# SpeechMiner Administration Guide

Setting Up the SQL Server for SpeechMiner

4/4/2025

Setting Up the SQL Server for SpeechMiner

Installing SQL Server 2008 R2

In order to install SQL Server 2008 R2 for use with SpeechMiner, run the normal setup wizard and follow the instructions. To install SQL Server 2008 R2:

1. Run the installation program. The **SQL Server Installation Center** window opens, with the **Planning** screen open.

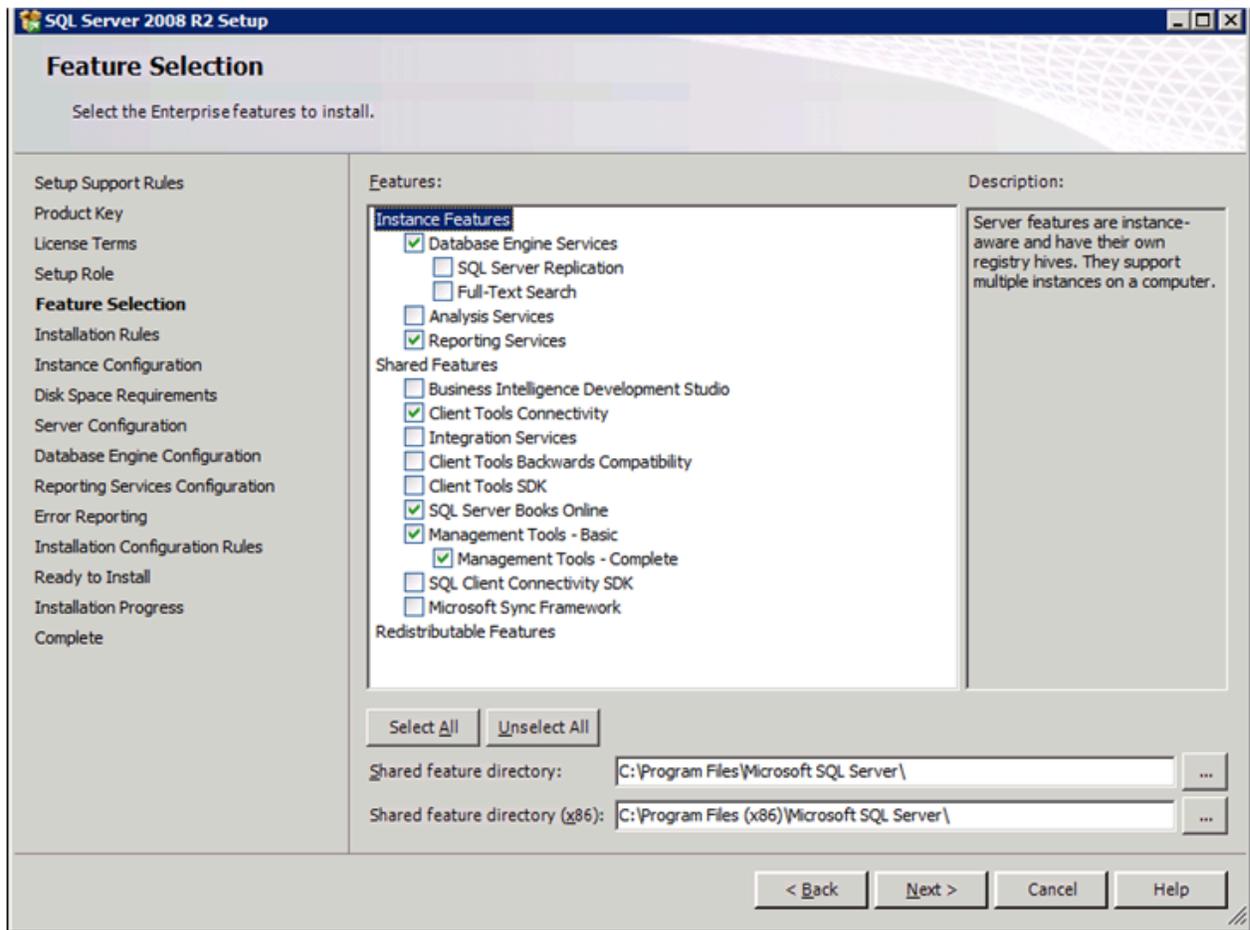2. From the menu on the left, select **Installation**. The **Installation** screen opens.
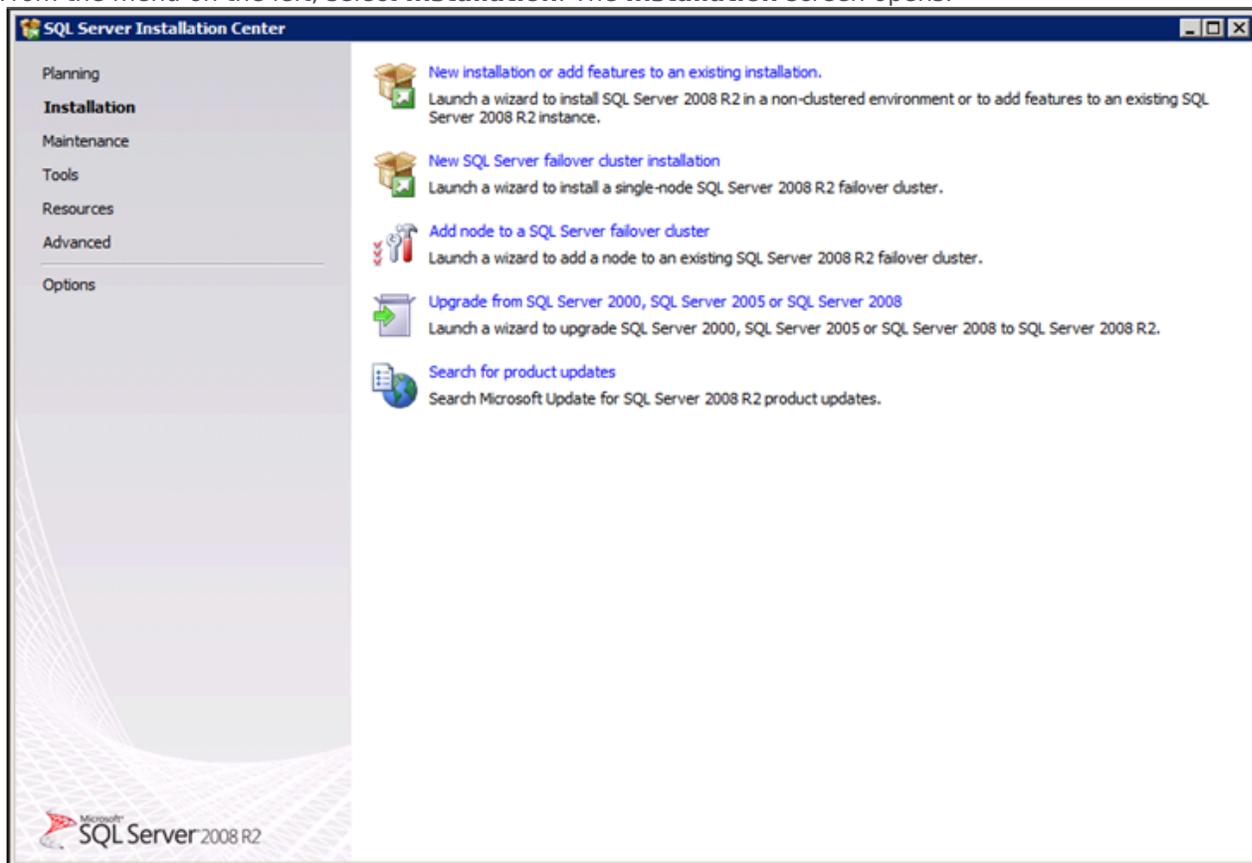
3. Select **New installation or add features to an existing installation**. The installation wizard opens.

