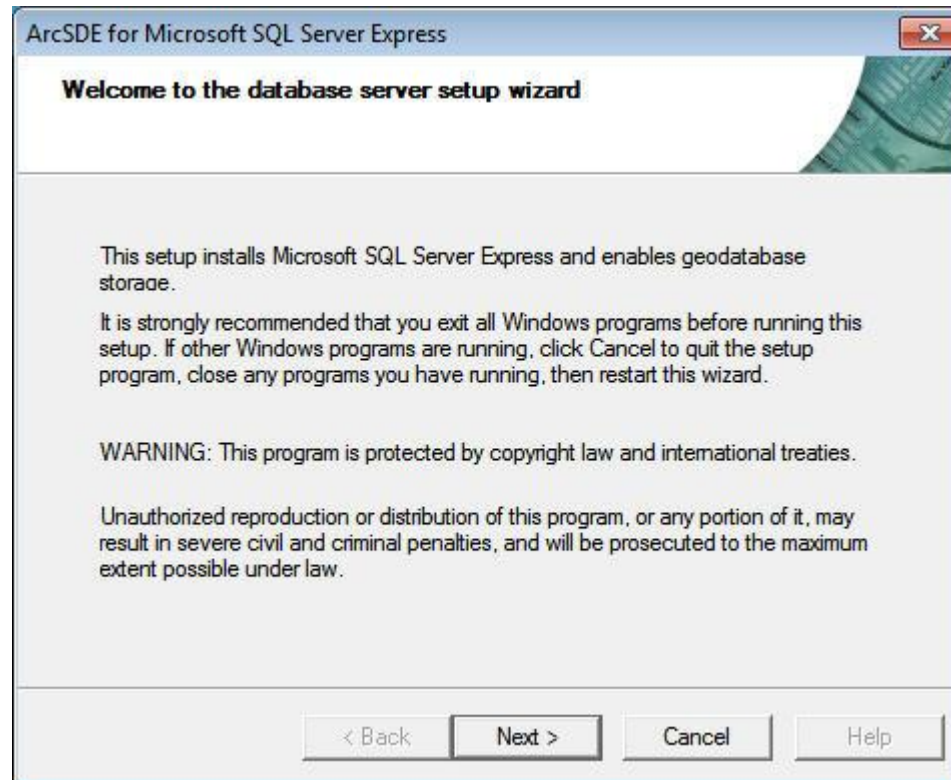
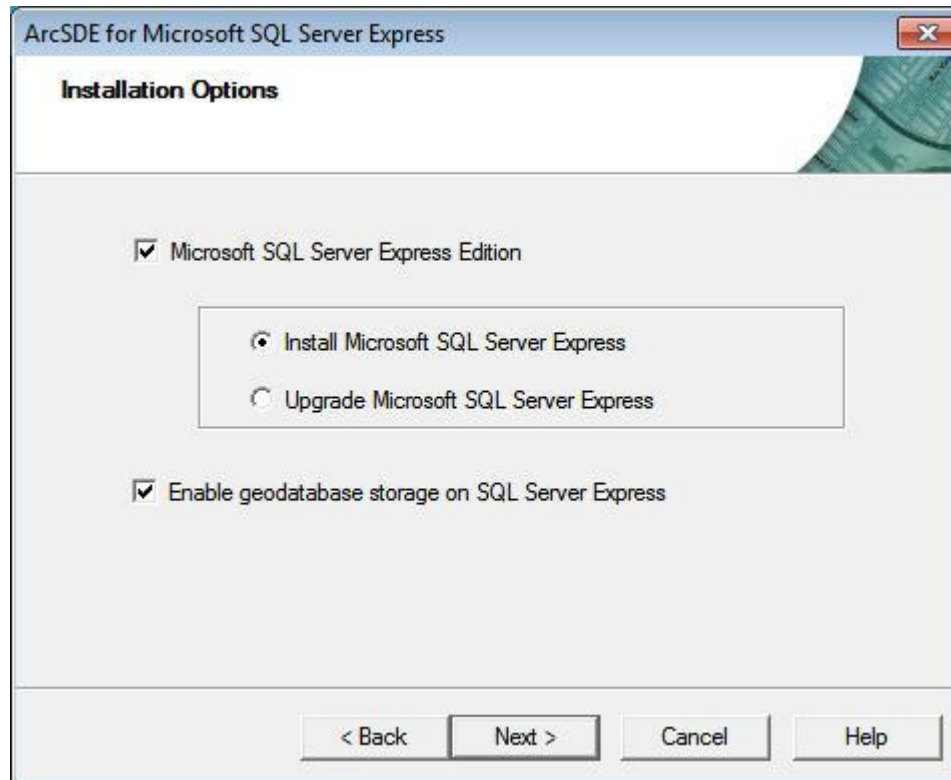


