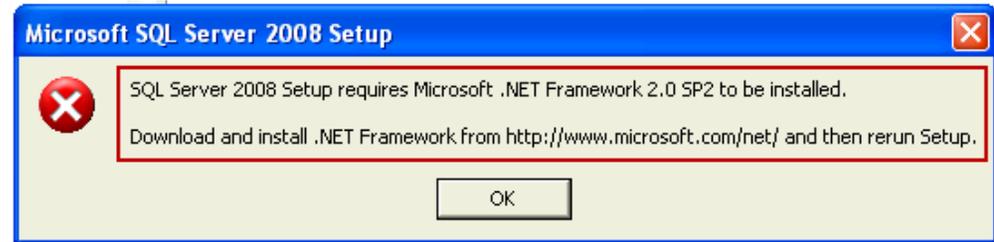
Missing components will be detected

Download and install if necessary

Restart the installation routine to continue

Each additional missing component will be detected

Correct as necessary



The Installation Center Utility opens once all prerequisites have been met



Select "Installation"

Select "New SQL Server....."

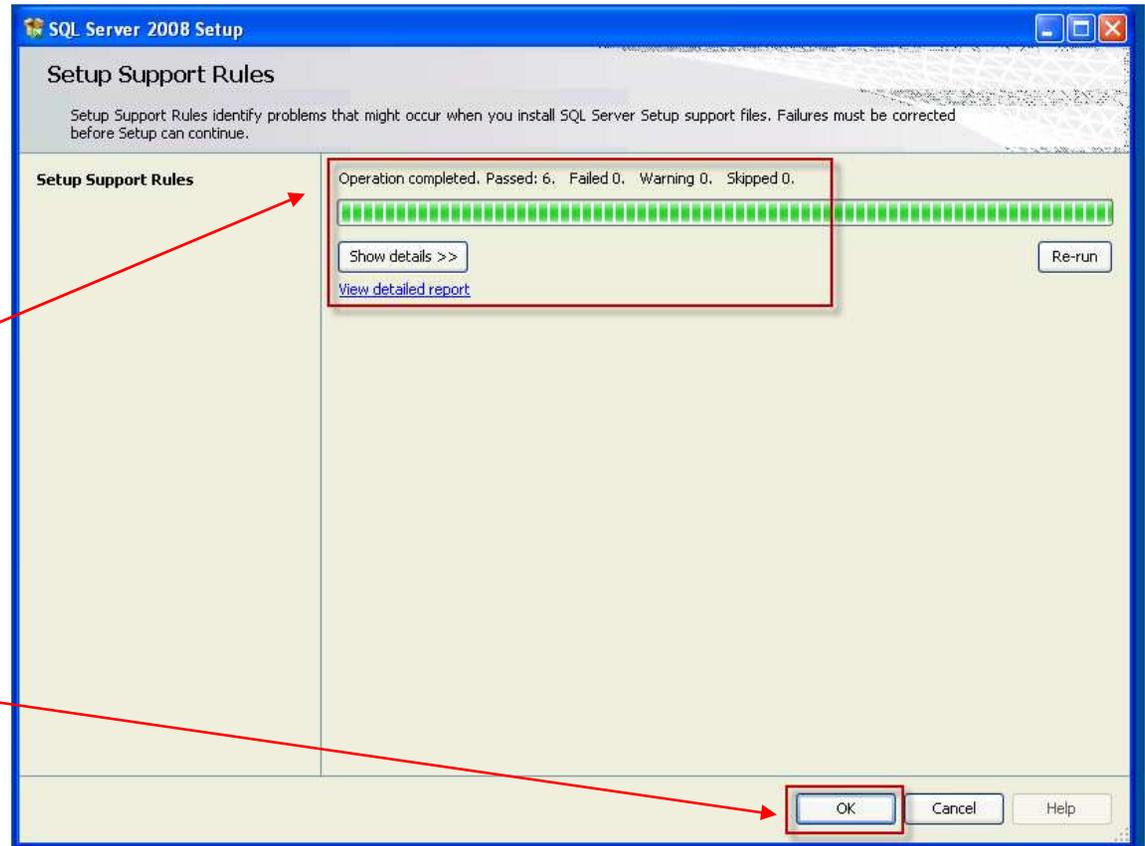


Setup Support

Setup Support Rules will take a few moments to check the system

All Failures must be corrected before continuing

Select "Ok" to continue

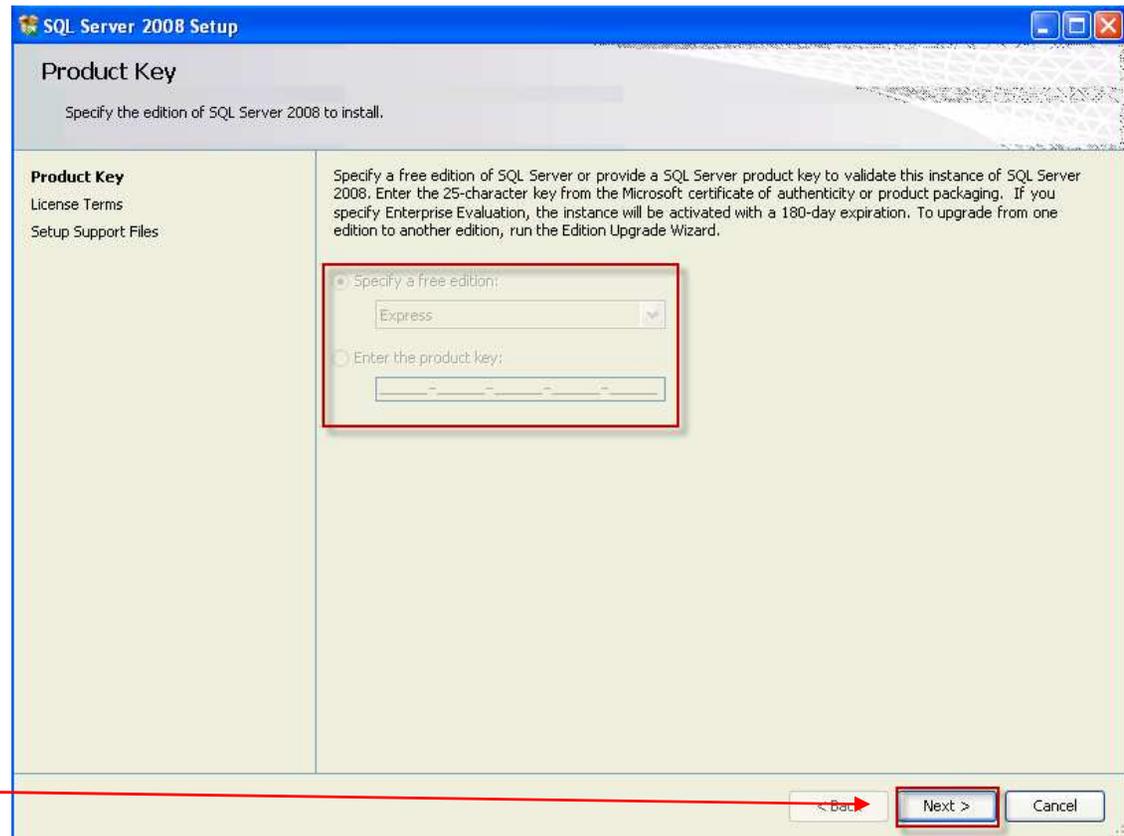


Setup Support

SQL Express does not
require a product key

SQL Standard does require
a product key

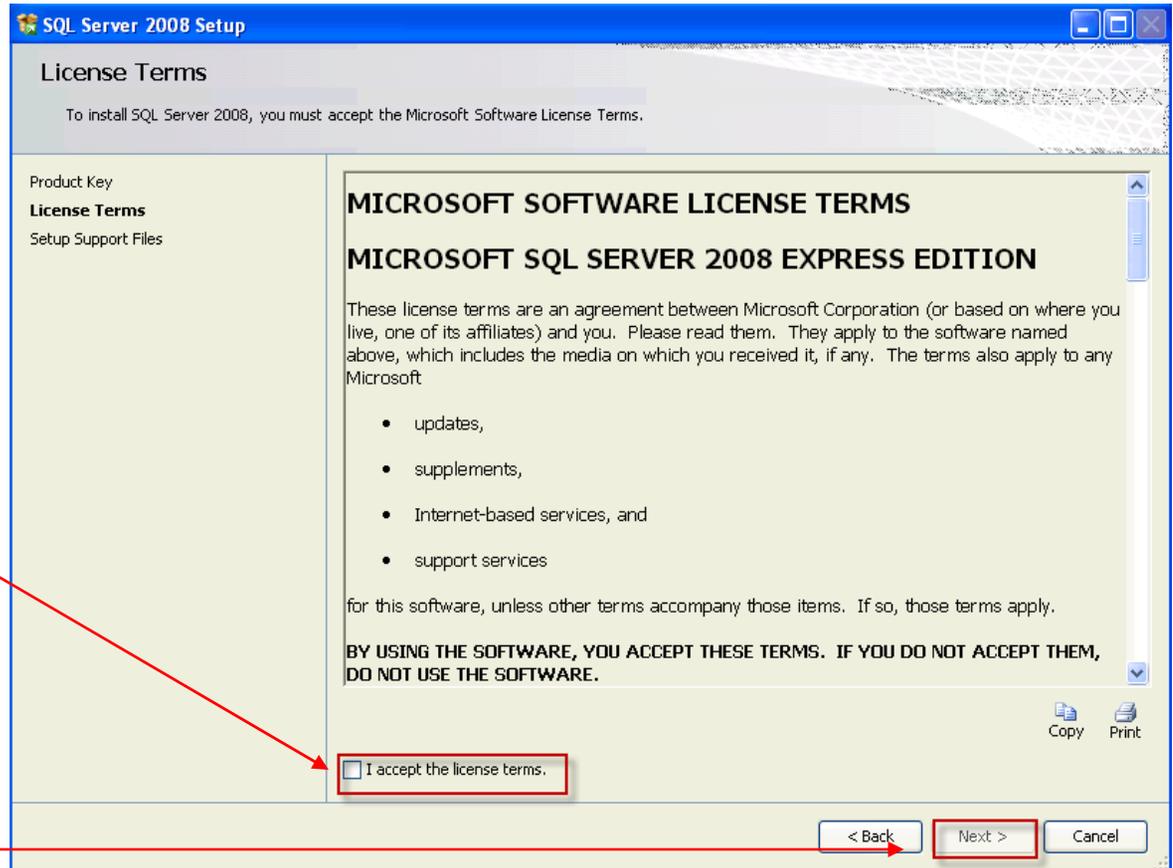
Click "Next" to continue



Setup Support

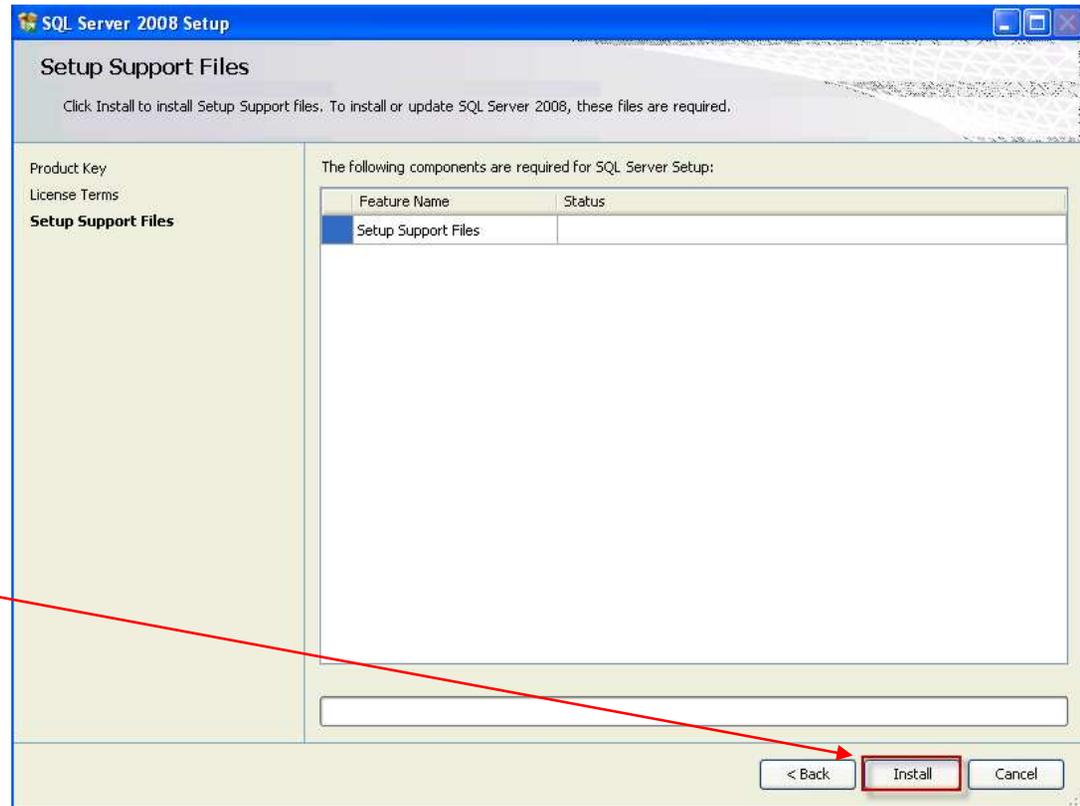
Select "I accept..."

Click "Next" to continue



Setup Support

Click "Install" to continue

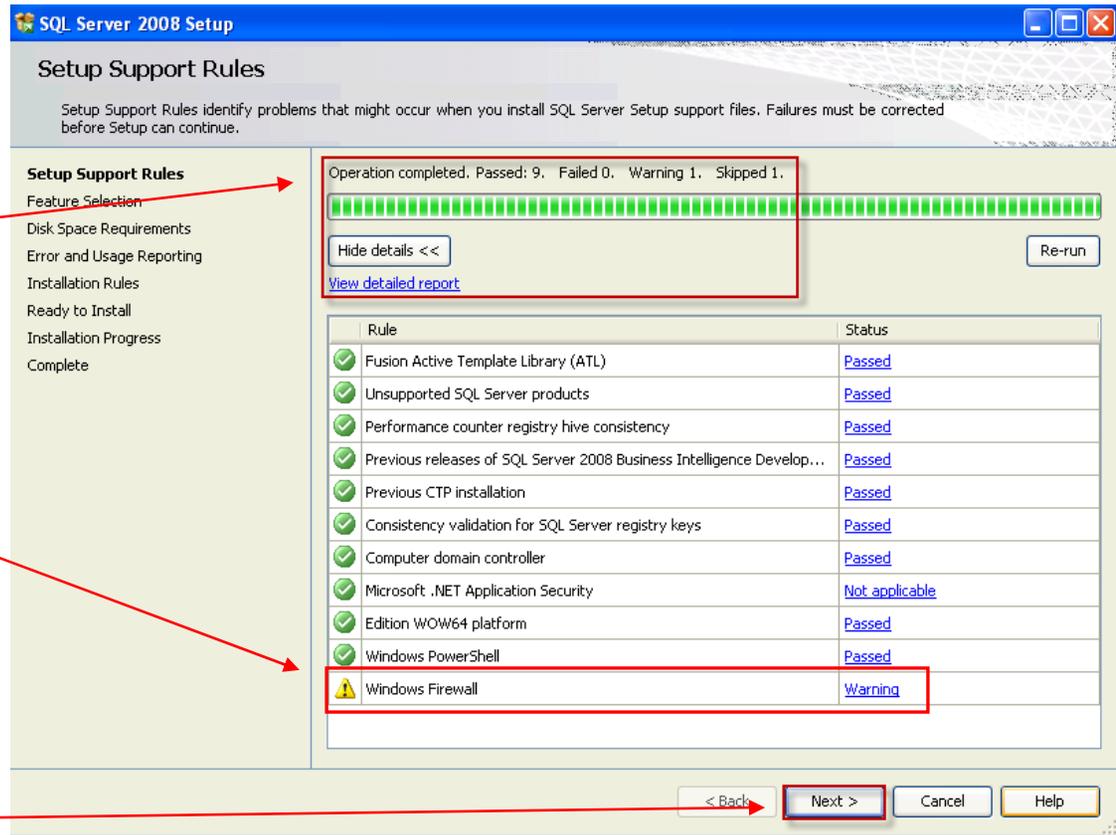


Setup Support

Any failed support rules must be corrected

The Windows Firewall should be turned off during the installation

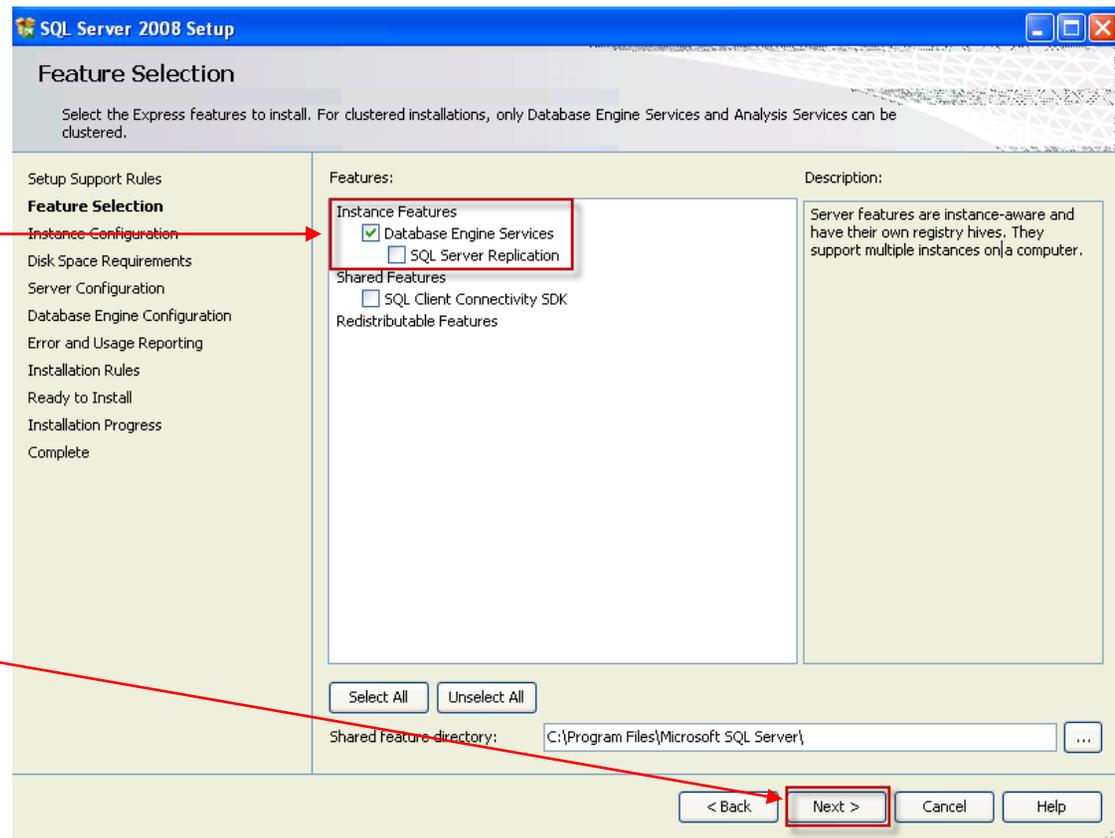
Click "Next" to continue



Feature Selection

Select "Database Engine Services"

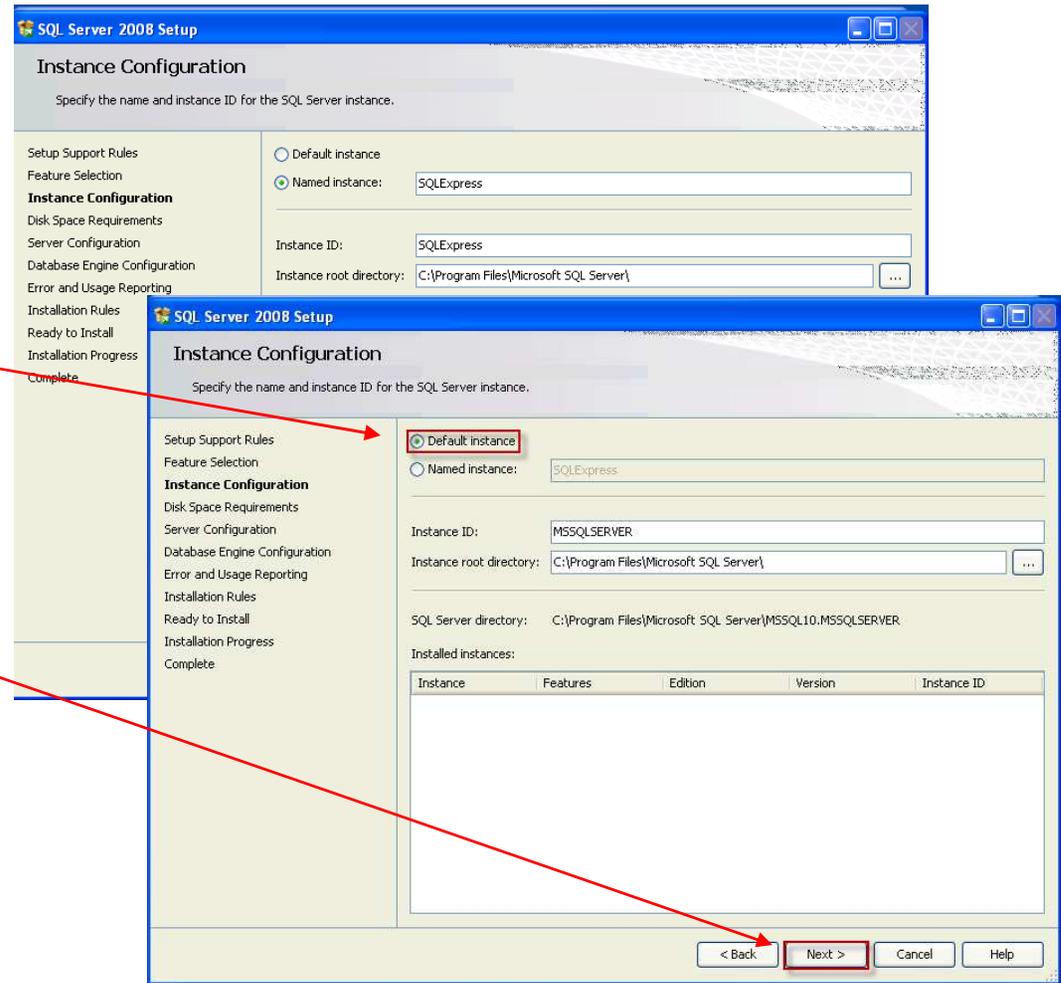
Click "Next" to continue



Instance Configuration

Select "Default Instance"

