



OAISYS Software Only Installation Guide

Version 6.x

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Americas Headquarters

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OVERVIEW

The purpose of this document is to guide a technical administrator through the process of installing an OAISYS recording solution as a software-only option on a dedicated server. The dedicated server is provided by the customer and must not have any applications installed on it that are not referenced in this document. This document is applicable to both the Talkument and Tracer recording solutions for the current production release.

These instructions assume a working knowledge of Windows and general setup procedures. Complete the installation of the software in the order presented within this document.

An electronic version of this document is available on the OAISYS web site (www.oaisys.com) under Support → Technical Support → Documentation.



MINIMUM HARDWARE REQUIREMENTS

Many factors go into selecting the best hardware platform to meet your call recording needs. Consider how many ports you plan to record and how many call recordings you would like to store online.

VoIP call recording (with the exception of Mitel Secure Recording Connector and ShoreTel TAPI-WAV configurations) requires a network switch with port mirroring. Most managed switches offer some form of port mirroring. VoIP recording servers require two network interface ports. One port provides connectivity to the LAN and for client access. The second port is dedicated to capturing VoIP traffic.

Digital Tap systems (Station Tap, Digital Trunk Tap, VOX, and Analog Tap) will require server chassis which have the capacity to hold **full length PCI cards**. These are full-sized cards and require the entire length in the chassis in order to fit.

Port Count	CPU	Memory	Operating System**	SQL *	Storage
1-48	Intel/AMD dual core	2GB	Windows 7 or Windows Server 2008	(XP) SQL Server 2008 Express w/Advanced Services or (Server) SQL Server 2008 Express w/Advanced Services, Workgroup, Standard, or Enterprise	160GB (20GB minimum for OS partition)
49-96		2GB 4GB	Windows 7 or Windows Server 2008	(XP) SQL Server 2008 Express w/Advanced Services or (Server) SQL Server 2008 Express w/Advanced Services, Workgroup, Standard, or Enterprise	160GB (20GB minimum for OS partition)
97-200		4GB	Windows Server 2008	SQL Server 2008 Workgroup, Standard, or Enterprise	250GB (60GB minimum for OS partition)

* SQL Server 2008 Workgroup, Standard, and Enterprise Editions require Windows Server 2008.

SQL 2008 Express w/ Advanced Services supports both of the Operating Systems listed above.

** **Note:** 32-bit Operating Systems only for Recording Server. 64-bit client installations are supported.

**ShoreTel TAPI-WAV integration requires a ShoreTel TAPI Application Server software license and Windows Server 2008 or Windows Server 2003 OS. ShoreTel version 10.1 and lower requires the same version of the OS be installed on both the Headquarters Server and the OAISYS Recording Server.



DOWNLOADS REQUIRED

The following prerequisites must be downloaded prior to installation. They are included on the provided installation disc and are available for download via www.oaisys.com

Support → Technical Support → Software Downloads

*****DO NOT INSTALL THESE PROGRAMS AT THIS TIME – DOWNLOAD ONLY*****

- .NET Framework 3.5 SP1

- AudioCodes (AiLogix) Driver (DP3200/ DP4800/ PT boards not supported)

- Sentinel USB Driver

- SQL Server 2008 Express w/ Advanced Services (if appropriate)

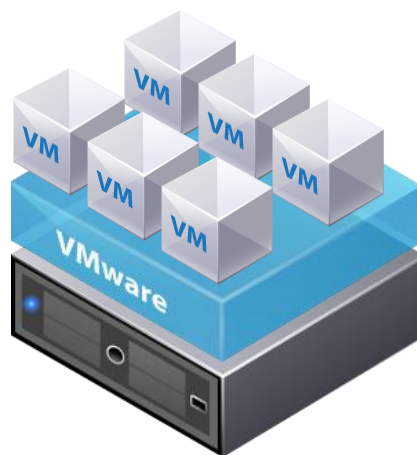
- OAISYS Recording Server Software

OVERVIEW

VMware support is now available with OAISYS versions 6.2 and later. Virtualization combines server resources onto one host server and reduces the number and identity of individual physical servers, processors, and operating systems. The host server can be divided into multiple isolated virtual environments. These virtual environments can run the OAISYS software; Tracer, Talkument, and Screen Recording.

Benefits of virtualization include:

1. Consolidation of applications onto fewer servers
2. Expense reduction through reduced hardware, power, cooling, and administrative costs.



The illustration provides an example of a Virtual Server running several virtual machines, and demonstrates how Tracer, Tracer Screen Recording, and any other VMware-compatible third-party applications can be configured.



REQUIREMENTS

- OAISYS Version 6.2 or higher
- OAISYS uses VMware vSphere 4 (ESX and ESXi) with network USB device or vSphere 4.1 with onboard USB
- Each OAISYS application (Tracer, Talkument, and Screen Recording) will require a set of reserved requirements
- Processors for the host machine must be Intel i7 or higher (or its equivalent)
- Processor and Memory Requirements per Port Capacity

100 Ports (6.3 or later) and 50 Ports (for 6.2)	200 Ports (6.3 or later) and 100 Ports (for 6.2)	350 Ports (6.3 or later) and 200 Ports (for 6.2)	Screen Recording up to 100 Ports
2.8 GHz (2 Processors)	3.0 GHz (2 Processors)	3.0 GHz (2 Processors)	3.0 GHz (2 Processors)
2 GB of Memory	2 GB of Memory	4 GB of Memory	2 GB of Memory

****All CPU and Memory values are minimum reserve requirements.**

DRIVE SPEED REQUIREMENTS

SATA drives up to 3Gbps data rate and 7200rpm spin rate

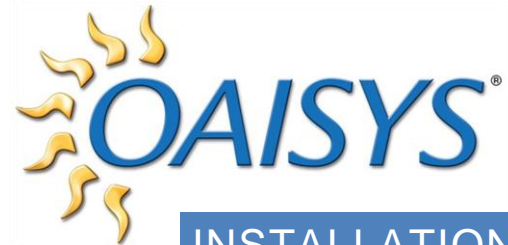
EXPECTATIONS

OAISYS can provide a virtual “image” containing the OS, OAISYS software, and all of the supporting modules. This image will be available as a VMware template (also known as an “appliance” or “blade”).

Three template options are available:

1. Windows 7 with SQL Express
2. Windows Server with SQL Express
3. Windows Server with SQL 2008

NOTE: The customer must provide their own OS and SQL licenses when using a VMware template.