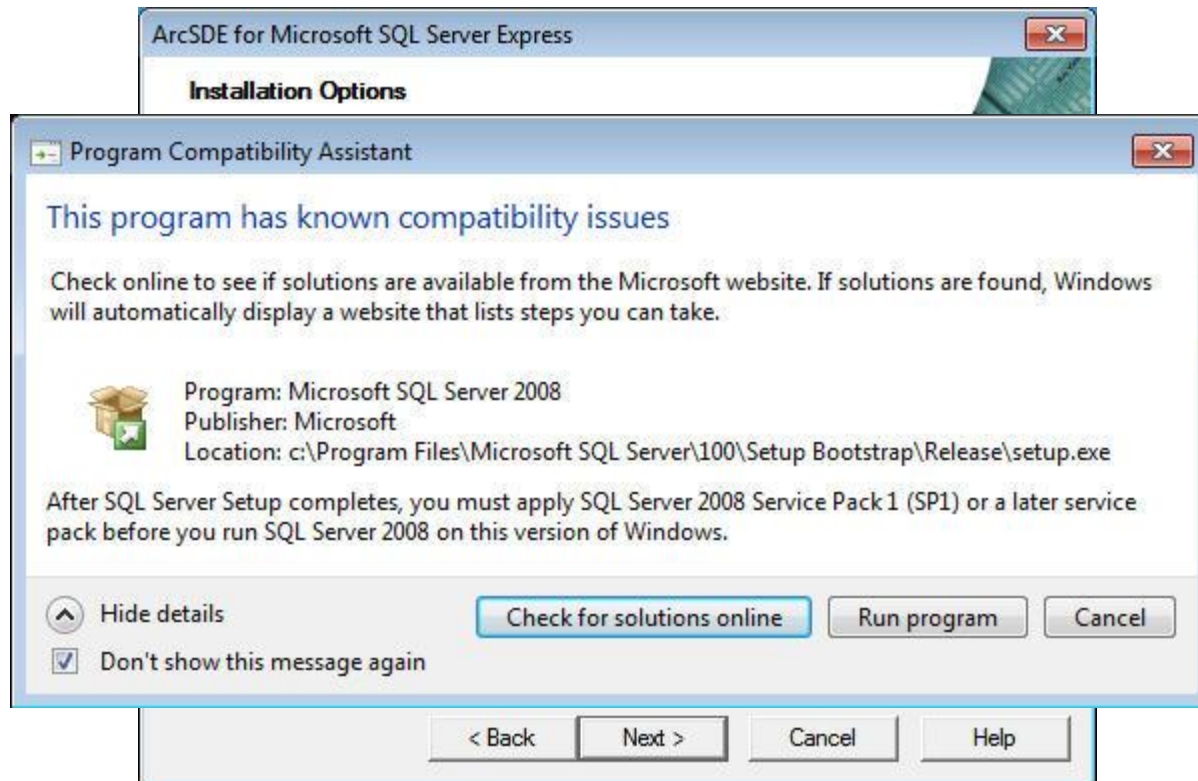
Typical Setup Introduction



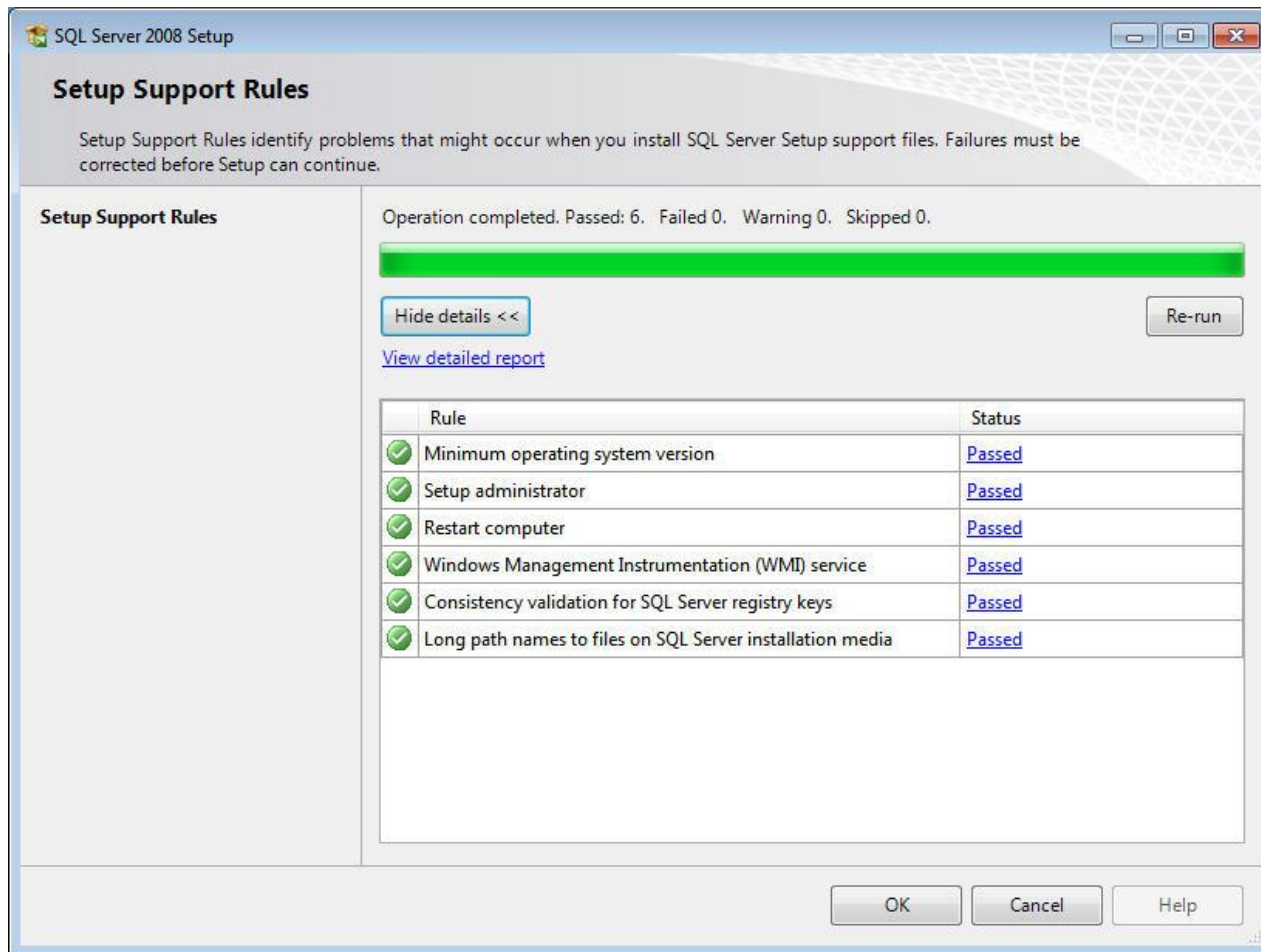
Make sure you check the box to “Enable geodatabase storage on SQL Server Express”



Installation on Windows 7 (and maybe XP) gives a compatibility warning. Click the “Don’t show this message again” box and continue with the installation by clicking the “Run program” button. Obviously, you should install the service pack when you get a chance, but this warning does not prevent ArcSDE Personal from working correctly.



Summary of Installation Prerequisites. Obviously you have to resolve any issues before continuing.



“Specify a free edition” is selected by default and grayed-out when installing ArcSDE Personal

SQL Server 2008 Setup

Product Key

Specify the edition of SQL Server 2008 to install.

Product Key
License Terms
Setup Support Files

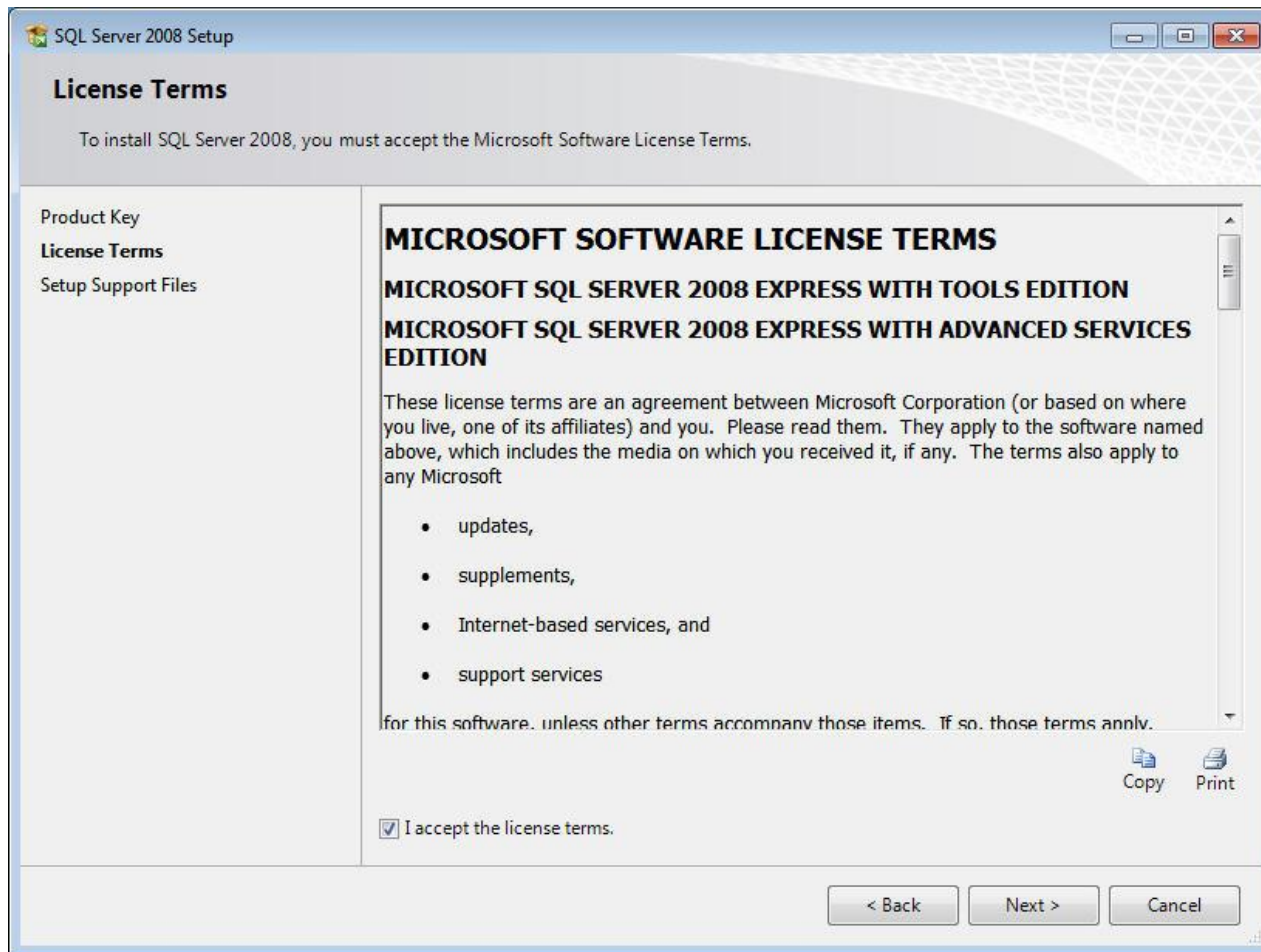
Specify a free edition of SQL Server or provide a SQL Server product key to validate this instance of SQL Server 2008. Enter the 25-character key from the Microsoft certificate of authenticity or product packaging. If you specify Enterprise Evaluation, the instance will be activated with a 180-day expiration. To upgrade from one edition to another edition, run the Edition Upgrade Wizard.

