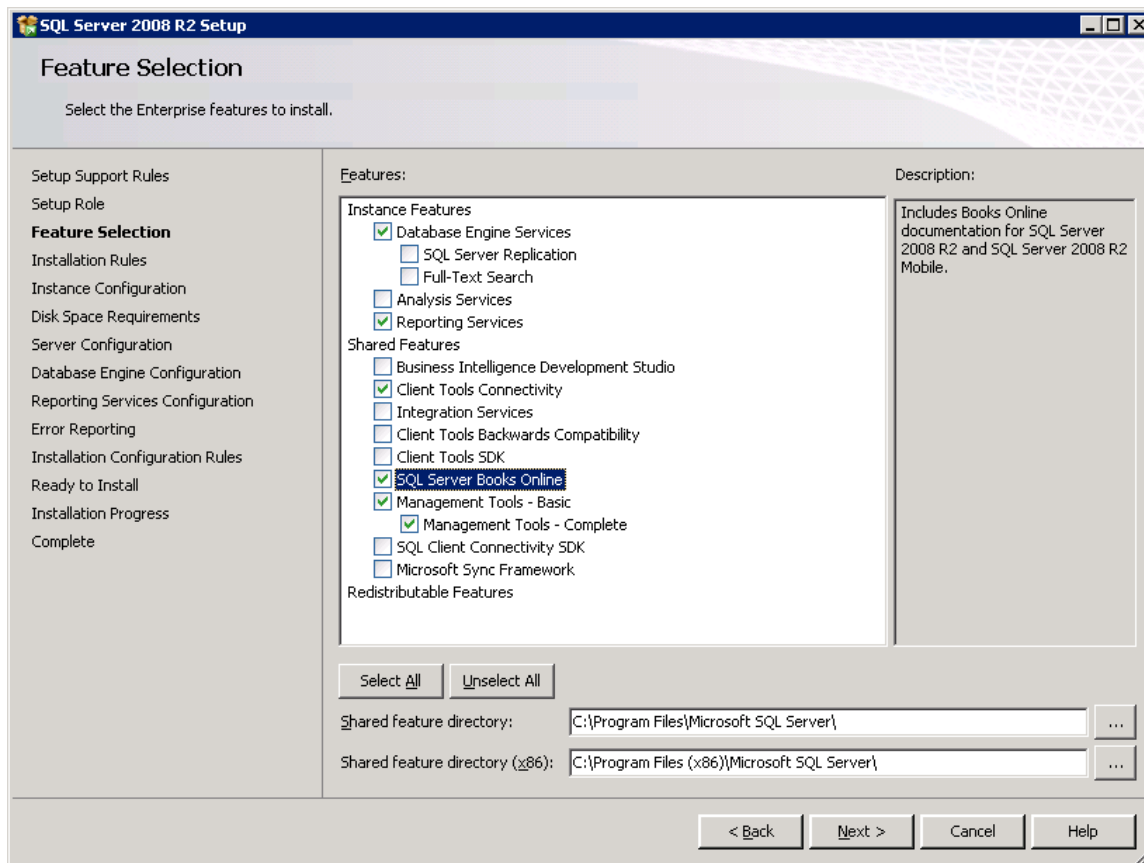# SQL2008 Server Installation and Configuration for SpeechMiner

SQL 2008 Enterprise Edition Installation:

SQL Server 2008 R2 Setup

Server Configuration

Specify the service accounts and collation configuration.

Setup Support Rules
Setup Role
Feature Selection
Installation Rules
Instance Configuration
Disk Space Requirements
Server Configuration
Database Engine Configuration
Reporting Services Configuration
Error Reporting
Installation Configuration 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 Agent	\sqlserviceaccount	••••••••	Automatic
SQL Server Database Engine	\sqlserviceaccount	••••••••	Automatic
SQL Server Reporting Services	\sqlserviceaccount	••••••••	Automatic
SQL Server Browser	NT AUTHORITY\LOCAL S...		Disabled

Use the same account for all SQL Server services

< Back   Next >   Cancel   Help

SQL Server 2008 R2 Setup

Database Engine Configuration

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

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

Account Provisioning | Data Directories | FILESTREAM

Data root directory: C:\Program Files\Microsoft SQL Server\

System database directory: C:\Program Files\Microsoft SQL Server\MSSQL10_50.MSSQLSERVER\MSSQL\Data

User database directory: D:\MSSQLData

User database log directory: C:\MSSQLLOG

Temp DB directory: D:\MSSQLData

Temp DB log directory: C:\MSSQLLOG

Backup directory: D:\MSSQLBackup

< Back   Next >   Cancel   Help

Don't forget to restart the machine after the SQL installation is completed.