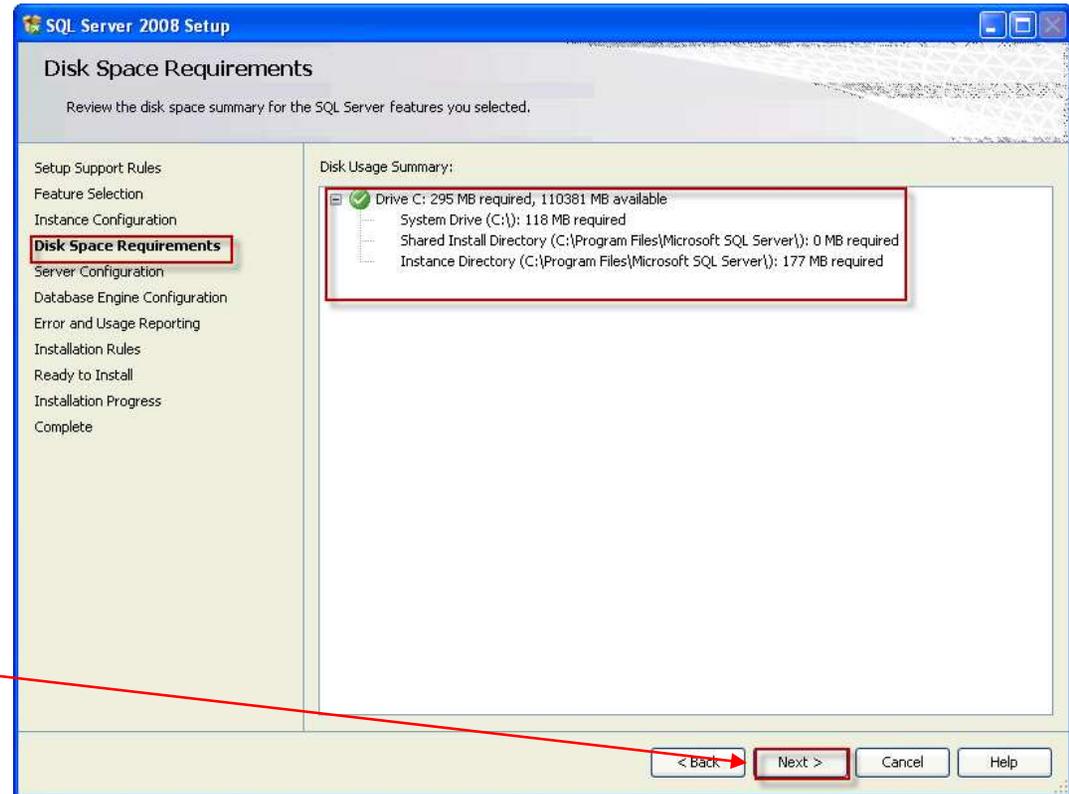
Click "Next" to continue



Disk Space Requirements

Review space requirement
summary

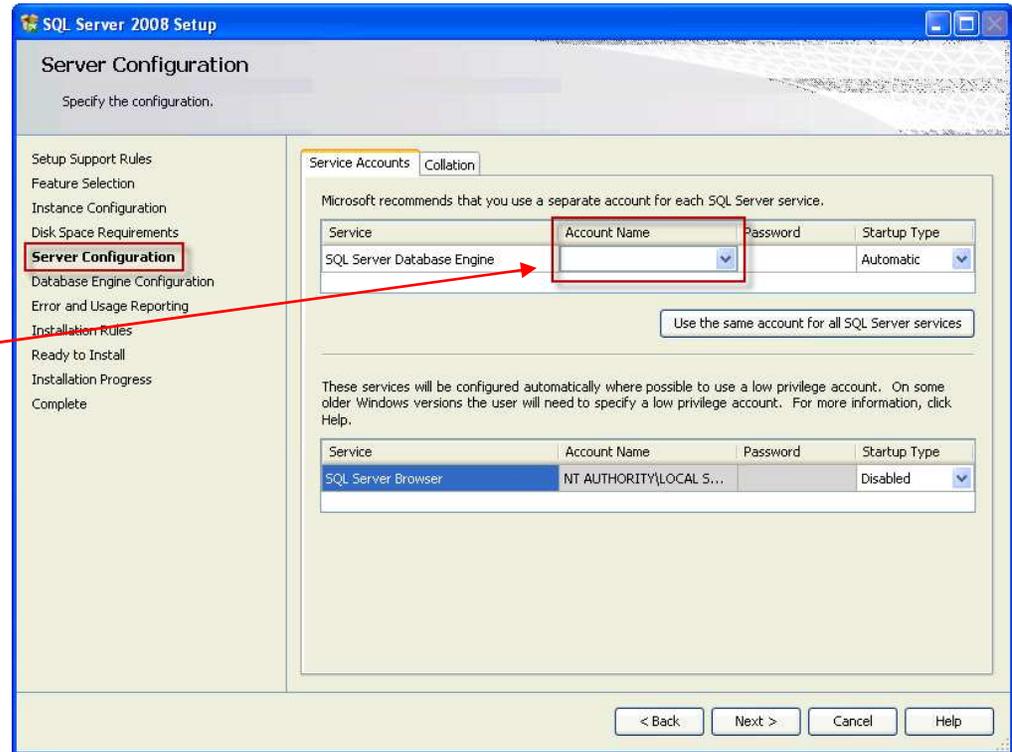
Click "Next" to continue



Server Configuration

SQL Server must connect to an account name

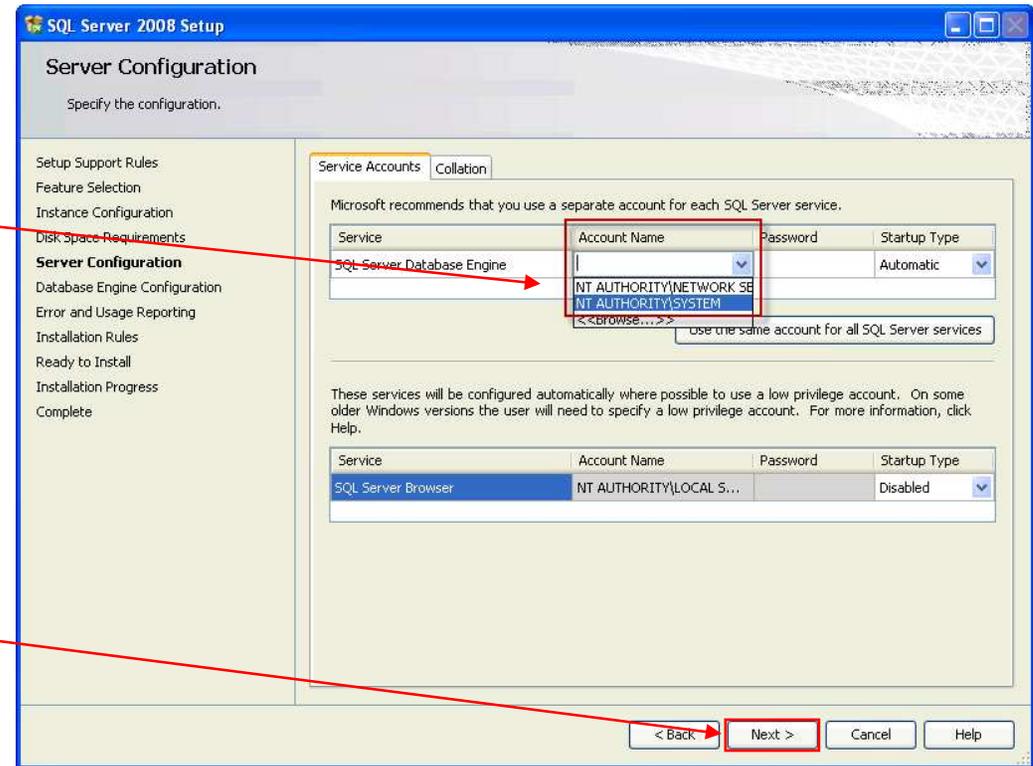
Open the “Account Name” dropdown



Server Configuration

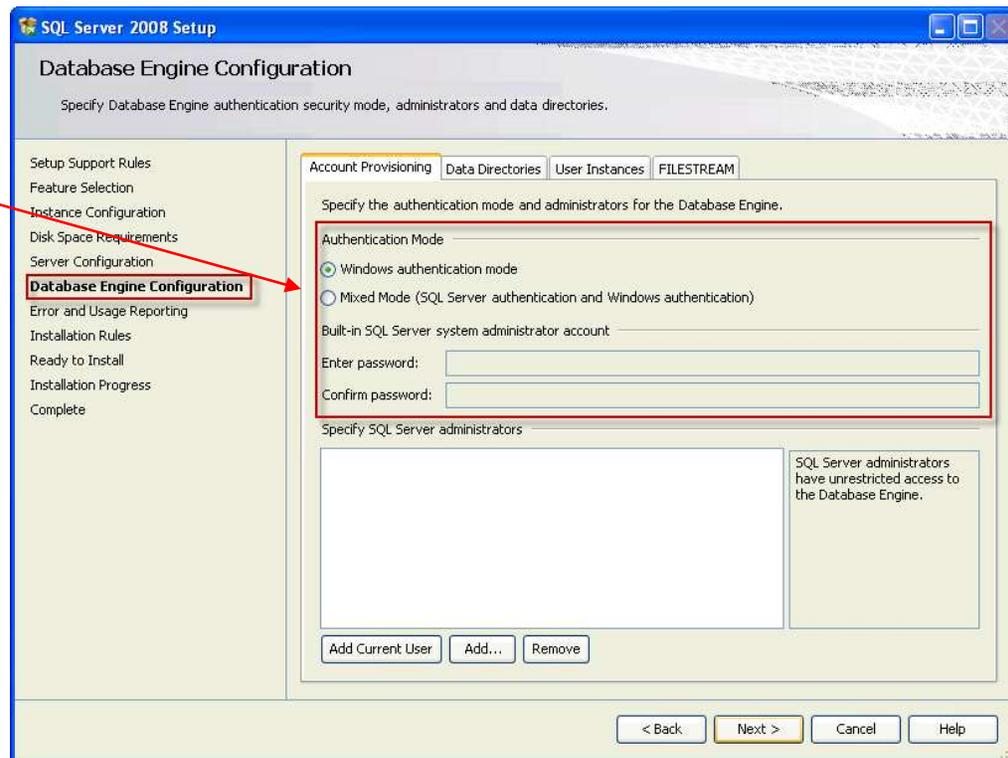
From the dropdown select
“NT Authority\System”

Click “Next” to continue



Database Engine Configuration

Select “Mixed Mode” in the Authentication Mode window

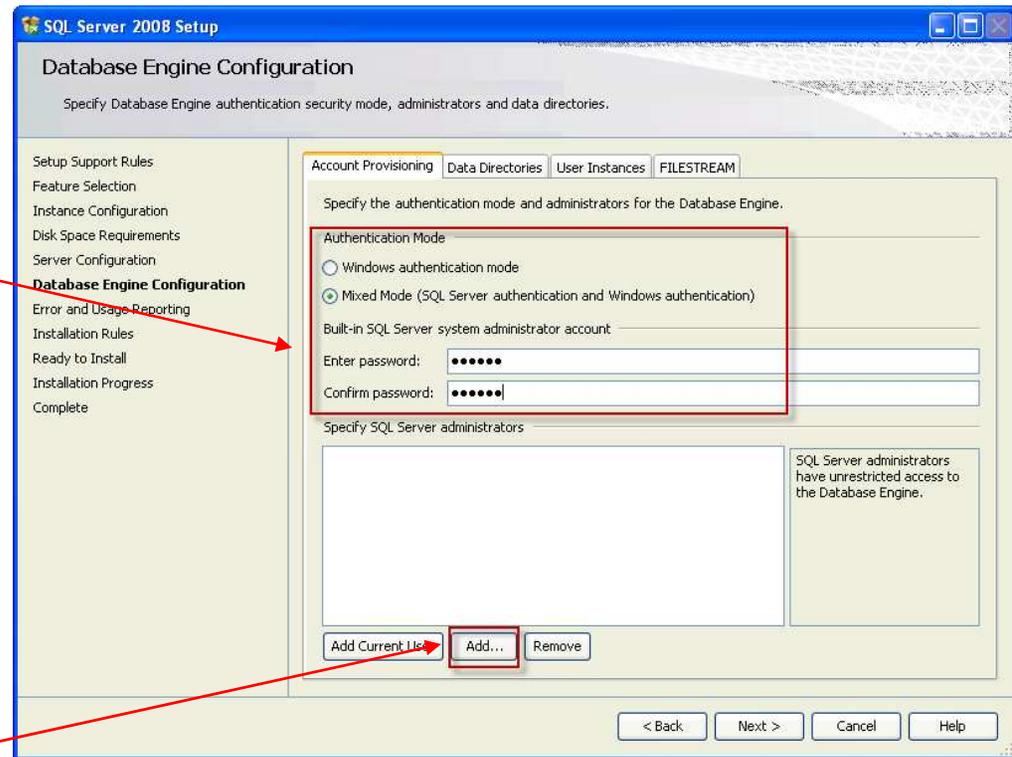


Database Engine Configuration

Enter a password for the SQL
“SA” account

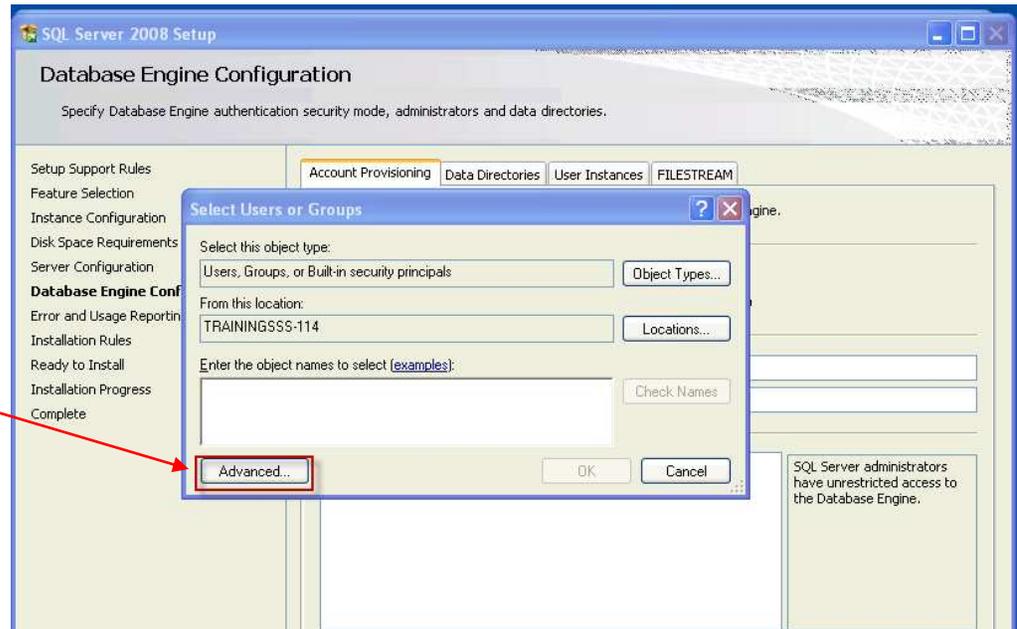
SQL requires a Windows User
Account with SQL
Administrator permissions

Click “Add” to search for a
Windows User Account



Database Engine Configuration

Click “Advanced” to
search for an existing
Windows User
Account



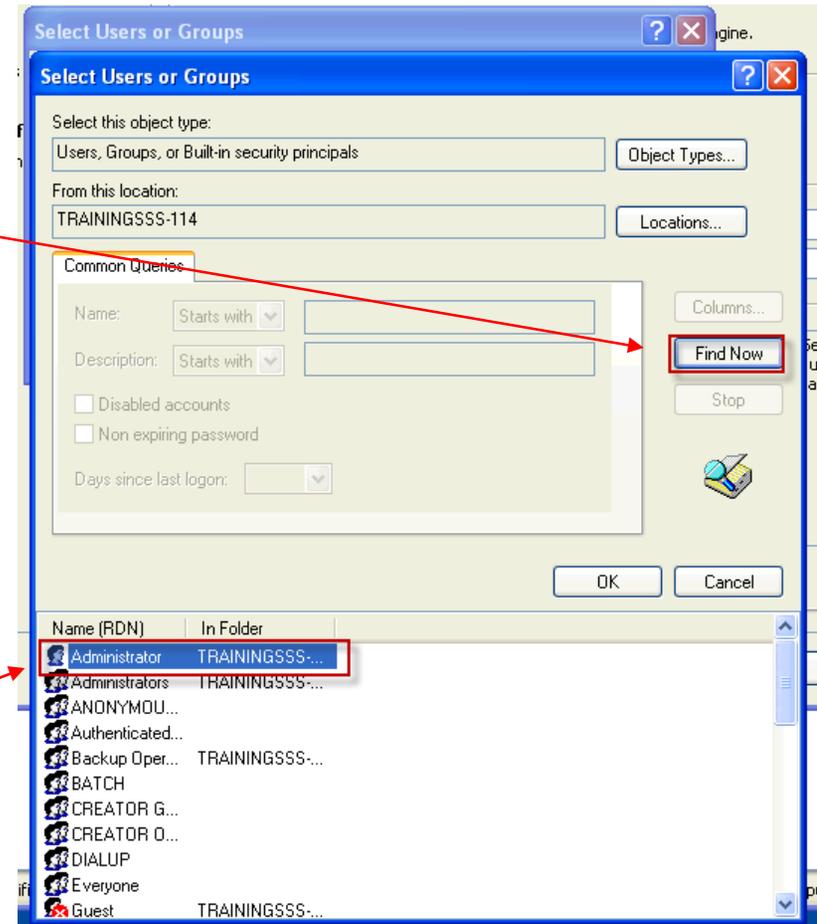
Database Engine Configuration

Click “Find Now”

