Installation Guide
SAP Business One 9.0 & SAP Business One 8.82
Document Version: 1.0 – 2013-08-14

SAP Business One on Microsoft SQL Server 2012 Express Edition

All Countries

Typographic Conventions

Type Style	Description
Example	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options.
	Textual cross-references to other documents.
Example	Emphasized words or expressions.
`EXAMPLE`	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
`Example`	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
`Example`	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
`<Example>`	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
`EXAMPLE`	Keys on the keyboard, for example, `F2` or `ENTER`.

Document History

Version	Date	Change
1.0	<YYYY-MM-DD>	<Change Description>

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Introduction

Purpose

As of SAP Business One 8.82 PL11 and 9.0 PL1, the application supports Microsoft SQL 2012 Express Edition. This document describes the technical installation of SAP Business One on SQL Server 2012 Express Edition.

Limitations

SAP Business One is subject to the following limitations when running on SQL Server 2012 Express Edition:
- Maximum memory utilized per instance of SQL Server Database Engine: 1 gigabyte
- Maximum Compute Capacity Used by a Single Instance: Limited to lesser of 1 Socket or 4 cores
- No individual database should grow beyond 10 gigabytes; otherwise, SAP cannot support the parameters set by Microsoft for using SQL Server 2012 Express Edition. To prevent this from happening, do the following:
  - Monitor the growth of the databases.
  - Implement an early warning system to advise the system administrator when the database grows to within 10% of the 10 GB size limit. Only the implementation of an early warning system can ensure that the customer has sufficient time to upgrade to SQL Standard Edition and help you avoid escalations.

    One way you can implement an early warning system is by using the sample script at

    http://searchsqlserver.techtarget.com/tip/0,289483,sid87_gci1313431,00.html . Based on this script, the SQL Server administrator or support engineer can perform standard tasks such as executing SQL Server stored procedures and setting up alerts. For more information about these tasks, see SQL Server 2012 Books Online.

    i Note

    This script is provided on a public page. Therefore, SAP does not take any responsibility for it. Should we notice any issues, we will describe them in an SAP Note.
  - Move the databases onto a server running Microsoft SQL Server 2012 Standard Edition. This can be done by detaching the databases, installing the newer version of SQL Server, and then re-attaching the files.
  - For more associated technical guidance, refer to the following Microsoft documentation: http://msdn.microsoft.com/en-us/library/cc645993%28v=SQL.110%29.aspx

Prerequisites

To effectively utilize SQL Server 2012 Express Edition and get the maximum performance from your application within the limitations, make sure that your system meets the following Microsoft requirements:
- CPU at 1.4 GHz or faster

- The server deployed is a multi-core processor-based system.
- At least 4 GB of RAM is installed on the server to allow the allocation of the full 1 GB of RAM to the SQL Server 2012 Express Edition engine.
- If you install SQL Server 2012 on a computer with the Windows Vista SP2 or Windows Server 2008 SP2 operating system, you can get the required update from here.
- If you install SQL Server 2012 on a computer with the Windows 7 SP1 or Windows server 2008 R2 SP1 or Windows Server 2012 or Windows 8 operating system, this update is included.
- For more associated technical guidance, refer to the following Microsoft documentation: http://msdn.microsoft.com/library/ms143506%28v=SQL.110%29.aspx

SAP Business One 8.82, 9.0 on SQL Server 2012 Express Edition Installation Process

To install SAP Business One 8.82, 9.0 on Microsoft SQL Express, follow the steps below:

1. Download SQL Server 2012 Express Edition.
2. Install SQL Server 2012 Express Edition.
3. Configure SQL Server 2012 Express Edition.
4. Install SAP Business One.

Downloading SQL Server 2012 Express Edition

To download the SQL Server 2012 Express Edition installation package from the official Microsoft site, proceed as follows:

1. Go to the Microsoft Download Center home page by clicking the Web site

   http://www.microsoft.com/downloads/Search.aspx?displaylang=en

2. In the *Search* field, enter `SQL 2012 Express`, and then choose *Go*.

3. On the search list page, read the features and system requirements for each installation.

4. Choose an installation accordingly and *Download*.

   ### ⅰ Note

   We recommend downloading **Microsoft SQL Server 2012 Express Edition with Advanced Services**, which bundles SQL Server Express, SQL Server Management Studio Express, and other additional services.

   It takes a few minutes to download this package depending on your bandwidth.

Installing and Configuring SQL Server 2012 Express Edition

Prerequisites

Before installing SQL Server 2012 Express Edition, make sure that you have done the following:

- Installed Microsoft .NET Framework 3.5 SP1

  To download, go to http://msdn2.microsoft.com/netframework/. After downloading is finished, double-click the downloaded file to run the installation.

- Installed Microsoft Windows Installer 4.5 or higher

  To download, go to http://go.microsoft.com/fwlink/?LinkId=120486. After downloading is finished, double-click the downloaded file to run the installation.

- Installed Windows PowerShell 2.0

  To download, go to http://support.microsoft.com/kb/968930/. After downloading is finished, double-click the downloaded file to run the installation.

- Uninstalled any previous Beta, CTP, or Tech Preview versions of SQL Server 2012 and Visual Studio 2012

  ### ⚠ Caution

  For security purposes, we highly recommend you do the following:

  o For daily use, create an unprivileged user account named `SQLExpressUser`, instead of using the built-in service accounts on your SQL Server. This can limit the server's attack surface more than using the latter.

  o Assign a strong password to the new account.

  o Join the new account to a domain and add the new account by using *Active Directory Users and Computers*. To test it locally, add the account by using *Computer Management*.

SAP Business One on Microsoft SQL Server 2012 Express Edition
SAP Business One 8.82, 9.0 on SQL Server 2012 Express Edition Installation Process