☒ Specify a free edition:
Express with Advanced Services

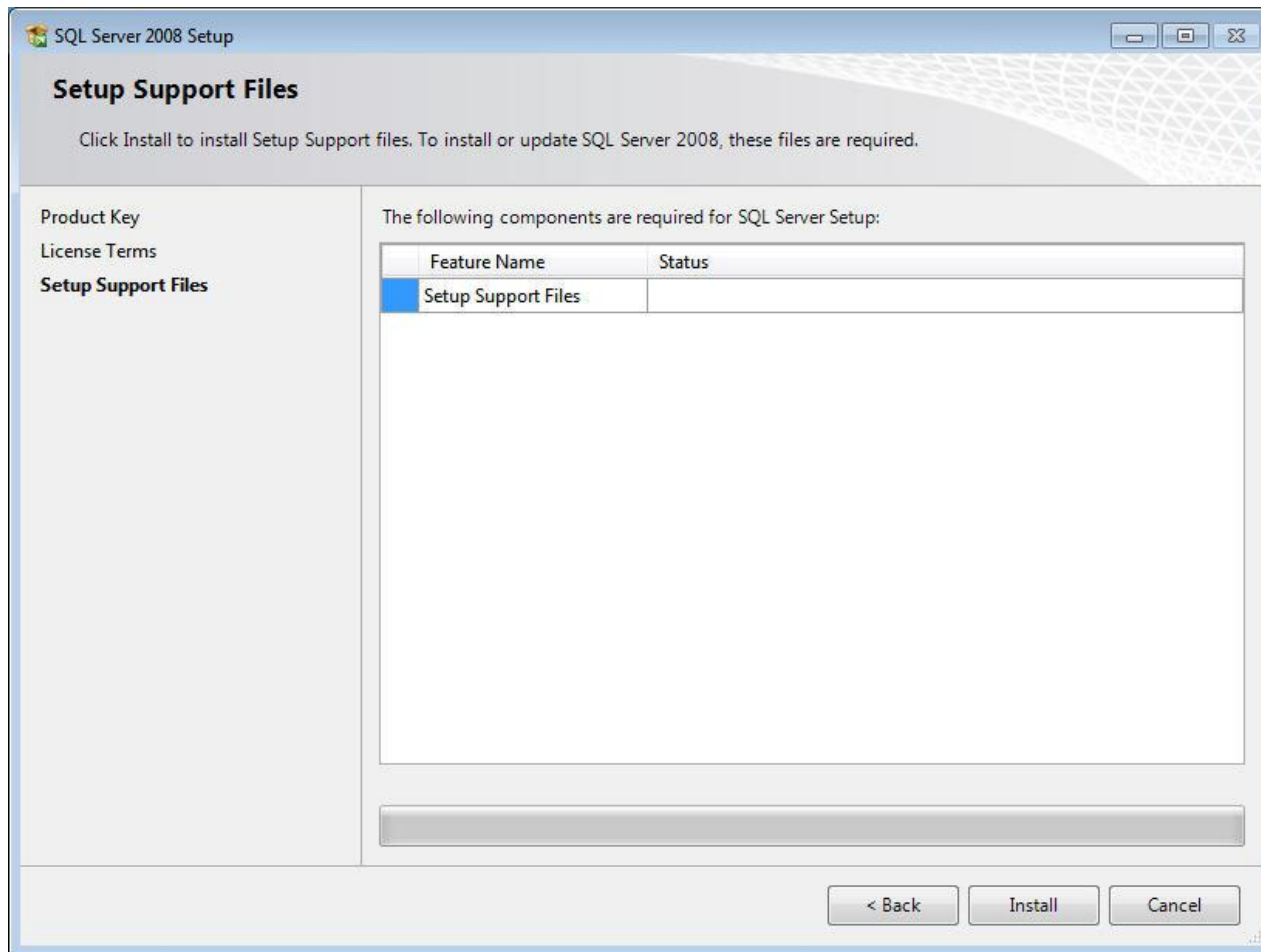
☐ Enter the product key:

< Back Next > Cancel

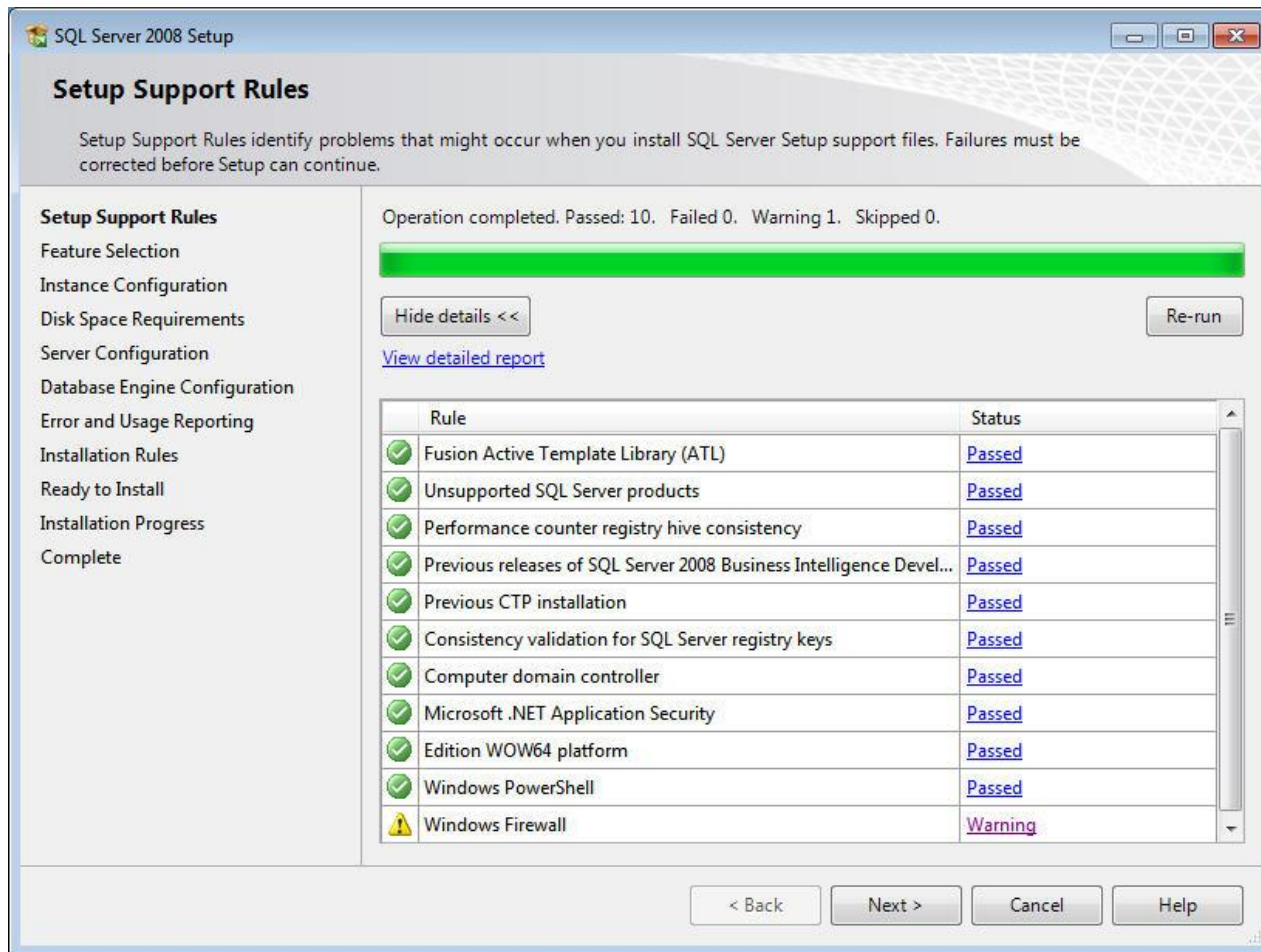
Check the box next to accept the license terms and continue.