Windows User Accounts will be shown

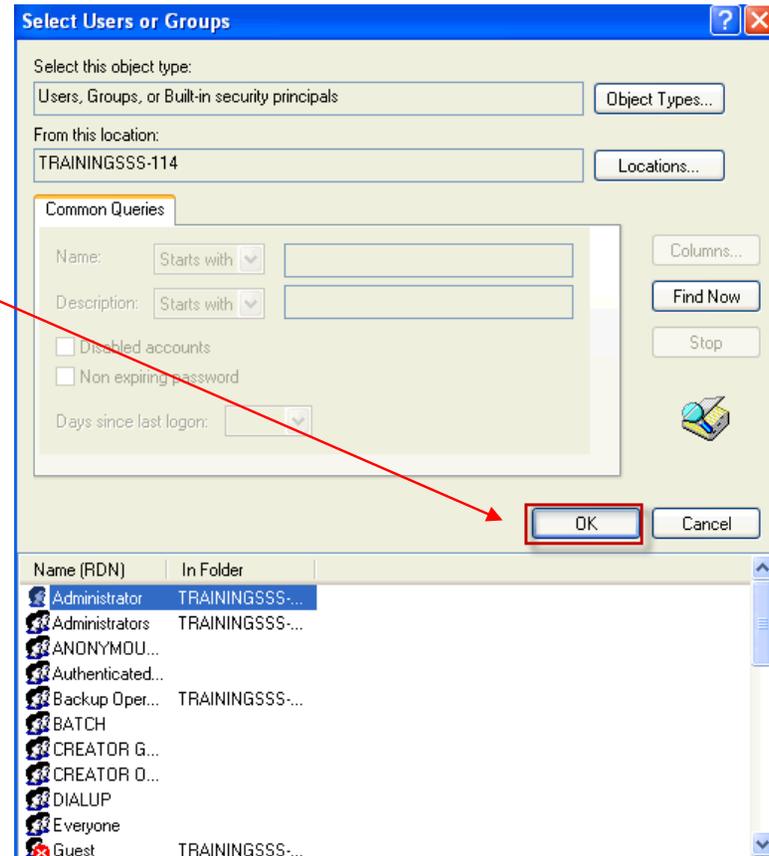
Select the required SQL Admin account

This example will use the Administrator Account



Database Engine Configuration

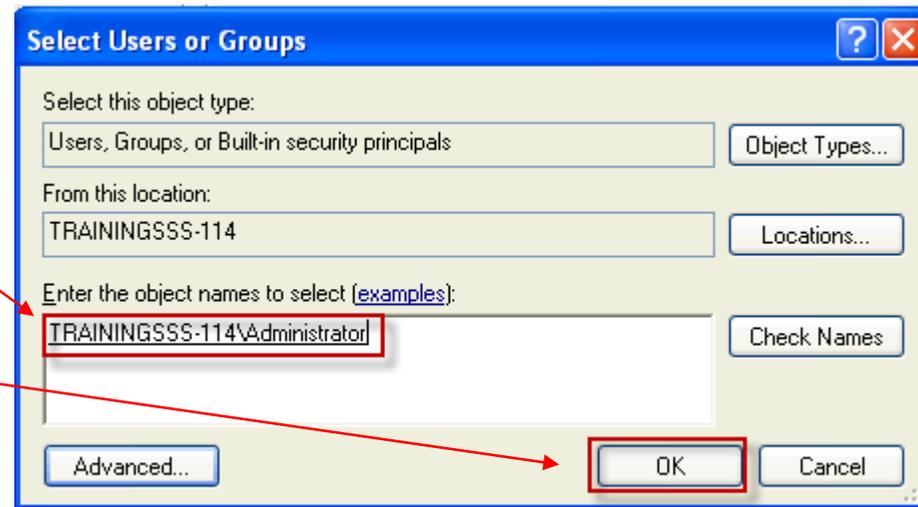
Click "Ok" to continue



Database Engine Configuration

Review the account selected

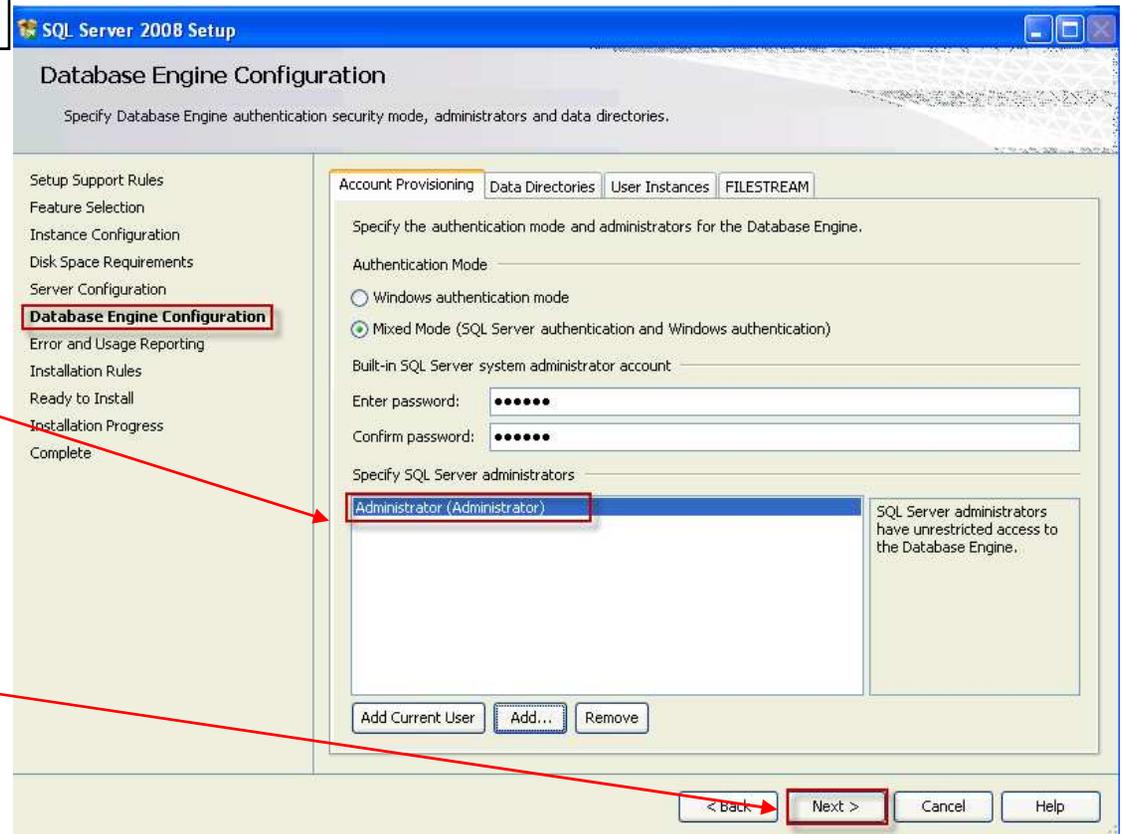
Click "Ok" to continue



Database Engine Configuration

Confirm correct
Windows User
Account has been
selected

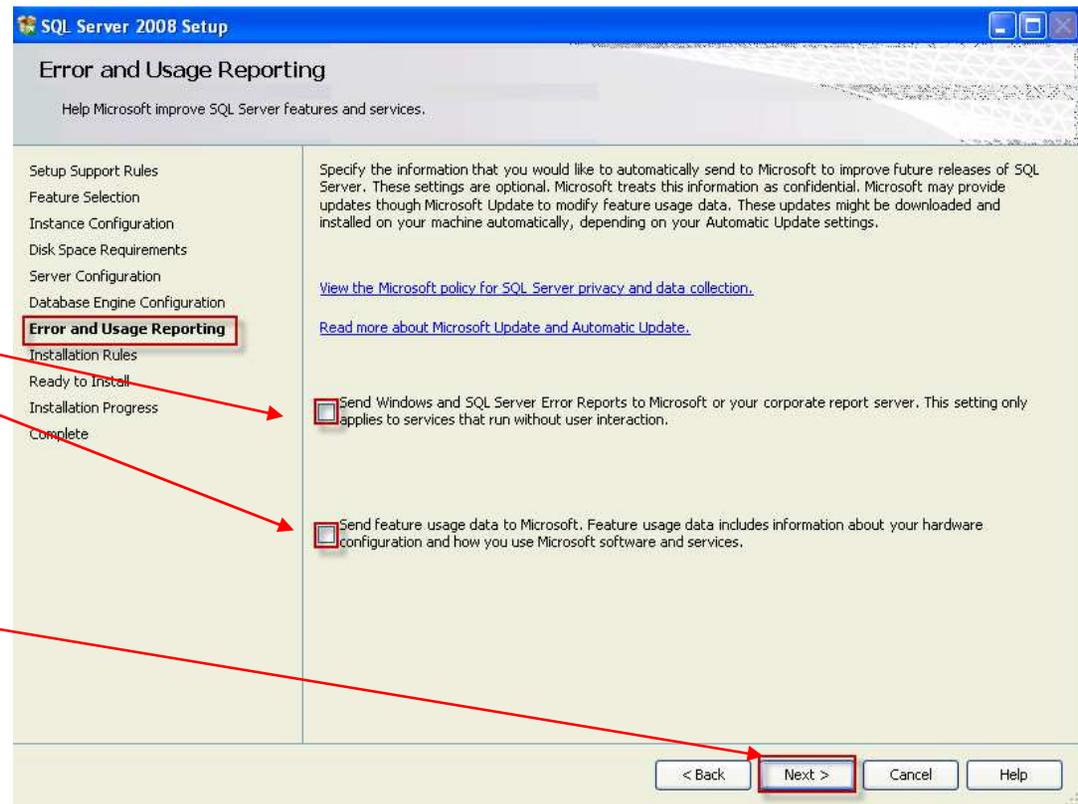
Click "Next" to continue



Error and Usage Reporting

Deselect error message reporting

Click "Next" to continue

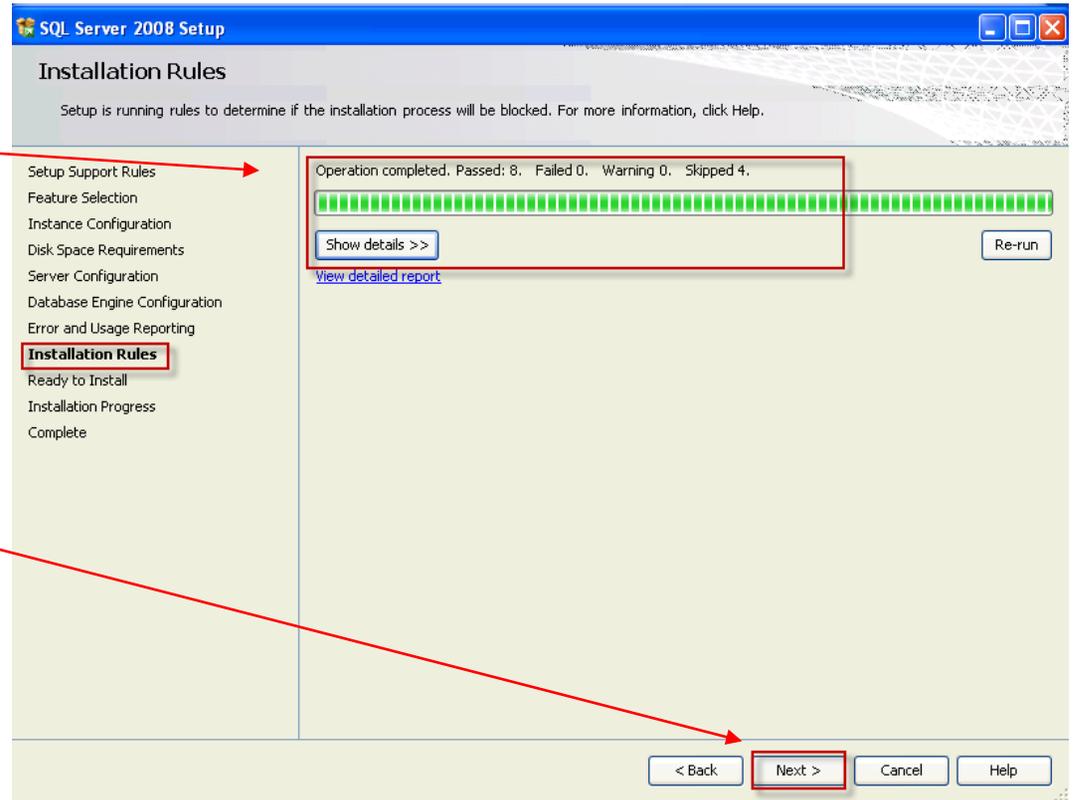


Installation Rules

Review setup rules

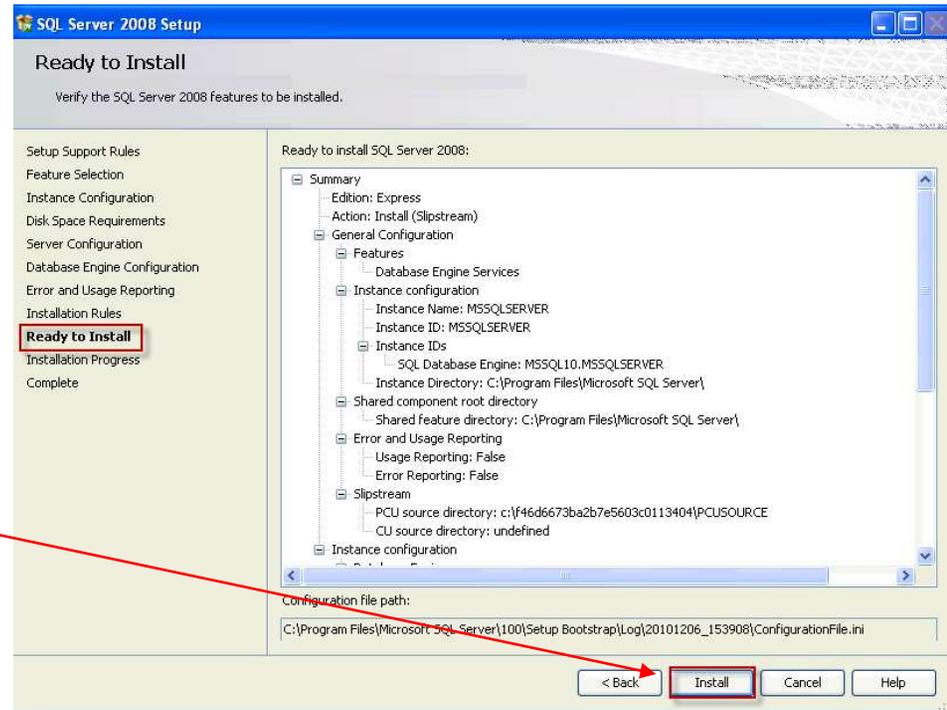
All failures must be corrected

Click "Next" to continue

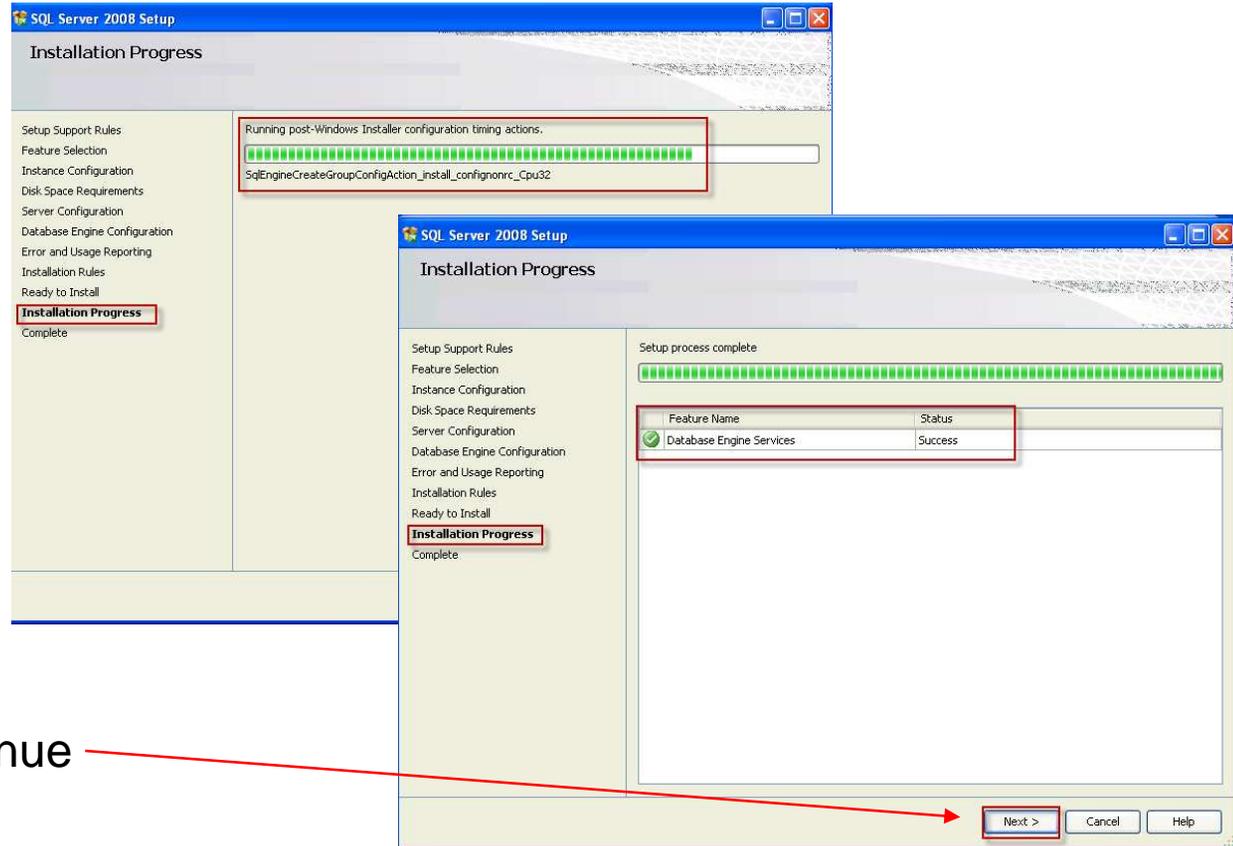


Ready to Install

Click "Install" to begin SQL engine installation

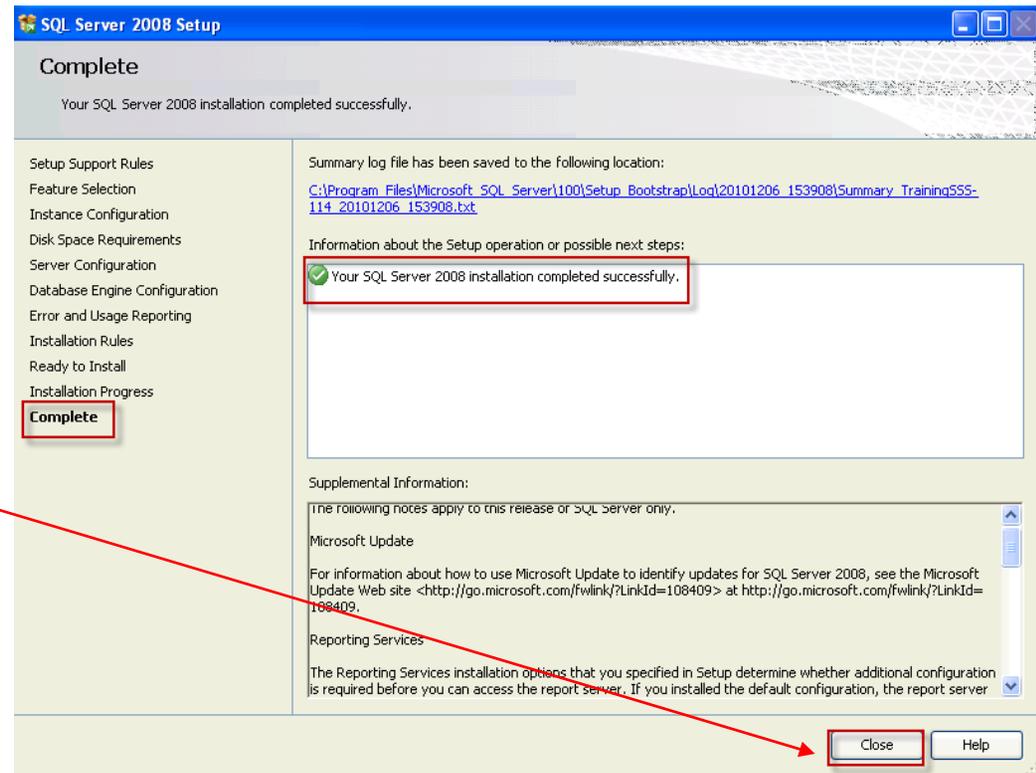


Installation Progress

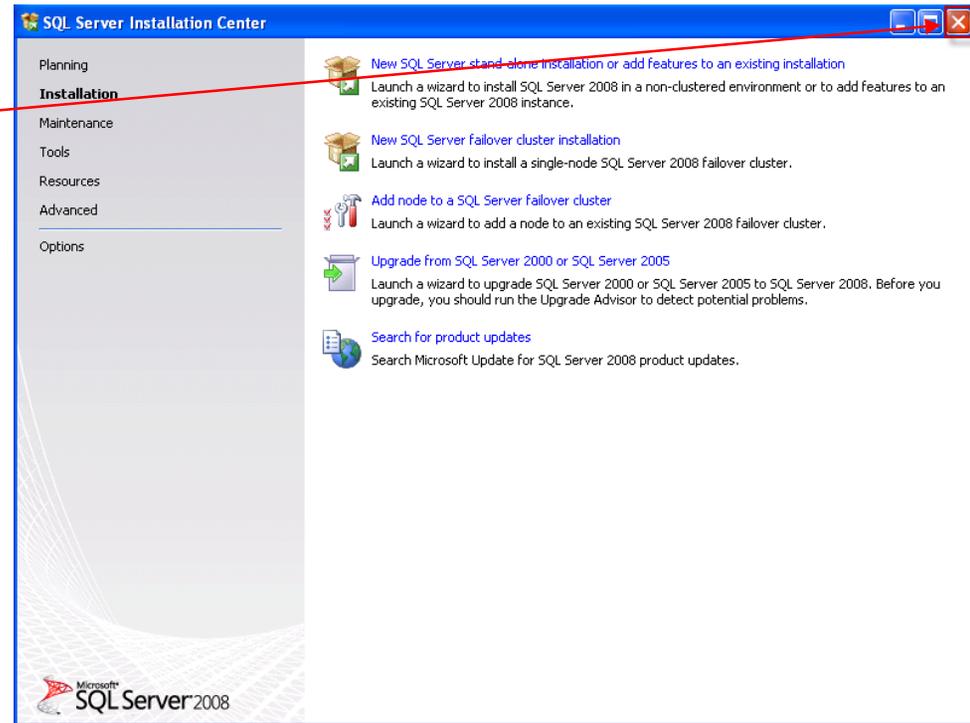


Complete

Click "Close" to exit the installation routine



Click "X" to close
the installation
utility



Continue to SQL Management Tools Installation

SQL 2008 Express Management Tools Installation

This section will walk through the steps necessary to install SQL 2008 Express Management Tools.