If one user has already logged on, other users cannot log on with the same account. This mechanism ensures only one logon session with the same SQL service account.
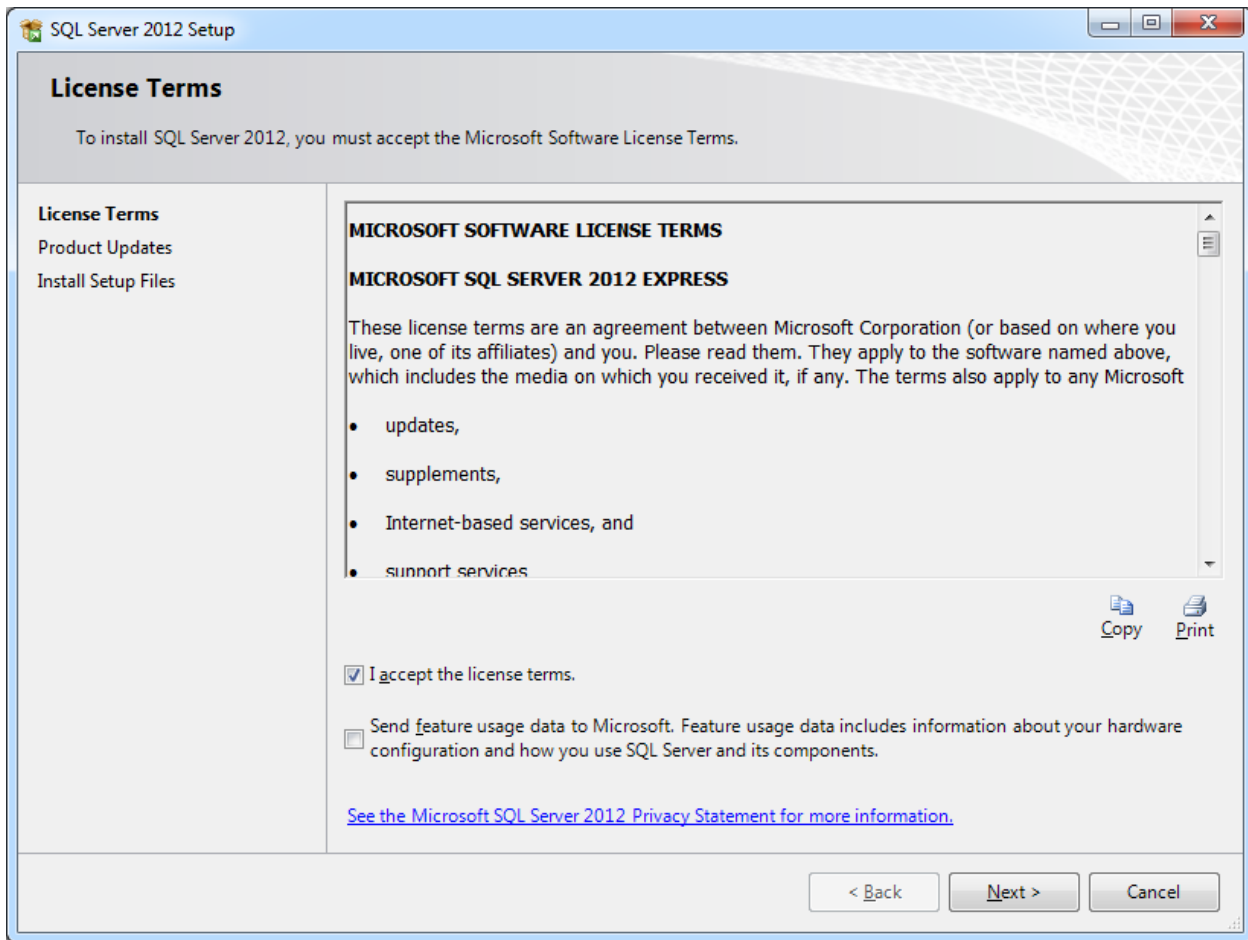
When logging on as this unprivileged user, you cannot change the password.
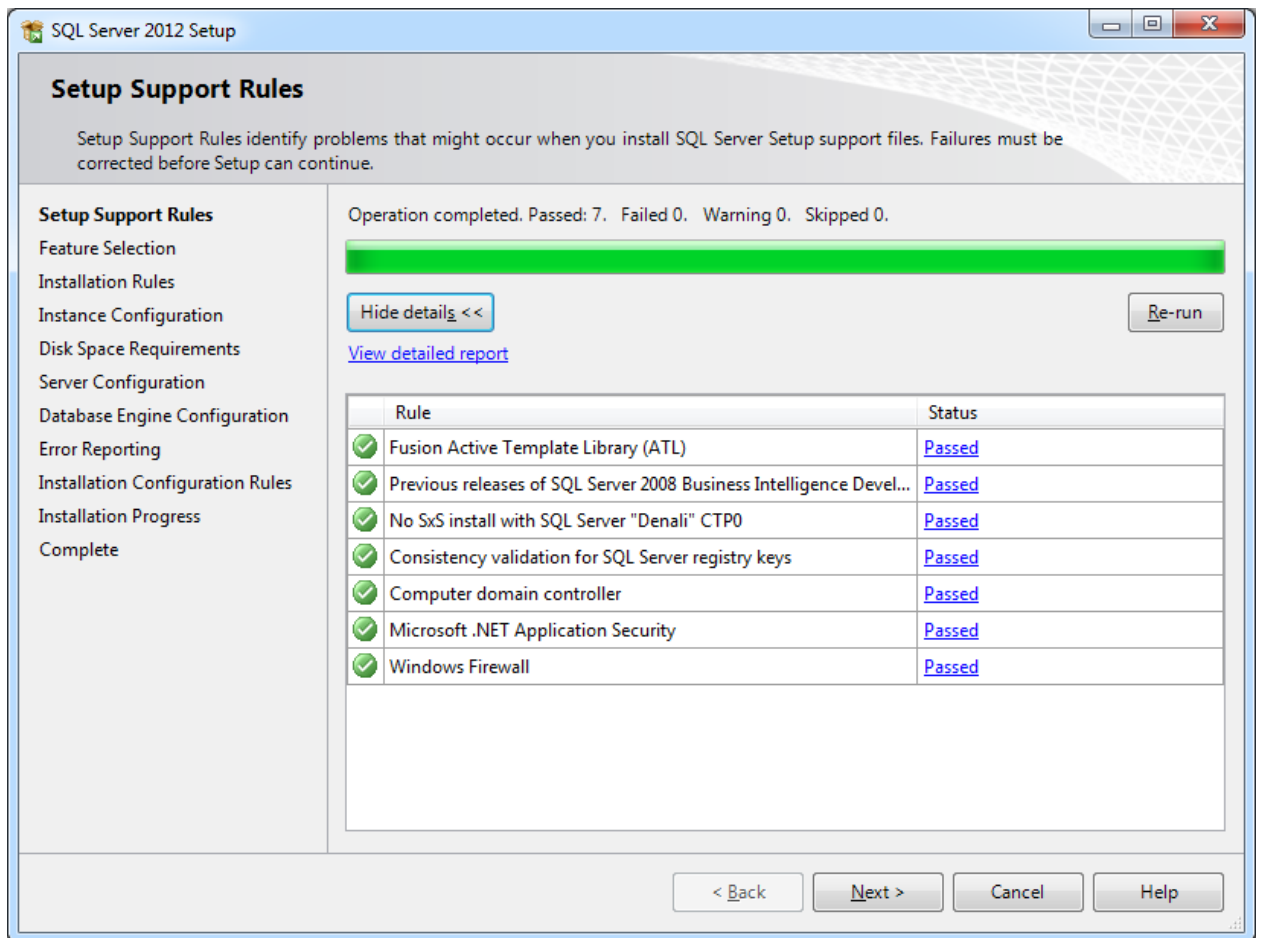
Installing SQL Server 2012 Express Edition