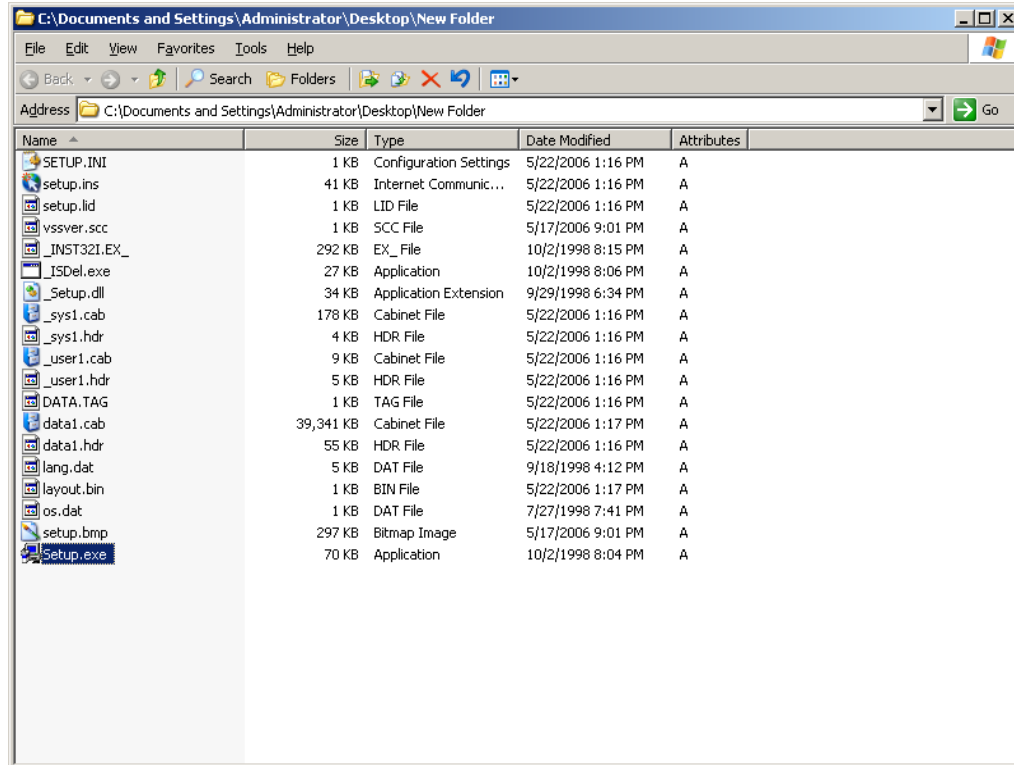
INSTALLATION STEPS

1. Install Operating System on Recording Server

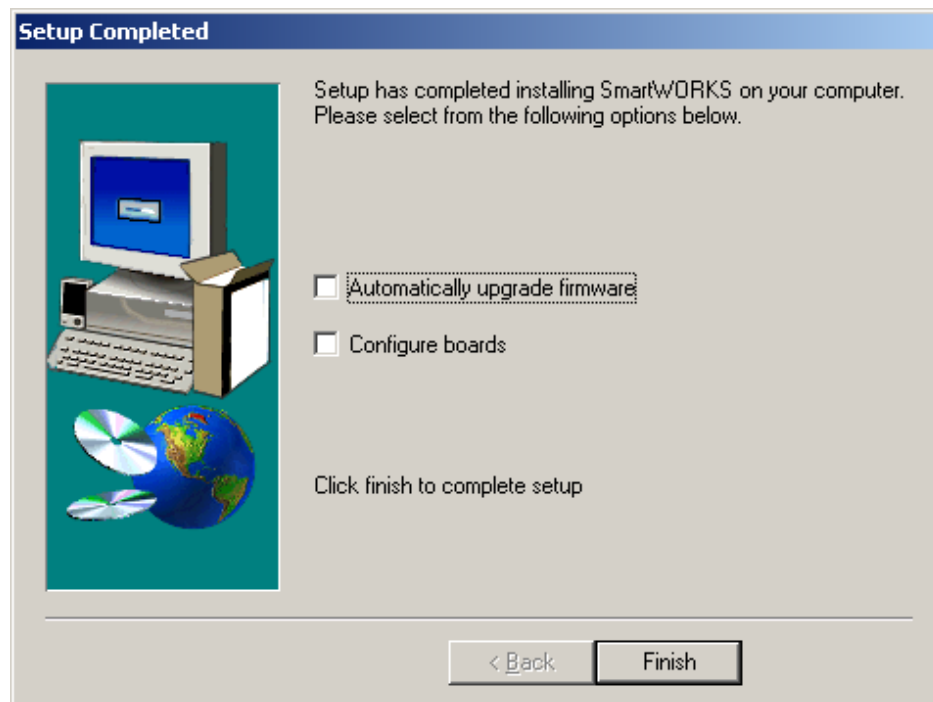
Here are some general tips for Windows 7 and Windows 2008

- a. Use “Run as Admin” option when running setup files (right-click on .exe to access the option).
 - b. Disable User Account Control (Windows 2008) or Select Lowest Level (Windows 7) through the Control Panel options
 - c. Disable Data Execution Protection (DEP)
 - i. Run Command Prompt as “Admin”
 - ii. Run the following command “bcdedit.exe/set{current} nx AlwaysOff”
 - d. Disable Internet Protocol version 6 (IPV6)
 - i. Disable it in the properties of each network adapter
 - ii. add the following registry value:
 1. HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\tcpip6\Parameters\
 2. Dword=DisabledComponents
 3. Decimal Value=255
 - e. Install Powershell through Windows Update (Windows 2008)
2. Be sure to enable IIS, ASP.NET, and Active Server Pages
 - a. See Microsoft documentation if needed
 3. Apply OS Service Packs and Windows Updates
 - a. Required reboot after updates installed
 4. Install .NET Framework Service Packs (.NET 1.1, .NET 2.0 SP1, .NET 3.5 SP1)
 - a. Download latest Microsoft Updates after installing .NET 3.5 SP1 when prompted
 5. Acrobat Reader
 - a. <http://get.adobe.com/reader/>
 6. Sentinel USB Driver

7. Audio Codes (Ai-Logix) Driver
 - a. Unzip Downloaded file to a new folder
 - b. Run Setup.exe



- c. Uncheck the following boxes after install → click **Finish**



8. Shut down Server and install Audio Boards (Optional)
 - a. Use the default setting in the Found New Hardware Wizard

9. Microsoft SQL Server (Standard or Express)

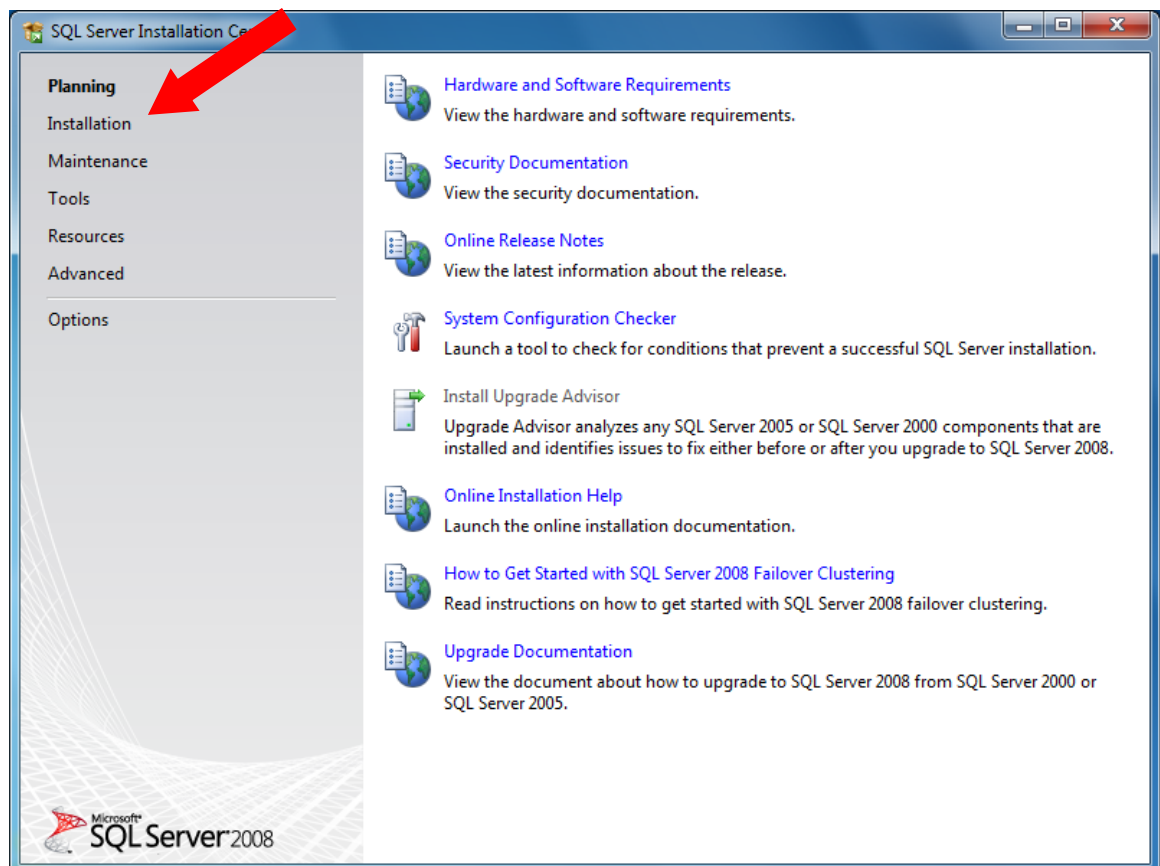
Requirements for Stand Alone SQL Server

- Windows Server 2008 R2 Standard SP2 x64
- Q9550 Core 2 Quad @ 2.83 GHz
- 8GB RAM
- 1 SATA HDD for OS
- 1 SATA HDD for DB
- Maximum calls in the database = 3 Million

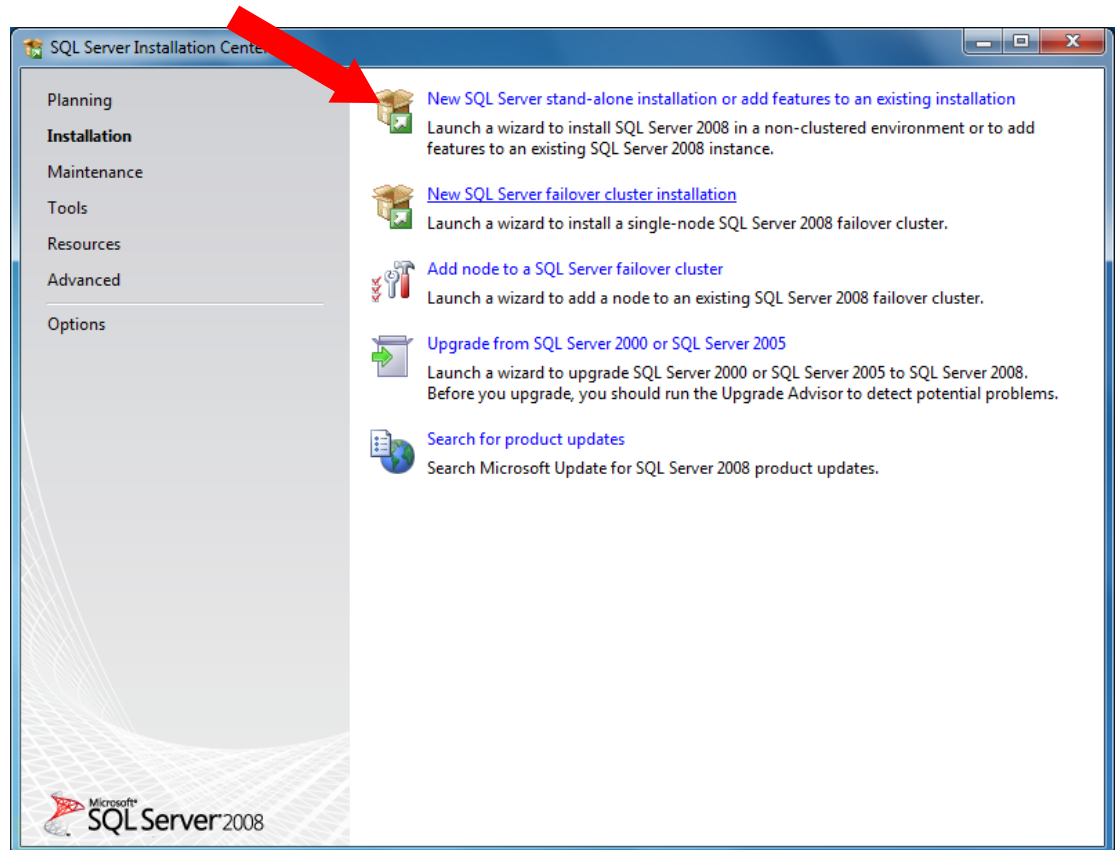
NOTE: Please use SQL Server 2008 Express Advanced Services R2. Issues were discovered installing just SQL 2008 Server; download the 32 or 64 bit versions here: <http://www.microsoft.com/express/Database/>

a. This is the install screen.