Configuration: SQL Server

1. Go to Start menu, go to *Microsoft SQL Server 2008 -> Configuration Tools -> SQL Server Configuration Manager*
a. if you haven't done it during installation make sure **SQL Agent** is running and set to **Automatic**

b. Make sure both **TCP/IP** and **Named Pipes** are enabled.
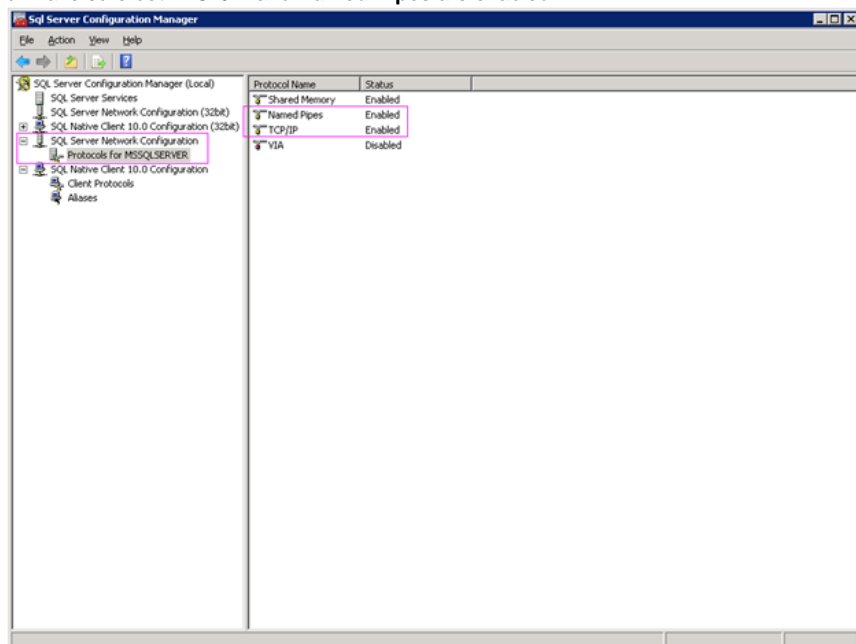
2. Deploy CLR assembly. On new db servers you need to run the following sql commands under the Master in oder to set the dll's permissions (make sure the user running SQL services has change permissions on sqlclr.XmlSerializers.dll):

```
CREATE ASYMMETRIC KEY SQLCLRTestKey FROM EXECUTABLE FILE =
'\\DB_SERVER\sqlclrDeploy\sqlclr.XmlSerializers.dll'
CREATE LOGIN SQLCLRTestLogin FROM ASYMMETRIC KEY SQLCLRTestKey
GRANT EXTERNAL ACCESS ASSEMBLY TO SQLCLRTestLogin
```

3. Enable **xp_cmdshell** and **CLR Integration -** run the following sql commands under the Master:

```
EXEC sp_configure 'show advanced options', 1
GO
RECONFIGURE
GO
EXEC sp_configure 'xp_cmdshell', 1
GO
EXEC sp_configure 'clr_enabled', 1
GO
RECONFIGURE
GO
```

Configuration: Reporting Services

Go to Start, All Programs, SQL Server 2008, Configuration Tools, Reporting Services Configuration Manager.