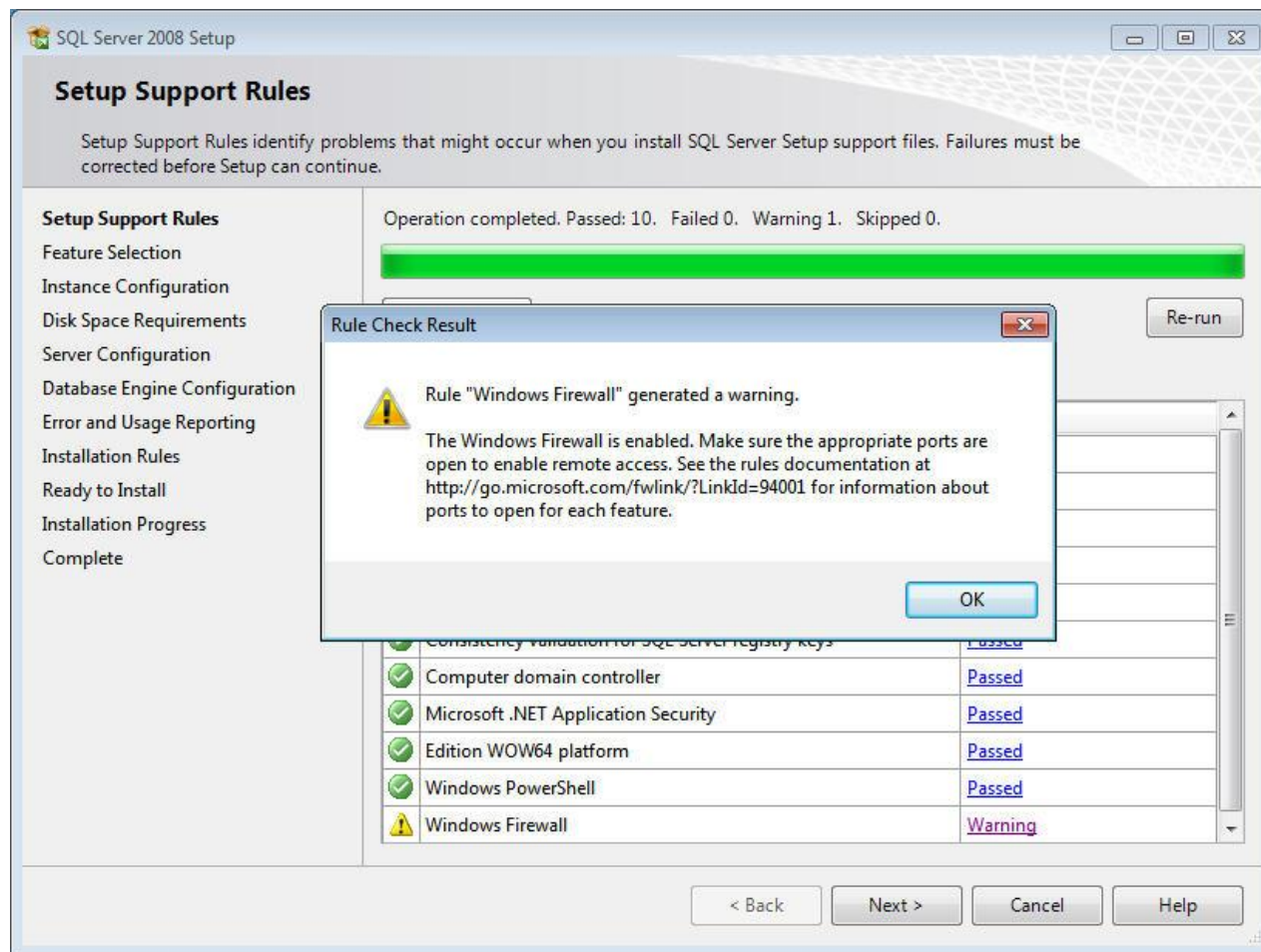
Setup Support Files are required. Nothing to do except click “Install” button



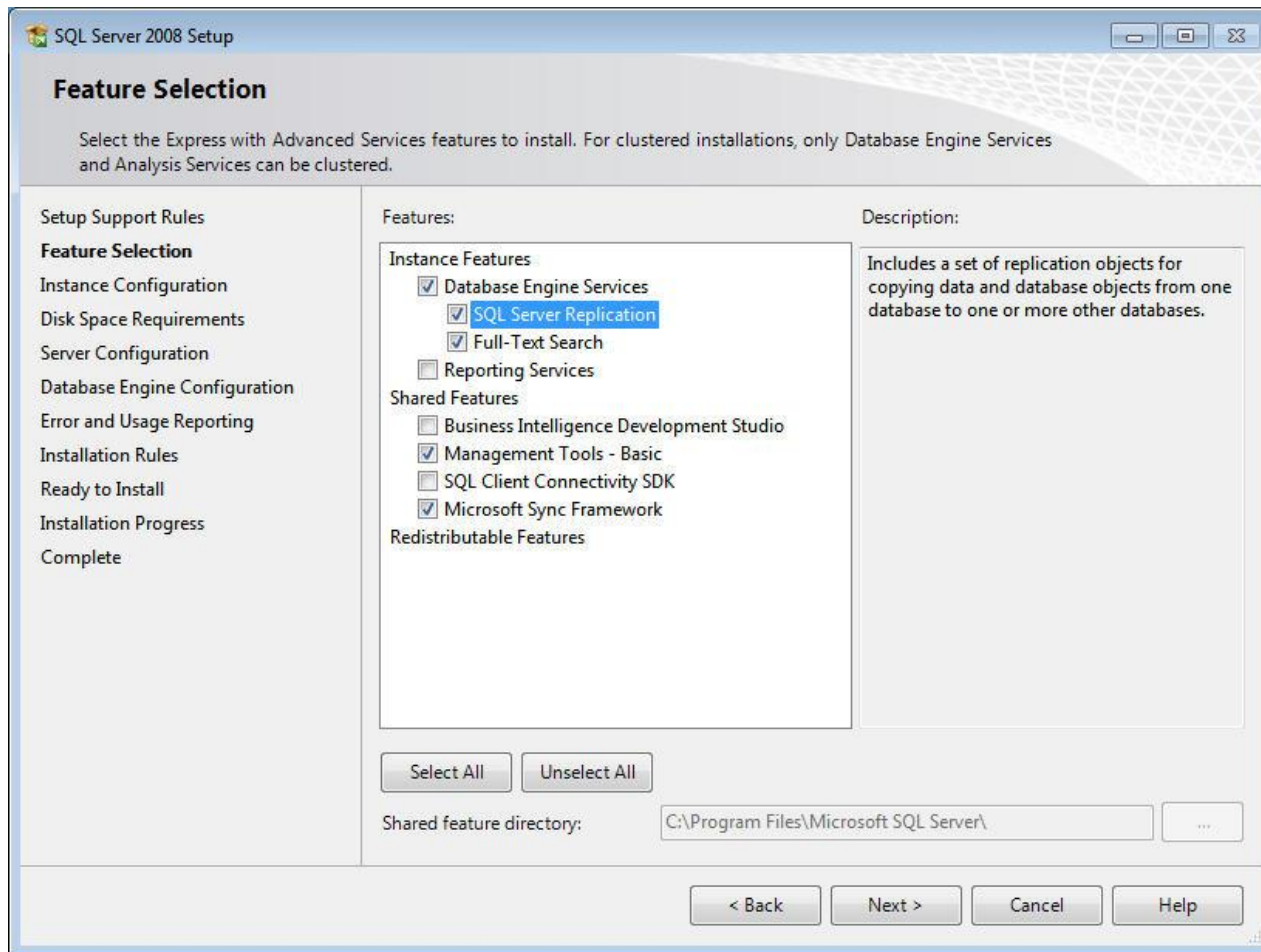
Summary of the setup support rules. Windows Firewall will give a warning – see next slide.



You may or may not get a Windows firewall warning about appropriate ports being open. The Windows Firewall settings on Active Directory machines use group policies and in general, ports are controlled by the network administrator. No remote access problems have been encountered related to this warning, but if you have problems, please let the EGIS team know about them.



Instance Features for SQL Server Replication and Full-Text Search are recommended. These are not deal-breakers and can always be added later. The one Shared Feature that is essential to install is “Management Tools – Basic” option. This will make SQL Express Administration functions much easier, if you need them.



For a variety of reasons, do yourself a favor and leave the instance name as “SQLExpress”. ArcSDE Personal instances are uniquely identified by both a server name and instance name syntax, so having the same instance name on multiple computers is not an issue. The instance root directory is where the database SOFTWARE is installed, not the databases. You have a chance later in the installation to change the location where databases are stored.

SQL Server 2008 Setup

Instance Configuration

Specify the name and instance ID for the SQL Server instance.

Setup Support Rules
Feature Selection
Instance Configuration
Disk Space Requirements
Server Configuration
Database Engine Configuration
Error and Usage Reporting
Installation Rules
Ready to Install
Installation Progress
Complete

☐ Default instance

☒ Named instance:

Instance ID:

Instance root directory: ...