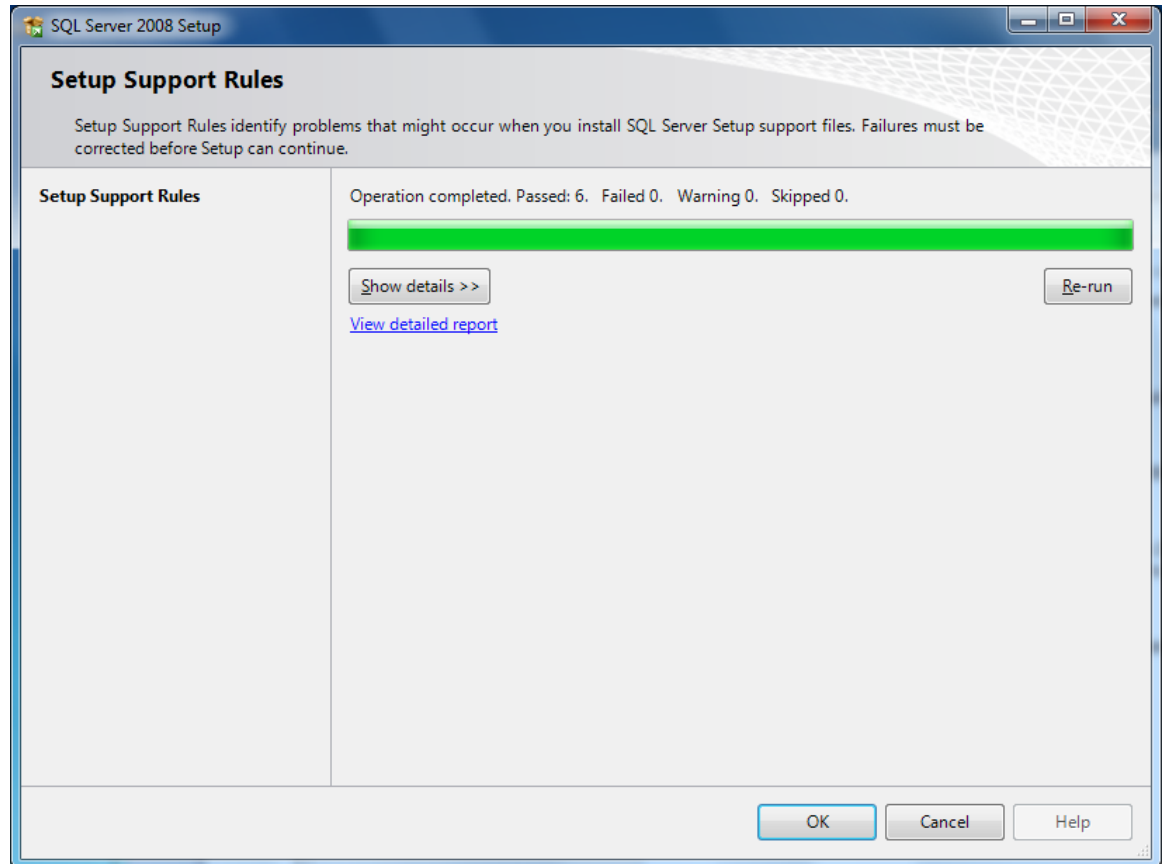
Click on the **Installation** option on the upper left side.



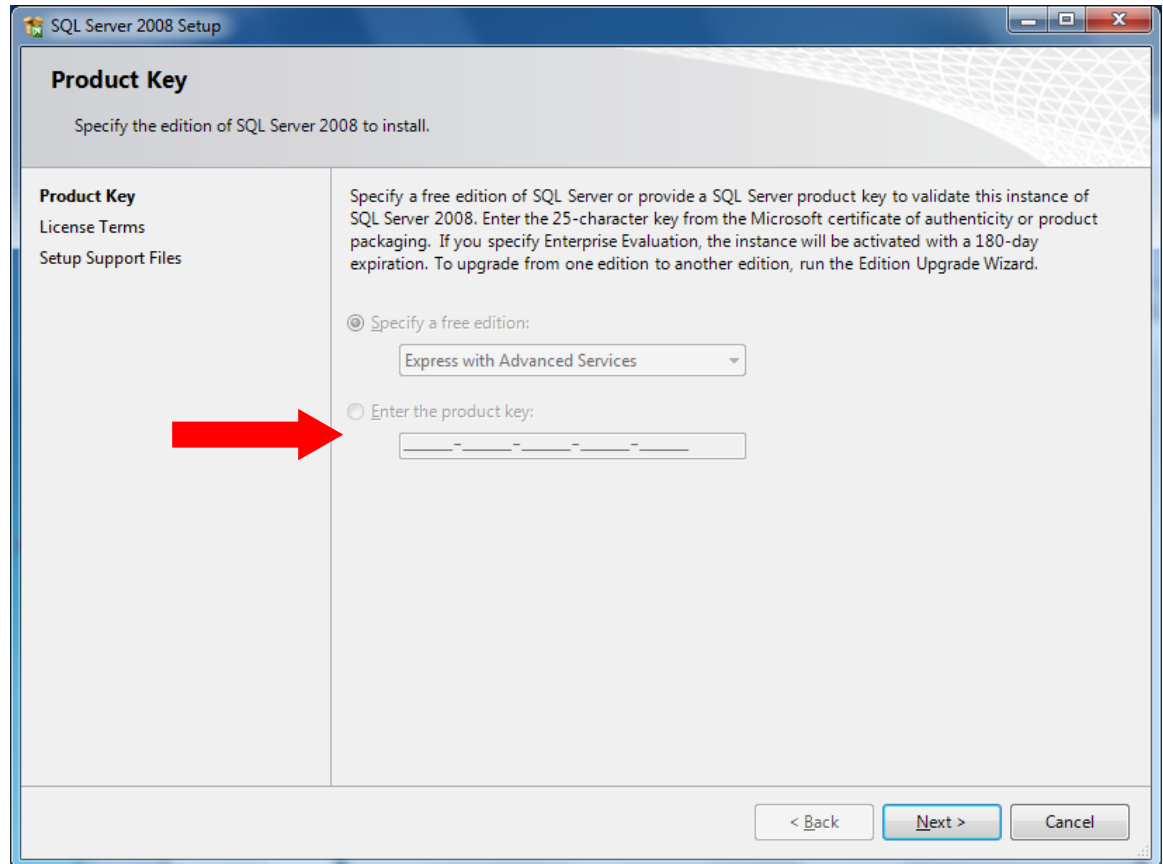
- b. From the installation screen
Click the link for New SQL Server stand-alone installation



- c. Once the setup support files are complete, verify there are no failures at the top of the page → click OK

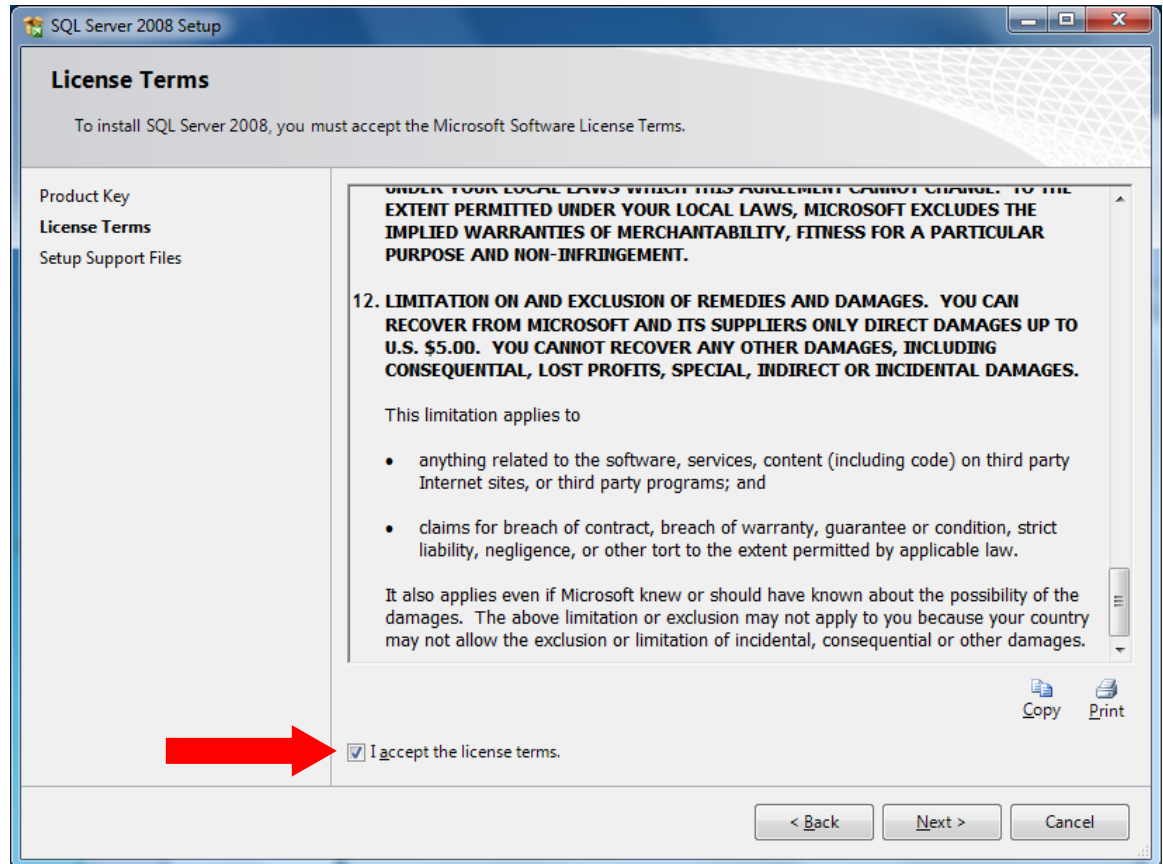


- d. This is the free edition; there is no license code to install. If a full version of SQL is being installed, enter the product key at this screen → click Next