Make sure the report server is started:
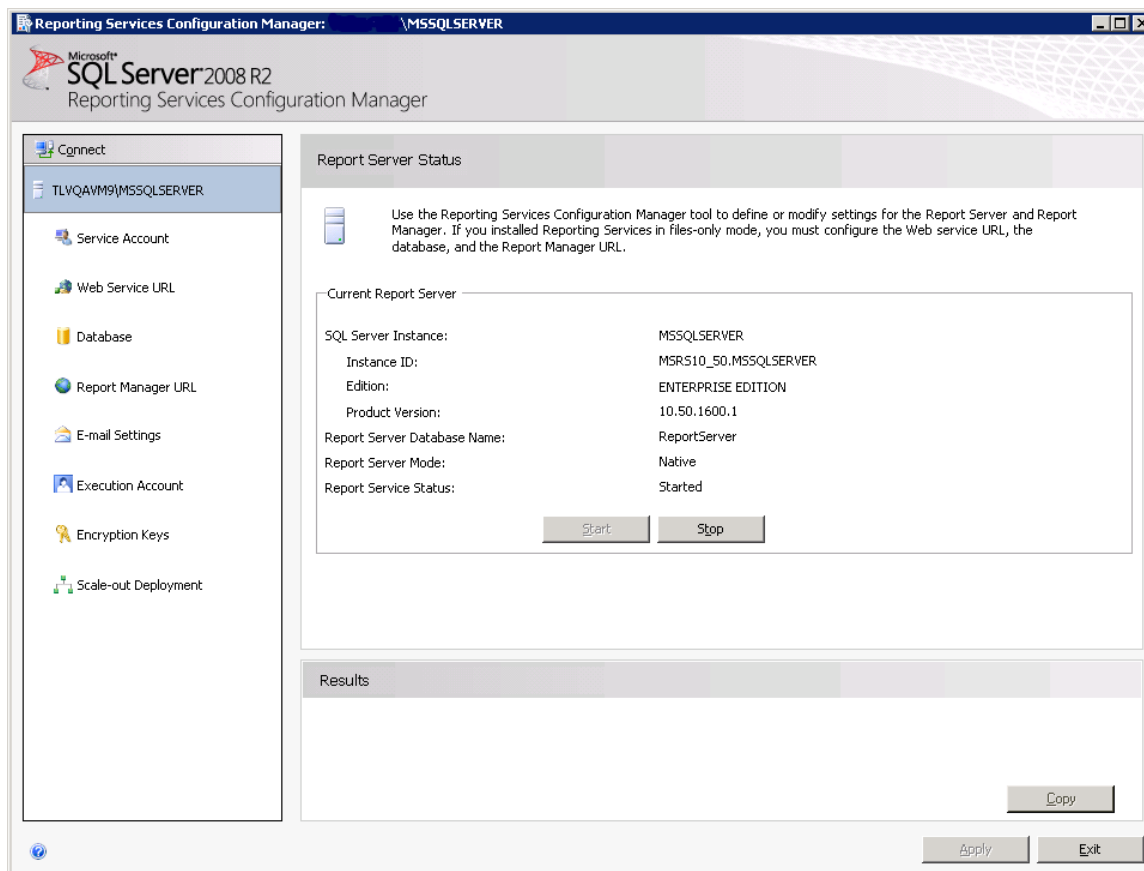
Under Services Accounts use a domain administrator user to run the service:
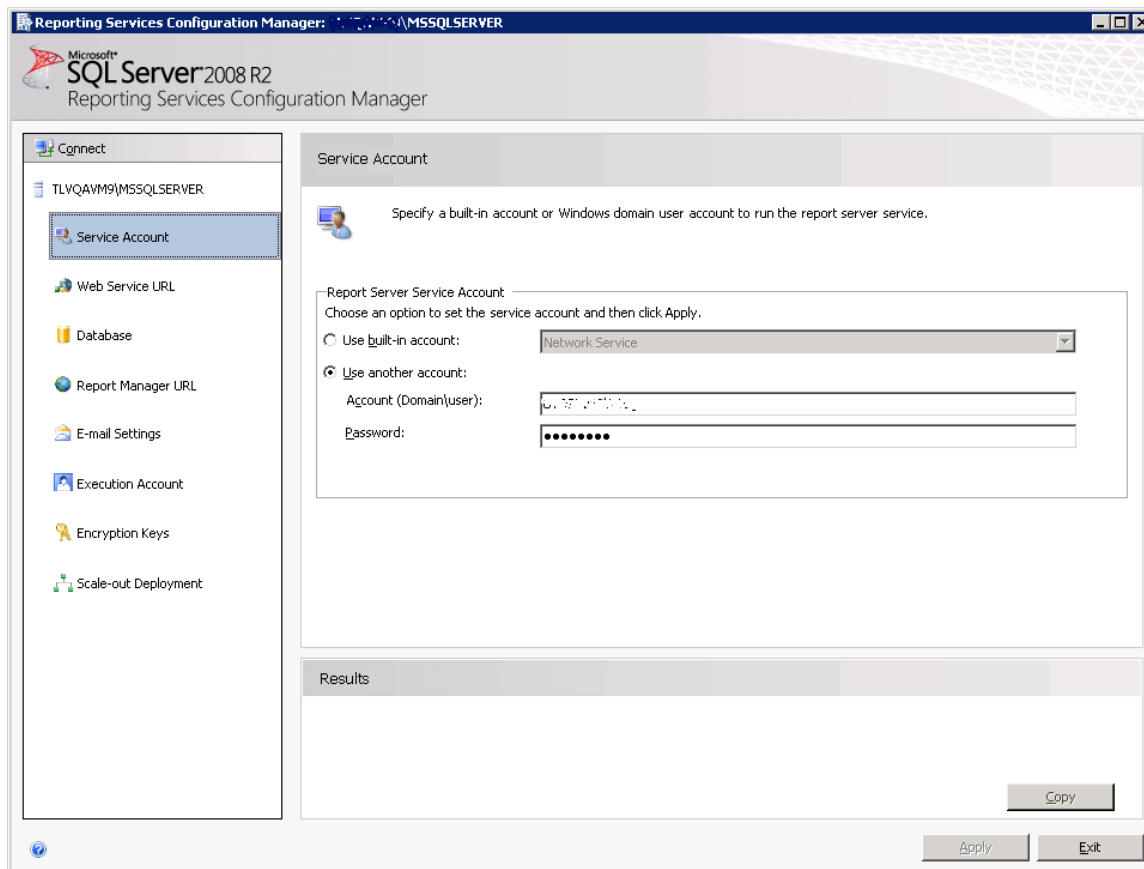
In Web Service URL fill as the below:

