# SCS DATABASE INSTALLATION SUPPLEMENTARY

Date: Jan 12, 2013

# 1 SCS Database Installation

# **1.1 Installation Overview**

- 1. Install prerequisites
  - Windows Installer 4.5
  - Windows PowerShell 1.0
- 2. Install SQL Server 2008, either Express Edition or SQL Server Standard Edition.
- 3. Install the SCS database schema.
- 4. Set parameter values in the SCS configuration file.

# 1.2 Install SQL Server 2008 Express Edition

1. Ensure the server you plan on installing the database on meets these minimum requirements:

### **Operating System**

- Windows Server 2003 Service Pack 2
- Windows Server 2008; Windows Vista;
- Windows Vista Service Pack 1;
- Windows XP Service Pack 2;
- Windows XP Service Pack 3

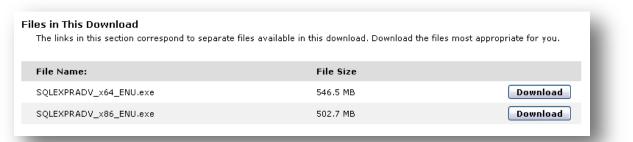
Hardware

- Minimum of 512 MB of RAM (1 GB or more is recommended)
- 1.9GB of free hard disk space
- 32-bit systems
- Computer with Intel or compatible 1GHz or faster processor (2 GHz or faster is recommended. Only a single processor is supported.)
- 64-bit systems (NOT IA64)
- GHz or higher processor (2 GHz or faster is recommended. Only a single processor is supported.)

Software Prerequisites (all products are included on the SCS install disk.

- Microsoft .Net Framework 3.5 SP1
- Windows Installer 4.5
- Windows PowerShell 1.0

- 2. Obtain a copy of the database from the Microsoft website. It is also included on the SCS Install Disk.
  - a. Browse to: http://www.microsoft.com/express/sql/download/
  - b. Find the link for SQL Server 2008 Express with Advanced Services
  - c. Download installation package (near bottom of page)



3. Run installer for SQL Server 2008 Express

Open File - Security Warning 🛛 🛛 🔀				
	ıblisher could s software?	not be verified. Are you sure you want to		
	Name: So	QLEXPRADV_x86_ENU.exe		
	Publisher: <b>U</b>	nknown Publisher		
	Туре: А	pplication		
	From: C	\Documents and Settings\John.Katebini\Desktop		
☑ Al <u>w</u> a	nys ask before op	<u>B</u> un Cancel		
		Extracting Files		
8	This file does n publisher, You <u>How can I dec</u>	should c Extracting File: x86\setup\sql_fulltext.msi		

# 4. Start Database Server Installation

- a. Review the planning portion; ensure your system is up to par.
- b. Click the Installation tab
- c. Click the New SQL Server stand-alone installation or add features to an existing

🐮 SQL Server Installation Center 🛛 🗖		
Planning Installation Maintenance	New SOL Server stand-alone installation or add features to an existing installation Launch a wizard to install SQL Server 2008 in a non-clustered environment or to add features to an existing SQL Server 2008 instance.	
Tools	New SQL Server failover cluster installation	-
	VIII Launch a wizard to install a single-node SQL Server 2008 failover cluster.	
Resources	10 Add and the COL Course follows durban	
Advanced	Add node to a SQL Server failover cluster	
	🔮 🛡 🖷 Launch a wizard to add a node to an existing SQL Server 2008 railover cluster.	
Options	Here and the second sec	
	Launch a wizard to upgrade SQL Server 2000 or SQL Server 2005 to SQL Server 2008. Before you upgrade, you should run the Upgrade Advisor to detect potential problems.	
	Search for product updates	
	Search Microsoft Update for SQL Server 2008 product updates.	

d. Ensure all rules have a green check (Passed), then hit OK. You may have to click

blems that might occur when you install SQL Server Setup support files. I	Failures must be corrected
Operation completed. Passed: 6. Failed 0. Warning 0. Skipped	0.
Hide details << View detailed report	Re-run
Rule	Status
Minimum operating system version	Passed
Setup administrator	Passed
Restart computer	Passed
Windows Management Instrumentation (WMI) service	Passed
Consistency validation for SQL Server registry keys	Passed
Long path names to files on SQL Server installation media	Passed
	OK Cancel Help
	Hide details <

e. Even though it says 'Gathering user settings' and looks like it's doing something, it's not. You must click Install to start the installation...