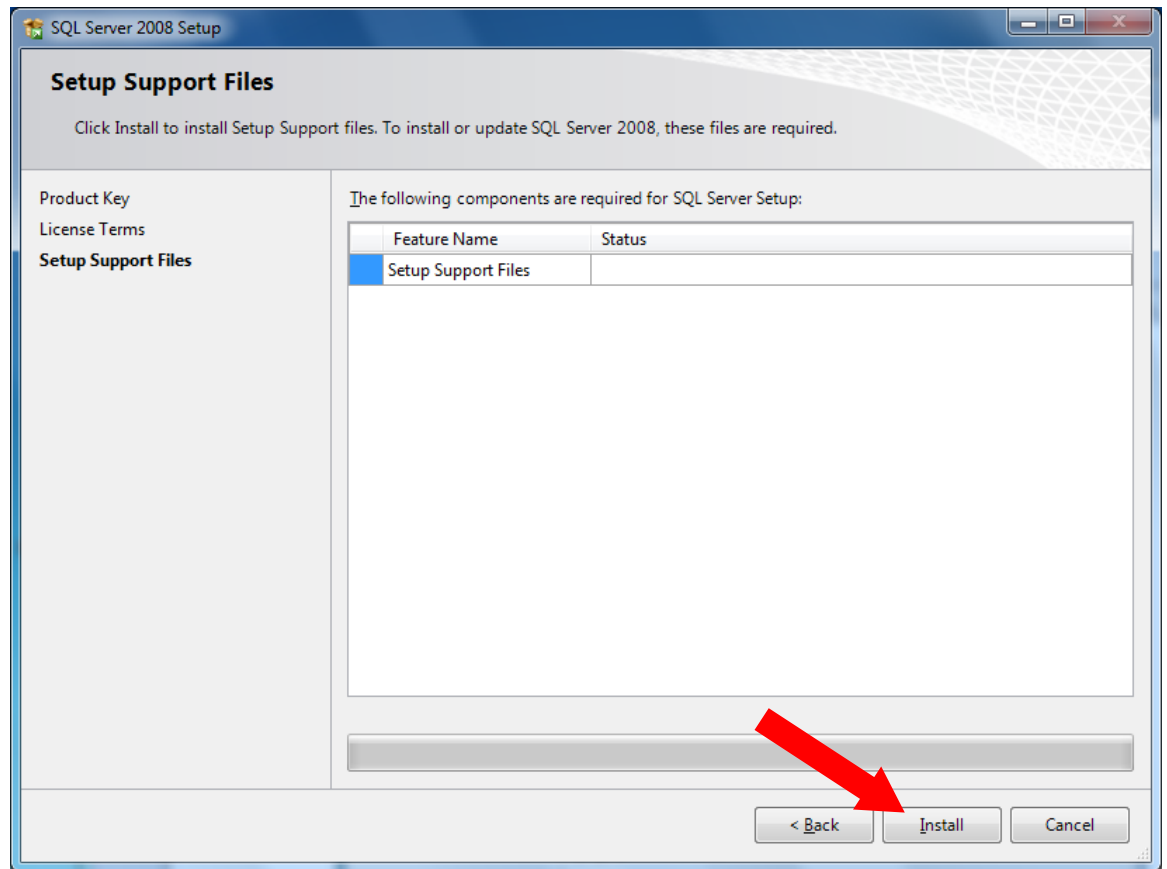


The screenshot shows the 'SQL Server 2008 Setup' window with the 'Product Key' tab selected. The window title is 'SQL Server 2008 Setup'. The main heading is 'Product Key' with the instruction 'Specify the edition of SQL Server 2008 to install.' Below this, there are three tabs: 'Product Key', 'License Terms', and 'Setup Support Files'. The 'Product Key' tab is active, showing a text area with instructions: '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.' There are two radio button options: 'Specify a free edition:' (which is selected) and 'Enter the product key:'. The 'Specify a free edition:' option has a dropdown menu currently showing 'Express with Advanced Services'. The 'Enter the product key:' option has a text input field with a red arrow pointing to it. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

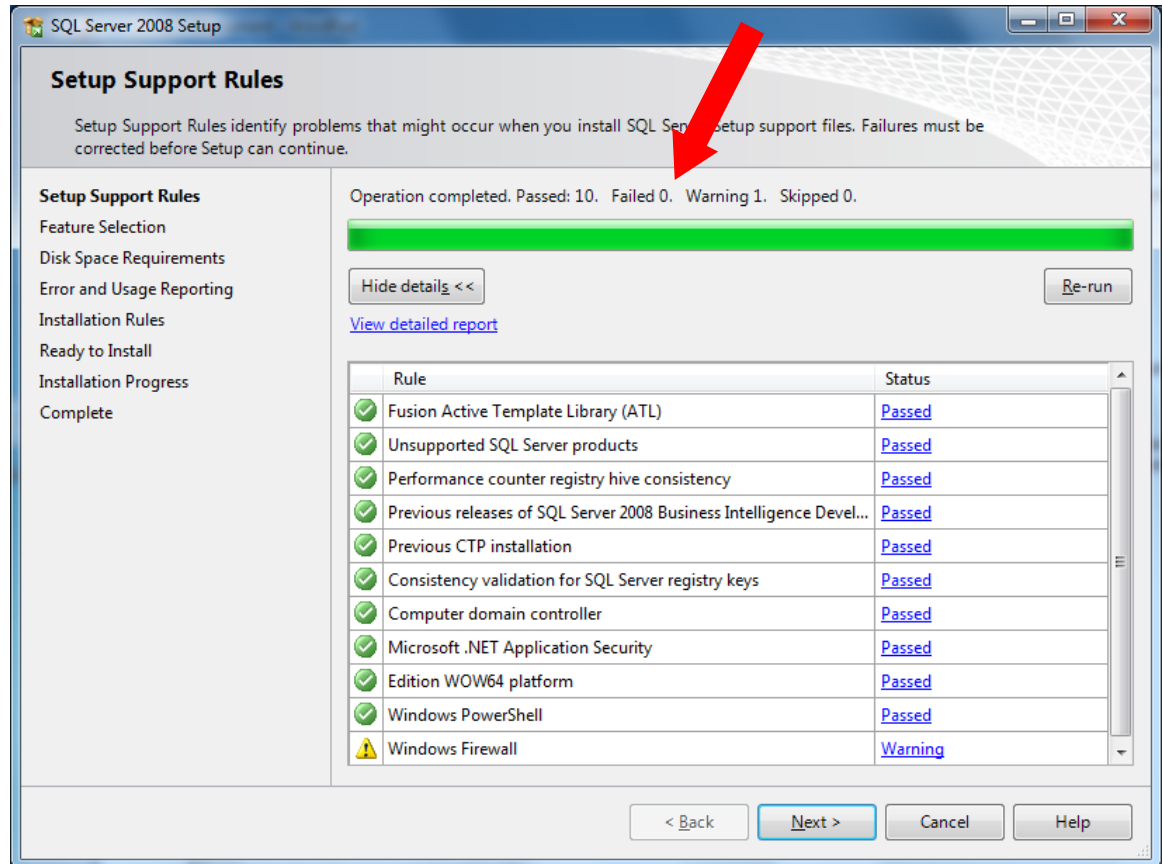
- e. Scroll to the bottom of this screen → accept the license agreement → click Next



- f. Click Install at the bottom of this screen



- g. Verify there are no failures of the operations at the top of the screen → click Next



The screenshot shows the 'Setup Support Rules' window in SQL Server 2008 Setup. A red arrow points to the top of the window. The window displays a progress bar and a table of rules. The 'Next >' button is highlighted.

SQL Server 2008 Setup

Setup Support Rules

Setup Support Rules identify problems that might occur when you install SQL Server setup support files. Failures must be corrected before Setup can continue.

Operation completed. Passed: 10. Failed 0. Warning 1. Skipped 0.