1. Start the Microsoft SQL Server 2012 Express Edition Setup.
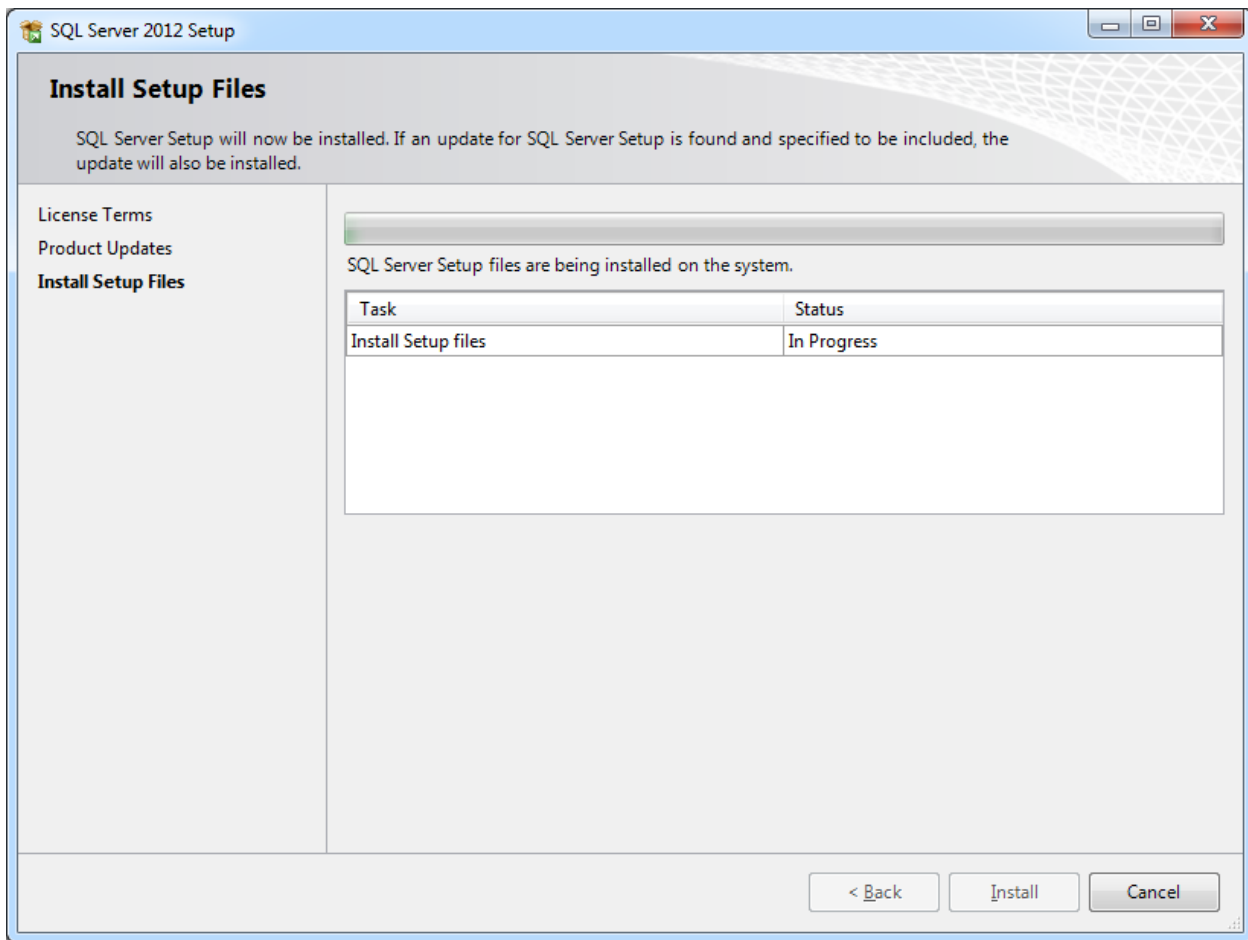2. On the *Installation* tab, click *New SQL Server stand-alone installation*.
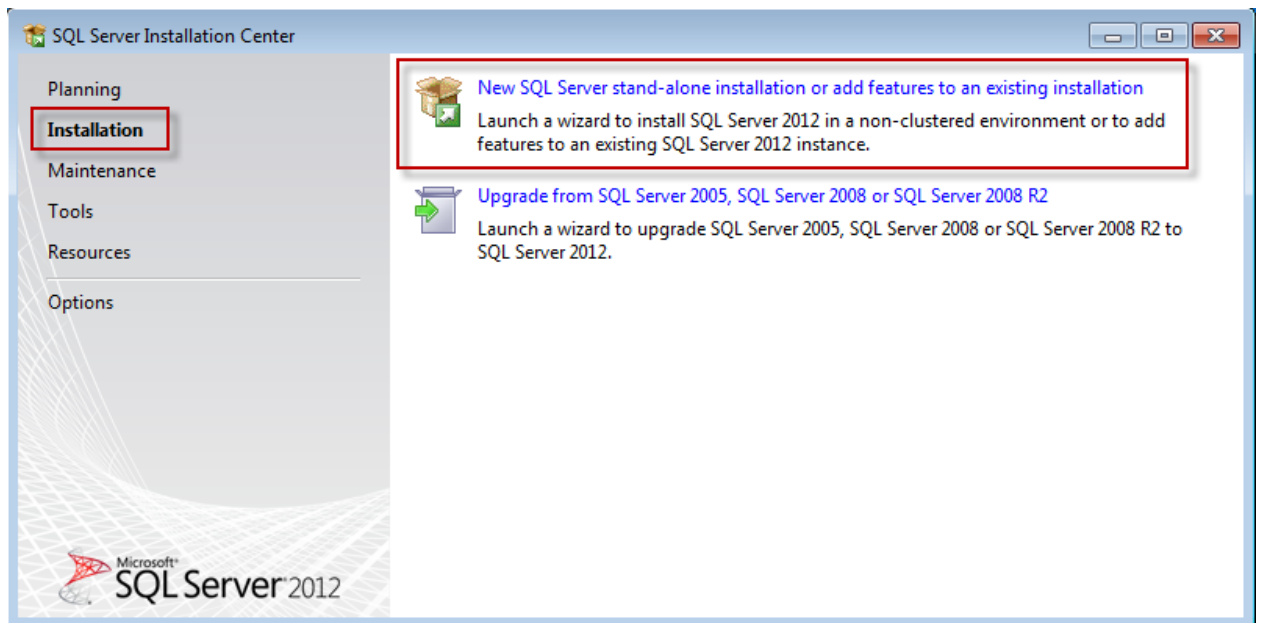
3. Accept the *End User License Agreement* and choose the *Next* button.