SQL Server 2008 Setup Setup Support Files Click Install to install Setup Supp	oort files. To install or update SQL Servi	ver 2008, these files are required.
Setup Support Files		required for SQL Server Setup:
	Feature Name	Status
	Setup Support Files	
	Gathering user settings.	< Boxy

f. Ensure everything passes (Windows Firewall will cause a warning, you can ignore this) then click Next until the feature selection screen

before Setup can continue.	blems that might occur when you install SQL Server Setup support files. Failur	es musi de correcteu
Setup Support Rules	Operation completed. Passed: 9. Failed 0. Warning 1. Skipped 1.	
Product Key		
icense Terms Feature Selection	Hide details <<	Re-run
-eature belection Disk Space Requirements	View detailed report	120 run
Fror and Usage Reporting		
installation Rules	Rule	Status
eady to Install	Fusion Active Template Library (ATL)	Passed
nstallation Progress	Unsupported SQL Server products	Passed
omplete	Performance counter registry hive consistency	Passed
	Previous releases of SQL Server 2008 Business Intelligence Develo	p Passed
	Previous CTP installation	Passed
	Consistency validation for SQL Server registry keys	Passed
	Computer domain controller	Passed
	Microsoft .NET Application Security	Not applicable
	Edition WOW64 platform	Passed
	Windows PowerShell	Passed
	Windows Firewall	Warning
		maning

g. Check the boxes next to Database Engine Services, Full-Text Search, Management Tools – Basic, and SQL Client Connectivity SDK

🖀 SQL Server 2008 Setup		
Feature Selection Select the Express with Advance Services can be clustered.	d Services features to install. For clustered installations, only I	Database Engine Services and Analysis
Setup Support Rules	Eeatures:	Description:
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 Installation Progress Complete	Instance Features Database Engine Services Sol: Server Realingtion Full-Text Search Reporting Services Shared Features Business Intelligence Development Studio Management Tools - Basic SQL Client Connectivity SDK Microsoft Sync Framework Redistributable Features	Include the Database Engine, the core service for storing, processing and securing data. The Database Engine provides controlled access and rapid transaction processing and also provides rich support for sustaining high availability.
	Select <u>All</u> <u>Unselect All</u> Shared feature directory: c:\Program Files\Micros	soft SQL Server\
		< Back Next > Cancel Help

- h. Click Next
- i. Use the default

j. If you desire, change the Instance Root Directory to something more appropriate for your installation (i.e. D:\...). Click "Next" until you get to Server Configuration dialog.

🐮 SQL Server 2008 Setup					
Instance Configuration Specify the name and instance ID					
Setup Support Rules Product Key License Terms	<ul> <li>Default instance</li> <li>Named instance:</li> </ul>	scs			
Feature Selection Instance Configuration Disk Space Requirements Server Configuration	Instance <u>I</u> D: Instance <u>r</u> oot directory:	SCS D:\SCS\Database\			
Database Engine Configuration Error and Usage Reporting Installation Rules Ready to Install	SQL Server directory: Installed instances:	D:\SCS\Database\M			
Installation Progress	Instance	Features	Edition	Version	Instance ID
Complete	SQLEXPRESS	SQLEngine,SQLEng	Express	9.2.3042.00	M55QL.1
			< <u>B</u> ac	k Next >	Cancel Help

- k. Choose NT Authority\System as the account which will run the database service .
- 1. In the lower list of services, set the Startup Type of the SQL Server Browser service to Automatic, if necessary.

SQL Server 2008 Setup Server Configuration Specify the configuration.				
Setup Support Rules Product Key License Terms	Service Accounts Collation	separate account for each SQ	Server service.	
Feature Selection	Service	🛛 Account Name 🛛 🗡	Password	Startup Type
Instance Configuration	SQL Server Database Engine	NT AUTHORITY\SYSTEM		Automatic 💌
Server Configuration Database Engine Configuration		Use the s	ame account for a	all SQL Server services
Installation Rules Ready to Install Installation Progress Complete	These services will be configured auto older Windows versions the user will n Help. Service	matically where possible to us need to specify a low privilege Account Name	e a low privilege account. For mo Password	account. On some ore information, click Startup Type
	SQL Full-text Filter Daemon Launcher			Manual
	SQL Server Browser	NT AUTHORITY\Network		Automatic 🖌

- m. Click Next
- n. Choose Mixed Mode for the authentication type.
- o. Enter a respectable password for the built-in administrator's account. This will be used in Part Three to log in to SQL Server Manager using the SQL manager account.
- p. Add appropriate Windows accounts/groups to the system. Note: These groups and users will have administrative access and control over the entire database. DO NOT hand this out casually! Recommend the ET accounts, Domain Admins, and (where applicable) SCS.ADMIN only...