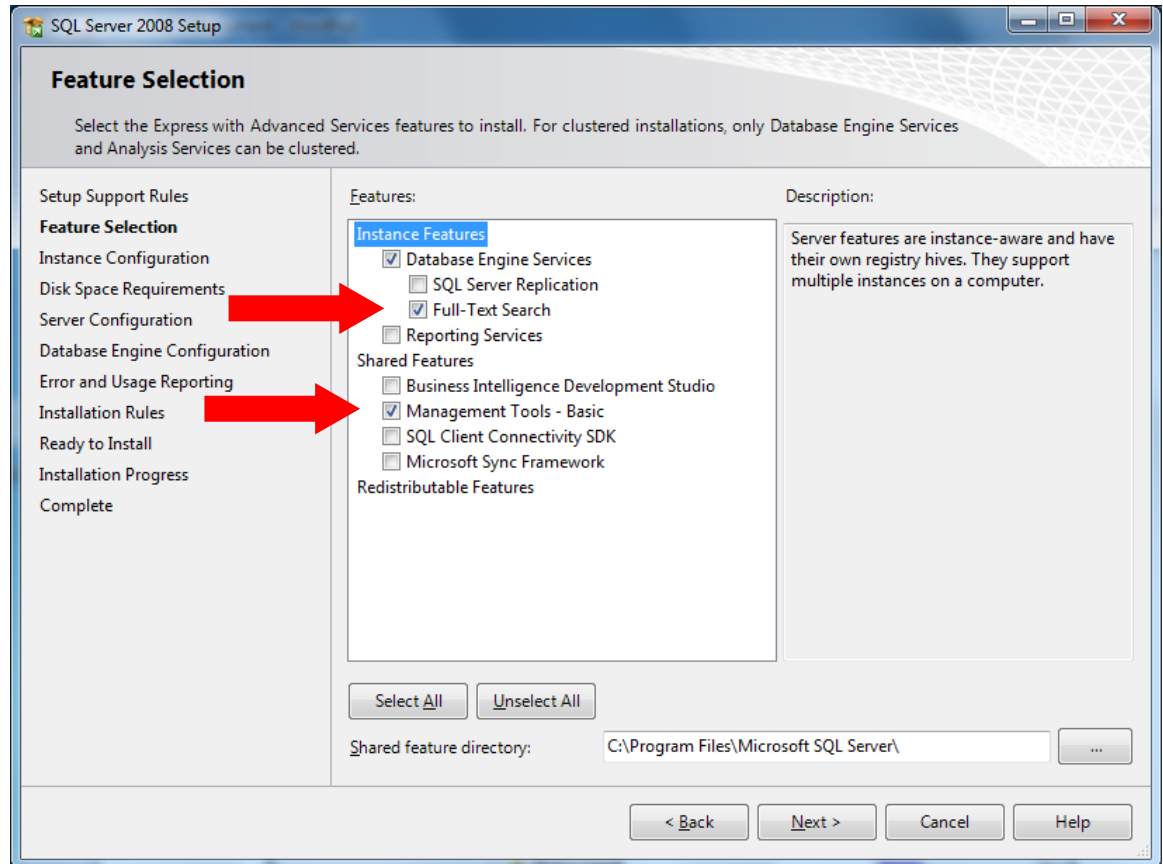
Hide details << Re-run

[View detailed report](#)

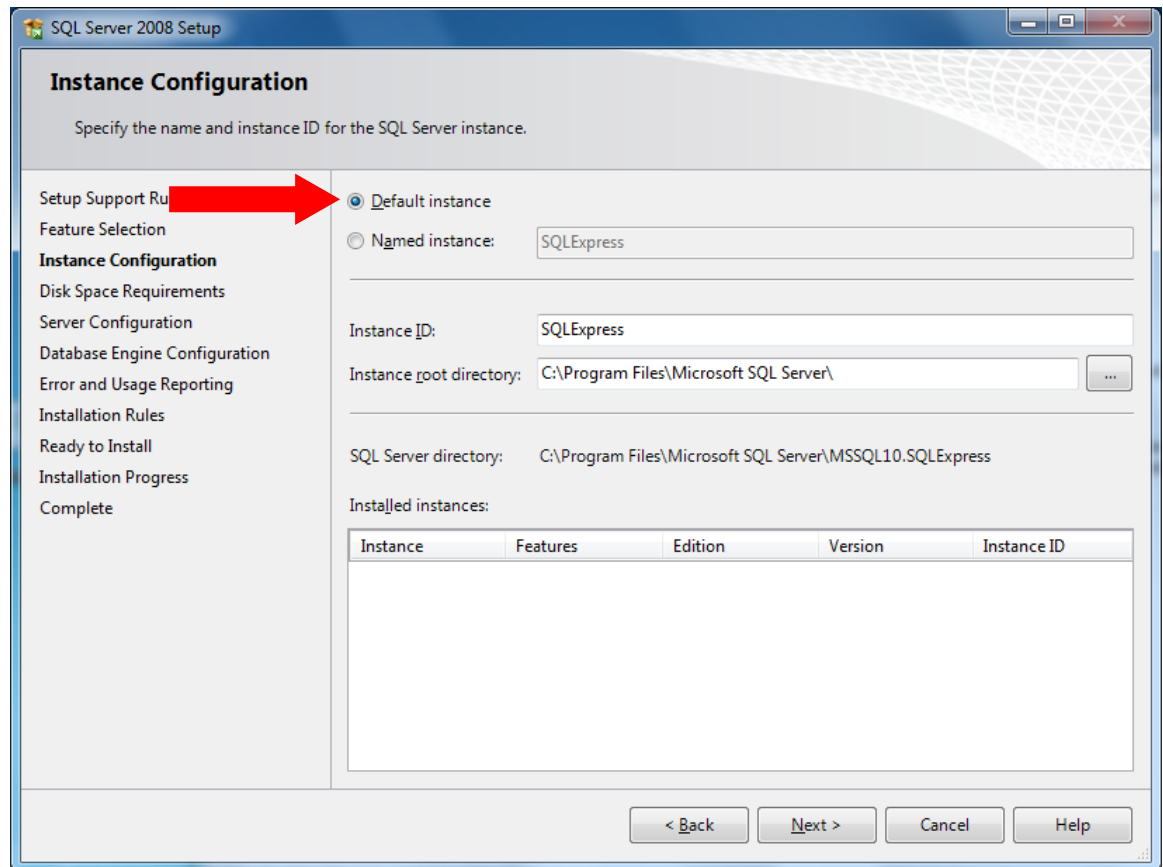
Rule	Status
✓ Fusion Active Template Library (ATL)	Passed
✓ Unsupported SQL Server products	Passed
✓ Performance counter registry hive consistency	Passed
✓ Previous releases of SQL Server 2008 Business Intelligence Devel...	Passed
✓ Previous CTP installation	Passed
✓ Consistency validation for SQL Server registry keys	Passed
✓ Computer domain controller	Passed
✓ Microsoft .NET Application Security	Passed
✓ Edition WOW64 platform	Passed
✓ Windows PowerShell	Passed
⚠ Windows Firewall	Warning

< Back **Next >** Cancel Help

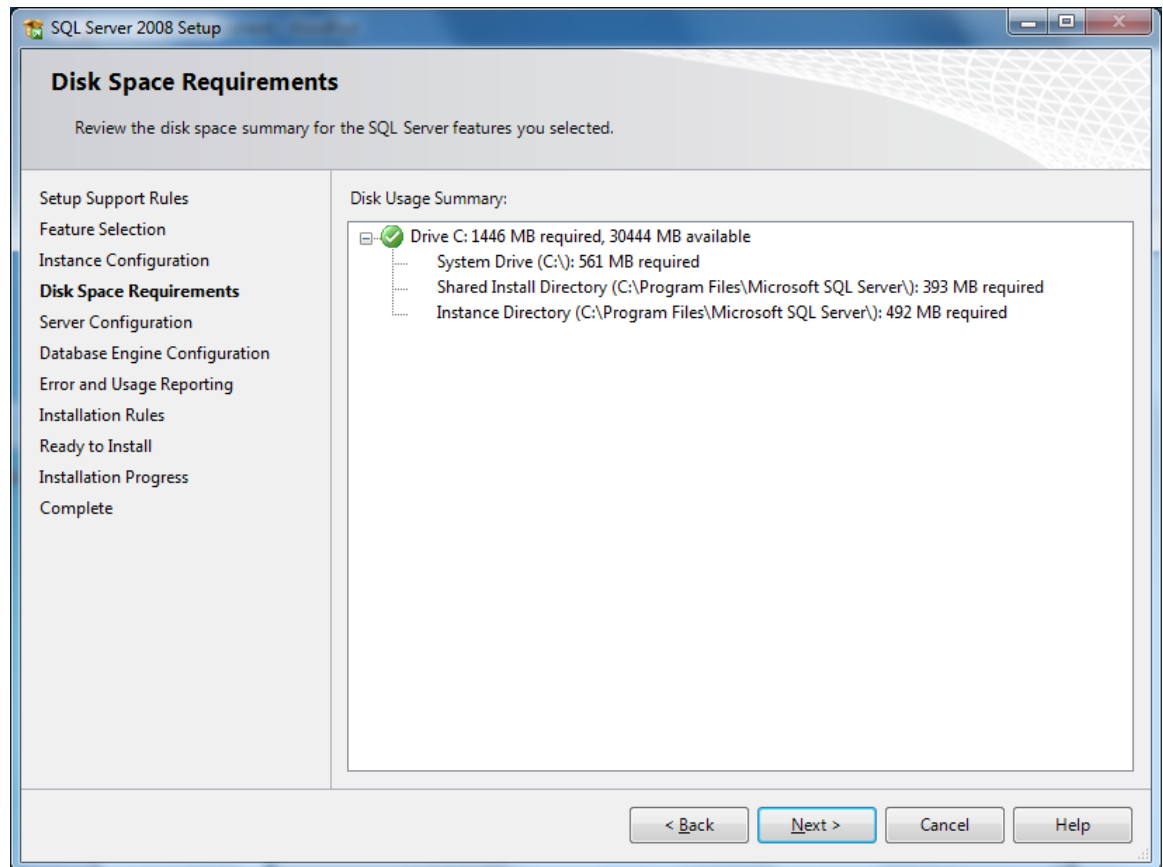
- h. Click the Full-Text Search option and the Management Tools option → click Next