- Install SQL 2008 Express database engine before tools
- SQL 2008 Express Management Tools found on Disk 2
- MS .Net Framework 3.5 SP1 is required for SQL Tools Installation
- Microsoft PowerShell is required for SQL 2008 Management Tools; download from Microsoft Download site
- Install Microsoft PowerShell before installing SQL 2008 Express Management Tools

Insert Disk 2 and navigate to the prerequisites section

Select SQL 2008 Express from the list

SQL instruction screen opens

This utility will install a new instance of SQL 2008 Express that includes the management tools for the database

Microsoft SQL Server 2008 Express

Microsoft SQL Server 2008 Express installations (for 32 and 64-bit systems) are available on the product installation disc. To install SQL Server 2008 Express, remove this supplemental disc, insert the product installation disc, then navigate to `.\Temp\SQLExpress\` where the SQL Server 2008 Express installation files are located. The `.bat` files located in this directory can be used to automate the installation of Microsoft SQL Server 2008 Express. Before running the appropriate `.bat` file, be sure to edit the file and replace the value for `SAPWD` with the SQL Server `sa` password which must conform to the strong password guidelines on Microsoft's Web site: <http://support.microsoft.com/kb/965823>.

SQL Server Management Studio is required if you intend to use Database Authentication or Windows single sign-on. Once you have SQL Server 2008 Express installed, use the following instructions to install the SQL Server management Studio. Note: Windows PowerShell is a required prerequisite for the SQL Server Management Tools. Windows PowerShell can be downloaded from the Microsoft Web site: <http://technet.microsoft.com/en-us/scriptcenter/powershell.aspx>.

Installing SQL Server Management Tools

1. From the link below, run:
 - `SQLManagementStudio_x86_ENU.exe` for 32-bit systems or
 - `SQLManagementStudio_x64_ENU.exe` for 64-bit systems.
2. Click Installation, then click New SQL Server stand-alone installation or add features to an existing installation.
3. The Setup Support Rules window will identify potential problems that might occur during installation. You must correct

Scroll to the bottom of the screen and select the link to the installation folder on Disk 2

Click "Prerequisite..." link

Microsoft SQL Server 2008 Express

Microsoft SQL Server 2008 Express installations (for 32 and 64-bit systems) are available on the product installation disc. To install SQL Server 2008 Express, then navigate to \Temp\SQLExpress\ where the SQL Server 2008 Express installation files are located. The .bat files located in the folder are used to install SQL Server 2008 Express. Before running the appropriate .bat file, be sure to edit the file and replace the value for SAPWD with the SQL Server 2008 Express password. For more information, see Microsoft's Web site: <http://support.microsoft.com/kb/965823>.

SQL Server Management Studio is required if you intend to use Database Authentication or Windows single sign-on. Once you have SQL Server 2008 Express installed, you can use SQL Server Enterprise Manager to manage the server. For more information, see <http://msdn.microsoft.com/en-us/scriptcenter/powershell.aspx>.

Installing SQL Server Management Tools

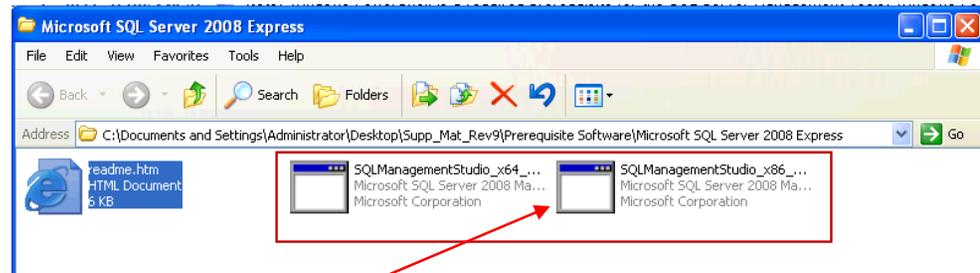
1. From the link below, run:
 - SQLManagementStudio_x86_ENU.exe for 32-bit systems or
 - SQLManagementStudio_x64_ENU.exe for 64-bit systems.
2. Click Installation, then click New SQL Server stand-alone installation or add features to an existing installation.
3. The Setup Support Rules window will identify potential problems that might occur during installation. You must correct any failures before clicking [Next].
4. In the Setup Support Files window, click [Install].
5. After the setup files have been installed, the Setup Support Rules will run again to identify potential issues. You must resolve any failures before clicking [Next].
6. In the Installation Type window, select Perform a new installation of SQL Server 2008 and click [Next].
7. In the Product Key window, click [Next].
8. In the License Terms window:
 - a. If you agree with the license terms, select I accept the license terms.
 - b. Click [Next].
9. In the Feature Selection window, select Management Tools - Basic and click [Next].
10. Review the Disk Space Requirements information and click [Next] if you have sufficient space.
11. In the Error and Usage Report Settings window, deselect both options. Click [Next].
12. The Installation Rules window will determine if there are any barriers to the installation process. If there are no failures, click [Next].
13. In the Ready to Install window, click [Install] to begin the installation.
14. After all installation progress has completed, click [Next].
15. In the Complete window, click [Close].

 [Prerequisite Software > Microsoft SQL Server 2008 Express](#)

Select correct OS processor version of SQL

This example will use the x86 version

Double click file to begin the installation



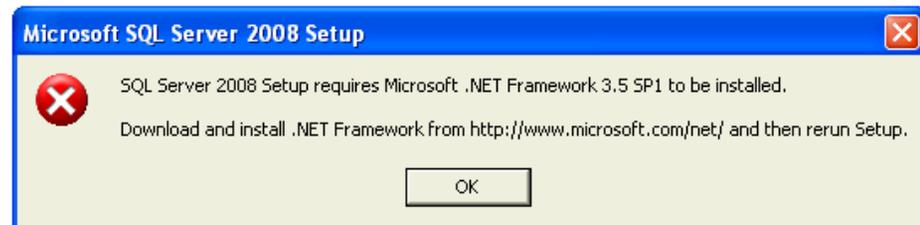
Missing components will be detected

Download and install if necessary

Restart the installation routine to
continue

Each additional missing component
will be detected

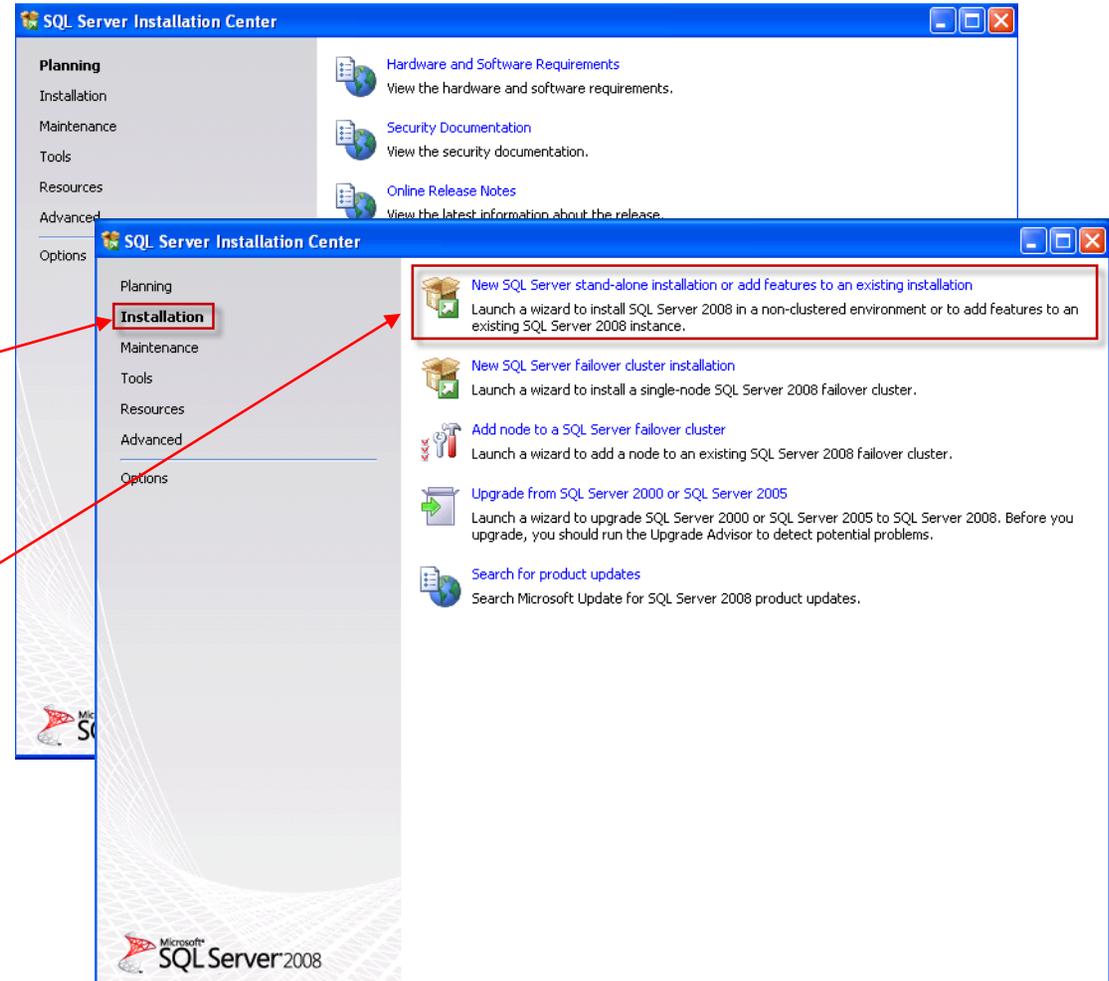
Correct as necessary



The Installation Center Utility opens once all prerequisites have been met

Select "Installation"

Select "New SQL Server....."

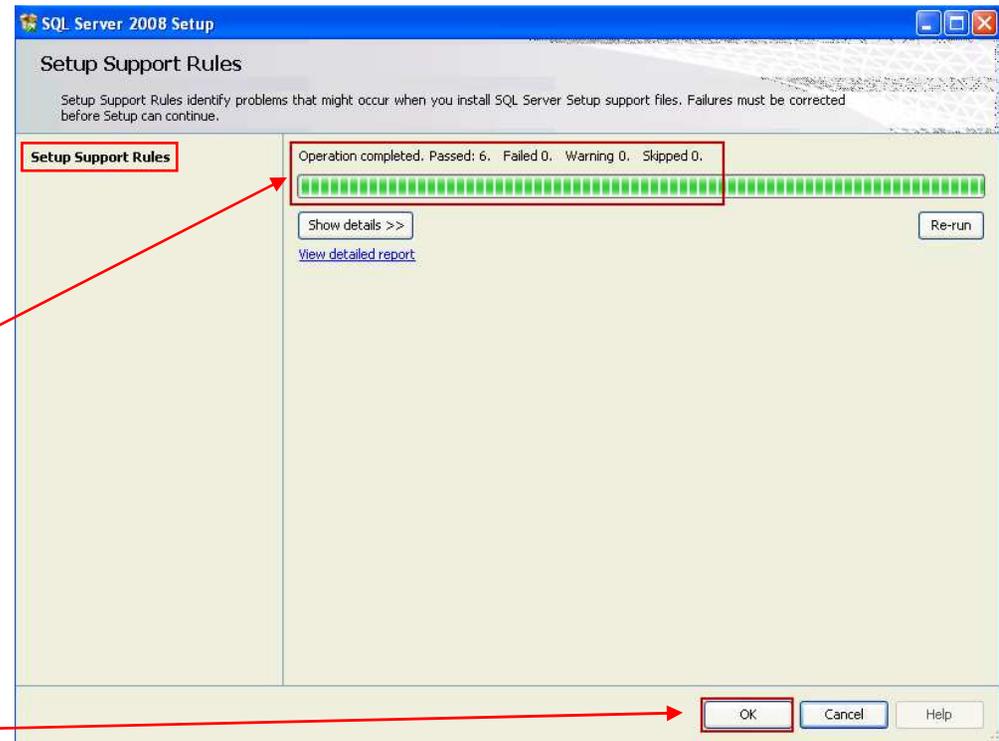


Setup Support

Setup Support Rules will take a few moments to check the system

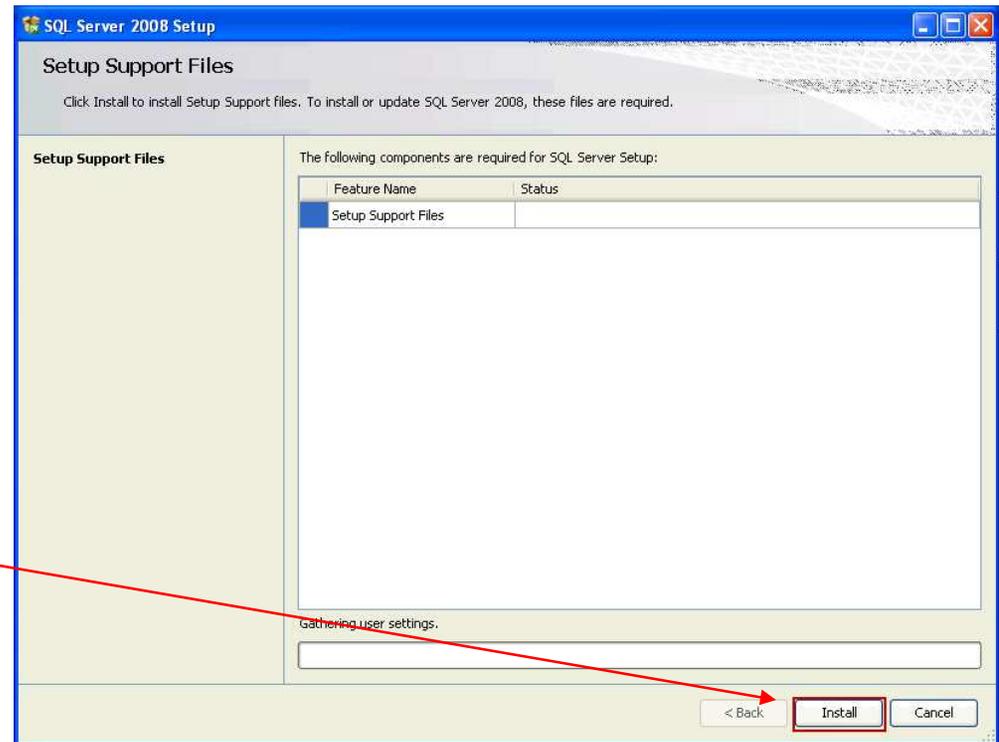
All Failures must be corrected before continuing

Select "Ok" to continue



Setup Support

Click "Install" to continue



Setup Support

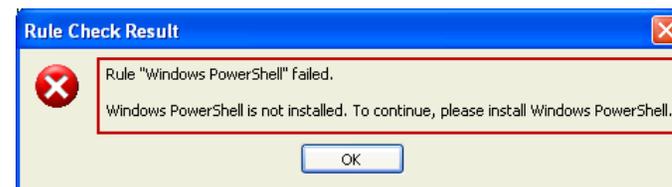
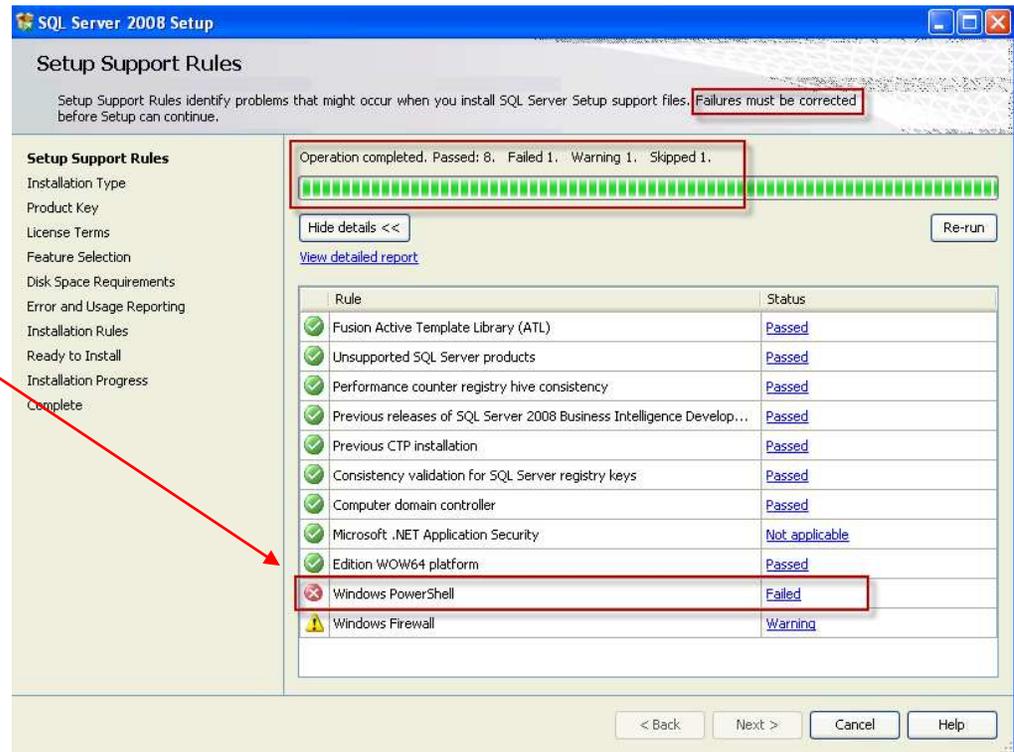
Missing components will be detected

All failures must be corrected before continuing

Restart the installation routine to continue once the failures have been corrected

Each additional missing component will be detected

Correct as necessary

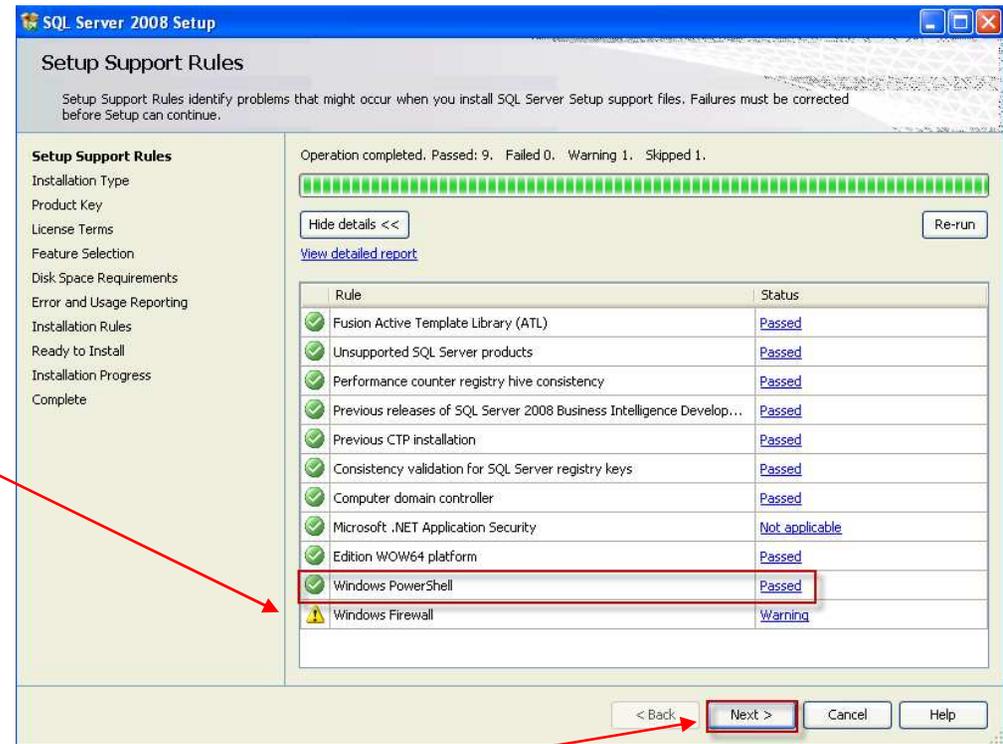


Setup Support

Setup support will look for additional issues

It is recommended to turn off the Windows Firewall during this installation to avoid conflicts