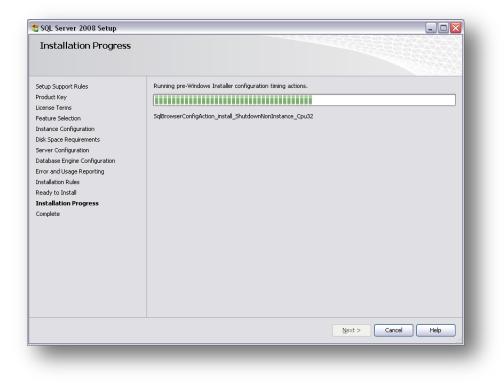
📸 SQL Server 2008 Setup		- 🗆 🔀
Database Engine Configu	ration n security mode, administrators and data directories.	
Setup Support Rules Product Key License Terms Feature Selection Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Error and Usage Reporting Installation Rules Ready to Install Installation Progress	Account Provisioning       Data Directories       FILESTREAM         Specify the authentication mode and administrators for the Database Engine         Authentication Mode	
Complete p.	KATEBINI\John.Katebini (John.Katebini)          Add <u>C</u> urrent User       Add	SQL Server administrators have unrestricted access to the Database Engine.
	< <u>Back</u> <u>N</u> ext >	Cancel Help

- q. Click Next
- r. Ignore Error and Usage Reporting
- s. Click Next

Ensure everything passes the rules, or is Not Applicable. You may have to click on Show Details to help resolve any problems.

Installation Rules Setup is running rules to determine	if the installation process will be blocked. For more information, click Help.	
ietup Support Rules roduct Key icense Terms reature Selection nstance Configuration Nick Space Requirements	Operation completed. Passed: 7. Failed 0. Warning 0. Skipped 4. Hide details_<< Wiew detailed report	<u>Rerun</u>
ierver Configuration Vatabase Engine Configuration irror and Usage Reporting <b>nstallation Rules</b> Leady to Install nstallation Progress Complete	Rule       Status         Same architecture installation       Passed         Cross language installation       Passed         Existing clustered or cluster-prepared instance       Passed         Reporting Services Catalog Database File Existence       Not applicable         Reporting Services Catalog Temporary Database File Existence       Not applicable         SQL Server 2005 Express tools       Not applicable         Perform File System       Passed         SQL Server 2000 Analysis Services (64-bit) install action       Passed         Instance name       Passed         Previous releases of Microsoft Visual Studio 2008       Not applicable	

- t. Click Next
- u. Click Install. Install may appear to stall for a while. Be patient, grab some coffee.
- v. Create a shortcut to SQL Server Manage on the desktop.



🖏 SQL Server 2008 Setup		
Installation Progress		
Setup Support Rules Product Key License Terms Feature Selection	Setup process complete	
Instance Configuration Disk Space Requirements	Feature Name	Status
Server Configuration	🖉 Database Engine Services	Success
Database Engine Configuration	Search	Success
Error and Usage Reporting Installation Rules Ready to Install Installation Progress Complete		
		Next > Cancel Help

🚼 SQL Server 2008 Setup	
Complete Your SQL Server 2008 installation of	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: <u>C.IProgram Files/Microsoft SQL Server100/Setup Bootstrapil.on/20081218_130823</u> <u>Isummary_Katebini_20081218_130823.txt</u> Information about the Setup operation or possible next steps: Your SQL Server 2008 installation completed successfully.
Complete	Supplemental Information: Information splut 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/?Linkld=108409">http://go.microsoft.com/fwlink/?Linkld=108409</a> > Reporting Services The Reporting Services installation options that you specified in Setup determine whether additional configuration is remained before you can access the report carver. If you installed the default configuration. The report carver
	Close Help

When installation finishes successfully install the SCS schema into the database – See SCS Schema Installation

# 1.3 Install SQL Server 2008 Standard Edition

- 1. Ensure the server you plan on installing the database on meets the minimum requirements specified by Microsoft. (<u>http://msdn.microsoft.com/en-us/library/ms143506.aspx</u>)
- Obtain the installation CD/DVD. This is a licensed product; it is not available for free download. If you do not own a license, consider using SQL Server 2008 Express Edition (see above). Note that Express is not meant to be used as a SCS logged data store, only for storing Sensor configurations.
- 3. Start Database Server Installation
  - a. Review the planning portion; ensure your system is up to par.
  - b. Click the Installation tab
  - c. Click the New SQL Server stand-alone installation or add features to an existing installation link