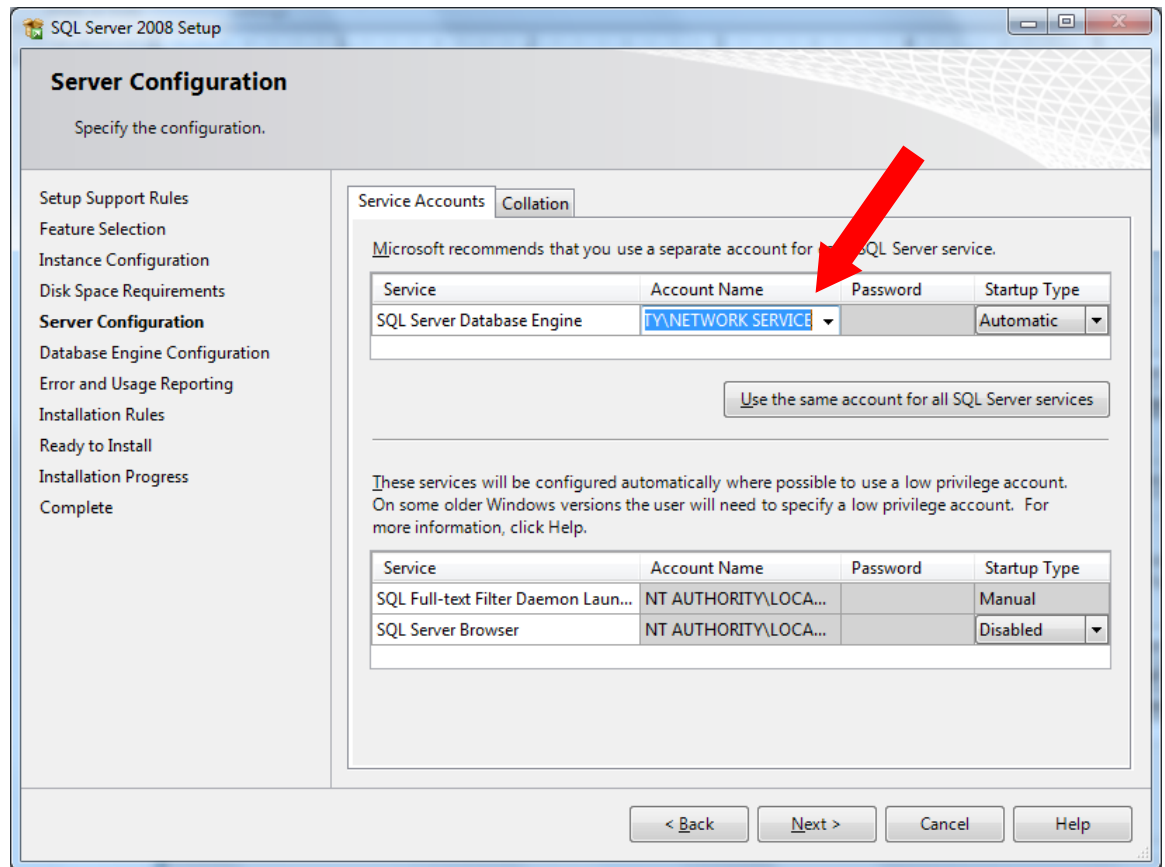
- i. Select the Default Instance (NOT Named Instance) → click Next



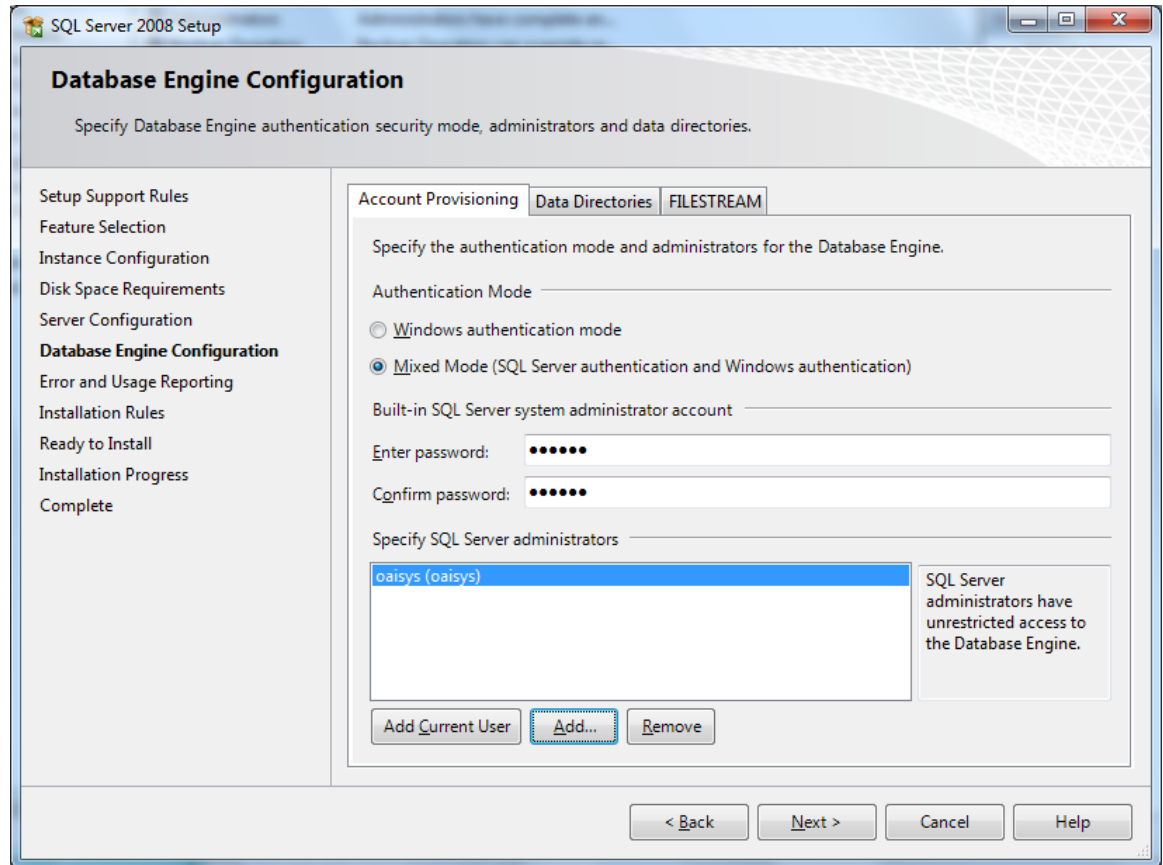
j. No modifications on this screen → click Next



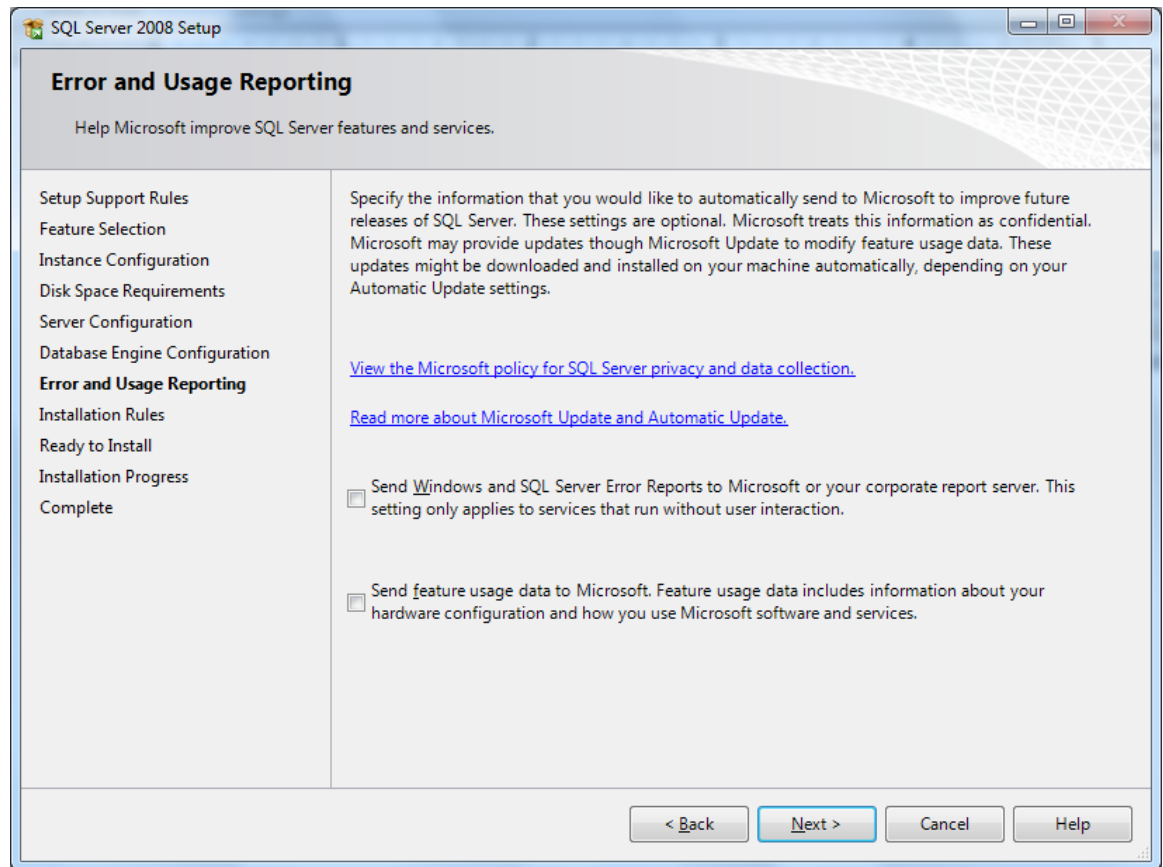
- k. Change the SQL Database Engine to the Network Service account.