4. After the *Setup Support Rules* check has finished, check that your computer has passed all rules and choose *OK*.

5. If the installation does not start by itself, in the *Setup Support Files* window, choose the *Install* button.

6. In the *Feature Selection* window, you may deselect the SDK options and the *SQL Server Replication* checkbox, and choose the *Next* button.
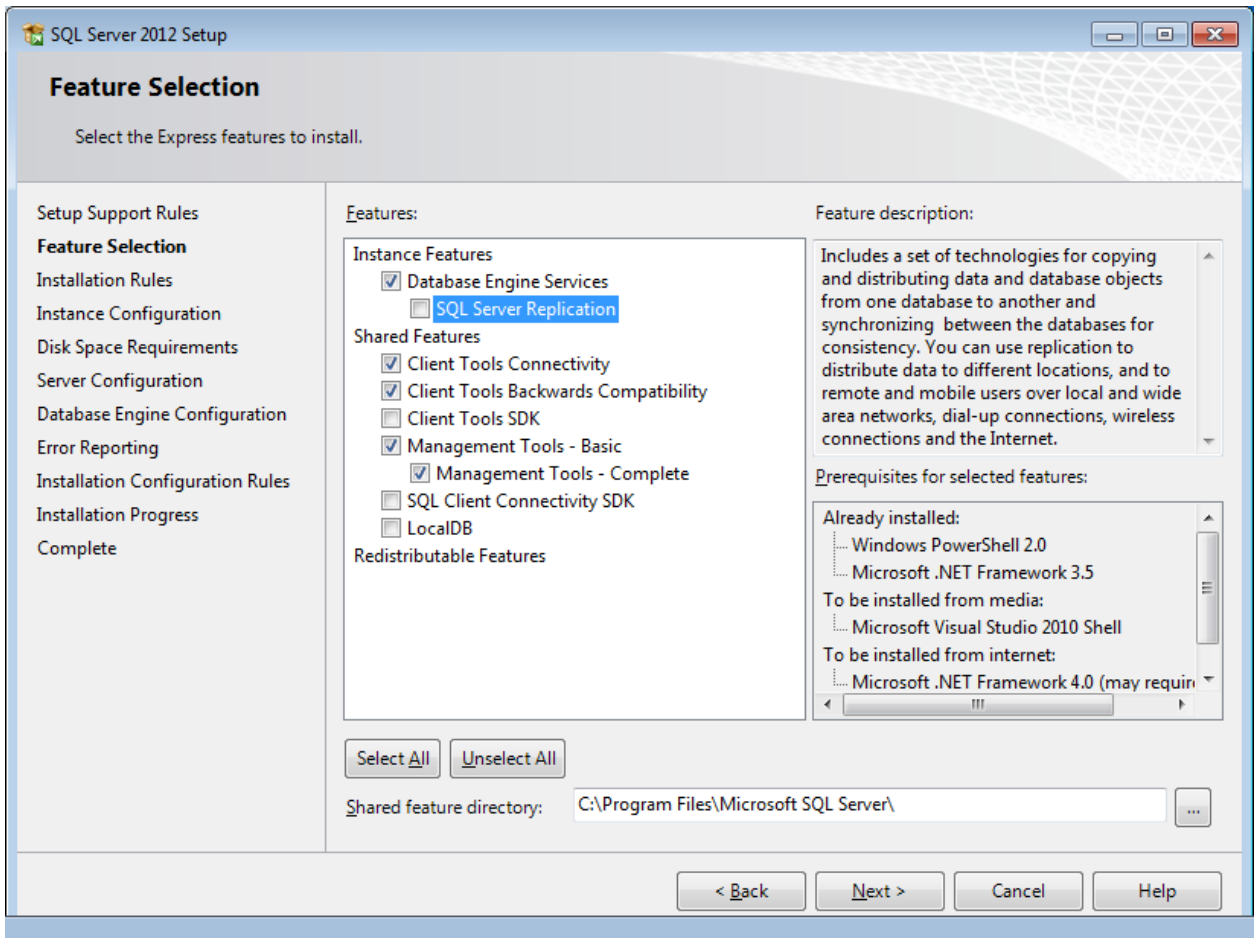
7. After the *Installation Rules* check has finished, select the *Default Instance* radio button in the *Instance Configuration* window, and then choose the *Next* button.