🐮 SQL Server Installation Center	
Planning Installation Maintenance	New SQL Server stand-alone installation or add features to an existing installation Launch a wizard to install SQL Server 2008 in a non-clustered environment or to add features to an existing SQL Server 2008 instance.
Tools Resources	New SQL Server failover cluster installation Launch a wizard to install a single-node SQL Server 2008 failover cluster.
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	Upgrade from SQL Server 2000 or SQL Server 2005 Launch a wizard to upgrade SQL Server 2000 or SQL Server 2005 to SQL Server 2008. Before you upgrade, you should run the Upgrade Advisor to detect potential problems.
	Search for product updates Search Microsoft Update for SQL Server 2008 product updates.

d. Ensure all rules have a green check (Passed), then hit OK. You may have to click Show Details in order to see the status of each rule

SQL Server 2008 Setup Setup Support Rules Setup Support Rules identify problems before Setup can continue.	that might occur when you install SQL Server Setup support file	s. Failures must be corrected
5etup Support Rules	Operation completed. Passed: 6. Failed O. Warning O. Skipp Hide details_<< <u>View detailed report</u>	ed 0. Re-run
	Rule	Status
	Minimum operating system version	Passed
	Setup administrator	Passed
	Restart computer	Passed
	Windows Management Instrumentation (WMI) service	Passed
	Consistency validation for SQL Server registry keys	Passed
	🖉 Long path names to files on SQL Server installation media	Passed
		OK Cancel Help

e. Enter your product key and hit Next

🎲 SQL Server 2008 Setup	
Product Key	
Specify the edition of SQL Server 2008	3 to install.
Product Key License Terms Setup Support Files	Specify a free edition of SQL Server or provide a SQL Server 2008. Enter the 25-character key from the Microsoft certifical specify Enterprise Evaluation, the instance will be activated w edition to another edition, run the Edition Upgrade Wizard. © Specify a free edition: Enterprise Evaluation © Enter the product key:

- f. Accept the License Terms, hit Next
- g. Even though it says 'Gathering user settings' and looks like it's doing something, it's not. You must click Install to start the installation...

Setup Support Files Click Install to install Setup Supp	ort files. To install or update SQL Serv	ver 2008, these files are required.
ietup Support Files	The following components are	required for SQL Server Setup:
	Feature Name	Status
	Setup Support Files	
	Gathering user settings.	

h. Ensure everything passes, click Next until the feature selection screen

Setup Support Rules identify pro before Setup can continue.	oblems that r	night occur when you install SQL Server Setup support files. Failures m	ust be corrected
etup Support Rules	Oper	ration completed. Passed: 10. Failed 0. Warning 0. Skipped 1.	
eature Selection			
isk Space Requirements	1000		
rror and Usage Reporting	L	e details <<	<u>R</u> e-run
nstallation Rules	View	detailed report	
eady to Install hstallation Progress		Rule	Status
omplete		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 Develop	Passed
		Previous CTP installation	Passed
		Consistency validation for SQL Server registry keys	Passed
		Computer domain controller	Passed
		Microsoft .NET Application Security	Not applicable
		Edition WOW64 platform	Passed
		Windows PowerShell	Passed
		Windows Firewall	Passed

- i. Install the following features:
  - Database Engine Services
  - Full-Text Search
  - Management Tools Basic
  - Management Tools Complete

SQL Server 2008 Setup Feature Selection Select the Standard features to in clustered.	stall. For clustered installations, only Database Engine Services and Analysis	Services can be
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	Eeatures:         Instance Features         SQL Server Replication         Full-Text Search         Analysis Services         Reporting Services         Business Intelligence Development Studio         Client Tools Connectivity         Integration Services         Client Tools Backwards Compatibility         Client Tools SOK         SQL Server Bools Online         Management Tools - Complete         SQL Client Connectivity SDK         Microsoft Sync Framework         Redistributable Features	Description: Includes Management Studio support for the Database Engine and SQL Server Express, SQL Server command-line utility (SQLMD), and the SQL Server PowerShell provider.
	Select All     Unselect All       Shared feature directory:     C:\Program Files\Microsoft SQL Serve	r)
	< <u>B</u> ack	Next > Cancel Help

- j. Click Next
- k. Change the instance to SCS
- 1. Optionally change the install directory to a non-C/root partition