In Database:

Report Server Database Configuration Wizard ☒

Change Database

Choose whether to create or configure a report server database.

Action	Choose a local or remote instance of a SQL Server Database Engine and specify credentials that have permission to connect to that server.
Database Server	
Database	
Credentials	Connect to the Database Server:
Summary	
Progress and Finish	

Server Name: [　　　]

Authentication Type: [SQL Server Account ▼]

Username: [sa]

Password: [●●●●●●●●●]

[Test Connection]

[Previous] [Next] [Cancel]

Report Server Database Configuration Wizard ☒

Change Database

Choose whether to create or configure a report server database.

Action	Enter a database name, select the language to use for running SQL scripts, and specify whether to create the database in native or SharePoint mode.
Database Server	
Database	
Credentials	
Summary	Database Name: [ReportServer]
Progress and Finish	Temp Database Name: ReportServerTemp

Language: [English (United States) ▼]

Report Server Mode: ⦿ Native Mode

○ SharePoint Integrated Mode

[Previous] [Next] [Cancel]

In Report Manager URL:

Point the browser to *//<dbserver>/reports*

1. Click the *Folder Settings* tab
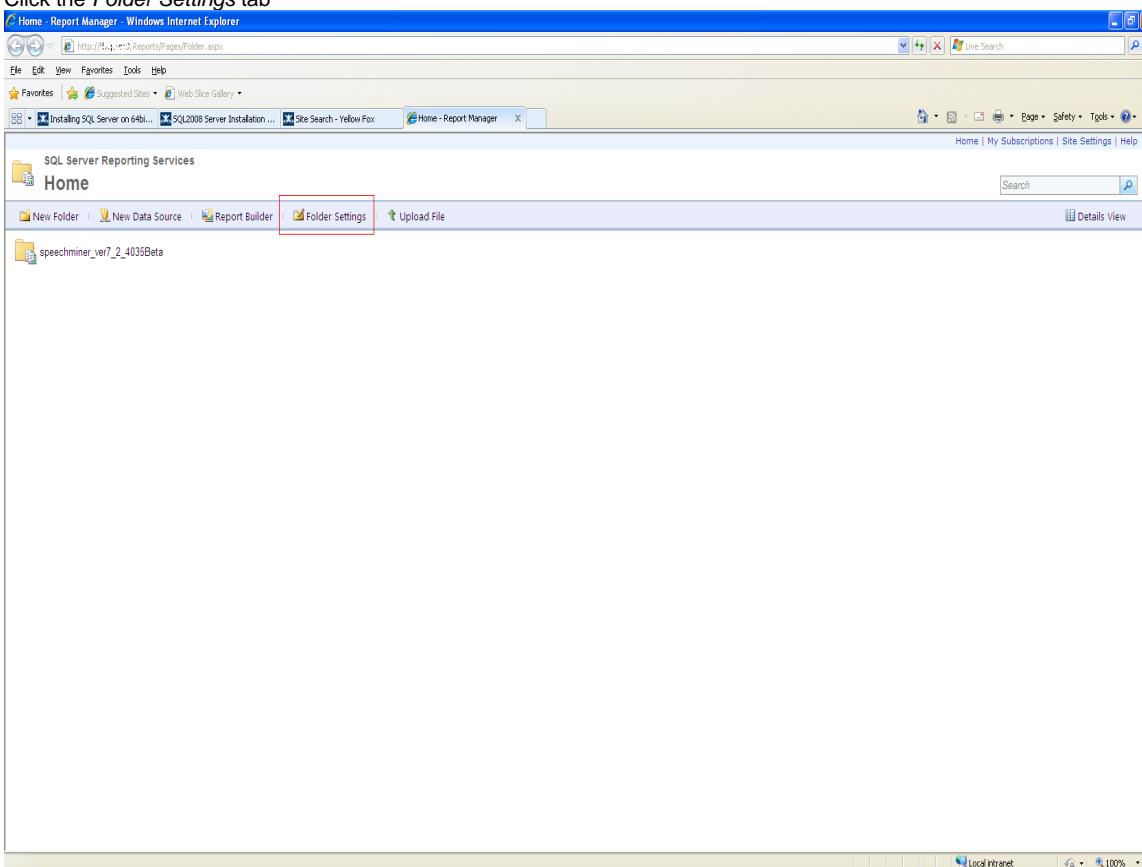
2.
   Note: If there is a problem to access this folder and you keep having to enter your user and domain credentials and eventually get a blank screen, do the following: In rsreportserver.config remove the value RSWindowsNegotiate