The Windows Firewall may be re-enabled once the installation is complete

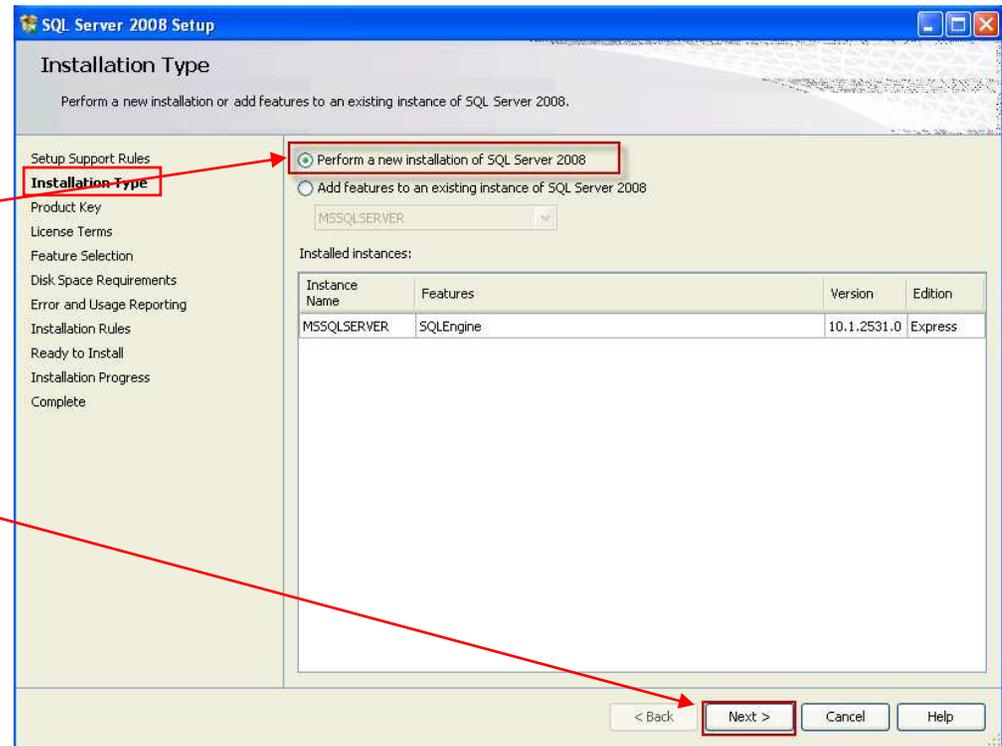


Click "Next" to continue

Installation Type

Select “Perform a new installation of SQL Server 2008”

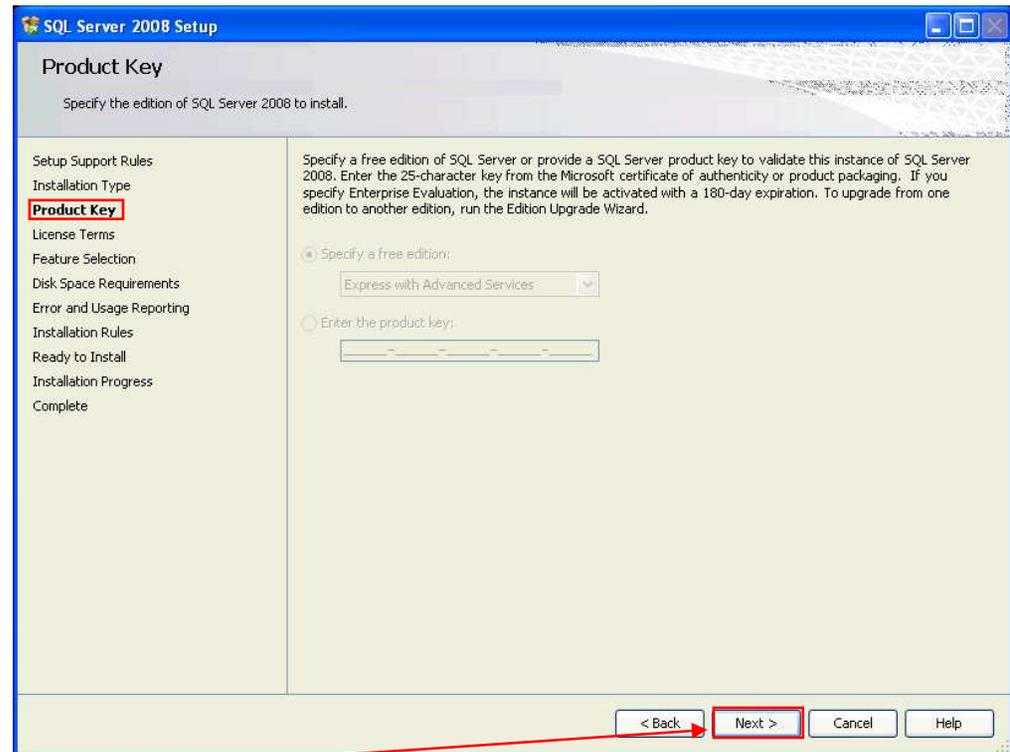
Click “Next” to continue



Product Key

SQL Express does not
require a product key

SQL Standard does require
a product key

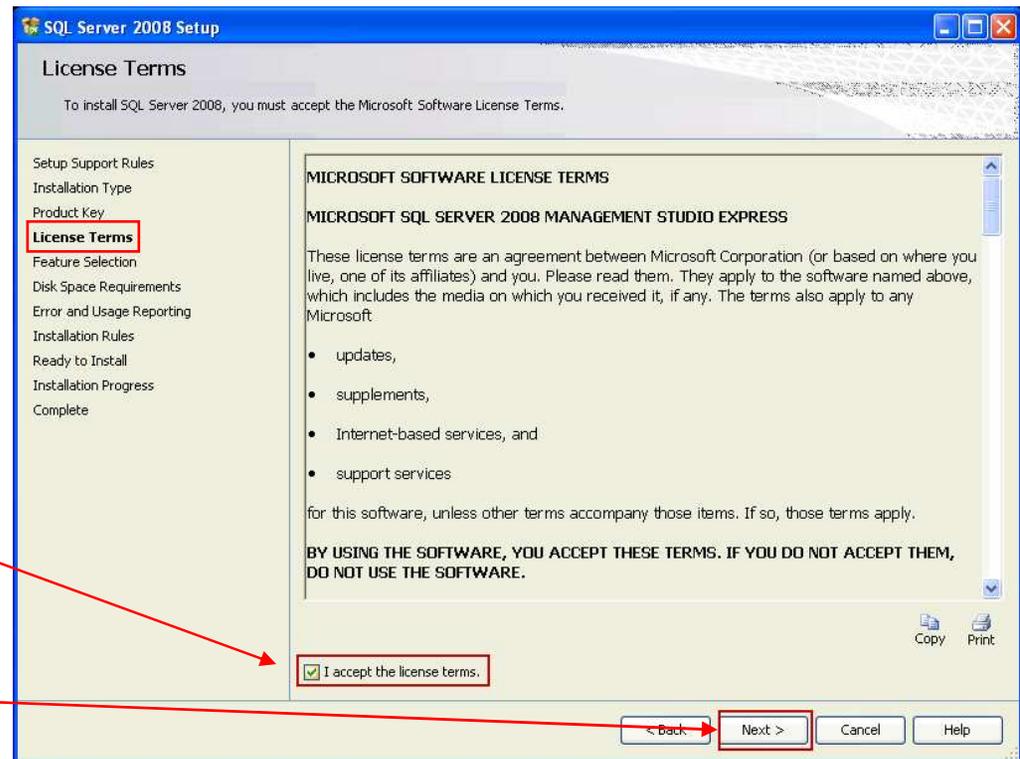


Click "Next" to continue

License Terms

Select "I accept..."

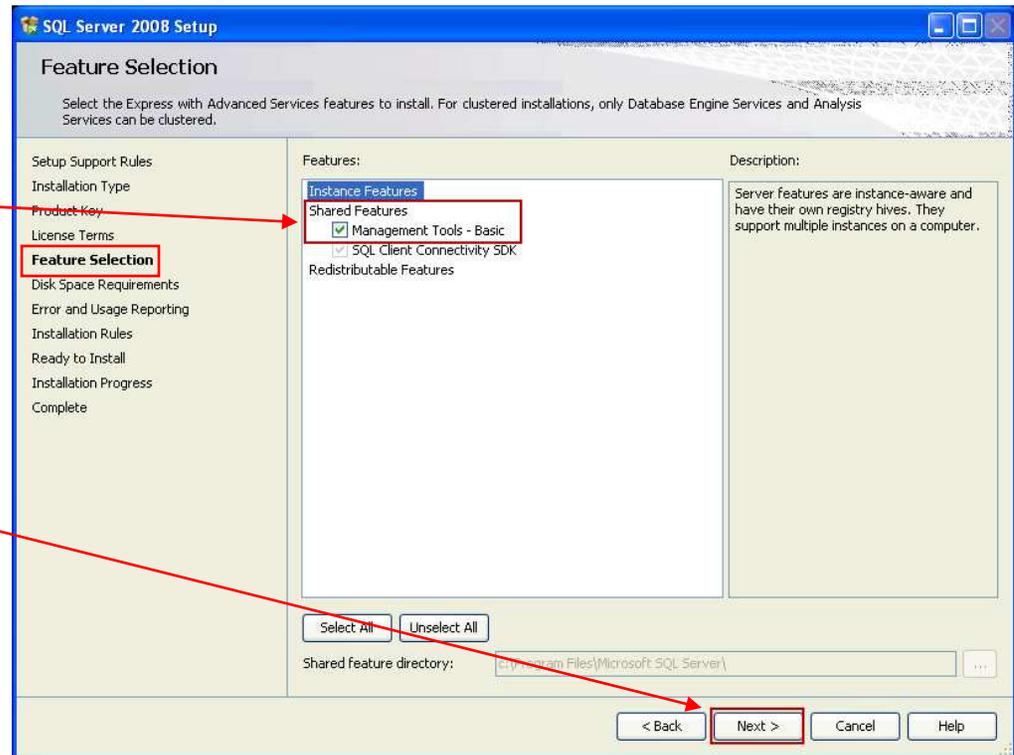
Click "Next" to continue



Feature Selection

Select "Management Tools"