🚼 SQL Server 2008 Setup					
Instance Configuration					
Specify the name and instance ID fo	or the SQL Server instance.				
Setup Support Rules Feature Selection	Default instance     Named instance:	SCS			
Instance Configuration	-	,			
Disk Space Requirements Server Configuration	Instance <u>I</u> D:	SCS			
Database Engine Configuration Error and Usage Reporting	Instance root directory	D:\F rogram Files\Mid	rosoft SQL Server\		
Installation Rules Ready to Install Installation Progress Complete	SQL Server directory: Installed instances:	D:\Program Files\Mic	rosoft SQL Server\MSS	QL10.5C5	
Complete	Instance	Features	Edition	Version	Instance ID
	SQLEXPRESS	SQLEngine,SQLEng	Express	9.2.3042.00	MSSQL.1
			< <u>B</u> ack	Next > Ca	ncel Help
	_	_			

- m. Hit Next until Server Configuration
- n. Use the local system account for each of the services

Server Configuration				IIIXX
Specify the configuration.				
ietup Support Rules	Service Accounts Collation			
eature Selection nstance Configuration	Microsoft recommends that you use a	separate account for each SO	Server service.	
)isk Space Requirements	Service	Account Name	Password	Startup Type
erver Configuration	SQL Server Agent	NT AUTHORITY\SYSTEM		Manual 💌
Database Engine Configuration	SQL Server Database Engine	NT AUTHORITY\SYSTEM		Automatic 💌
rror and Usage Reporting				
nstallation Rules			-	
teady to Install		Use the s	ame account for	all SQL Server services
installation Progress Complete	These services will be configured aut	omatically where possible to us	e a low privilege	account. On some
	Ihese services will be configured aut older Windows versions the user will Help.	need to specify a low privilege	account. For mo	ore information, click
	older Windows versions the user will Help. Service	need to specify a low privilege Account Name		Startup Type
	older Windows versions the user will Help. Service SQL Full-text Filter Daemon Launcher	need to specify a low privilege Account Name	account. For mo	Startup Type Manual
	older Windows versions the user will Help. Service	need to specify a low privilege Account Name	account. For mo	Startup Type
	older Windows versions the user will Help. Service SQL Full-text Filter Daemon Launcher	need to specify a low privilege Account Name	account. For mo	Startup Type Manual

- o. Choose Mixed Mode for the authentication type
- p. Enter a respectable password for the built-in administrator's account
- q. Add appropriate Windows accounts/groups to the system. Note: These groups and users will have administrative access and control over the entire database. DO NOT hand this out casually! Recommend the ET accounts, Domain Admins, and (where applicable) SCS.ADMIN only...

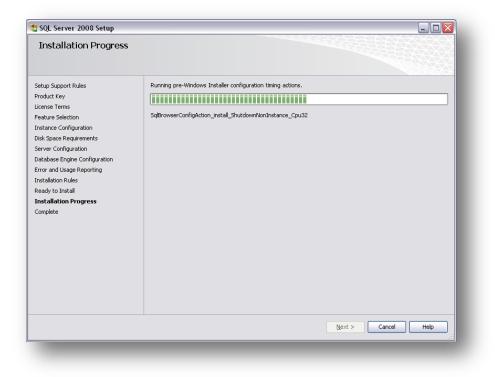
📸 SQL Server 2008 Setup	
Database Engine Config	uration tion security mode, administrators and data directories.
Setup Support Rules Product Key License Terms Feature Selection Instance Configuration Disk Space Requirements Server Configuration Error and Usage Reporting Installation Rules Ready to Install Installation Progress	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:         Specify SQL Server administrators
Complete P.	KATEBINI\John.Katebini (John.Katebini)       SQL Server administrators have unrestricted access to the Database Engine.         Add <u>Current User</u> Add         Remove       Add Current User
	<u>A Back</u> <u>Next</u> > Cancel Help

- r. Click Next
- s. Ignore Error and Usage Reporting
- t. Click Next

u. Ensure everything passes the rules

Operation completed. Passed: 7. Failed 0. Warning 0. Skipped 4. Hide details <<	Re-run	
Rule	Status	
Same architecture installation	Passed	
Cross language installation	Passed	
Existing clustered or cluster-prepared instance	Passed	
	Not applicable	
	Not applicable	
	Not applicable	
	Passed	
	Passed	
SQL Server 2000 Analysis Services (64-bit) install action	Passed	
Instance name	Passed	
Previous releases of Microsoft Visual Studio 2008	Not applicable	
	Same architecture installation     Cross language installation     Cross language installation     Existing clustered or cluster-prepared instance     Existing clustered or cluster-prepared instance     Reporting Services Catalog Database File Existence     SQL Server 2005 Express tools     Operating system supported for edition     FAT32 File System     SQL Server 2000 Analysis Services (64-bit) install action     Instance name	