4. Follow the on-screen instructions. When the screens mentioned below open, follow the instructions below to select the required settings and options for SpeechMiner.

5. From the **Setup Role** screen, select **SQL Server Feature Installation**.
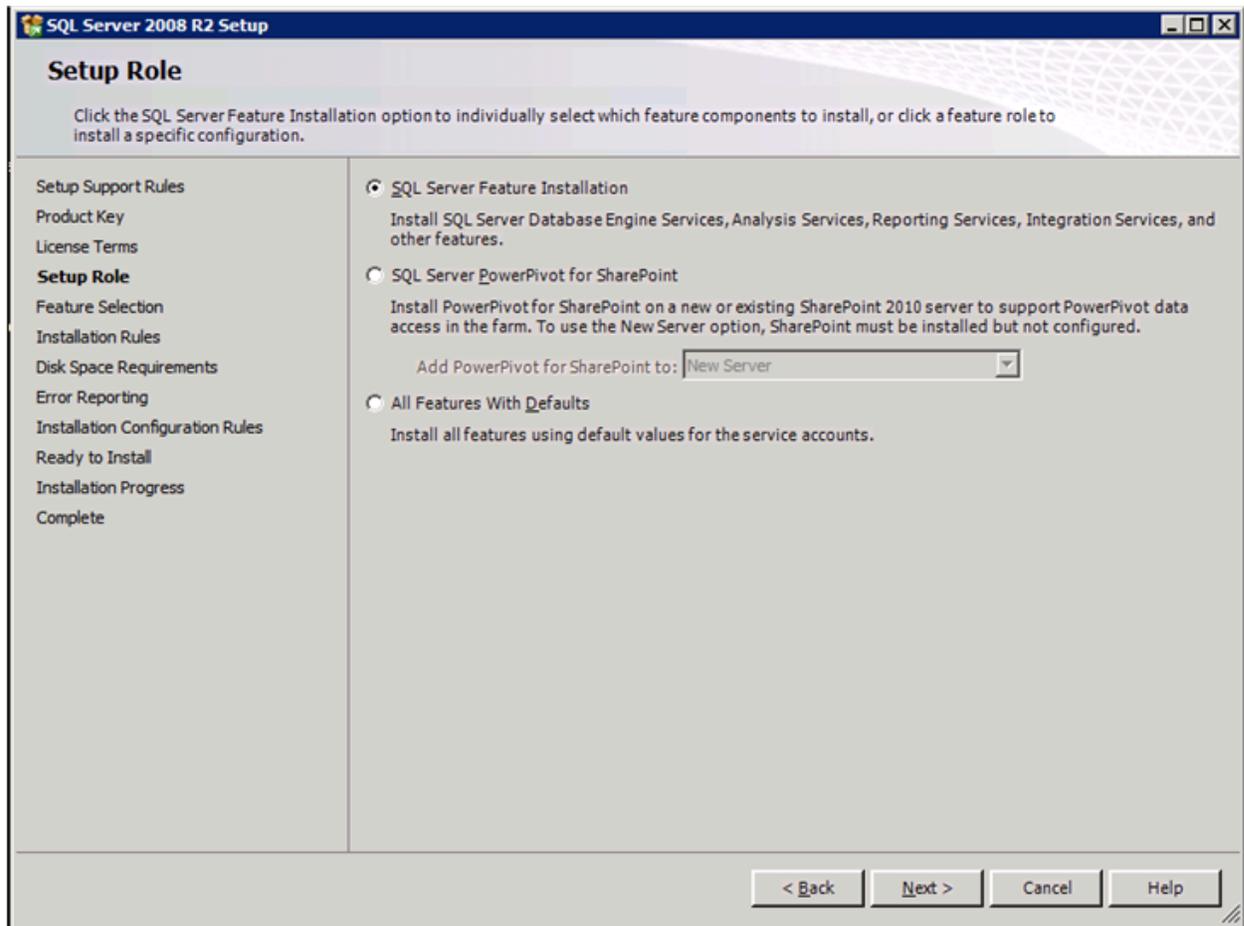
6. From the **Feature Selection** screen, select the following options:
   - Database Engine Services
   - Reporting Services
   - Client Tools Connectivity
   - SQL Server Books Online
   - Management Tools Basic
   - Management Tools Complete

7. From the **Server Configuration** screen, in the **Service Accounts** tab, for the **SQL Server Agent**, **SQL Server Database Engine**, and **SQL Server Reporting Services**, do the following:

   • Enter the user account and password of the service account.