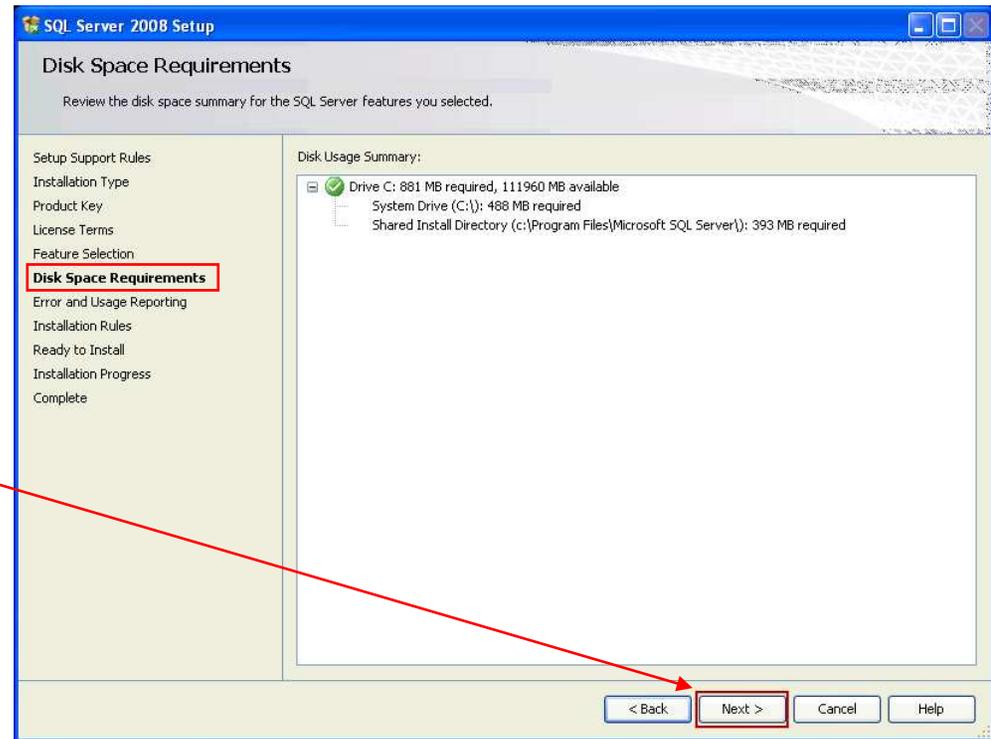
Click "Next" to continue



Disk Space Requirements

Review disk space requirements

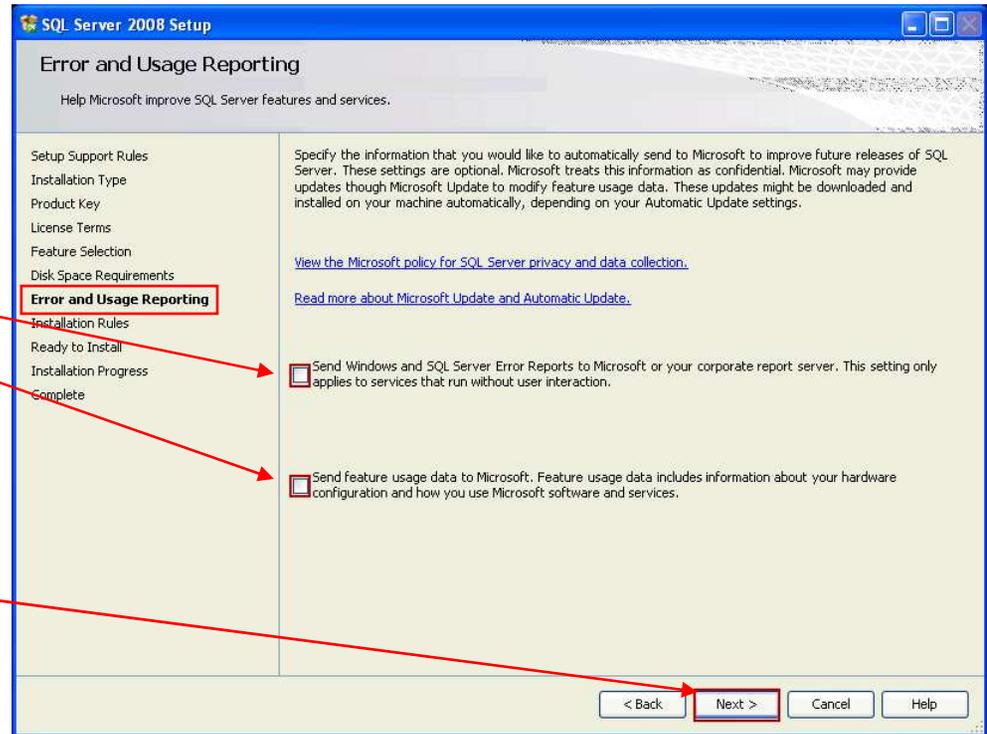
Click "Next" to continue



Error and Usage Reporting

Deselect error message reporting

Click "Next" to continue

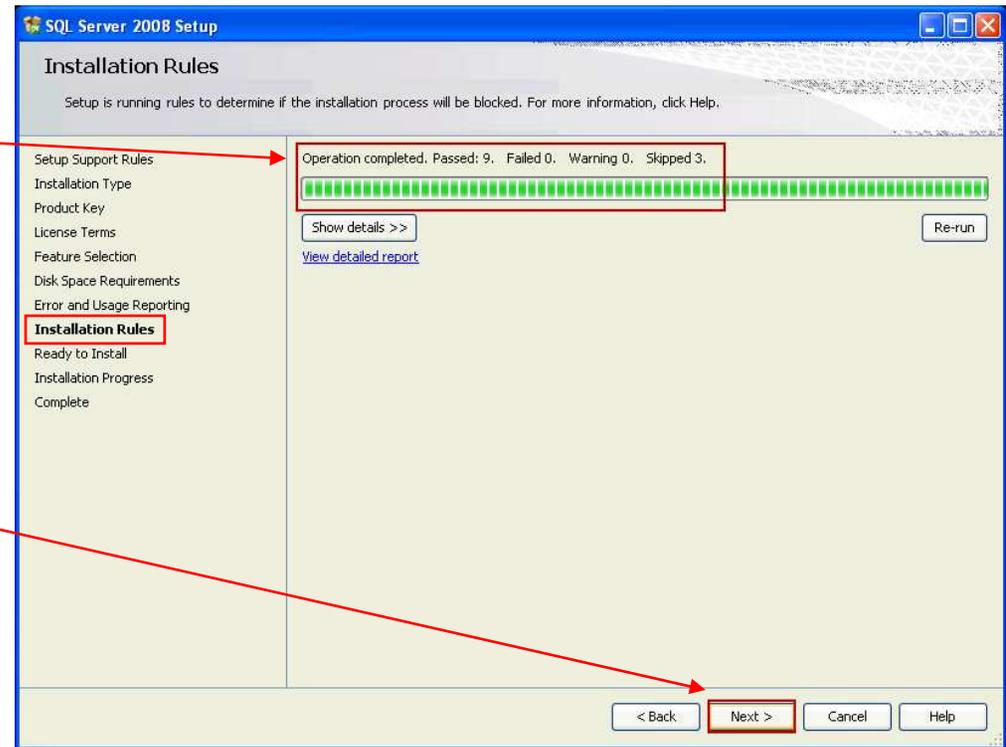


Installation Rules

Review setup rules

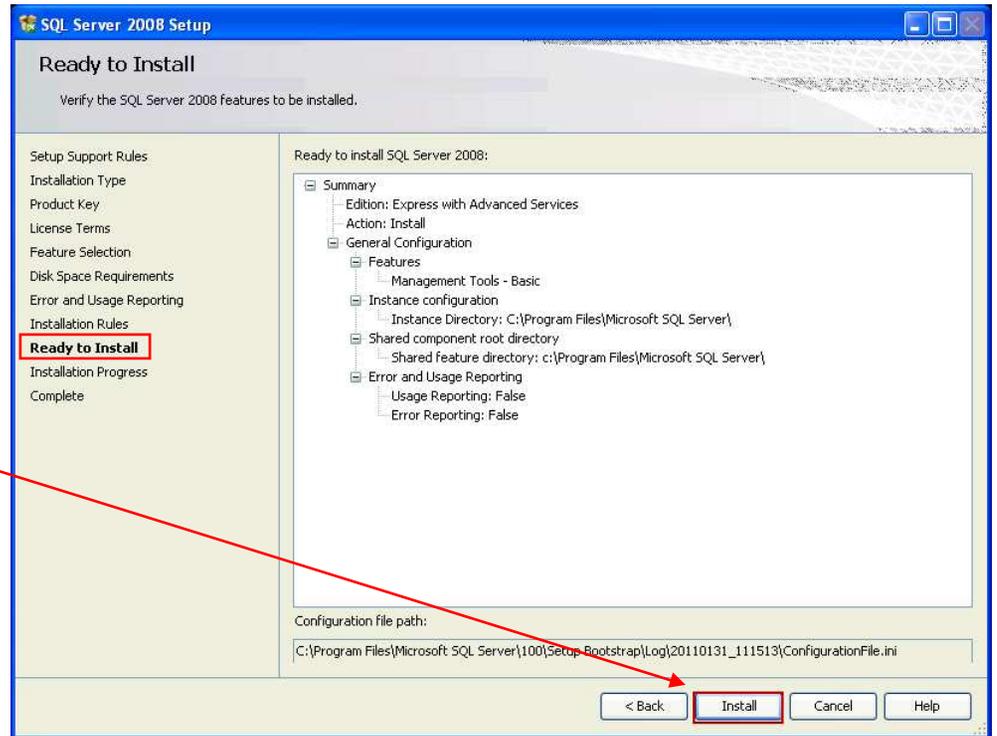
All failures must be corrected

Click "Next" to continue



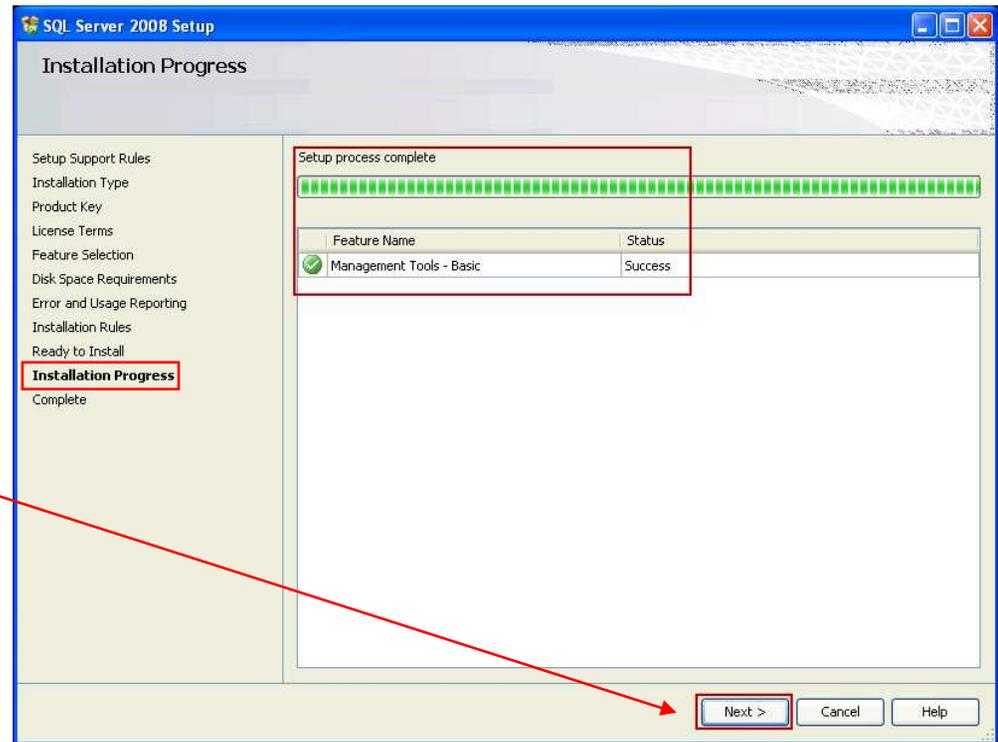
Ready to Install

Click "Install" to continue



Installation Progress

Click "Next" to continue

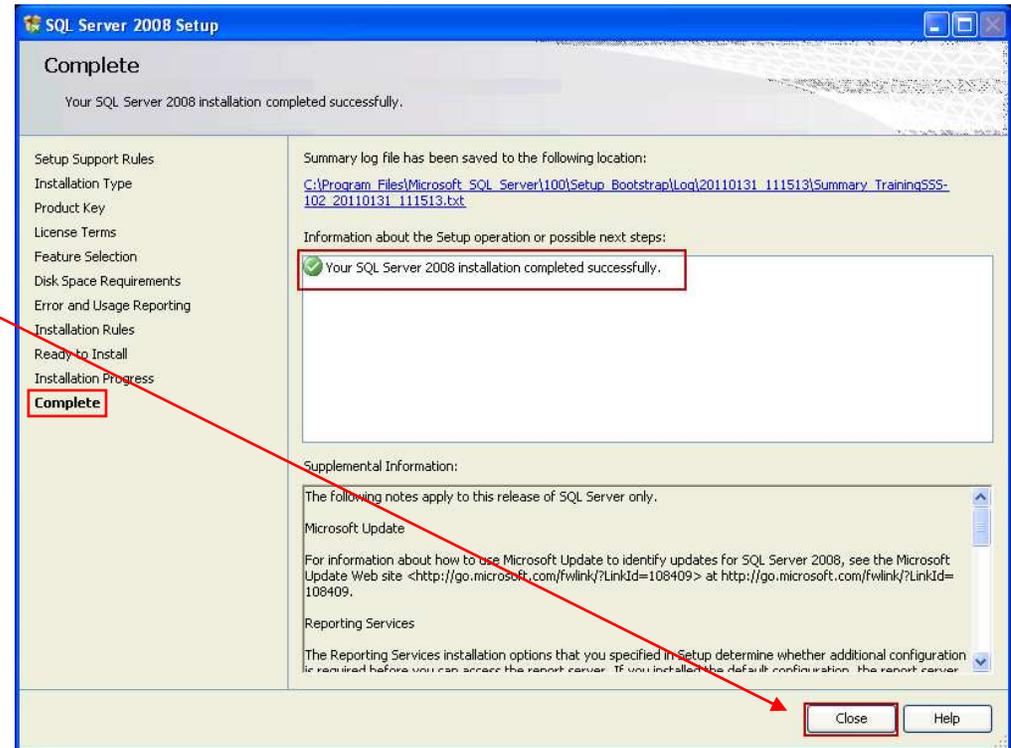


Complete

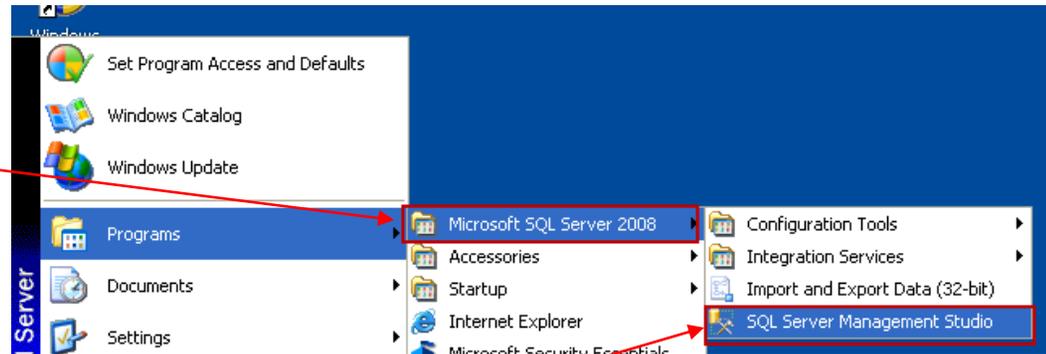
Click “ Close” to complete installation

SQL Management Tools have now been installed

Navigate to SQL Express 2008 to confirm Management Tools have been installed



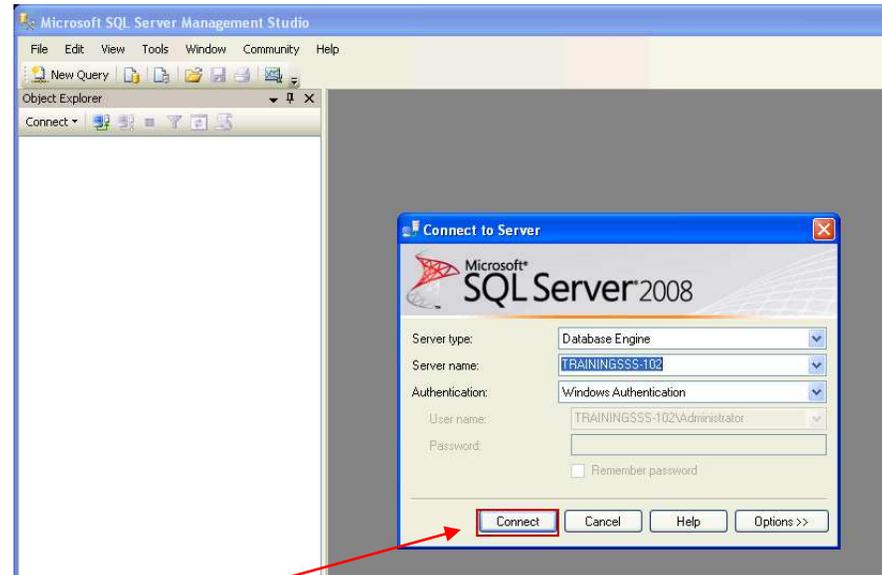
Navigate to SQL 2008



Select "SQL Server Management Studio"

The connect to server
dialogue box opens

Windows Authentication
will be the default
connection method



click "Connect" to continue

SQL Server Configuration (Optional)

This section will go through the steps of configuring the database engine manually.

A Standard SQL Server installation requires several configuration steps prior to the installation of the Basis software.

SQL Express may be configured manually if necessary

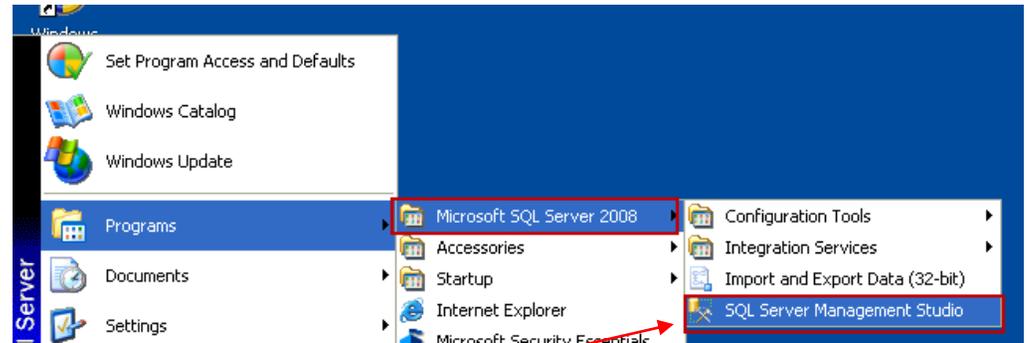
Configuration steps

- Create the Access Control database
- Create a login account for Lenel
- Assign database permissions to Lenel with an SQL query
- Adjust maximum CPU memory available to SQL Server
- Adjust database log file capacity

Create the database

Navigate to SQL Server 2008

Open “SQL Server Management Studio”



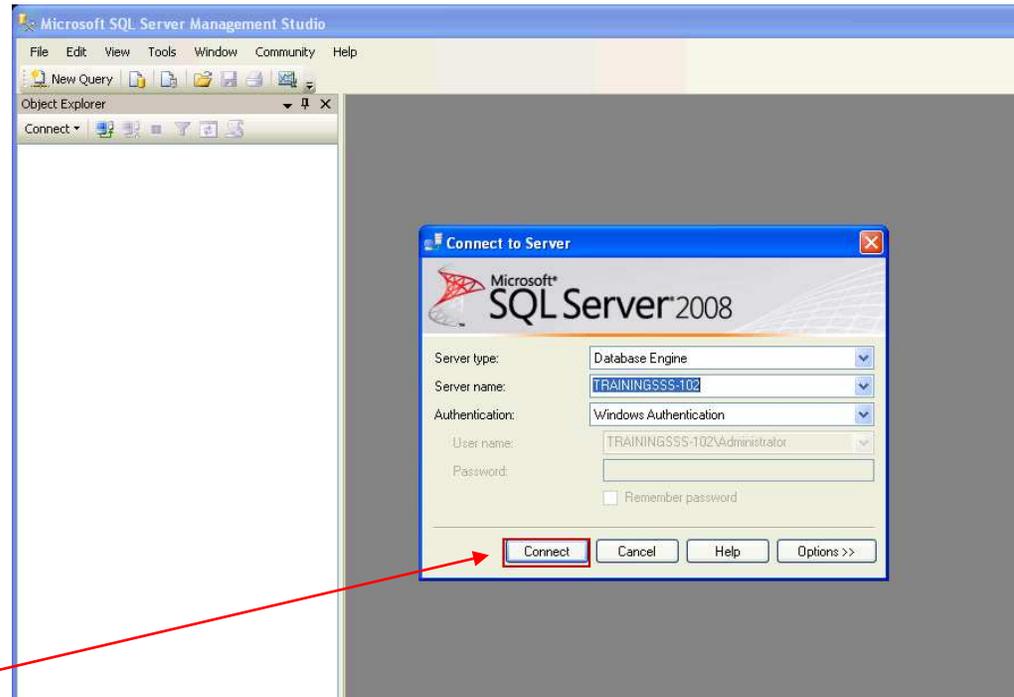
Log into SQL Management Studio

Use Windows authentication

OR

SQL authentication

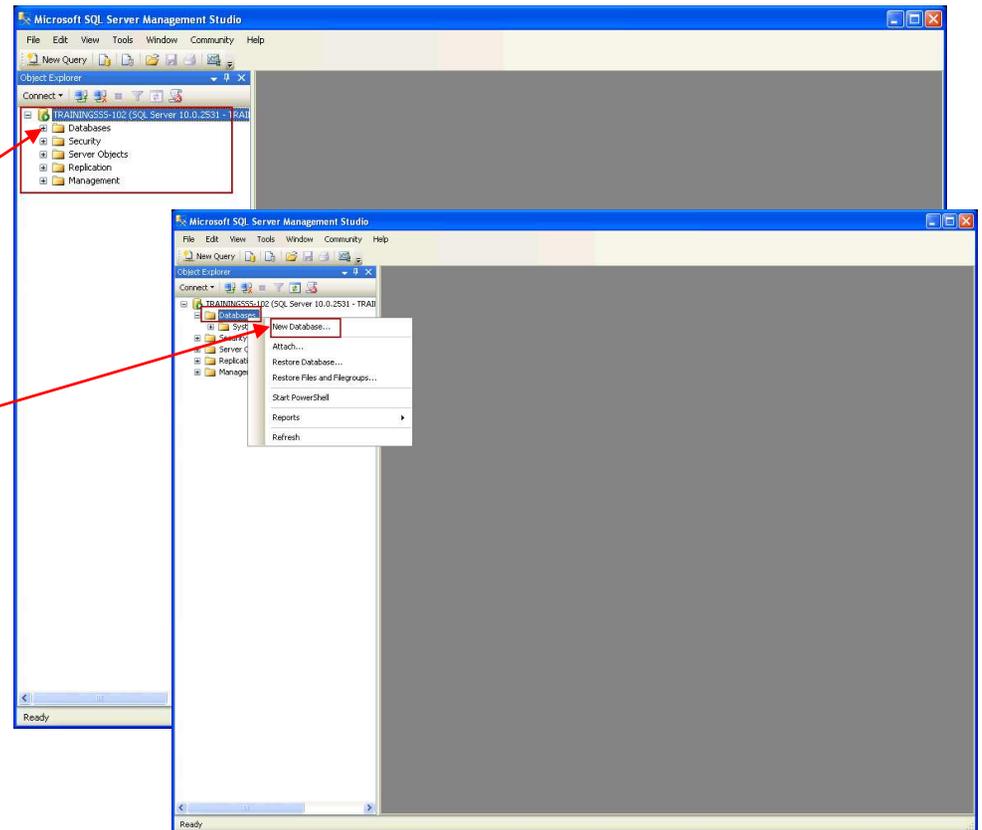
Click "Connect" to continue



Expand Object Explorer

Right Click on "Databases"

Select 'New Database' from
the option menu



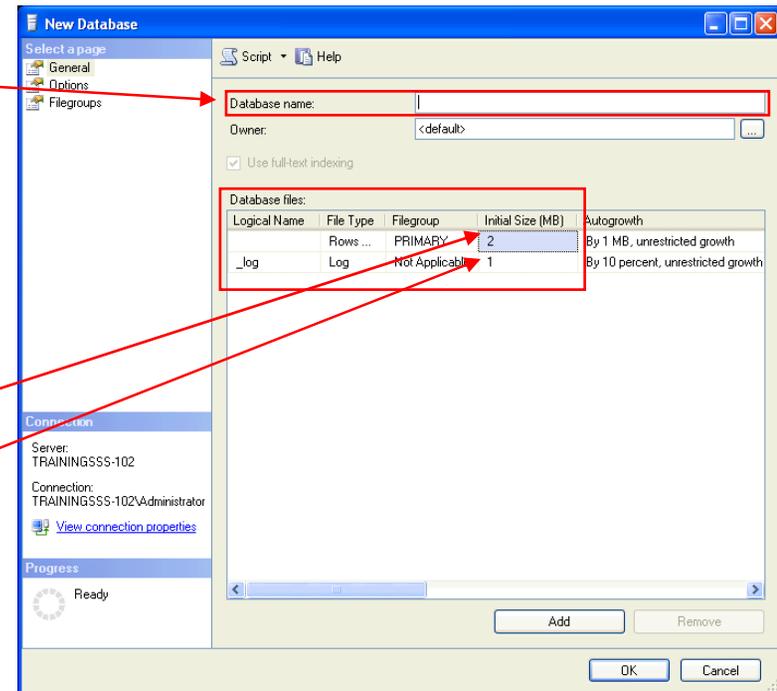
Select "Database name"

Name the new database
AccessControl

The database name must be
entered exactly as shown

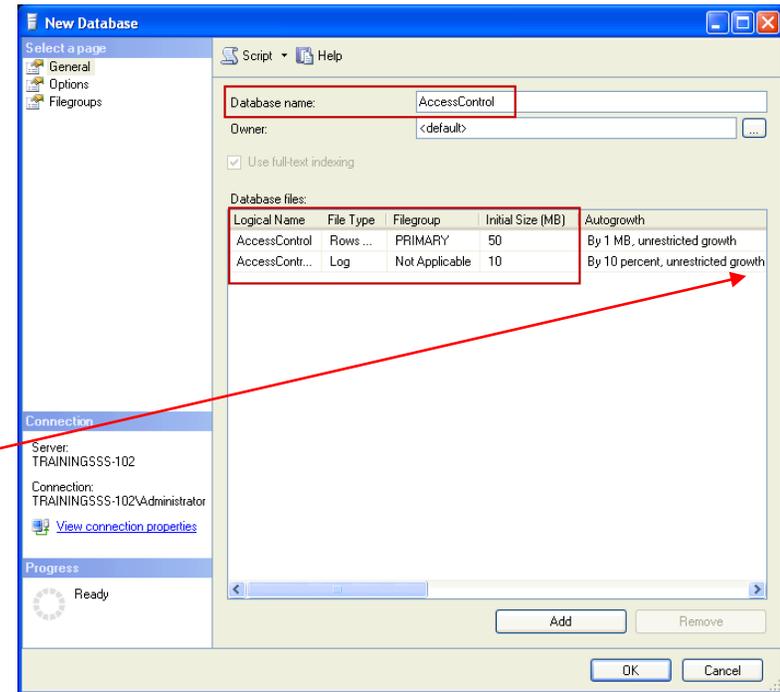
Set Data size to 50mb

Set Log size to 10mb

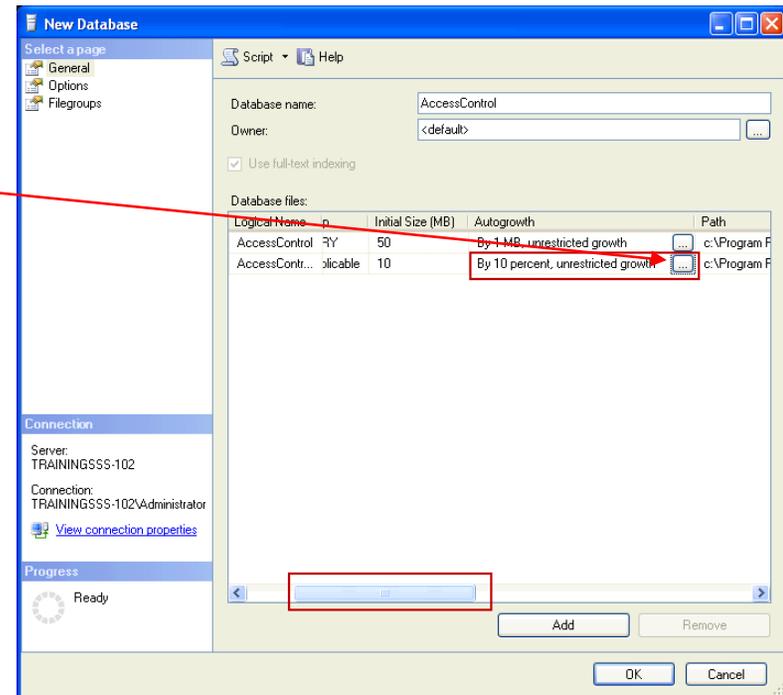


The size of the log file must be configured to overwrite as needed

Scroll to the right until a option button appears to the right of “By 10 percent,.....”