- v. Click Next
- w. Click Install



🚼 SQL Server 2008 Setup		
Installation Progress		
Setup Support Rules Feature Selection Instance Configuration Disk Space Requirements Server Configuration	Setup process complete	
Database Engine Configuration Error and Usage Reporting	Feature Name           Ø         Database Engine Services	Status Success
Installation Rules Ready to Install	Full-Text Search  Management Tools - Complete	Success Success
Installation Progress	Management Tools - Basic	Success
Complete		
		Next > Cancel Help

🍀 SQL Server 2008 Setup	
Complete	
Your SQL Server 2008 installation of	completed successfully.
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 <b>Complete</b>	Summary log file has been saved to the following location: <u>C:\Program Files\Microsoft SQL Server\100\Setup Bootstrap\Log\20090105_210306</u> <u>\Summary PISCES_20090105_210306.txt</u> Information about the Setup operation or possible next steps: <u>\Vertical Your SQL Server 2008 installation completed successfully.</u>
	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> at http://go.microsoft.com/fwlink/?LinkId=108409> at http://
	CloseHelp

# 1.4 Install the SCS Database



SQL Server Management Studio

- 1. Start SQL Server Management Studio
- 2. If you're logged into the system with an account you specified as administrator during the install, use Windows Authentication, otherwise use SQL Authentication (SQL user name is sa, use the password specified for the administrator during the install)

Server type:	Database Engine	~
<u>S</u> erver name:	KATEBINI\SCS	~
Authentication:	Windows Authentication	~
<u>U</u> ser name:	KATEBINI/John.Katebini	~
<u>P</u> assword:		

3. Right click on the Databases tree node. And click *Restore Database*.....

🇏 Microsoft SQL Server Ma	anagement Studio
File       Edit       View       Tools       W         Image: Second S	vindow Community Help
Ref	resh

- 4. Restore to database SCS (this field may come up blank)
- 5. Restore from device (file), click the browse button to choose the SCS\_Empty.bak file supplied on your SCS Installation CD.

🥫 Restore Database - SCS	
Select a page	🖾 Script 👻 🚺 Help
🚰 Options	Destination for restore
	Select or type the name of a new or existing database for your restore operation.
	To database:
	Io a point in time: Most recent possible
	Source for restore
	Specify the source and location of backup sets to restore.
	O From database:
	From device:
	Select the backup sets to restore: Restore Name Component Type Server Database Position First LSN Last LSN
Connection	
Server:	
HQ-1605346-W-JK\SCS Connection:	
NMAO\john.katebini	
View connection properties	
Progress	
O Ready	
	OK Cancel

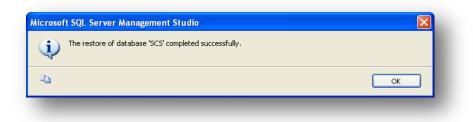
6. Choose Add and select the appropriate database backup

Specify Backup		
Specify the backup media and it	s location for your restore operation.	$\mathbf{X}$
<u>B</u> ackup media:	File	~
Backup location:		
C:\Temp\SCS_V4.3.3.bak		Add
· · · · · · · · · · · · · · · · · · ·		Benove
		Contents
		Congerina
		Cancel Help

7. Select the database you want to restore

🥫 Restore Database - SCS					
Select a page	🔄 Script 👻 📑 Help				
🚰 Options	Destination for restore				
	Select or type the name of a new or	existing data	base for your re:	store op	eration.
	T <u>o</u> database:	SCS			~
	<u>I</u> o a point in time:	Most rece	nt possible		
	Source for restore				
	Specify the source and location of b	ackup sets to	restore.		
	○ F <u>r</u> om database:				✓
	• From <u>d</u> evice:	C:\Temp\	SCS_V4.3.3.ba	ik	
	S <u>e</u> lect the backup sets to restore:				
	Restore		Component	Туре	
Connection	SCS_V4.3.3-Full Datab	ase Backup	Database	Full	FSCSDEV02\SQLEXPRE
Server: HQ-1605346-W-JK\SCS					
Connection: NMAO\john.katebini					
View connection properties					
Progress					
Ready					
Tagger					>
					OK Cancel

8. Click OK



- 9. Add a SQL account for SCS to use
  - a. In the left window pane, select Databases -> SCS -> Security -> Users. If the user SCS appears there, then delete it.
  - b. In SQL Management Studio, right click Security→ Logins
  - c. Click on option to create New Login...