   • Under **Startup Type**, select **Automatic**.
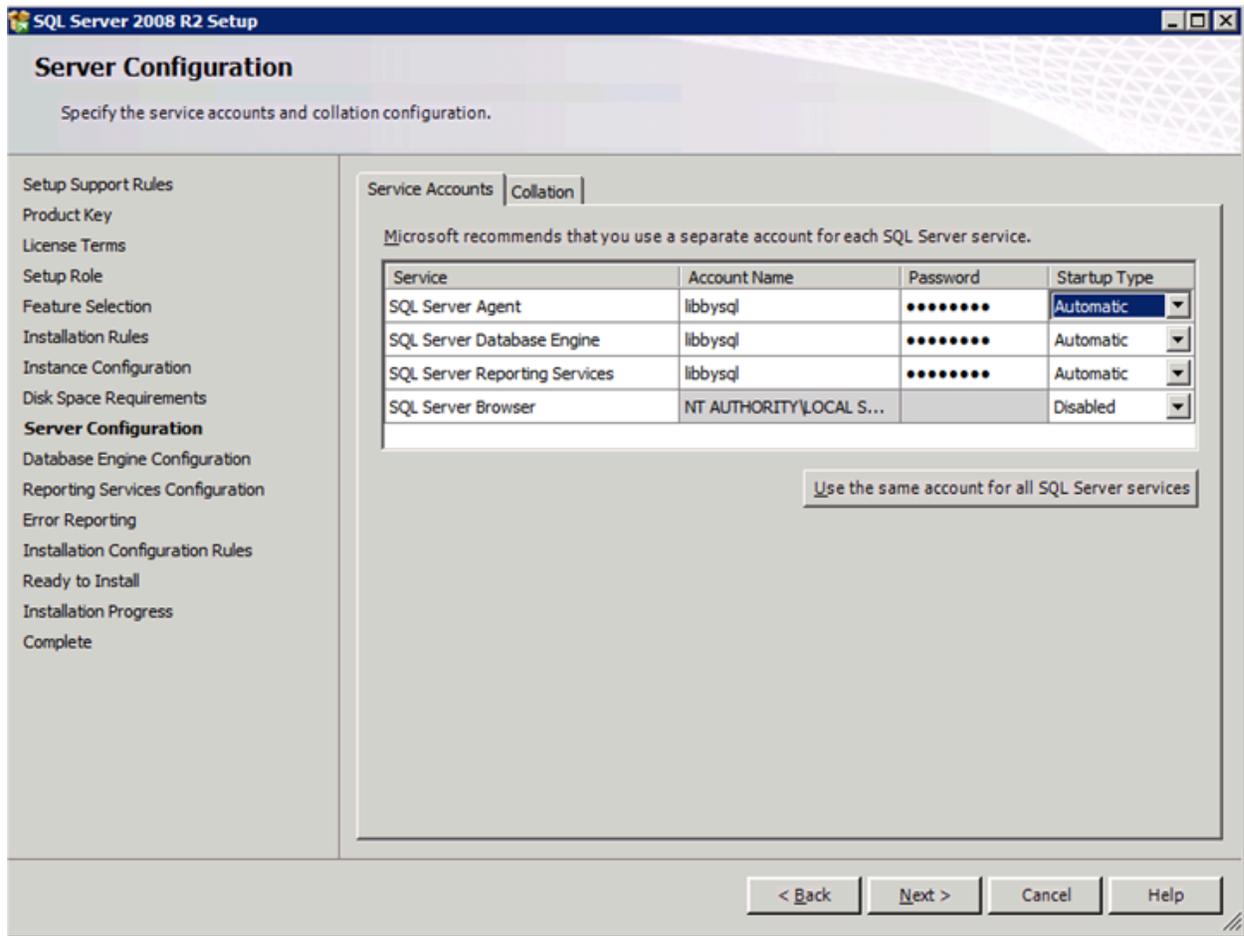
8. From the **Server Configuration** screen, in the **Collation** tab, under **Database Engine**, select
   SQL_Latin1_General_CP1_CI_AS (the default value).