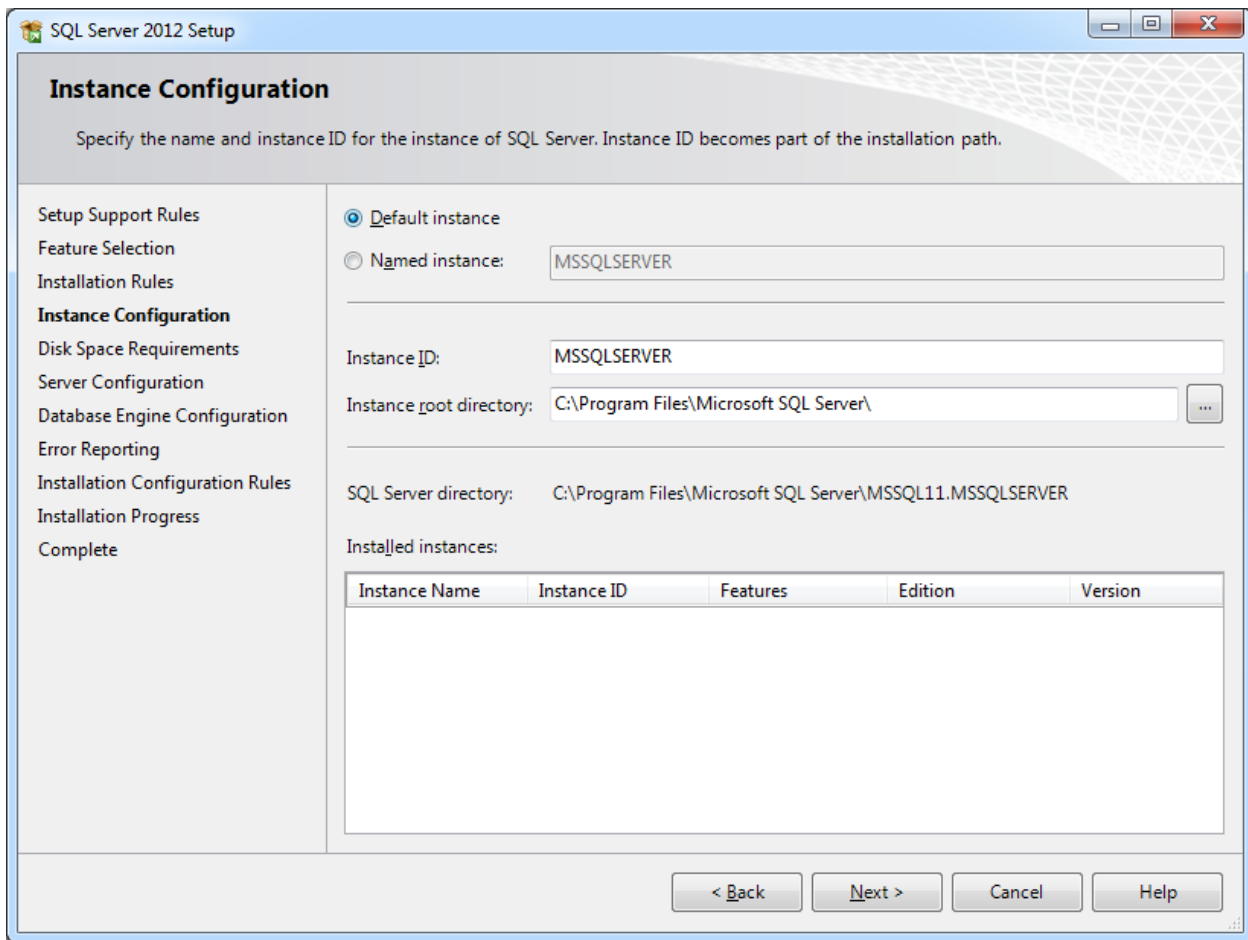
8. After the *Disk Space Requirements* check has finished, select the *Collation* tab and check if the *Database Engine* has the *SQL_Latin1_General_CP1_CI_AS* value selected; otherwise, choose *Customize* and set the value manually. Choose the *Next* button to continue.
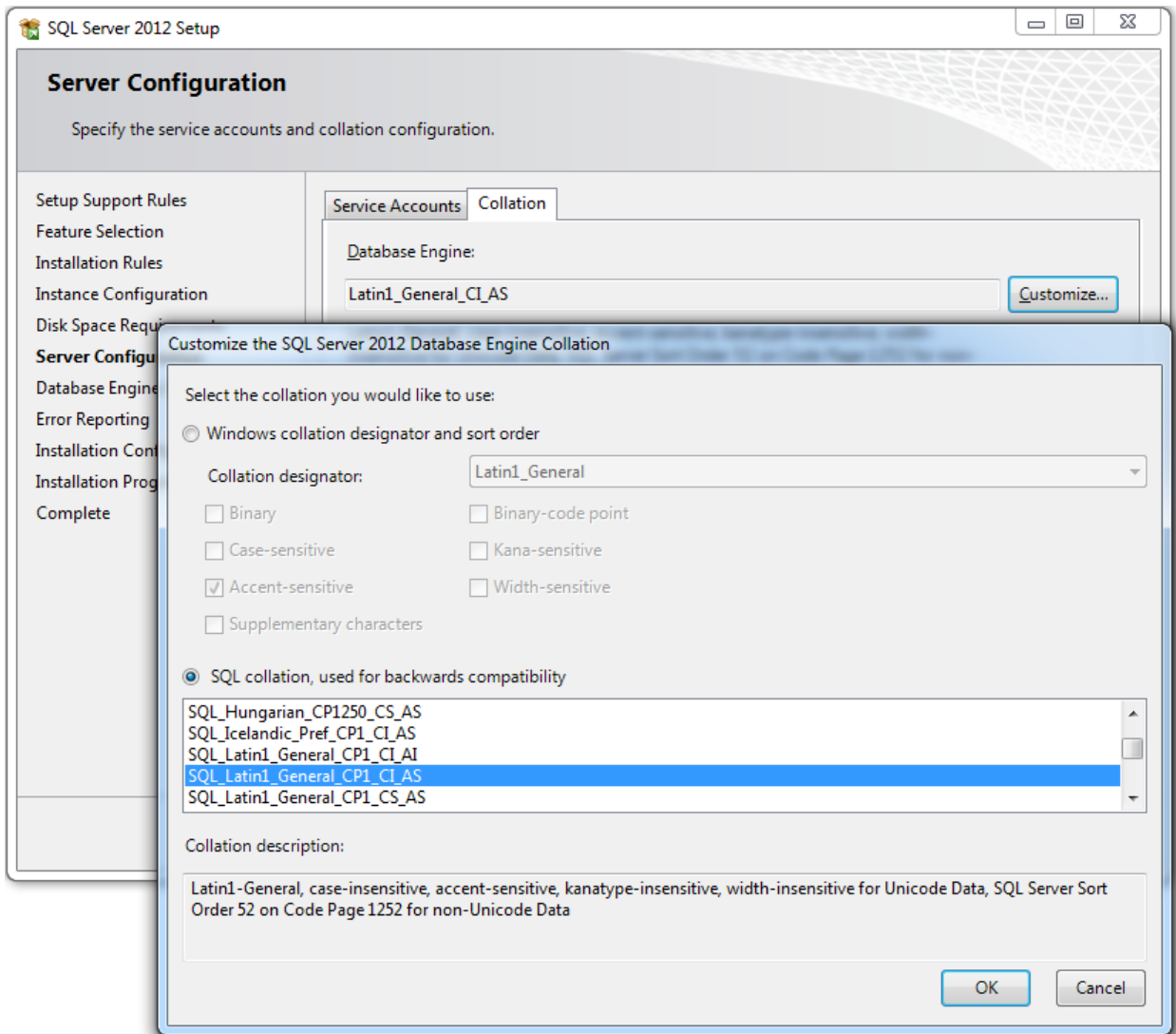
9. Select the *Mixed Mode* radio button and enter a password for the **s**ystem **a**dministrator (sa) account. You can also add the SQL Server administrator group by choosing the *Add* button (*Advanced → Find Now*).