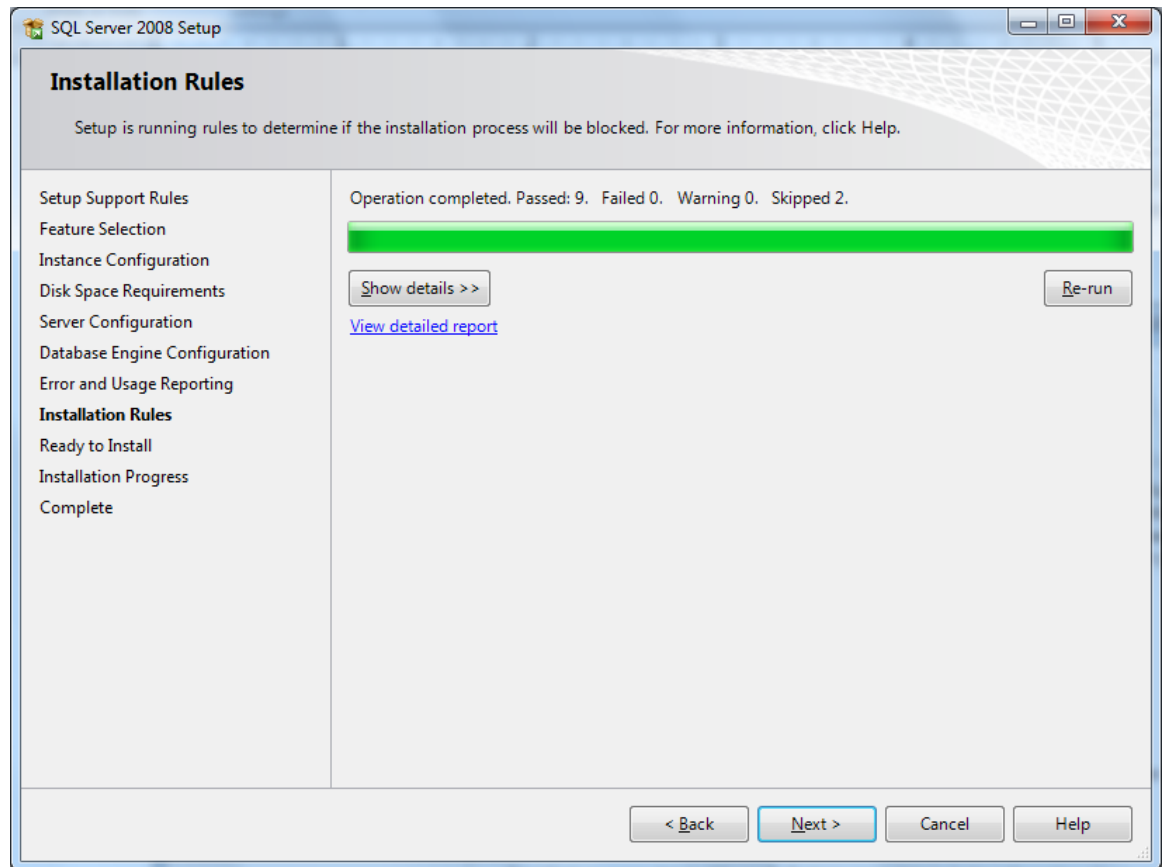
- I. Choose Mixed Mode → enter “oaisys” as the password.
We also suggest making an oaisys user, put the user in the Admin group, and add this user in this box “Specify SQL Server administrators” box.



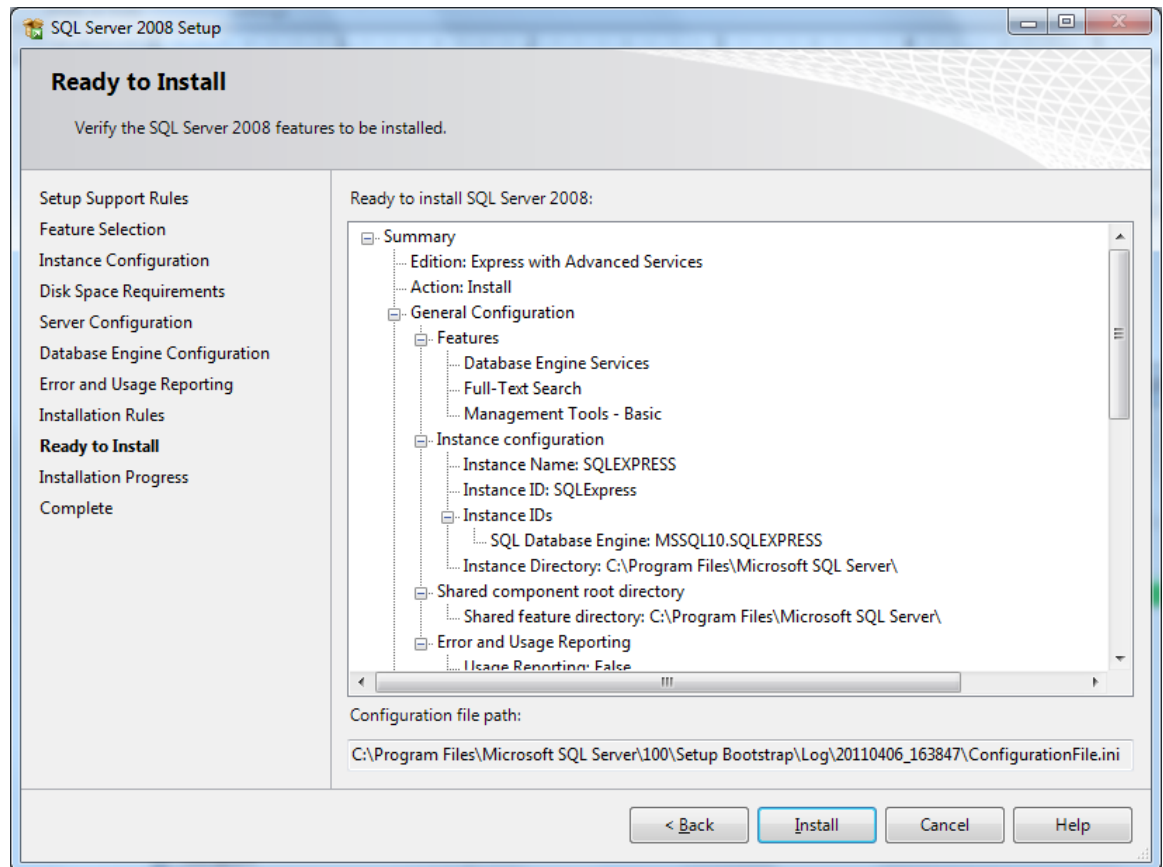
m. Leave both boxes empty → click Next



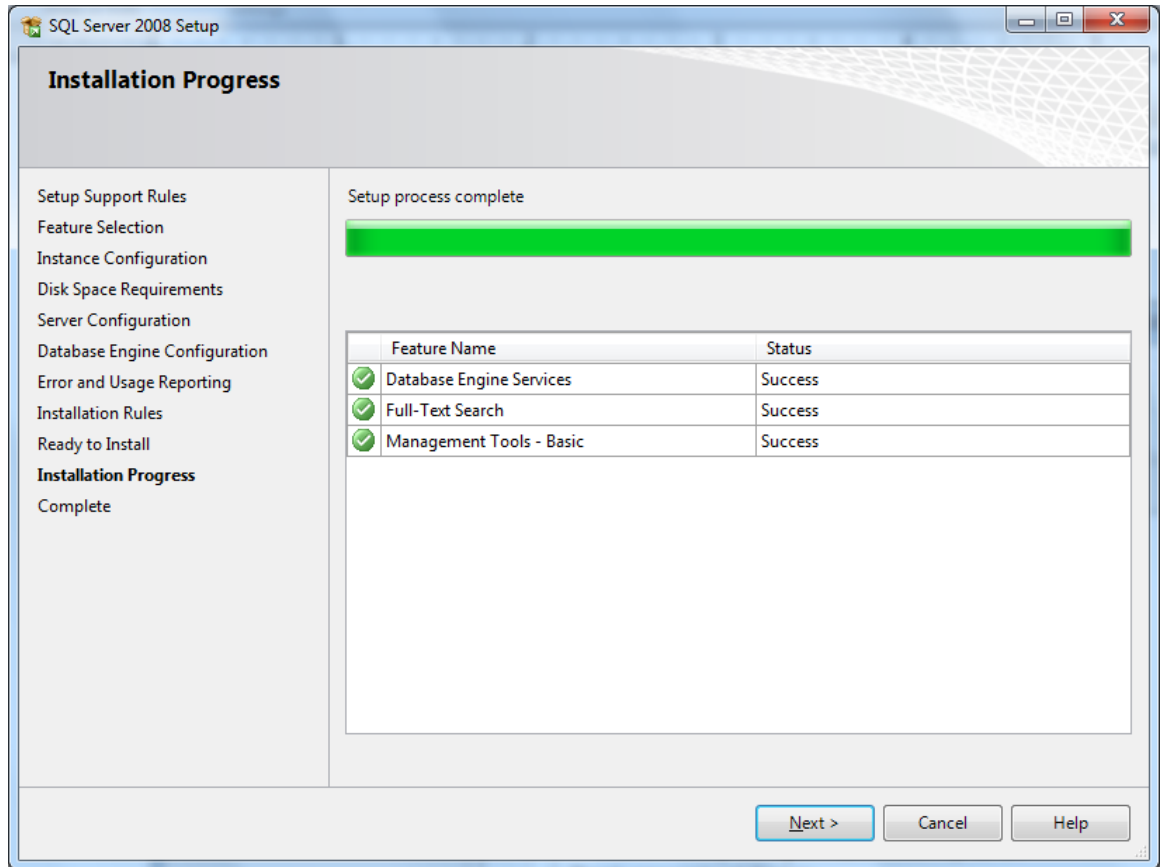
- n. Verify there are no failed operations → click Next