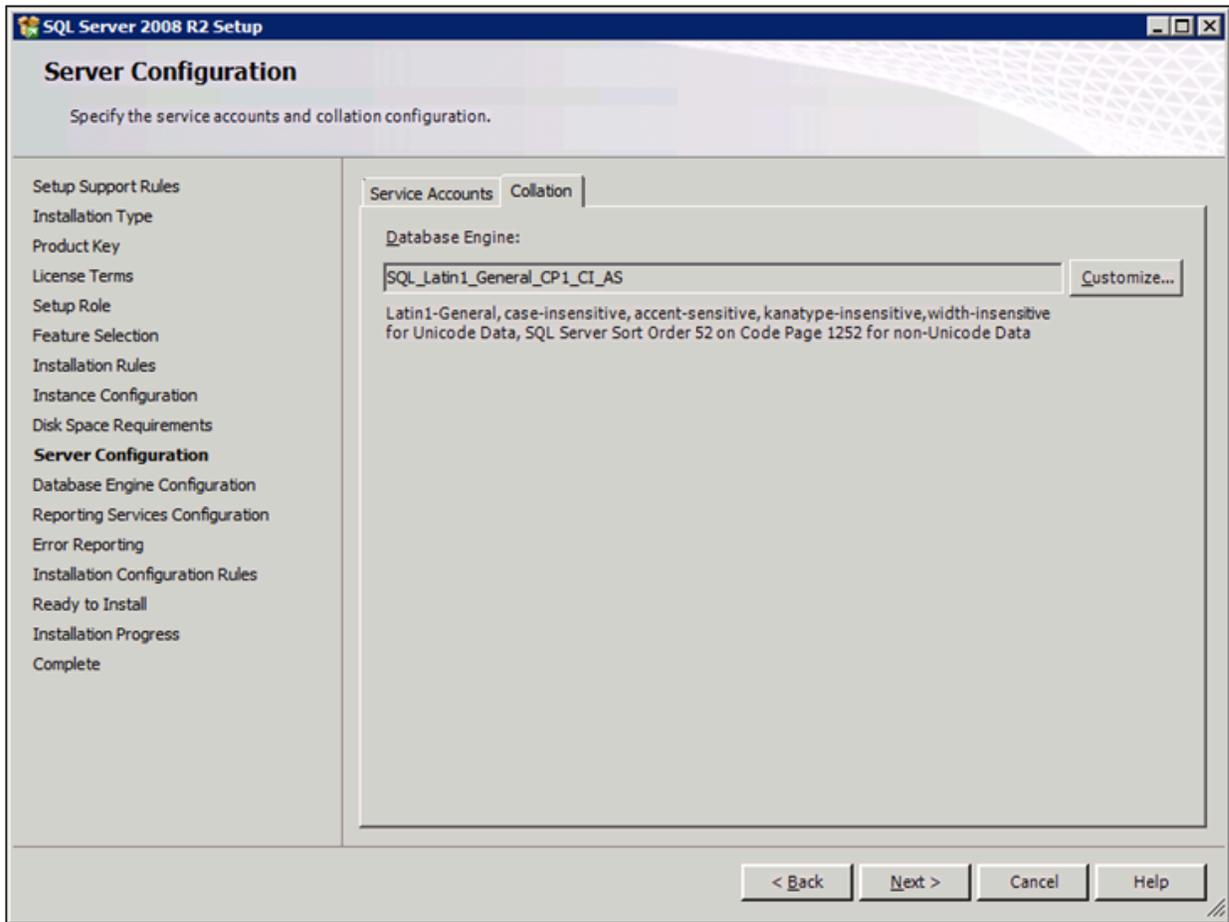
9. From the **Database Engine Configuration** screen, in the **Data Directories** tab, select the locations for the database folders. If possible, put the User database directory, the Temp DB directory, and the Backup