Choose the *Next* button.
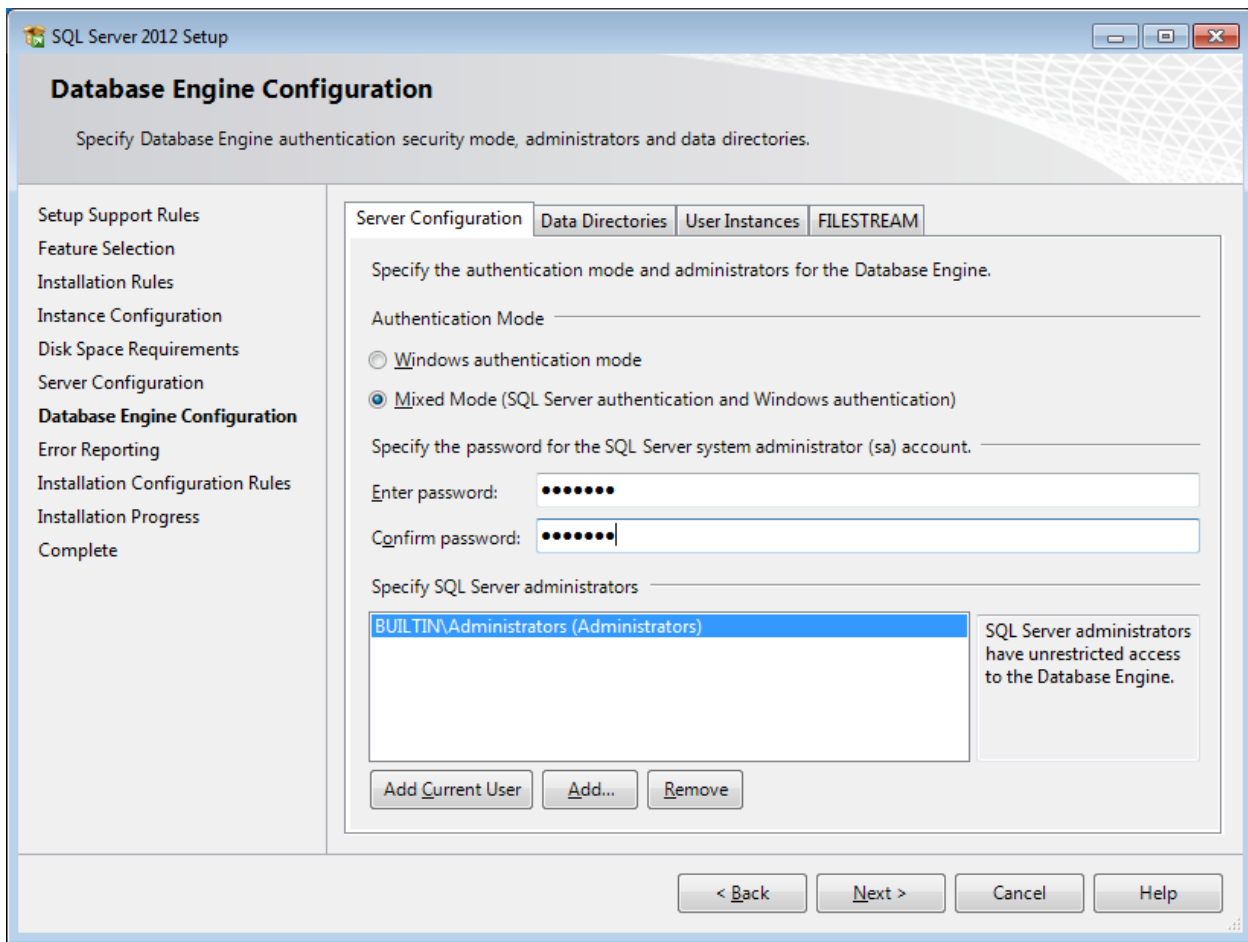
10. In the *Error and Usage Reporting* window, choose the *Next* button.
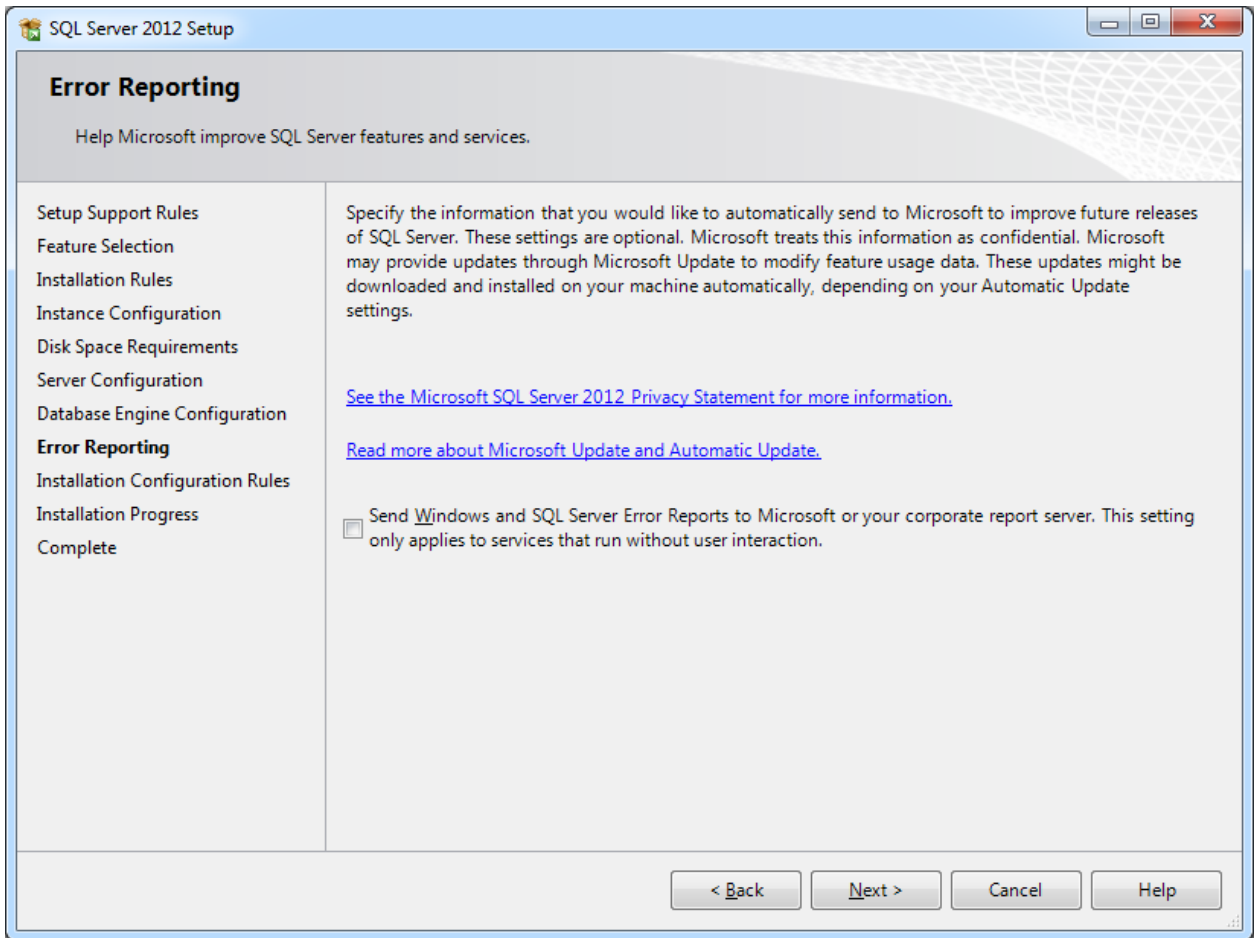
11. After the *Installation Rules* check has finished, the installation progress begins.