and ensure RSWindowsNTLM is specified. (There is more information about this problem and some other solutions at http://blogs.msdn.com/b/lukaszp/archive/2008/03/26/solving-the-reporting-services-login-issue-in-the-february-ctp-of-sql-server-2008.aspx)
3. If the domain user used by SpeechMiner is not on the list, click on *New Role Assignment*, otherwise *Edit* the existing account
4. Give the account *Content Manager* role

To enable remote access through SQL Management studio when Windows Firewall is on follow instructions at http://msdn.microsoft.com/en-us/library/ms175043.aspx

SQL Server Configuration Best Practices

Memory Usage - if not limited SQL server will consume all available memory, therefore it is recommended to limit the memory usage of the SQL Server,

It can be done by limiting the **max server memory**
It is important to note that the **max server memory** is not all the memory used by SQL Server process and therefore it is recommended to set that to 2-4GB less than the desired size
The following example sets the max server memory option to 4 GB:

```
sp_configure 'show advanced options', 1;
GO
RECONFIGURE;
GO
sp_configure 'max server memory', 4096;
GO
RECONFIGURE;
GO
```

see more details at http://msdn.microsoft.com/en-us/library/ms178067.aspx

The users can alos change the **max server memory** setting using GUI by right click on the server name -> properties -> memory
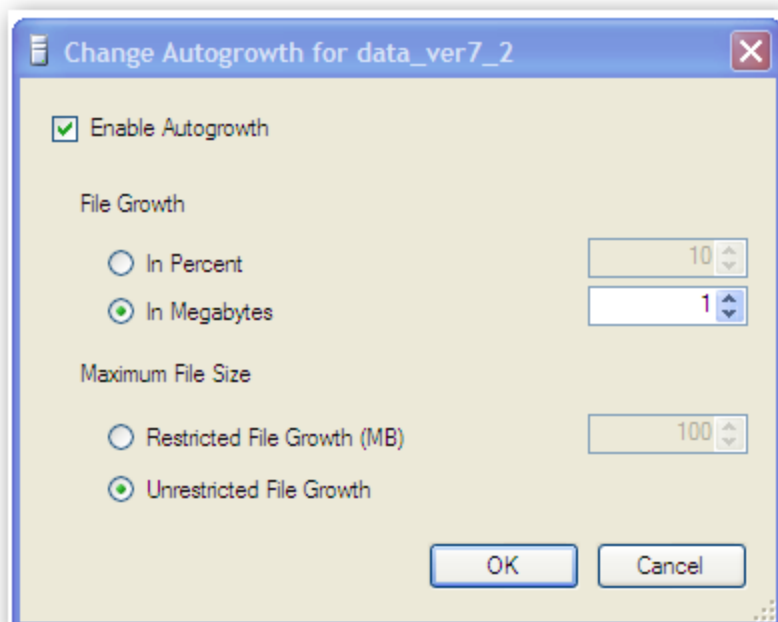
Recovery Model