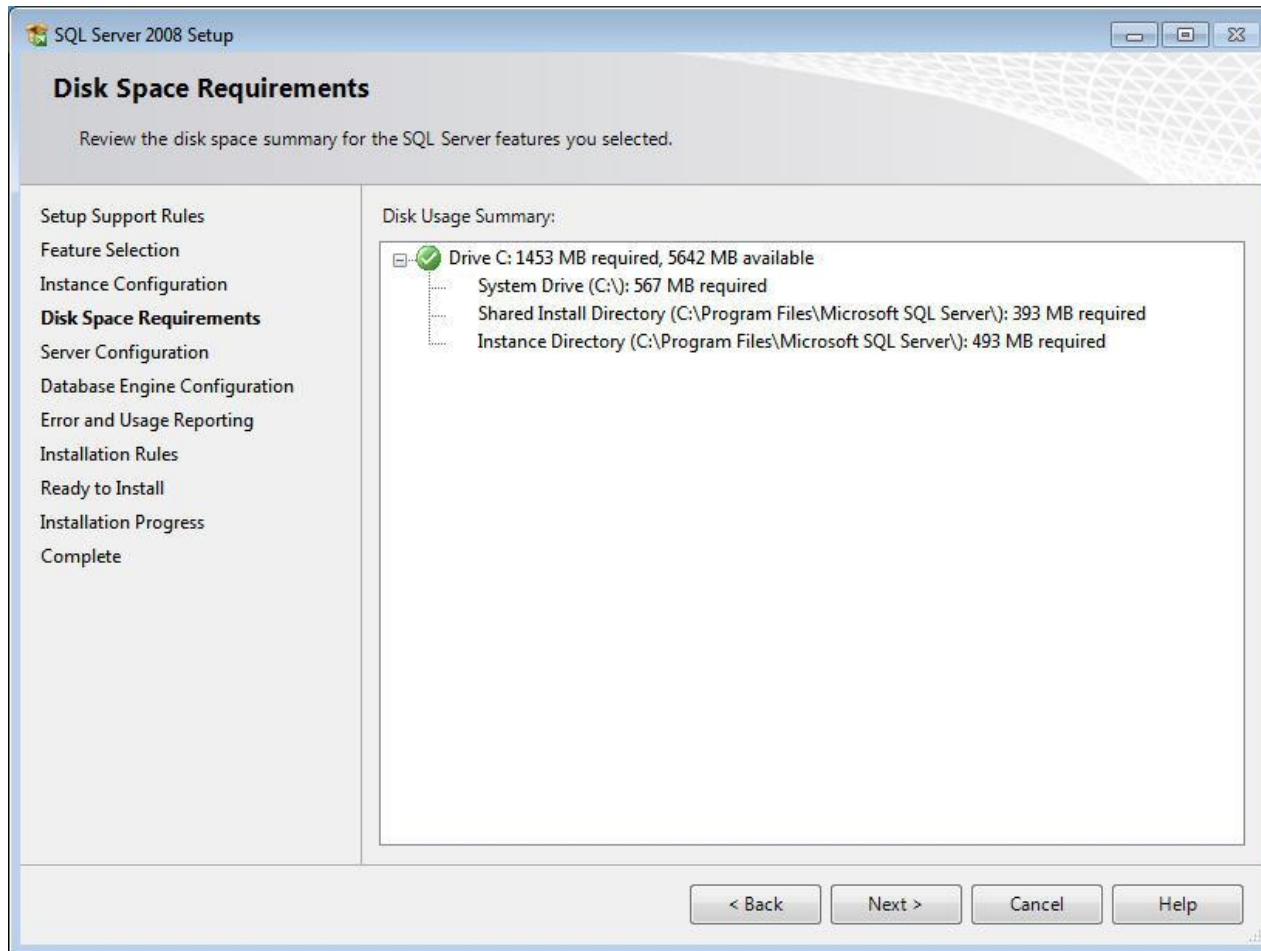
SQL Server directory:

Installed instances:

Instance	Features	Edition	Version	Instance ID
----------	----------	---------	---------	-------------

< Back Next > Cancel Help

Make sure you have enough disk space for the installation.



There is some debate over the user that the database server engine should run under. In an Active Directory environment like USGS, run the database server as a Network Service. This gives the least amount of access while still providing access to your geodatabases for other ArcGIS users.

SQL Server 2008 Setup

Server Configuration

Specify the configuration.

Setup Support Rules
Feature Selection
Instance Configuration
Disk Space Requirements
Server Configuration
Database Engine Configuration
Error and Usage Reporting
Installation Rules
Ready to Install
Installation Progress
Complete

Service Accounts | Collation

Microsoft recommends that you use a separate account for each SQL Server service.

Service	Account Name	Password	Startup Type
SQL Server Database Engine	NT AUTHORITY\NETWORK SERVICE		Automatic

Use the same account for all SQL Server services

These services will be configured automatically where possible to use a low privilege account. On some older Windows versions the user will need to specify a low privilege account. For more information, click Help.

Service	Account Name	Password	Startup Type
SQL Full-text Filter Daemon Launcher	NT AUTHORITY\LOCAL SERVICE		Manual
SQL Server Browser	NT AUTHORITY\LOCAL SERVICE		Automatic

< Back Next > Cancel Help

You can choose just Windows authentication for connecting to an ArcSDE Personal Instance and in an Active Directory environment that works fine. In some cases you may want to use Mixed Mode authentication – see next slide.

The screenshot shows the 'Database Engine Configuration' window in the SQL Server 2008 Setup. The window has a title bar 'SQL Server 2008 Setup' and standard window controls. Below the title bar is the section 'Database Engine Configuration' with the instruction 'Specify Database Engine authentication security mode, administrators and data directories.' On the left is a navigation pane with the following items: 'Setup Support Rules', 'Feature Selection', 'Instance Configuration', 'Disk Space Requirements', 'Server Configuration', 'Database Engine Configuration' (which is highlighted), 'Error and Usage Reporting', 'Installation Rules', 'Ready to Install', 'Installation Progress', and 'Complete'. The main area has three tabs: 'Account Provisioning', 'Data Directories', and 'FILESTREAM'. The 'Account Provisioning' tab is active. It contains the text 'Specify the authentication mode and administrators for the Database Engine.' Below this are two radio buttons: 'Windows authentication mode' (which is selected) and 'Mixed Mode (SQL Server authentication and Windows authentication)'. There are three text input fields: 'Built-in SQL Server system administrator account', 'Enter password:', and 'Confirm password:'. Below these is a section 'Specify SQL Server administrators' with a large empty text box. To the right of this box is a note: 'SQL Server administrators have unrestricted access to the Database Engine.' At the bottom of this section are three buttons: 'Add Current User', 'Add...', and 'Remove'. At the very bottom of the window are four buttons: '< Back', 'Next >' (which is highlighted), 'Cancel', and 'Help'.

SQL Server 2008 Setup

Database Engine Configuration

Specify Database Engine authentication security mode, administrators and data directories.

Setup Support Rules
Feature Selection
Instance Configuration
Disk Space Requirements
Server Configuration
Database Engine Configuration
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 Engine.

Authentication Mode

☒ Windows authentication mode
☐ Mixed Mode (SQL Server authentication and Windows authentication)

Built-in SQL Server system administrator account

Enter password:

Confirm password:

Specify SQL Server administrators

SQL Server administrators have unrestricted access to the Database Engine.

Add Current User Add... Remove

< Back Next > Cancel Help

With Mixed Mode authentication, you still have Window Authentication, but you can also allow database access based on a user name. There are times when this can be useful. For example, say you have a web service that needs to query a table in the geodatabase. You only want this web service to have read permission to a particular table. The web service is not a “user” per se, but it can be given a database user name such as “WEB_SERVICE_USER” and permission to the geodatabase controlled.

The screenshot shows the 'Database Engine Configuration' window in the SQL Server 2008 Setup. The window has a title bar 'SQL Server 2008 Setup' and standard window controls. The main title is 'Database Engine Configuration' with a subtitle 'Specify Database Engine authentication security mode, administrators and data directories.' On the left is a navigation pane with the following items: 'Setup Support Rules', 'Feature Selection', 'Instance Configuration', 'Disk Space Requirements', 'Server Configuration', 'Database Engine Configuration' (which is highlighted), 'Error and Usage Reporting', 'Installation Rules', 'Ready to Install', 'Installation Progress', and 'Complete'. The main area has three tabs: 'Account Provisioning' (selected), 'Data Directories', and 'FILESTREAM'. Below the tabs, the text says 'Specify the authentication mode and administrators for the Database Engine.' There are two radio buttons for 'Authentication Mode': 'Windows authentication mode' and 'Mixed Mode (SQL Server authentication and Windows authentication)', with 'Mixed Mode' selected. Below this are fields for 'Built-in SQL Server system administrator account', 'Enter password:', and 'Confirm password:', all containing masked text. A section titled 'Specify SQL Server administrators' contains a list box with one entry, 'W732\dmccullo (dmccullo)', which is selected. To the right of the list box is a text box stating 'SQL Server administrators have unrestricted access to the Database Engine.' At the bottom of this section are three buttons: 'Add Current User', 'Add...', and 'Remove'. At the very bottom of the window are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

SQL Server 2008 Setup

Database Engine Configuration

Specify Database Engine authentication security mode, administrators and data directories.