12. After the *Installation Progress* is finished you may get notified to restart the computer.
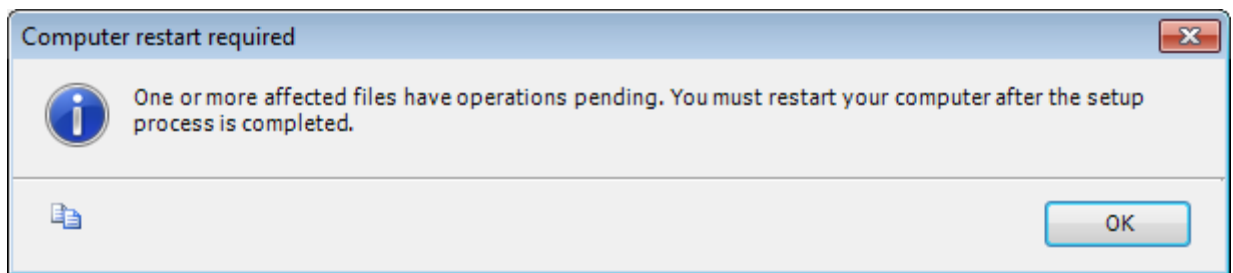
13. Choose *Close* to complete the installation, and reboot the computer, if required.

SAP Business One on Microsoft SQL Server 2012 Express Edition
SAP Business One 8.82, 9.0 on SQL Server 2012 Express Edition Installation Process

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Result

You have installed SQL Server 2012 Express Edition successfully. You must now configure the application before setting up SAP Business One 8.82, 9.0 on it.
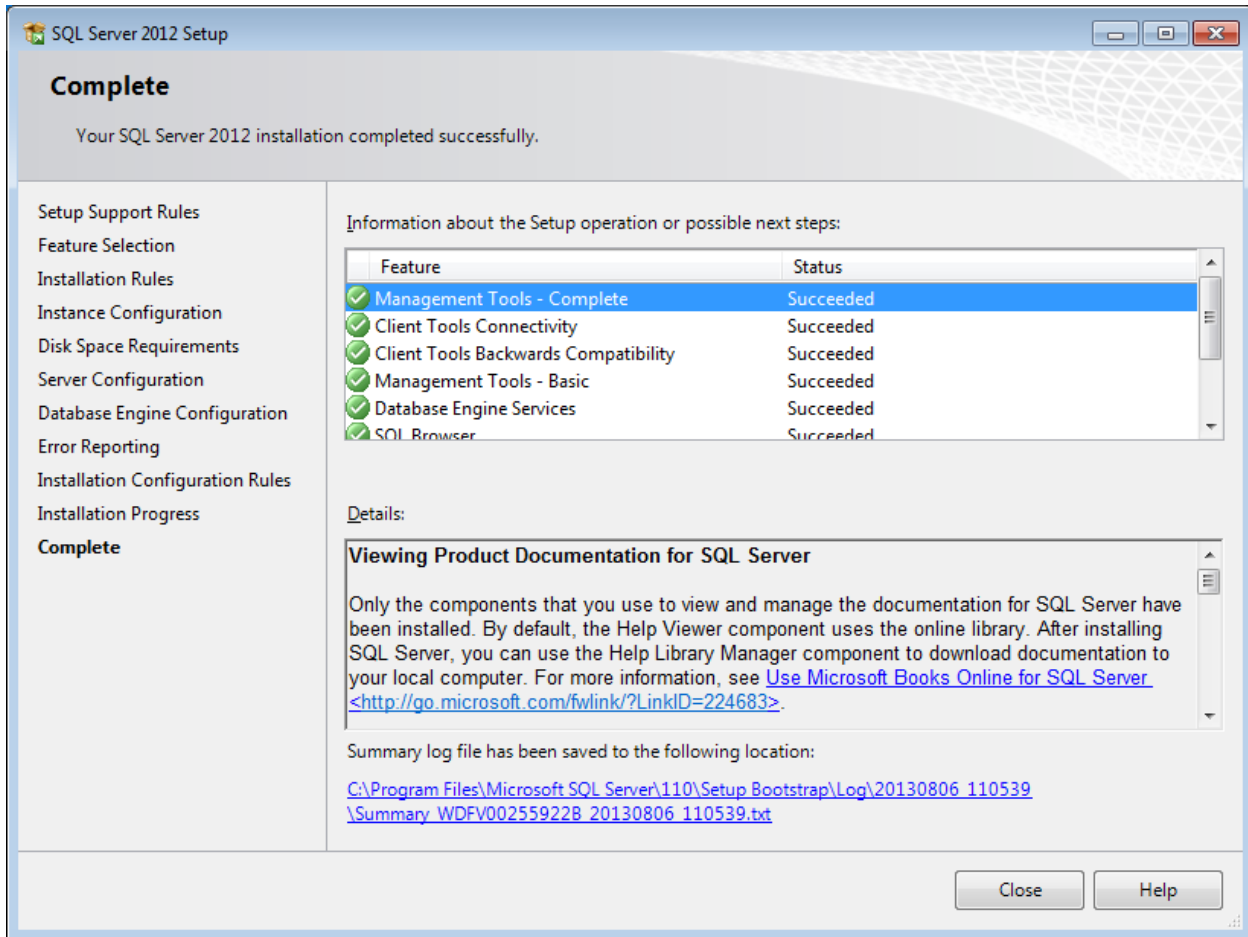
Configuring SQL Server 2012 Express Edition

To configure SQL Server 2012 Express Edition, proceed as follows:

1. From the *Start* menu, choose *All Programs* → *Microsoft SQL Server 2012* → *Configuration Tools* → *SQL Server Configuration Manager*.