🝢 Microsoft SQL Serve	r Management Studio
File Edit View Tools	Window Community He
😫 New Query 🛛 🔓	
Object Explorer	<del>~</del> ₽ ×
Connect 🕶 📑 📑 🔤	7 💈 🏂
<ul> <li>HQ-1605346-W-JK\S</li> <li>Databases</li> <li>Security</li> <li>Security</li> <li>Security</li> <li>##</li> <li>##<!--</td--><td>SCS (SOL Server 10.0.1600 - 1 New Login Filter • Start PowerShell Reports • Refresh</td></li></ul>	SCS (SOL Server 10.0.1600 - 1 New Login Filter • Start PowerShell Reports • Refresh

- 10. Set the login name to SCS
  a. Use SQL Server Authentication
  b. Do NOT Enforce Password Expiration (functional account)
  c. Set the Default Database to SCS

🖥 Login - New					
Select a page	<u> S</u> Script 🝷 📑 Help				
General Server Roles User Mapping Securables Status	Login name: Windows authentication SQL Server authentication Password: Confirm password: Specify old password Old password: Enforce password expiration Login name Enforce password expiration Login name Specify old password expiration Enforce password expiration Login name Specify old password expiration Specify ol	ation			Sgarch
	Mapped to certificate			~	
	Mapped to asymmetric key			~	
Connection	Map to Credential			~	<u>A</u> dd
Server: HQ-1605346-W-JK\SCS	Mapped Credentials	Credential	Provider		
Connection: NMAO\john.katebini					
View connection properties					
Progress					Remo <u>v</u> e
Ready	Default <u>d</u> atabase:	SCS		~	
	Default language:	<default></default>		*	
			ОК		Cancel

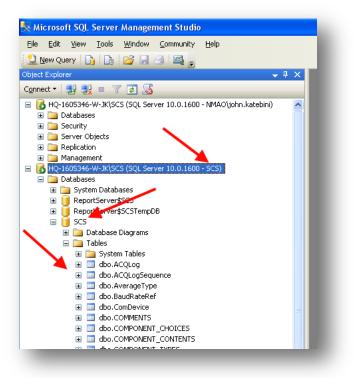
- 11. Under the User Mappings tab
  a. Select the SCS database
  b. Check db\_datareader, db\_datawriter, db\_owner
  c. Check public
  d. Hit OK

🖥 Login - New				
Select a page 🚰 General	Script 🕚	• 🛐 Help		
Prover Roles	Users map	ppe <u>d</u> to this login:		
Securables	Мар	Database	User	Default Schema
🚰 Status		master		
		model		
		msdb		
		ReportServer\$SCS		
		ReportServer\$SCSTem		
	▶ 🗹	SCS	SCS	
		tempdb		
Connection Server: HQ-1605346-W-JK\SCS Connection: NMA0\john.katebini	☐ db_ac ☐ db_ba ✔ db_da ✔ db_da ✔ db_da	role membership for: SCS cessadmin ckupoperator tareader tawriter ladmin nydatareader		
View connection properties Progress	db_de db_ow	nydatawriter mer curityadmin		
Ready	✓ public Scs_ci	onfig_editor_user		
				OK Cancel

- 12. Verify SCS database setup
  - a. Log in using new SCS credentials
    - Click Connect
- Click Database Engine...
  - Choose SQL Authentication
  - Enter the SCS account name and password; Click on "Connect"
  - Click Connect

🍢 Microsoft SQL Server Managem	Connect to Ser	ver 🔀
File Edit View Tools Window (	Microsof SOI	Server <sup>2008</sup>
😫 New Query 🕞 🕞 🖙 🖓 👌	Server type:	Database Engine
Object Explorer	<u>S</u> erver name:	HQ-1605346-W-JK\SCS
Connect 🕶 📑 📑 🔽 💽 🔊	Authentication:	SQL Server Authentication 💌
📔 Database Engine 🗾 Serve	Login:	SCS 💌
SQL Server Compact	Password:	
		Remember password
		nect Cancel Help Options>>

- b. With the new connection (ends with SCS ) expand the Databases node
- c. Find the SCS database and expand it
- d. Expand the Tables node
- e. Verify that the SCS tables exist...