Setup Support Rules
Feature Selection
Instance Configuration
Disk Space Requirements
Server Configuration
Database Engine Configuration
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 Engine.

Authentication Mode

☐ Windows authentication mode

☒ Mixed Mode (SQL Server authentication and Windows authentication)

Built-in SQL Server system administrator account

Enter password:

Confirm password:

Specify SQL Server administrators

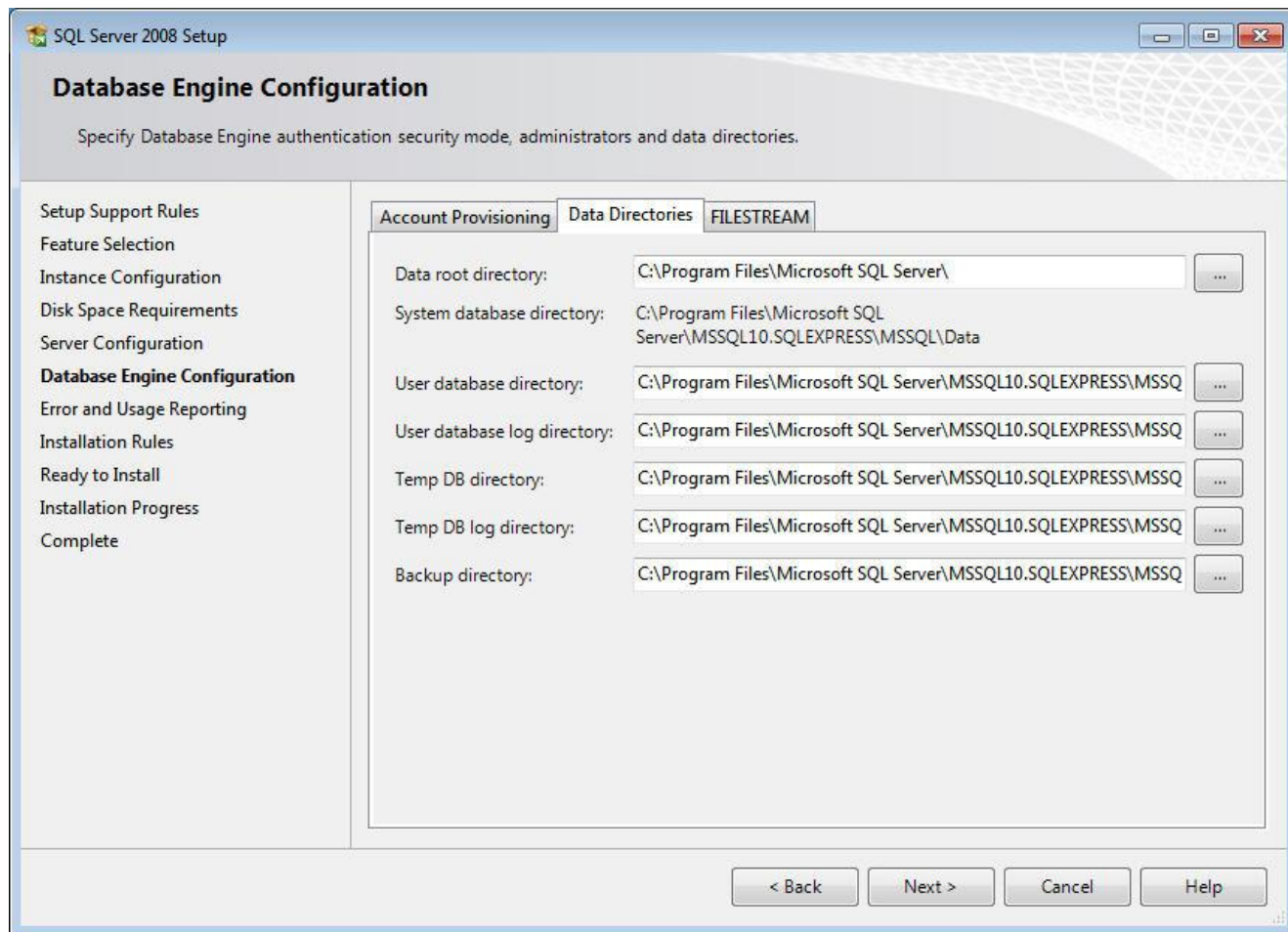
W732\dmccullo (dmccullo)

SQL Server administrators have unrestricted access to the Database Engine.