2. Expand the *Server Network Configuration* node and click the nodal point *Protocols*.

3. In the *Protocol Name* column, right-click the *TCP/IP* entry and choose *Properties*.

4. On the *Protocol* tab, set the *Enabled* option to *Yes*.
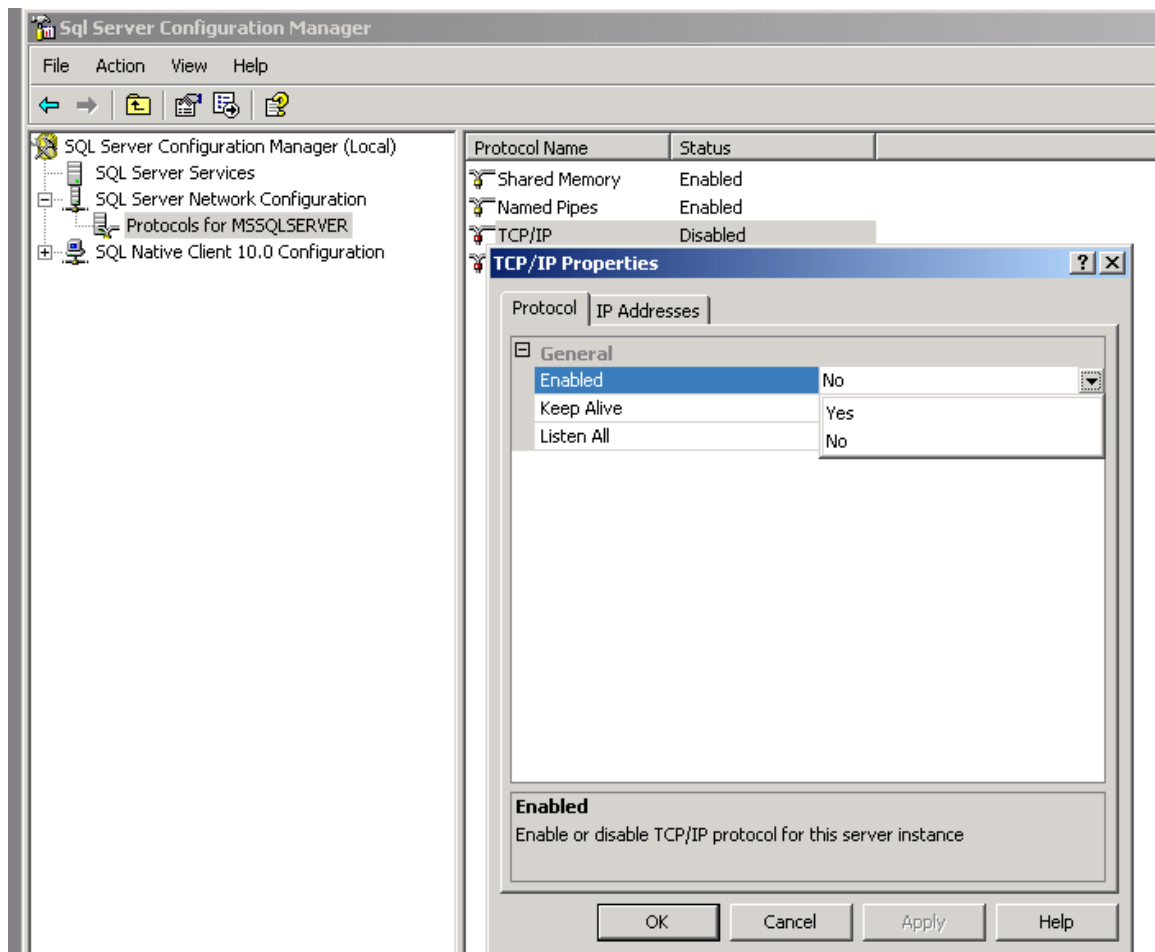
5. Choose the *OK* button.
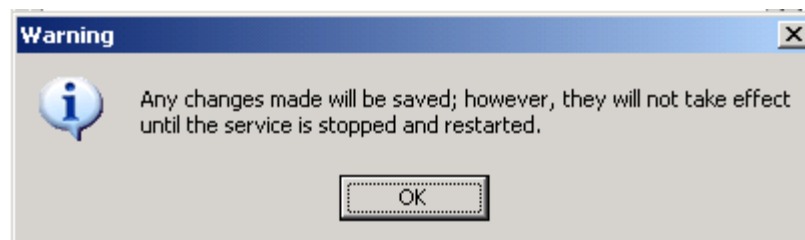
6. On the *IP Addresses* tab, check if your desired Network Adapters and the local host adapter with the IP-Address 127.0.0.1 is set to Enabled = Yes. Also enter the TCP Port 1433 for all enabled adapters and choose Apply.
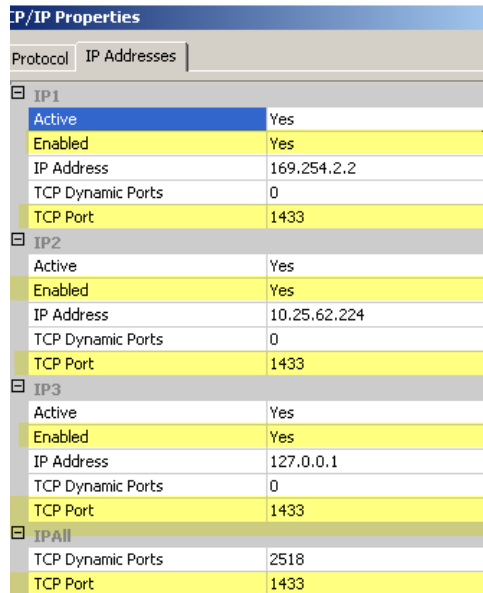
7. Choose the *OK* button again.
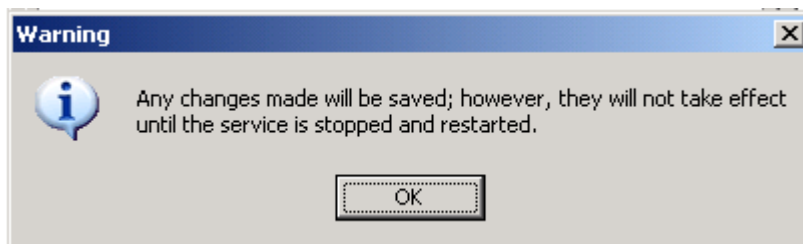
8. Select SQL Server Services, select the row with *SQL Server* in the *Service Type* column, and in the icon bar, click the *Stop Service* button.
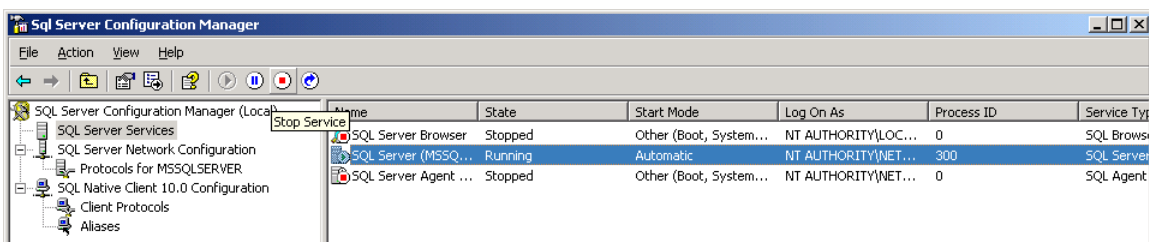
9. After stopping the database, click (*Start*) to restart it.

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SAP Business One on Microsoft SQL Server 2012 Express Edition
SAP Business One 8.82, 9.0 on SQL Server 2012 Express Edition Installation Process

Result

Your system is ready for the SAP Business One setup.

Installing SAP Business One 8.82, 9.0

To install SAP Business One 8.82, 9.0, in the related *Administrator's Guide*, go to chapter 3.
For more information, see http://sappartneredge.com/b1/documentation.

www.sap.com/contactsap