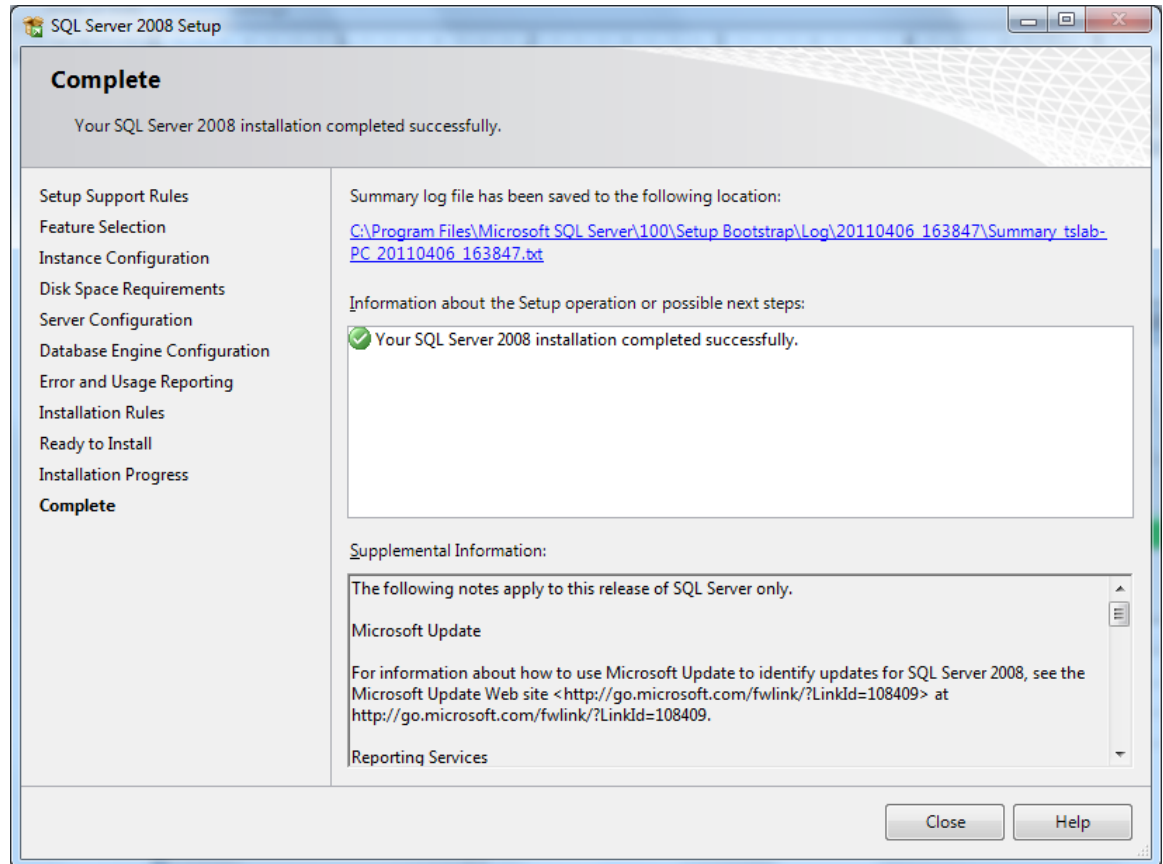
o. Click Install



p. Click Next



- q. The installation of SQL 2008 should be complete, and the following screen should display.

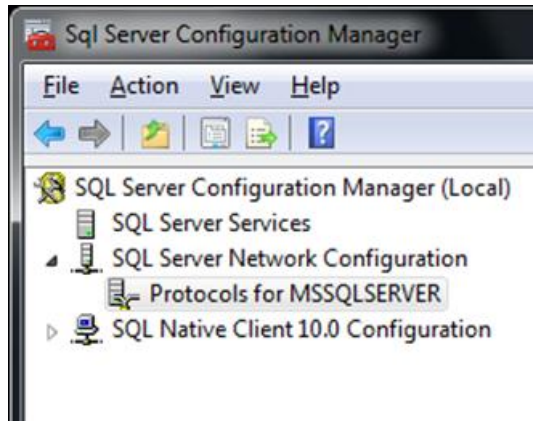


NOTE: If any updates need to be applied to the SQL server installation, do so now.

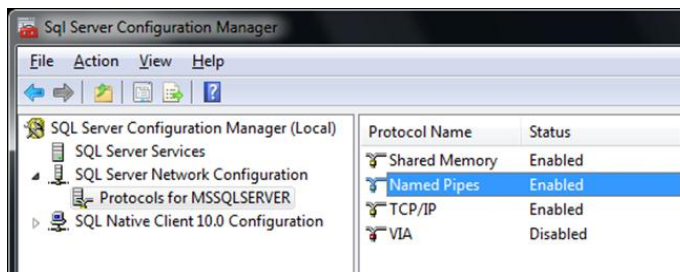
10. Launch the SQL configuration manager to set the SQL protocols.

Start → All Programs → Microsoft SQL 2008 R2 → Configuration tools → SQL server configuration manager

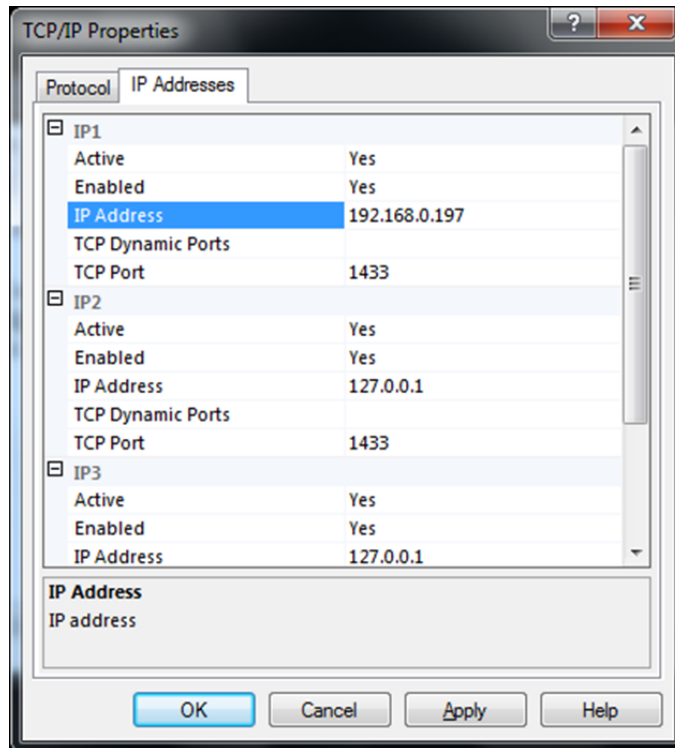
- a. Expand SQL server network configuration and click on Protocols for MSSQLSERVER



- b. Set both Named Pipes and TCP/IP to Enabled
- c. Double-click on TCP/IP and go to the IP Address Tab



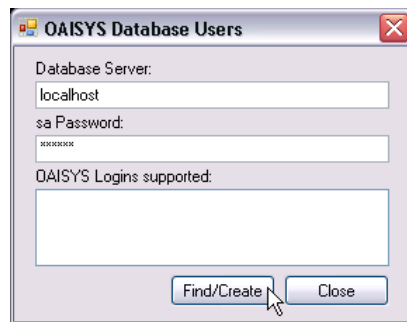
- d. On the IP Address tab, verify IP1 Active and Enabled are set to Yes
- e. Set the IP Address listed for IP1 to the actual IP address of the Tracer Server
- f. Verify IP2 Active and Enabled are set to Yes
- g. Set the IP Address to the loopback address (127.0.0.1)



11. Install OAISYS Recording Server Main Setup
 - a. The default options are fine.

12. Create Database Users

- a. Click on Start → Programs → OAISYS → Create New Database Logins
- b. Fill in the blanks (Database Server is usually “localhost” and the SA Password is typically “sa”, “oaisys” or left blank).
Click on **Find/Create**



- c. Once the “OAISYS” user is created → click **Close**



NOTE: OAISYS is not responsible for troubleshooting hardware issues, or network performance or behavior.

13. Quick Installation Guide

This document will guide you through the remaining steps of installation:
http://www.oaisys.com/downloads/OAISYS_Tracer_6_Quick_Install_Guide.pdf



ADDITIONAL INFORMATION

OAISYS provides access to a wide variety of technical documentation, including user guides, API development guides, and platform documentation for your convenience. View this information at: <http://www.oaisys.com/documentation.aspx>

RELATED DOCUMENTATION

Current Release

[Installation Guides](#)

[User Guides](#)

[SIP Implementation](#)

[Screen Recording](#)

[Additional Technical Information](#)

Previous Releases

[User Guides](#)

Communication Platform Specific Documentation

[Avaya](#)

[Mitel](#)

[ShoreTel](#)

[Toshiba](#)

TRAINING OPTIONS

For access to complimentary OAISYS training tools, including instructor-led web-based training and pre-recorded training videos, please visit:

<http://www.oaisys.com/training.aspx>

TROUBLESHOOTING

For additional troubleshooting information, please review our "Installation Troubleshooting Guide," which can be downloaded here:

http://www.oaisys.com/downloads/troubleshooting_guide.pdf