directory on a separate drive from the other folders.
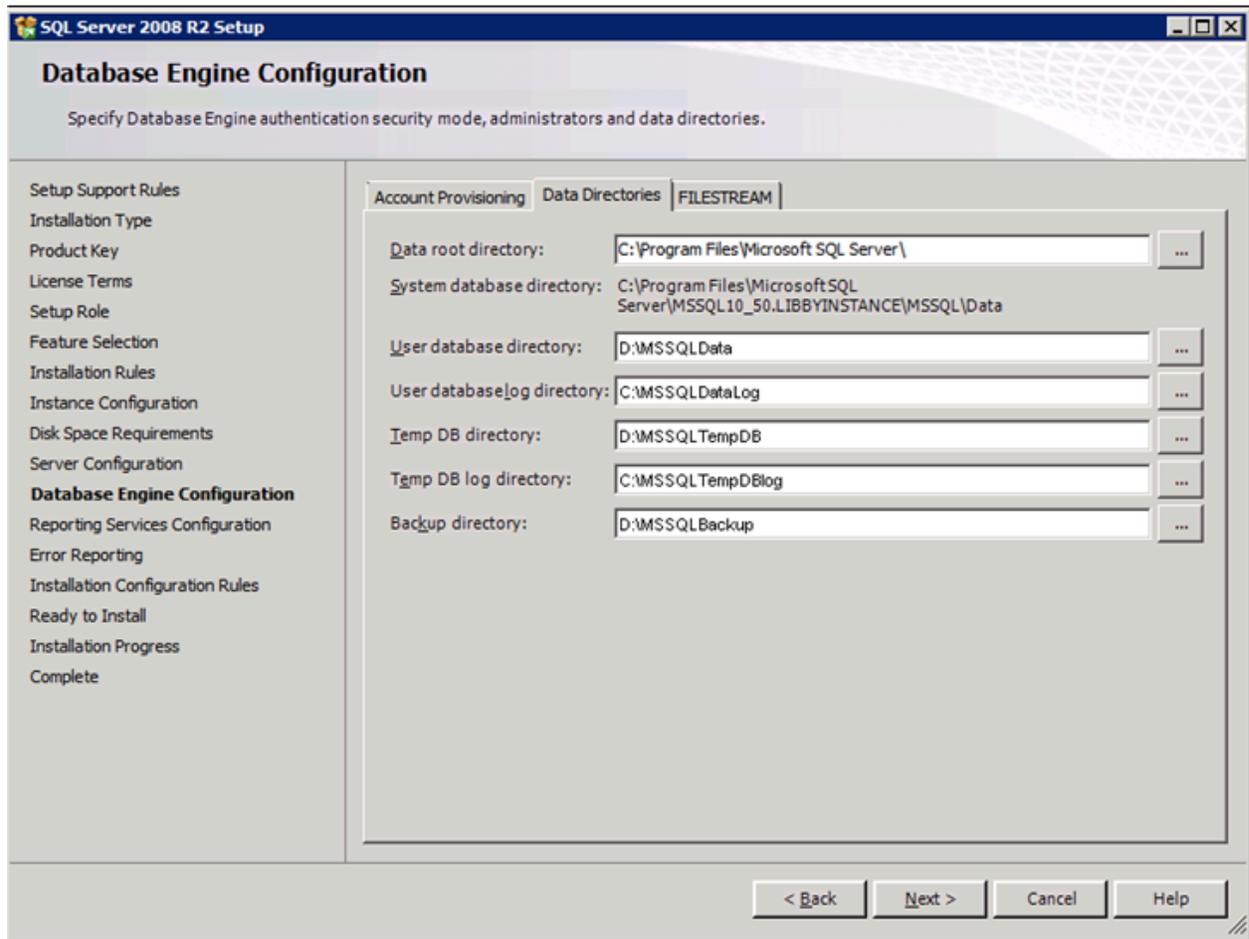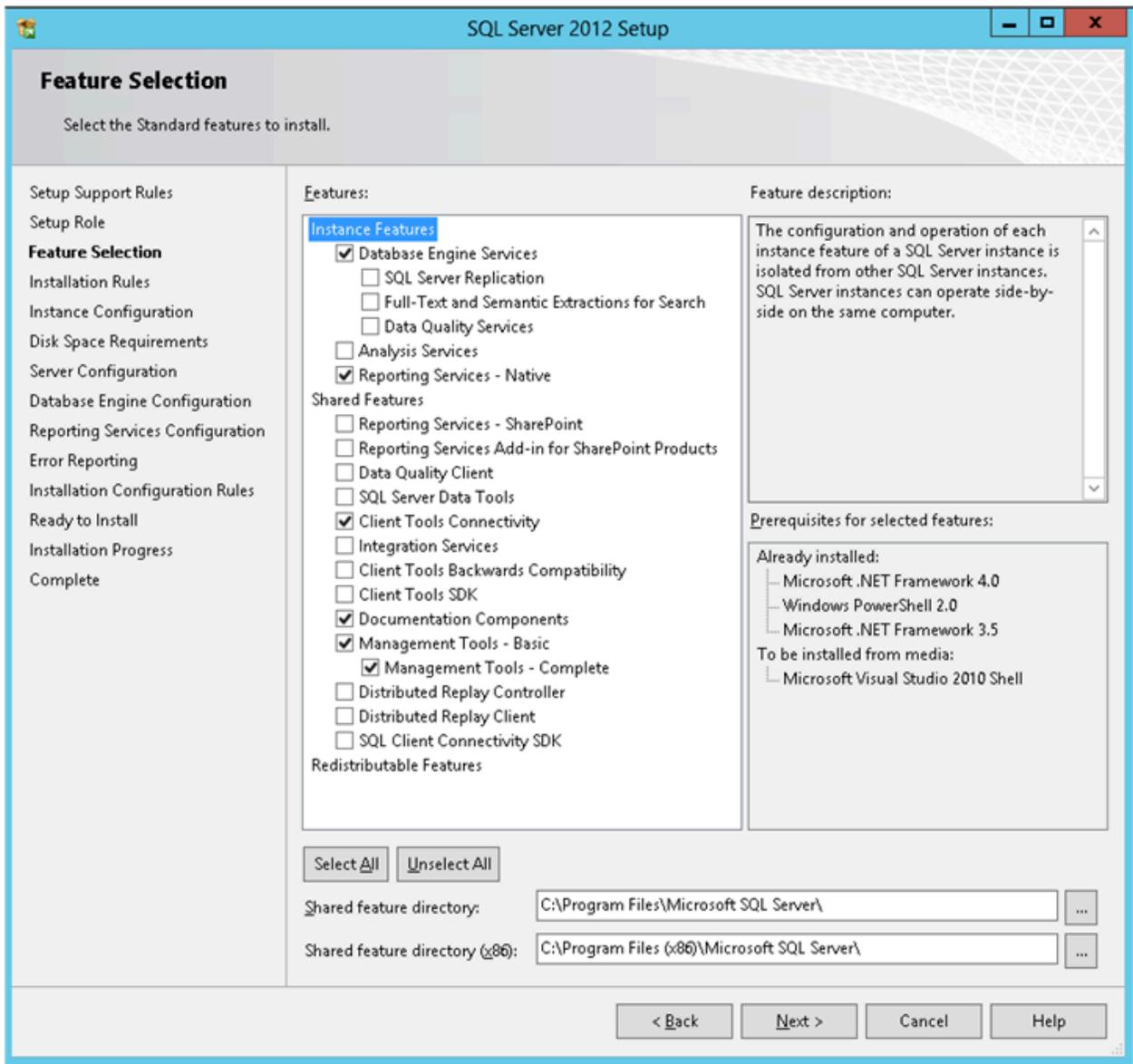
10. From the **Reporting Services Configuration** screen, select **Install the native mode default configuration**.