# **1.5 SCS Configuration File Setup**

The final step in setting SCS for database operations is to make a few changes to the SCS Configuration File. To do this open the SCS Configuration File Editor (Chapter Two – Acquisition)

- 1. Add / Edit DBConnectionString parameter
  - Host should be the database server
  - Schema should be SCS
  - Username should be SCS
  - Password should be same as specified for SCS account during SQL Installation
  - Instance should only be used for SQL Server Express

🖶 Edit Parameter Value
Host 10 . 49 . 68 . 53
Schema SCS_V4.3.3
Authentication © SQL © Windows User SCSV4.3.3
Password
Instance SQLEXPRESS
OK Cancel

2. Set SCSDatabase parameter equal to 1 to allow the database-oriented apps to operate.

魓 Edit Par	ameter Value	
Name	SCSDATABASE	
Value	0	_ _
	OK Cancel	_
	C.t. Calibor	

This parameter is the "master switch" that allows database activity. It controls which apps are displayed in the SCS Menu. If this parameter is set to 0 SCS reverts to its predatabase mode, as in v 4.2.3 and previous releases; database apps are invisible in ScsMenu. The new database version of CFE-DB is displayed on the SCS Menu, and the legacy CFE-DB is not available.

3. Set SCSDatabaseLogging

To allow ACQ to log raw data to the database, set the SCSDatabaseLogging parameter to 1. If set to 0 no database logging will take place. This allows small SCS installations to limit use of the database to sensor configuration by setting SCSDATABASE to 1 but SCSDatabaseLogging to 0.

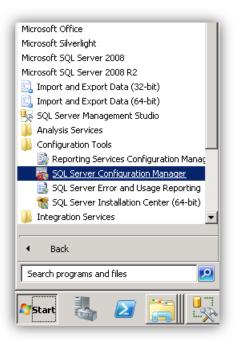
4. Set ScsOelEnabled

Even with SCSDATABASE set to 1, the SCS Operation Event Logger (OEL), and its associated event builder are not available if this parameter is 0. Set it to 1 to make SCS OLE visible in the ScsMenu.

# **1.6 Supplementary Installation**

With the release of SQL Server 2008 <u>R2</u> additional steps are needed in order for SCS to successfully connect via TCP due to increased security restrictions with the new database. This section goes over those additional steps and should be performed after the normal installation (as defined in previous sections) has already taken place.

- 1. Start SQL Server Configuration Manager
  - a. Start Menu
  - b. Microsoft SQL Server 2008 R2
  - c. Configuration Tools
  - d. SQL Server Configuration Manager



- 2. Find the Protocols node for the SCS database
- 3. Ensure that TCP/IP is enabled

- 4. Tab over to the IP Addresses tab
- 5. Ensure all [relevant] IP address nodes are
  - a. Active
  - b. Enabled
  - c. Have a blank value for TCP Dynamic Ports
  - d. Have 1433 set for the TCP port

	TP Properties		? )			
Ξ	IP1		<u> </u>			
	Active	Yes	-			
	Enabled	Yes				
	IP Address	10.49.68.84				
	TCP Dynamic Ports					
	TCP Port	1433				
	IP2					
	Active	Yes				
	Enabled	No				
	IP Address	::1				
	TCP Dynamic Ports	0	0			
	TCP Port					
Ξ	IP3					
	Active	Yes				
	Enabled	Yes				
	IP Address	127.0.0.1	<b>-</b>			
	t <b>ive</b> dicates whether the selected If	P Address is active.				
	ок с	ancel Apply	Help			

6. Once you've modified all IP address, restart the SQL Service

E COL Service Services	Name	State	Start Mode	Log On As	Process ID	Service T
DQL berver bervices	50L Server Integr	Running	Automatic	NT AUTHORITY\NET	1504	
SQL Server Services         SQL Server Network Configuration (32bit)         SQL Native Client 10.0 Configuration         SQL Native Client 10.0 Configuration	SQL Server (SCS)	Running Sto Running Pau Res Pro	Automatic Automatic Stop Pause Restart Properties Help	LocalSystem LocalSystem NT AUTHORITY(LOC	1698 0 1756	SQL Ser
	4					

7. Now you can proceed with hooking SCS up to the SQL Server.

# 1.7 Troubleshooting

<u>Known Problem</u>: At the start of the SQL install, it tells you that a previous installation failed to complete and you need to reboot You reboot, start the install again, and it gives you the same message. And on and on ...

Solution: There may be other ways but this Registry hack works

Drill down to

```
HKEY_LOCAL_MACHINE->SYSTEM->CURRENT_CONTROL_SET-> SESSION_MANAGER->PENDING_FILE_RENAM
```

Clear all text out of the Value Data.