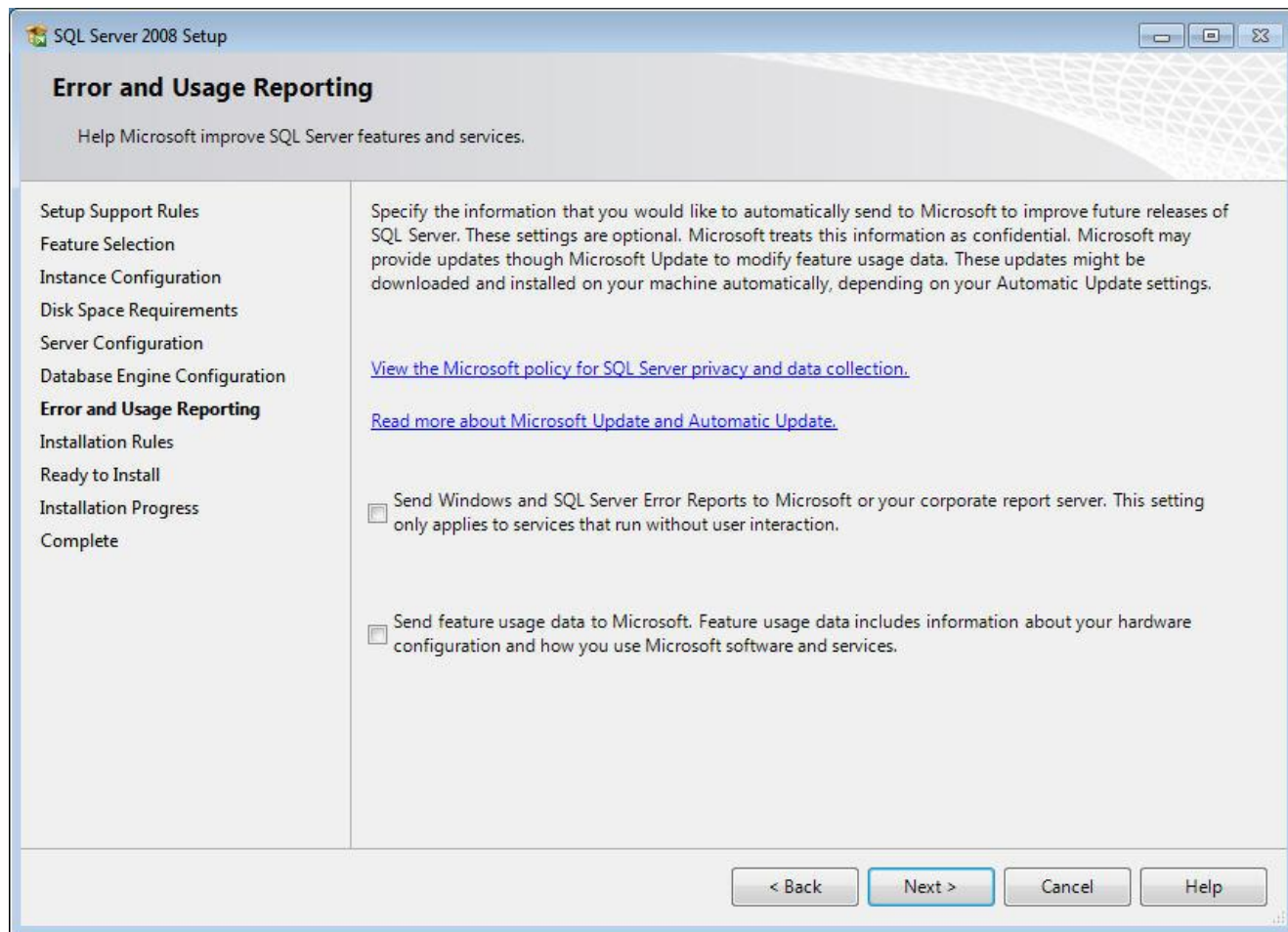
Add Current User Add... Remove

< Back Next > Cancel Help

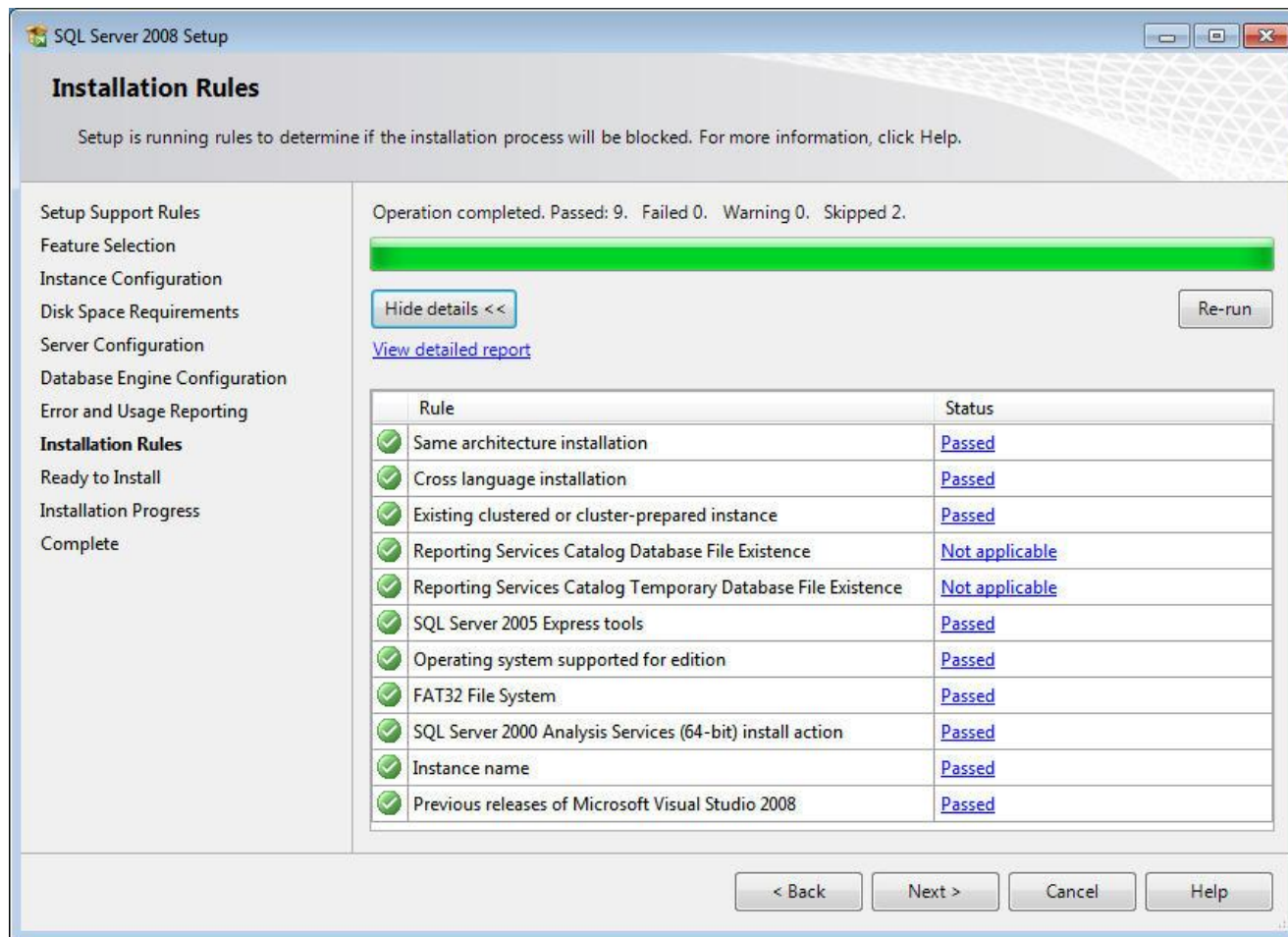
Notice that this is a “tab” on the Database Engine Configuration Dialog, not a separate dialog. This dialog specifies the location for databases and storage for related functions such as log files. These are “default” locations and individual databases can be stored in different locations when created using the Management Studio. For ArcSDE Personal geodatabases, the most important “default” directory is the User database directory. It is strongly recommended that you do not store data on the C: drive. Use something like D:\GeoData for the Data root directory and you should have no problems.



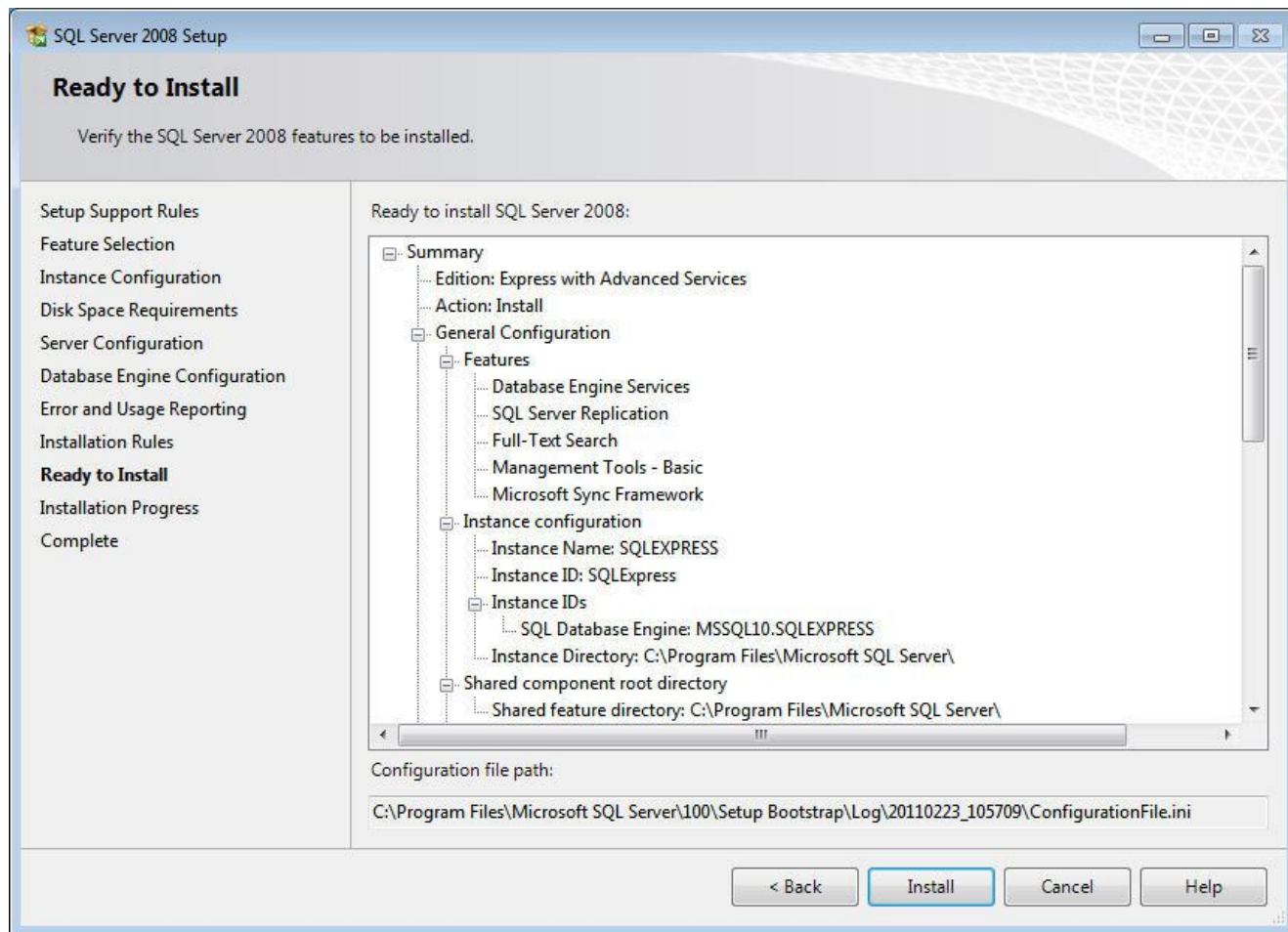
User preference whether or not you send error reports and feature usage to Microsoft.