It is recommended to set the recovery model to simple in order to save disk space
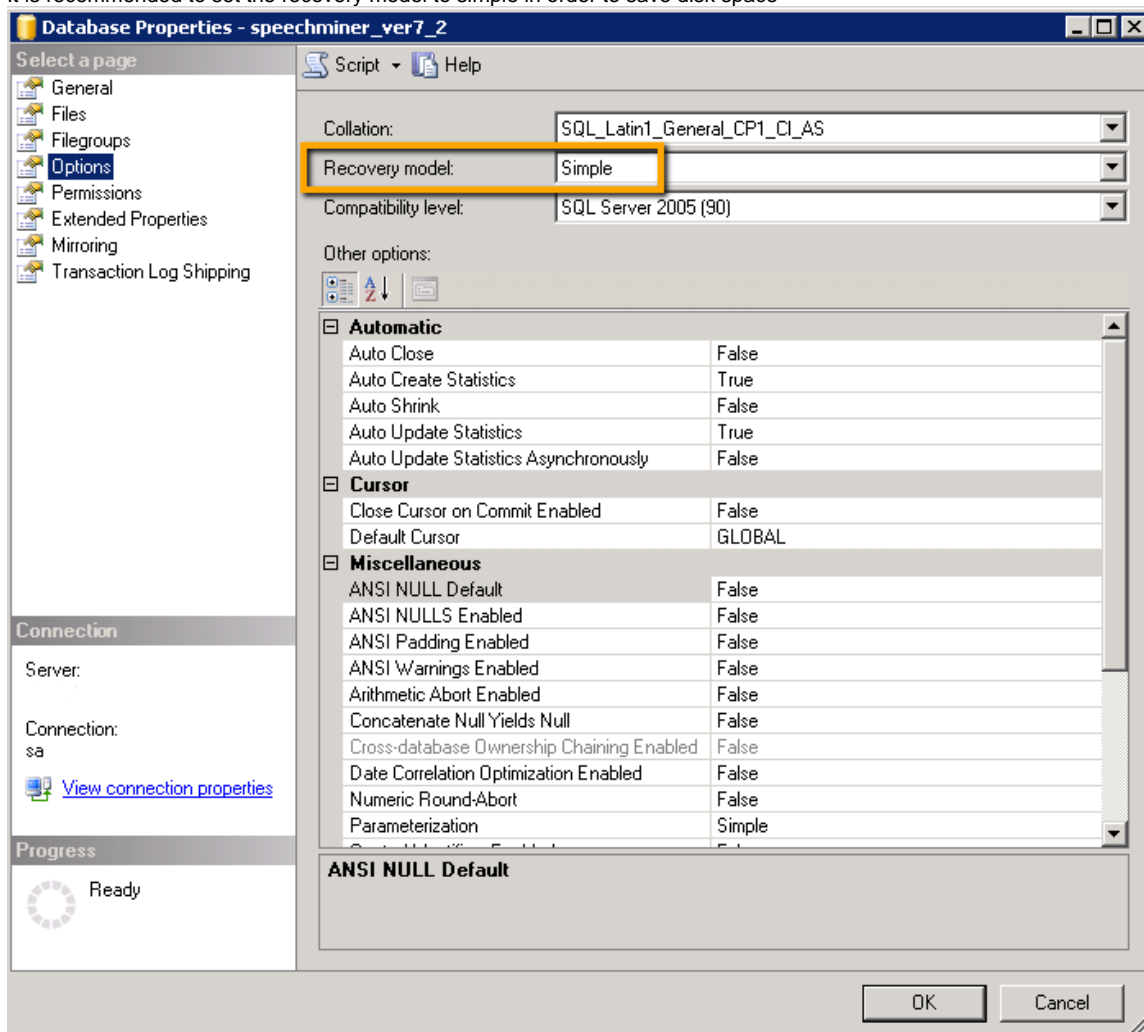
AutoGrowth

the default Autogrowth in SQL2008R2 is to enable Autogrowth of 1 Megabytes

we recommend changing that to 5 or 10 Percent.

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