11. When you finish installing SQL Server, restart the machine on which you installed it.
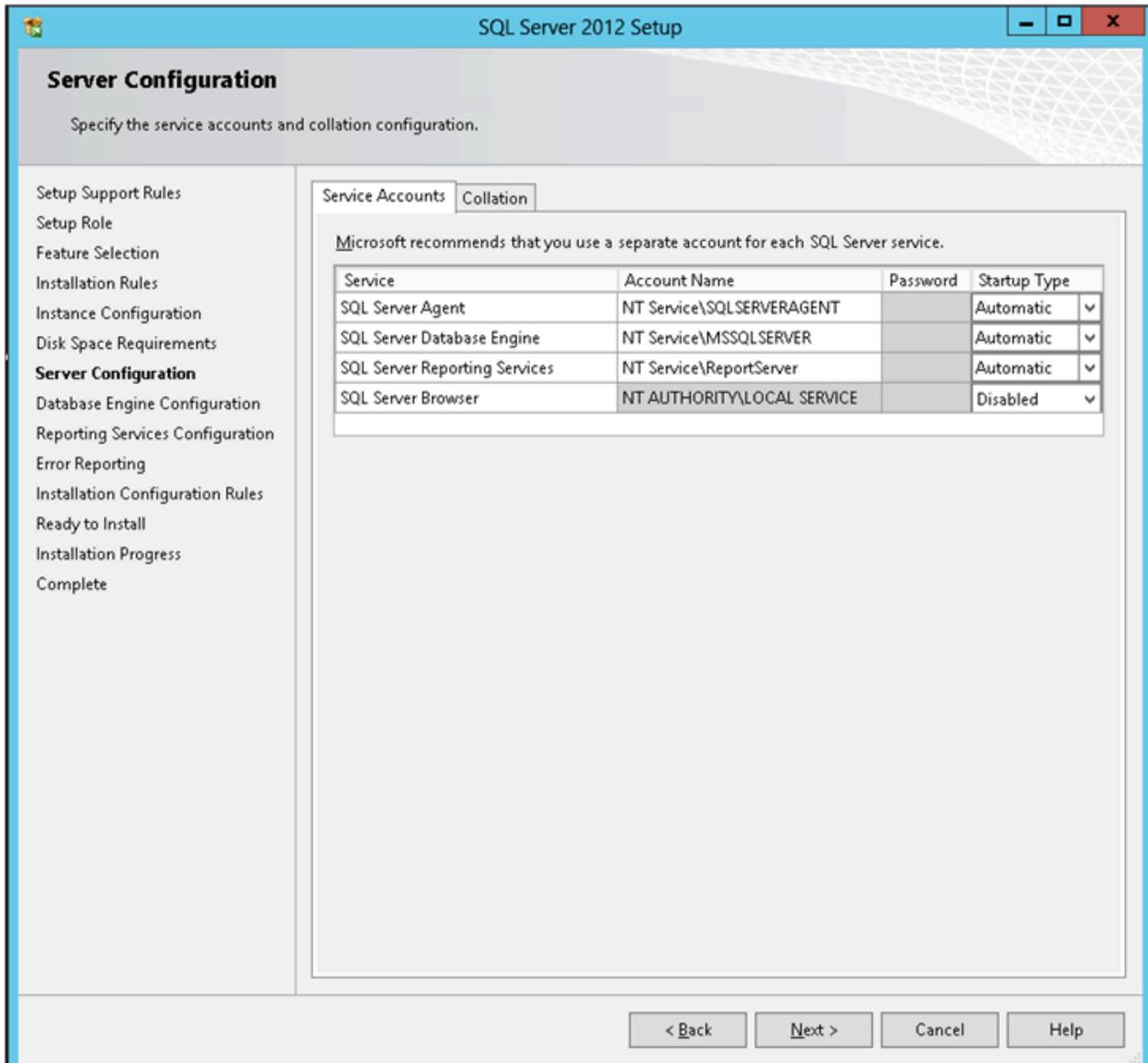
Installing SQL Server 2012