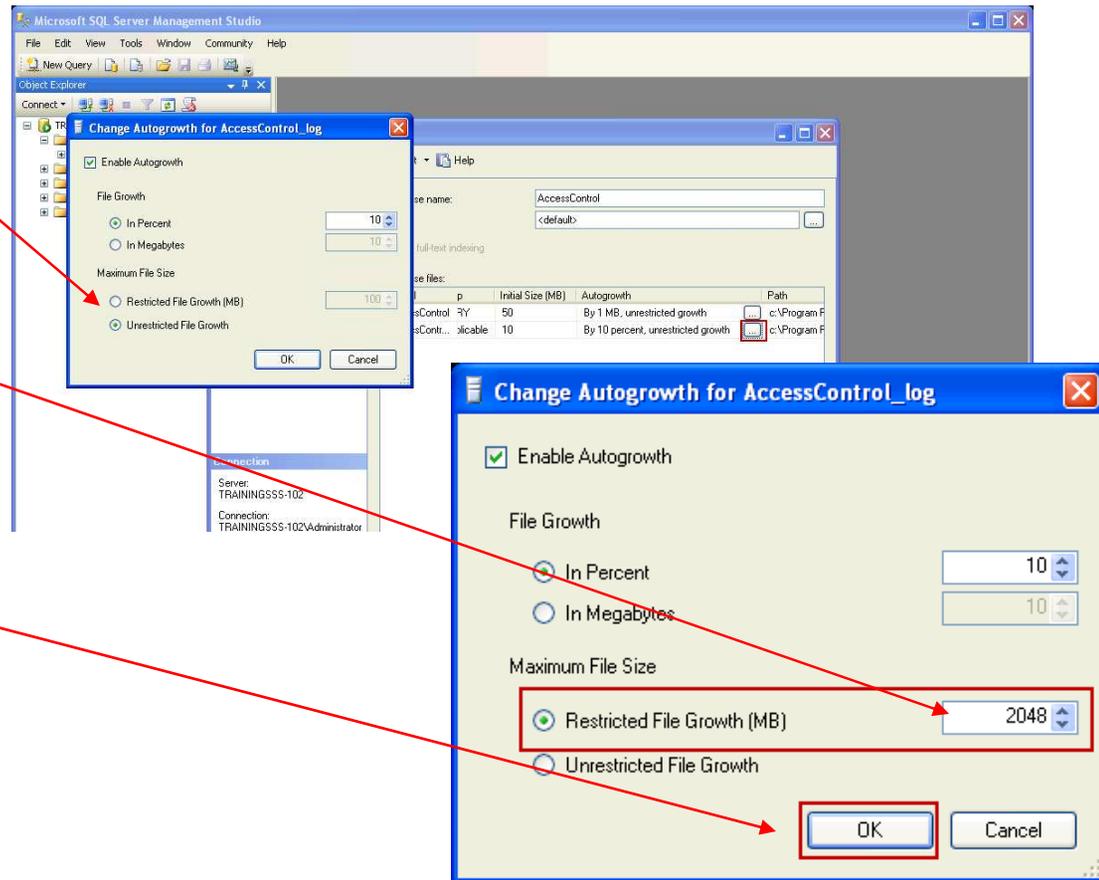
Click on the "Option" button
to activate a menu



Select "Restricted File Growth" radio button

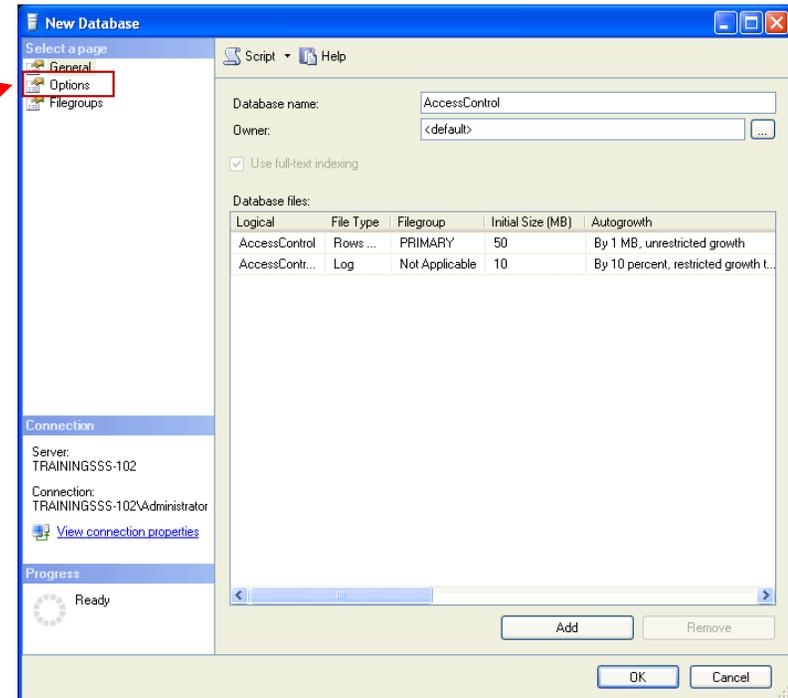
Enter "2048" as suggested log file capacity

Click "Ok" to continue



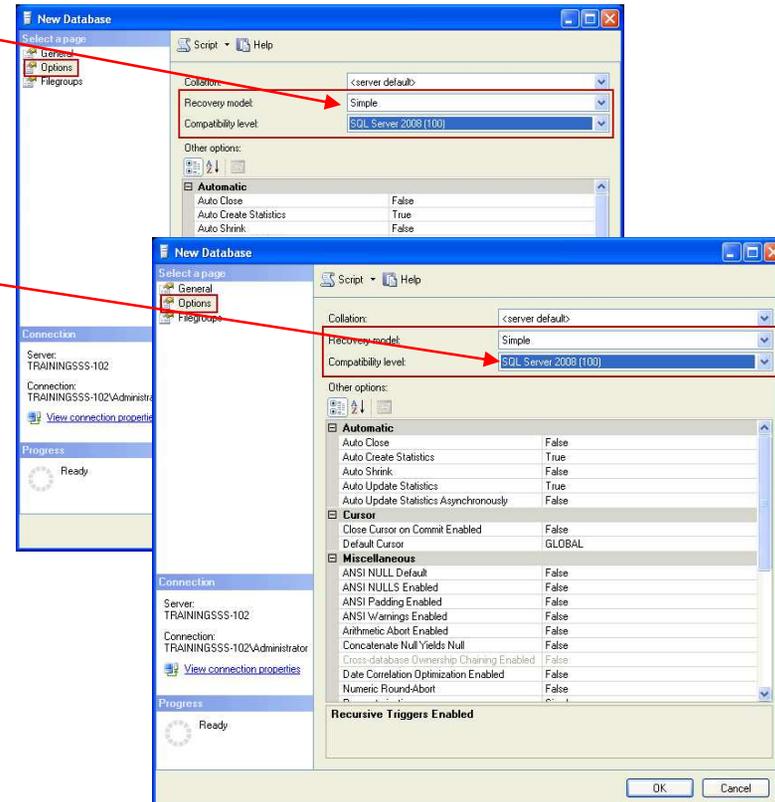
Select "Options" from the select a page panel on the left side of the screen

This will open the option setup screens for the database



Confirm the “Recovery Model”
is set to Simple

Open the “Compatibility Level”
drop down and select “SQL
Server 2005 (90)”

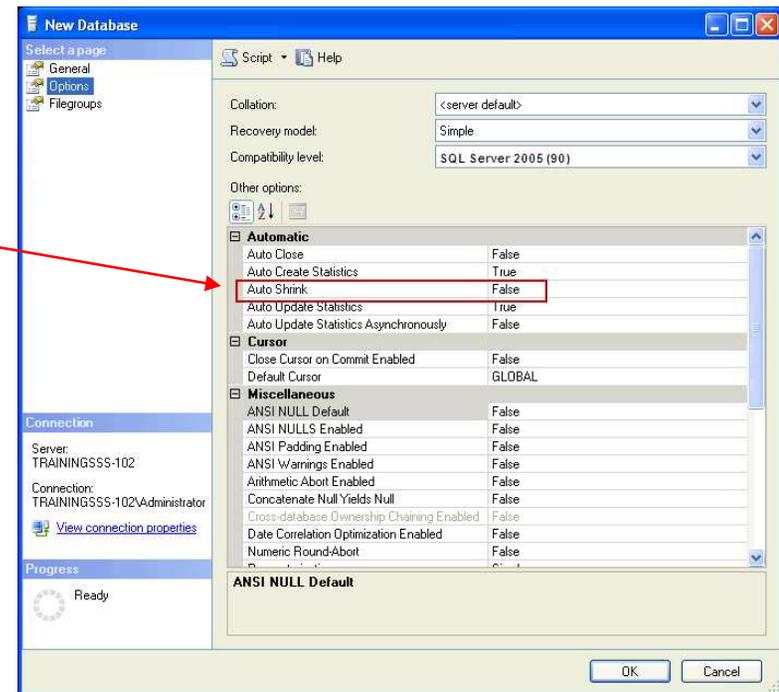


In the “Automatic” section,
select the following options
and set to “True” using the
drop down

“Auto Shrink”

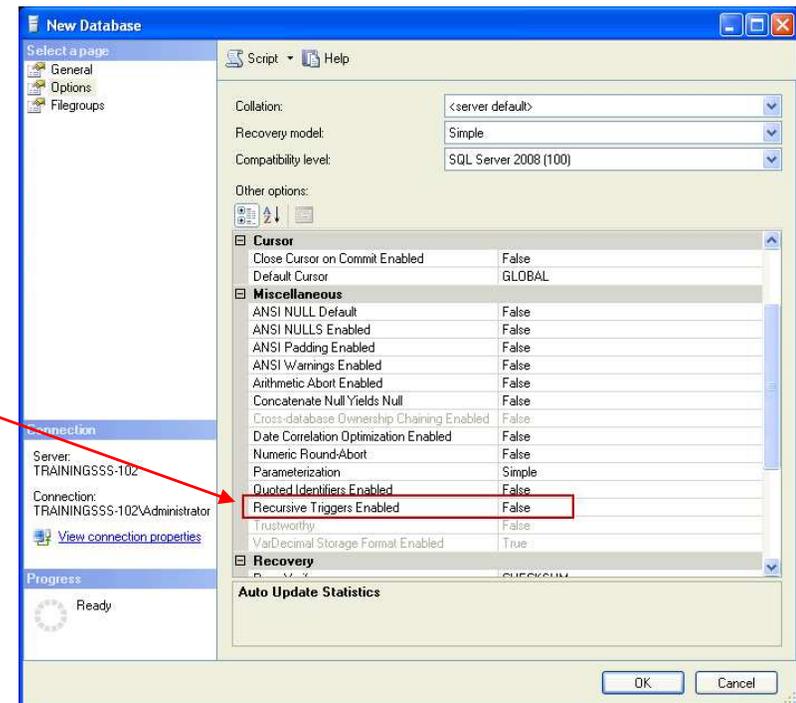
“Auto Update Statistics”

“Auto Create Statistics”



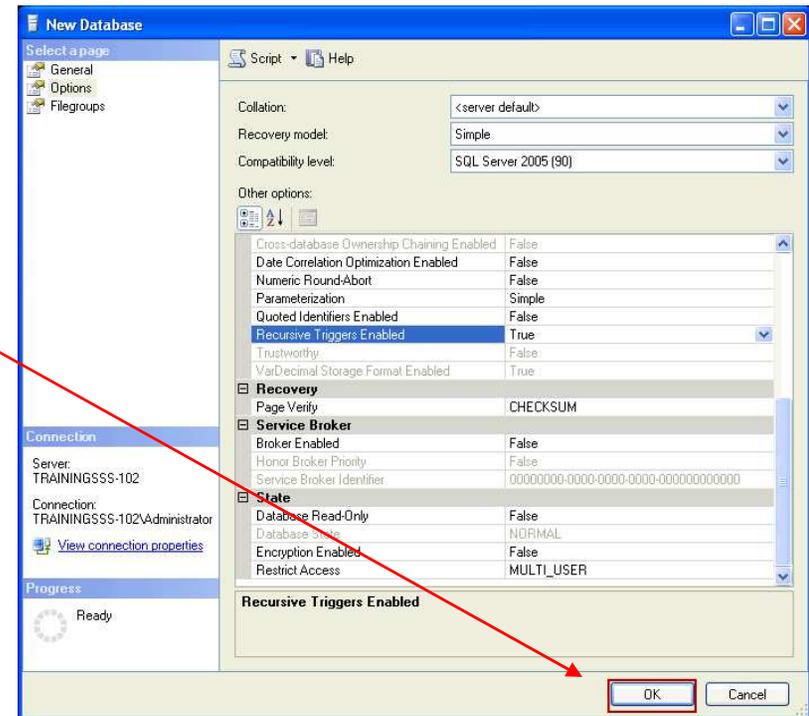
In the “Miscellaneous” section,
scroll down until “Recursive
Triggers” appears

Open “Recursive Triggers
Enabled” and select “True”
from the dropdown



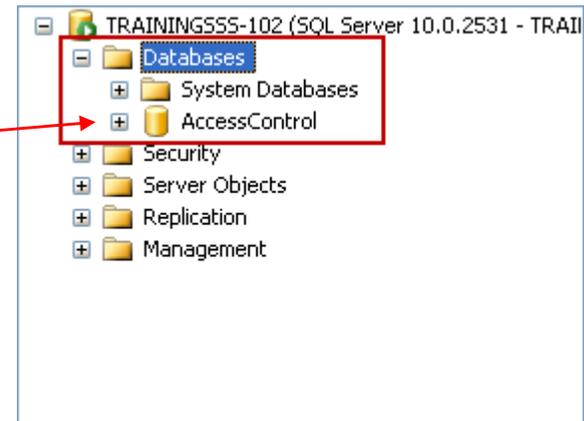
Click "Ok" to continue

The next step will be to create a login for the database



Confirm “AccessControl” is listed in the
Databases group

The next step is to create the required
login account for Lenel

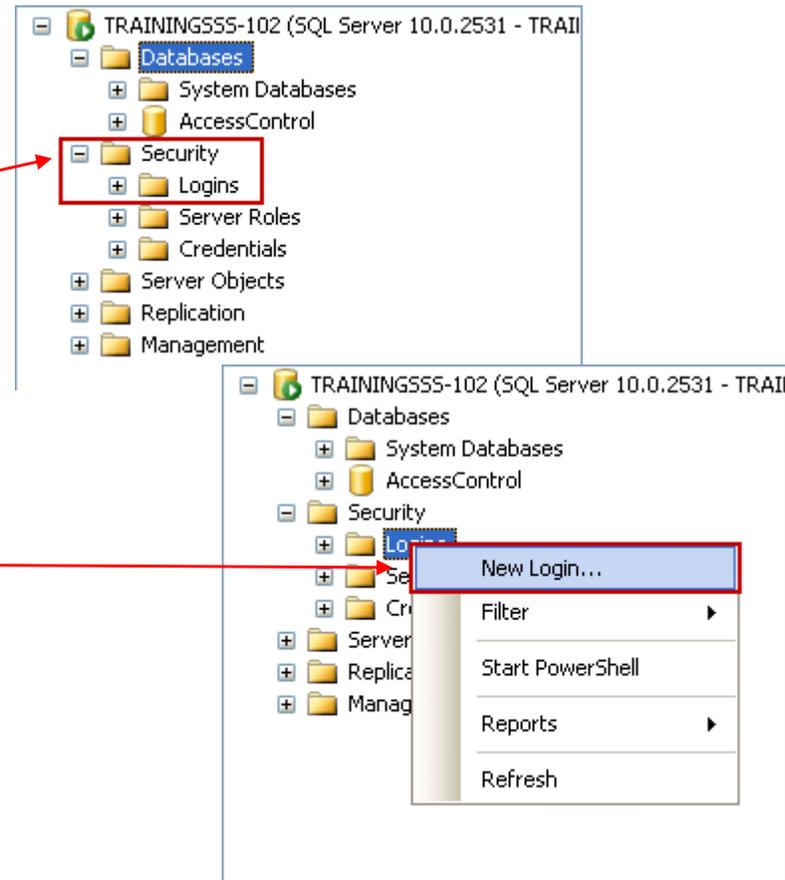


Create database login for Lenel

Expand the Security folder

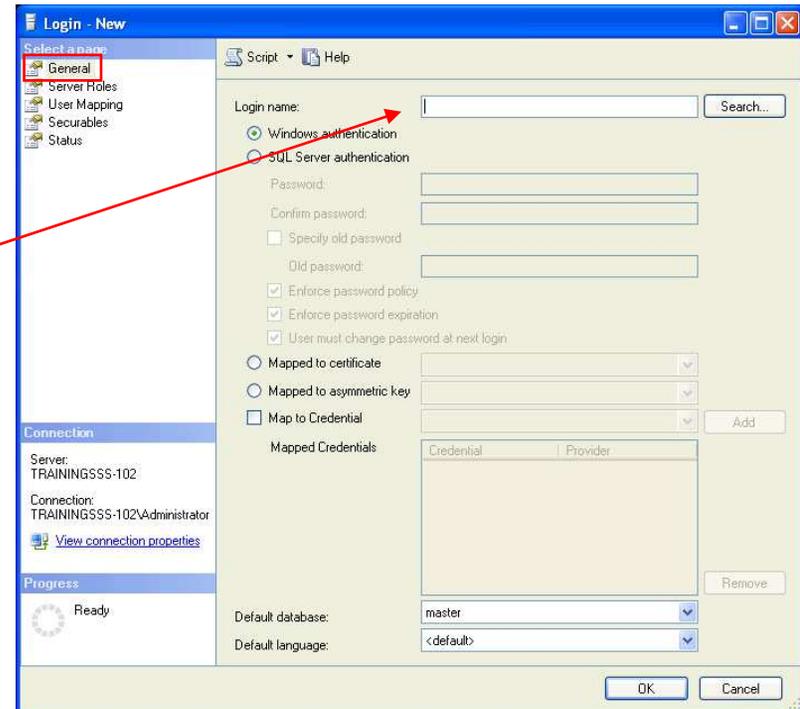
Right Click on Logins

Select "New Login" from the option list



General Page

From the General Page,
Select the Login Name
field



Login Name: lenel

Select "SQL Server authentication"

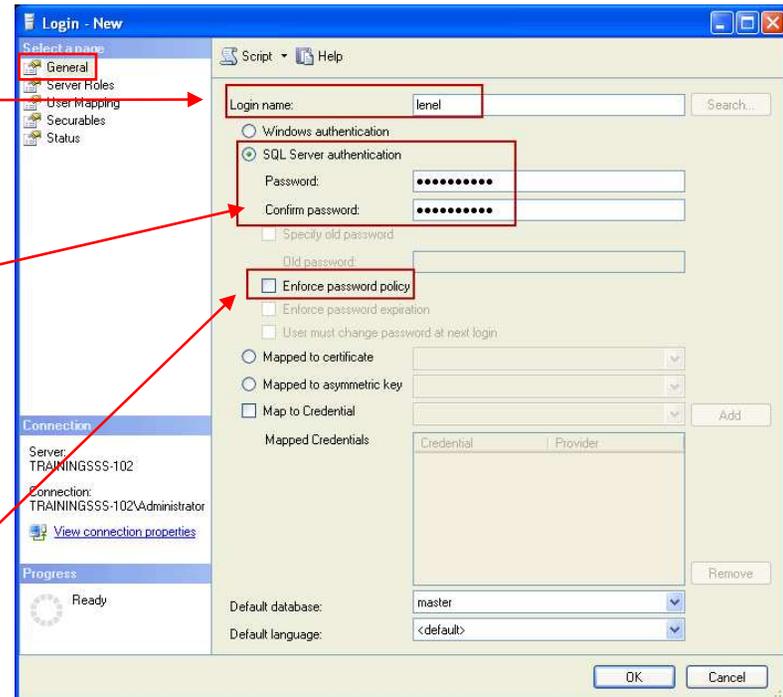
Password: MULTIMEDIA

Confirm password: MULTIMEDIA

(Note: Password is case sensitive)

Deselect "Enforce password policy"

Select "Server Roles" from the select a page pane

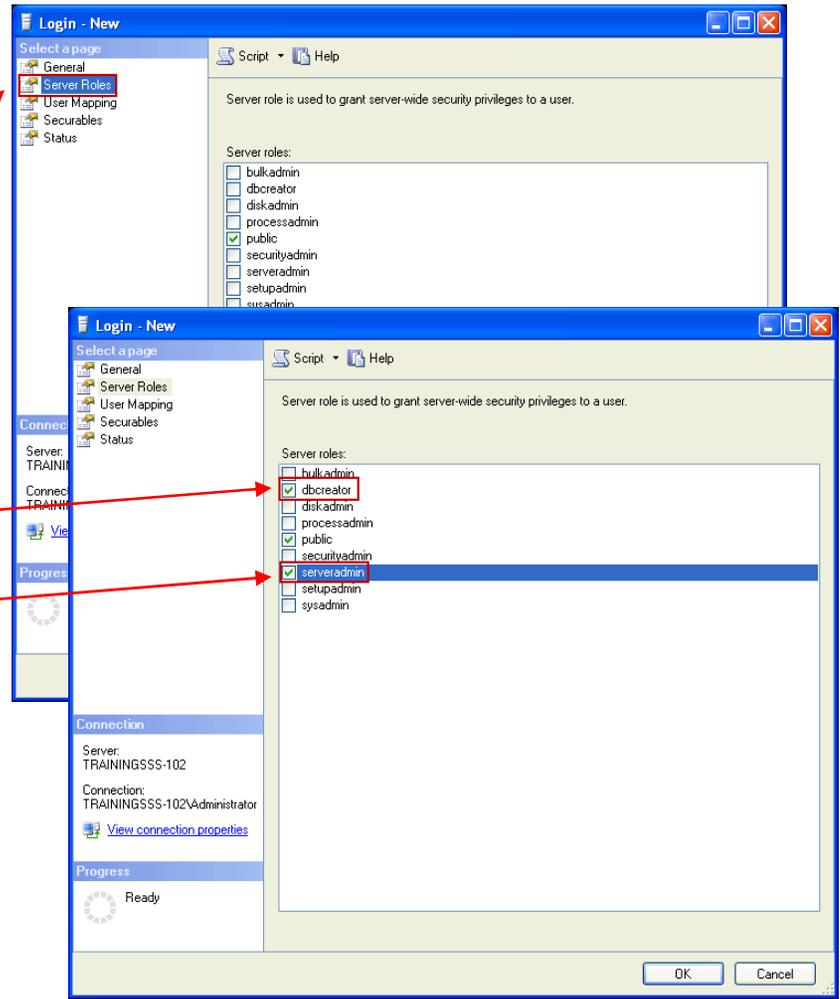


Server Roles

Select "Server Roles" from the select a page pane

From the Server roles list select:
"dbcreator"
"serveradmin"