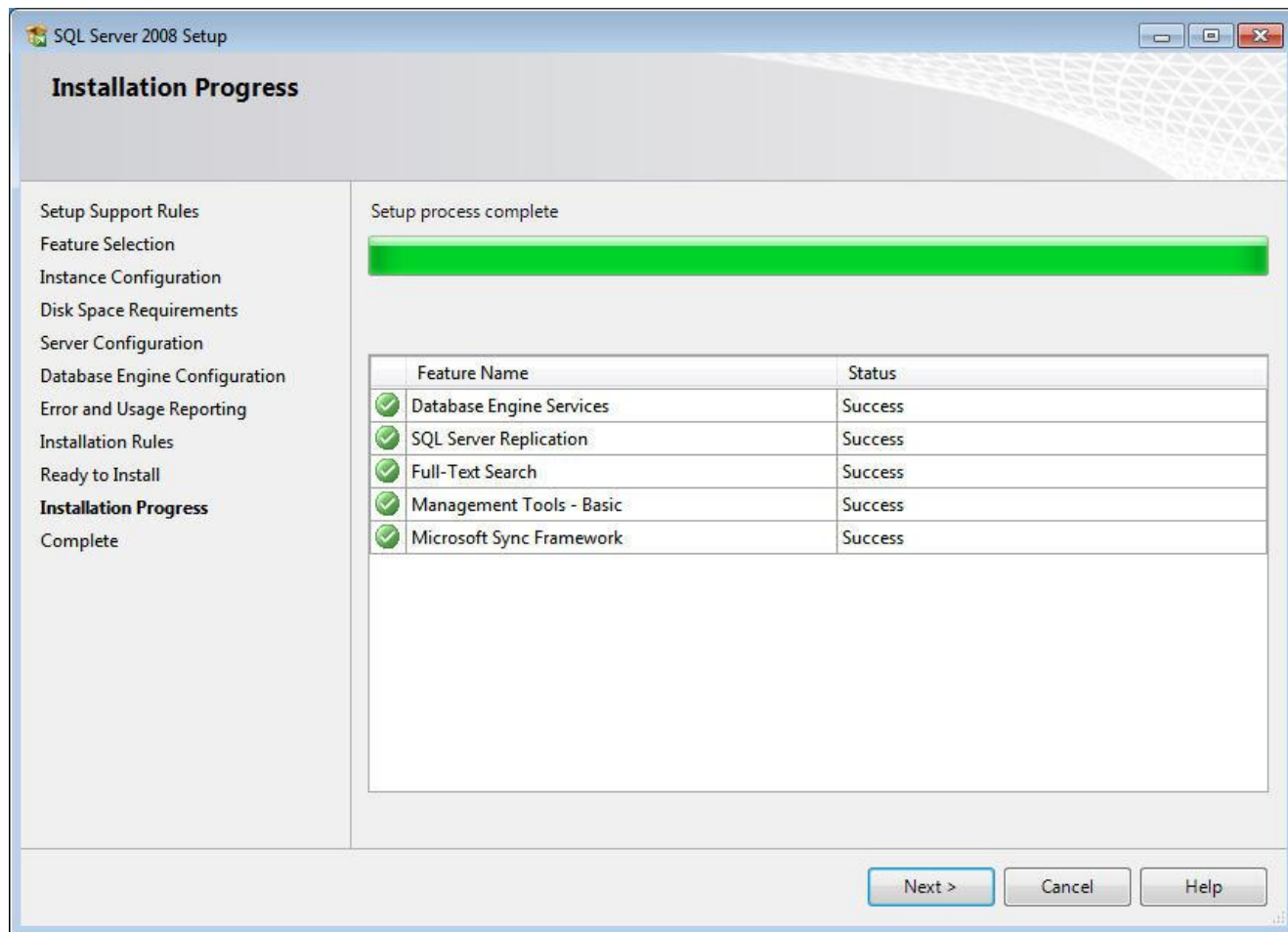
Another summary screen showing the results from various installer checks. Obviously you have to resolve any issues before continuing. In numerous installations on numerous operating systems, it is very rare that you will run into issues.



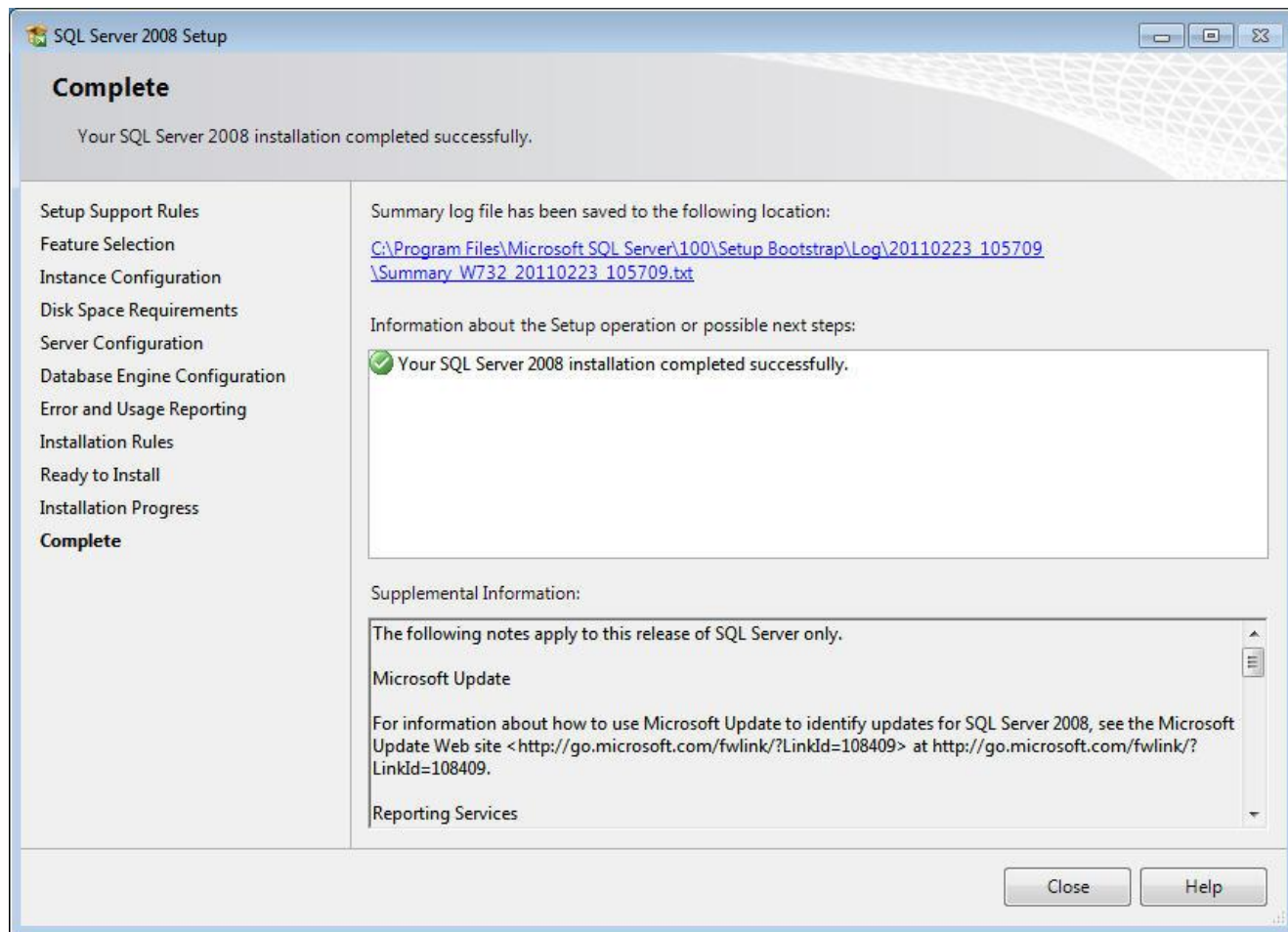
Installation summary – worth a quick double-check.



Installation progress and results



Installation successfully completed



After the SQL Express installer finishes, the ESRI installer resumes control and gives you an opportunity to add an SQL Express Administrator login user. This user is a Windows authenticated login, not a database login. The reason you want to do this is that the user installing software has to have administrative access, but the machine's regular user should be given access to administer the database instance. For example, I installed ArcSDE Personal using my dmccullo-pr account, but I want my non -pr account, dmccullo, to be able to administer the database instance.

ArcSDE for Microsoft SQL Server Express

Choose a SQL Server Instance and add a Windows login
Specify an instance and the login of the user to administer it.

SQL Server instance name:
E.g. SERVER\sqlexpress

Windows Login:
E.g. DOMAIN\login_name

If you want to add a Windows login to SQL Server as an Administrative user you may do so now. This step is necessary if the person who is to be using this software is not a member of the local Windows Administrators group.

< Back Next > Cancel Help

End of installation