Select User Mapping from the select a page pane



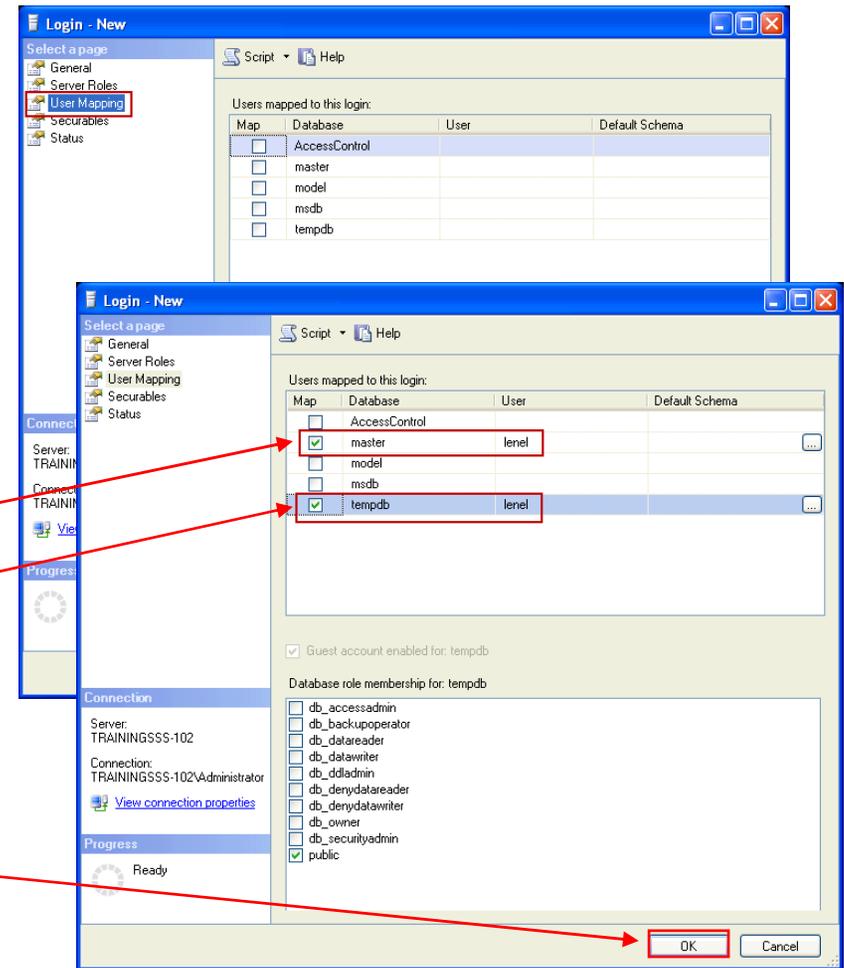
User Mapping

Select "User Mapping" from the select a page pane

From the User Mapping list select:

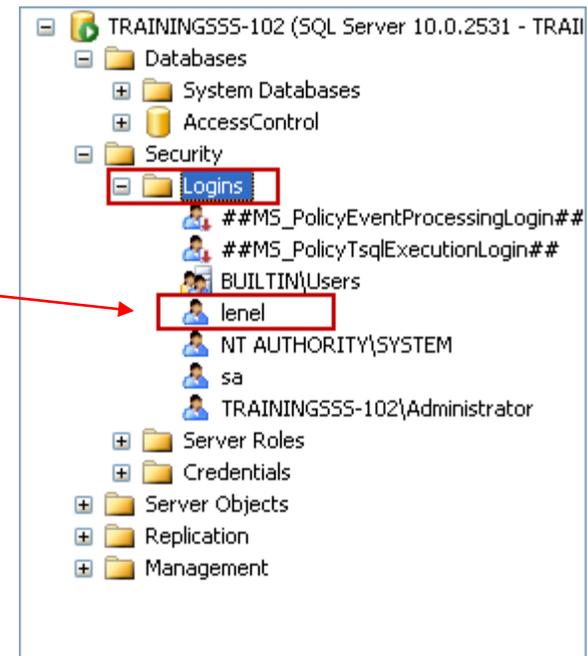
"master"
"tempdb"

Click "Ok" to continue, the new login will appear in the Logins folder



Confirm “Lenel” appears in the Logins folder

The next step is to run an SQL query

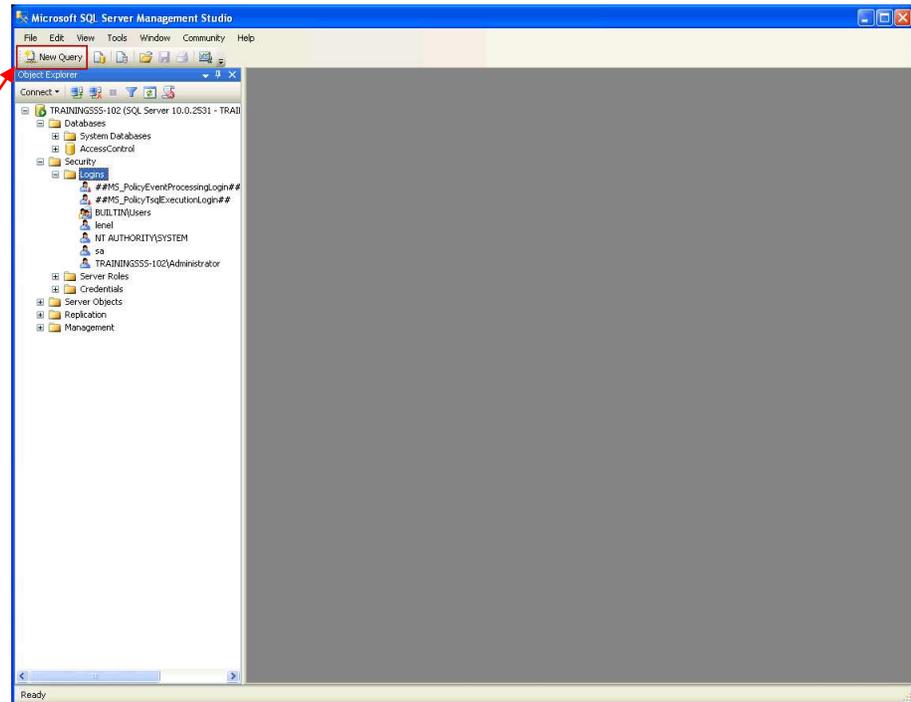


SQL Query

Select “New Query” from the menu bar

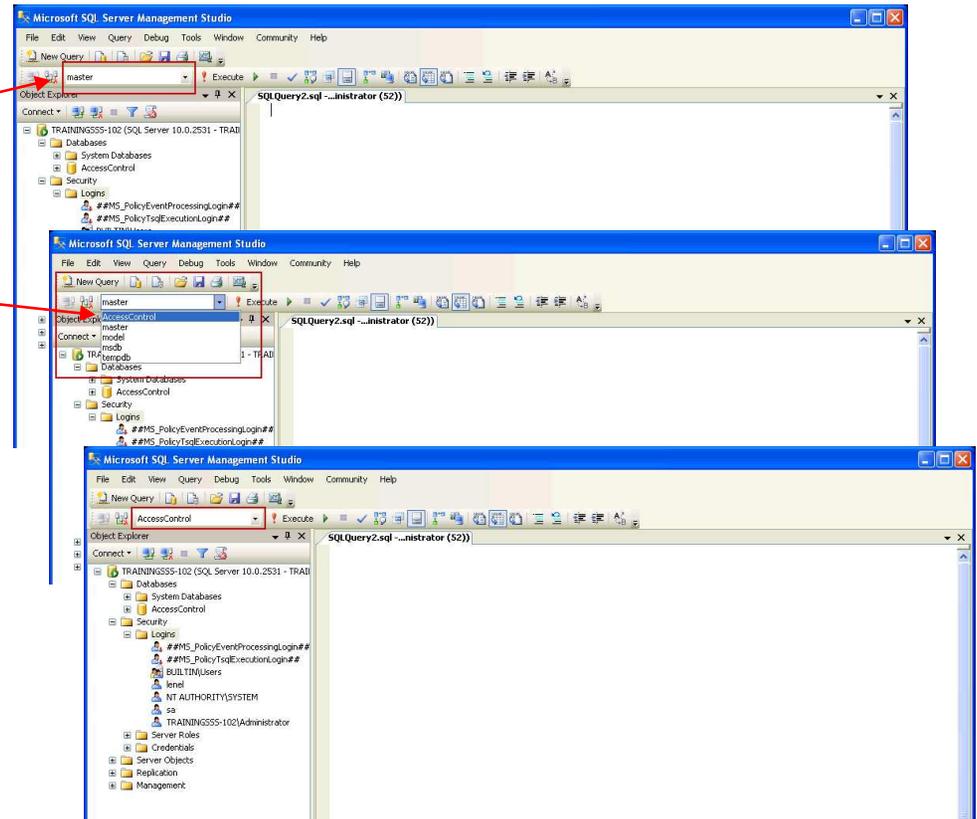
Or

Right click on the “AccessControl” database and select “New Query”



Open the database dropdown

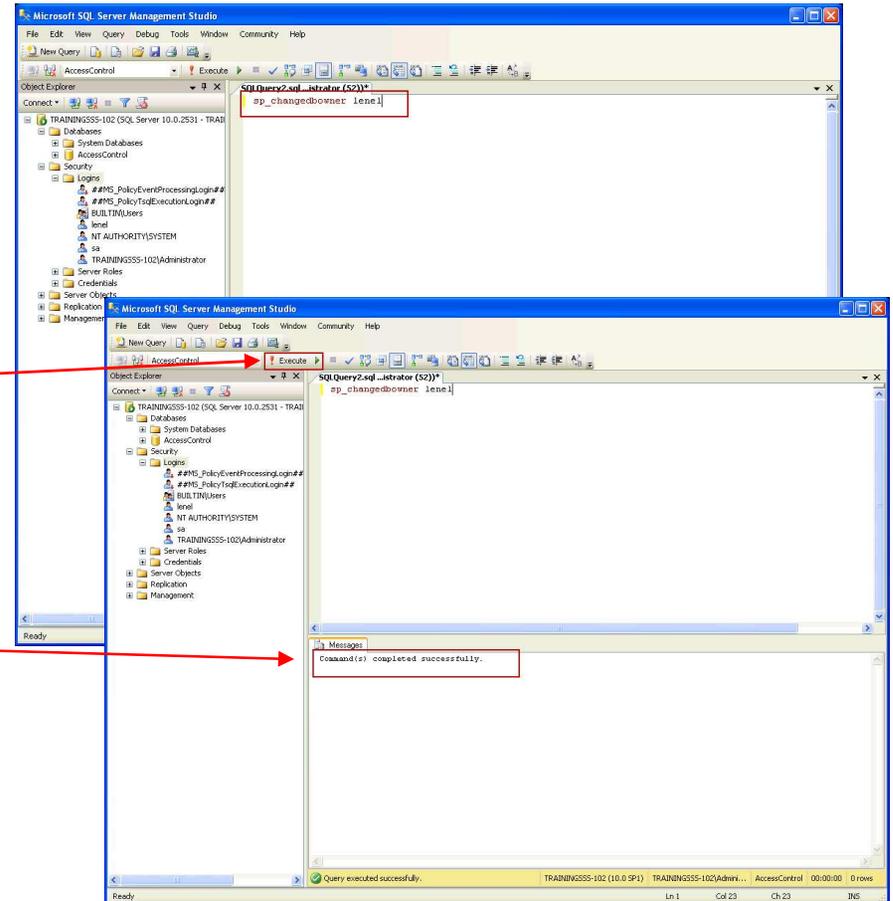
Select "AccessControl" from the list



In the text window type the following command exactly
sp_changedbowner lene1
Press F5 or click “Execute”

Confirm “Command(s) completed successfully” is displayed

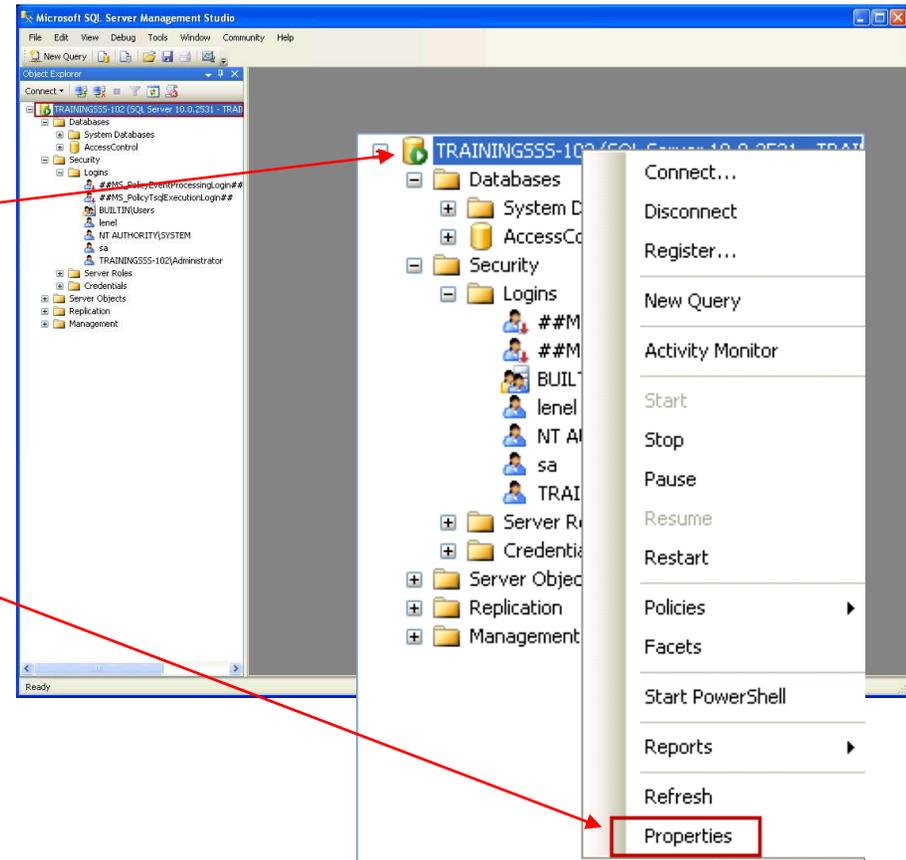
Click the “x” to close query tool



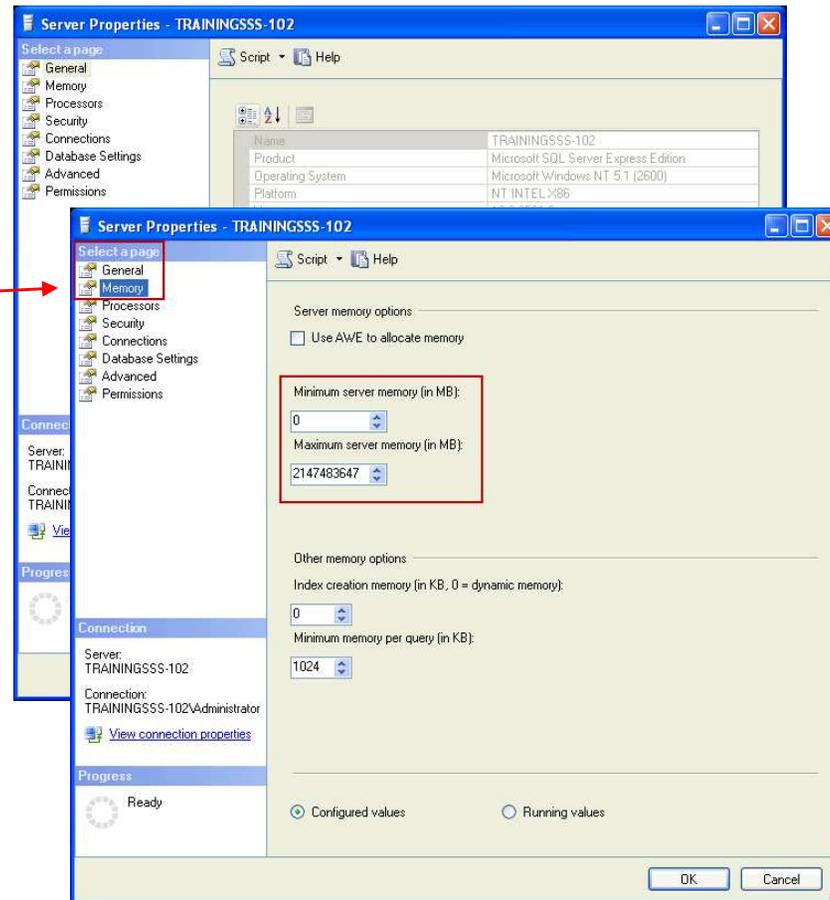
Memory Usage

Right click on SQL Server instance name

Select "Properties"



Select "Memory"

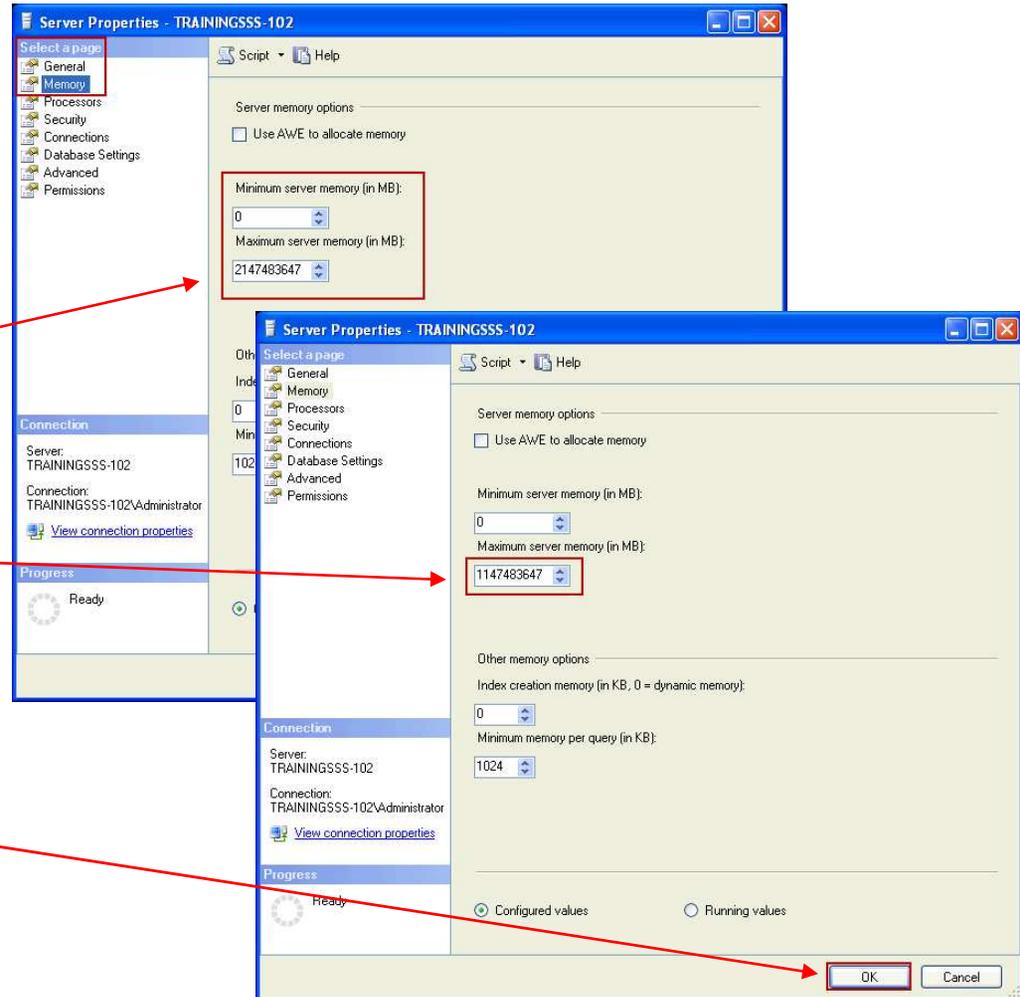


Adjust “Maximum server memory”

Reduce default maximum setting by 1/2

Ex: 2141483647 to 1141483647

Click “Ok” to continue



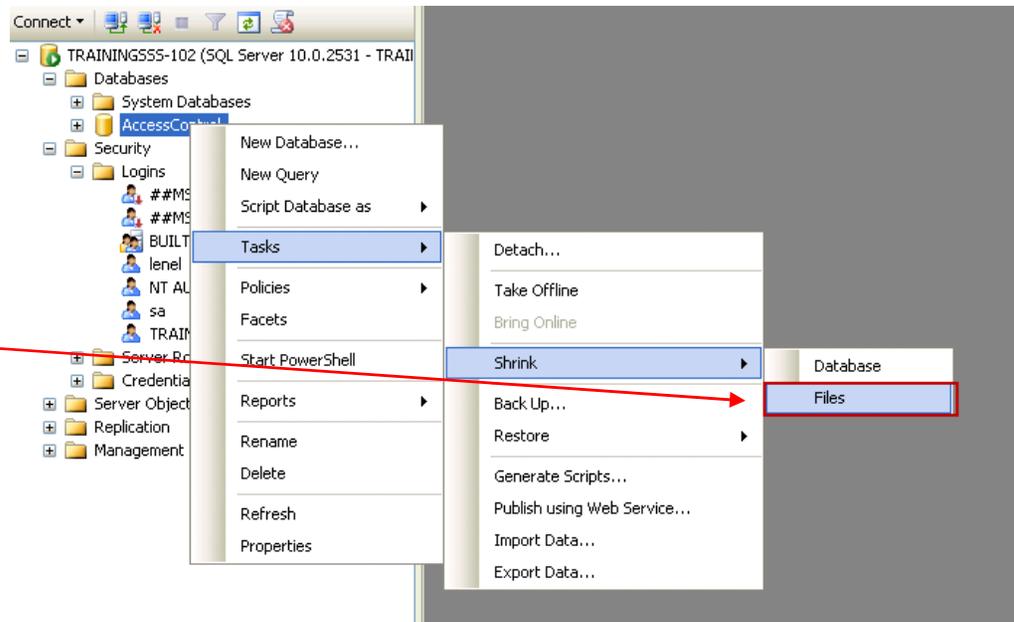
Truncate Log File

Right click on “AccessControl”



From the option menu select:

Tasks=>Shrink=>Files



Open “File Type” and select “Log”

Select “Release unused space” is selected

Click “Ok” to continue

Basis Server software may now be installed