In order to install SQL Server 2012 for use with SpeechMiner, run the normal setup wizard and follow the instructions. To install SQL Server 2012:

1. Run the installation program. The **SQL Server Installation Center** window opens, with the **Planning** screen open.

2. From the menu on the left, select **Installation**. The **Installation** screen opens. Select **New installation or add features to an existing installation**. The installation wizard opens.

3. Follow the on-screen instructions. When the screens mentioned below open, follow the instructions below to select the required settings and options for SpeechMiner.
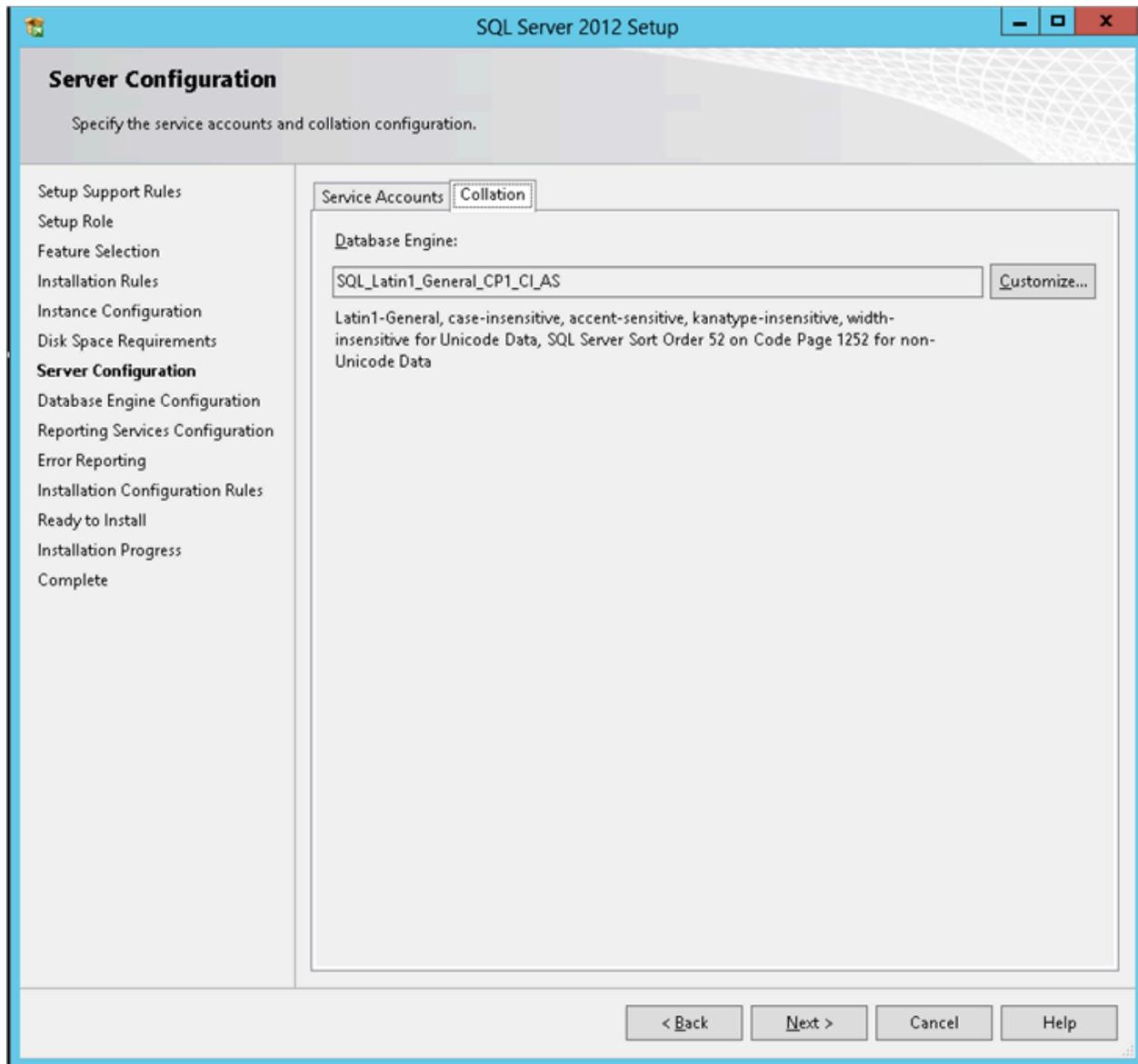
4. From the **Setup Role** screen, select **SQL Server Feature Installation**.

5. From the **Feature Selection** screen, select the following options:

   - Database Engine Services

   - Reporting Services

   - Client Tools Connectivity

   - SQL Server Books Online

   - Management Tools Basic

   - Management Tools Complete

6. From the **Server Configuration** screen, in the **Service Accounts** tab, for the **SQL Server Agent**, **SQL Server Database Engine**, and **SQL Server Reporting Services**, do the following:

   - Enter the user account and password of the service account.

   - Under **Startup Type**, select **Automatic**.

7. From the **Server Configuration** screen, in the **Collation** tab, under **Database Engine**, select SQL_Latin1_General_CP1_CI_AS (the default value).

8. From the **Database Engine Configuration** screen, in the **Data Directories** tab, select the locations for the database folders. If possible, put the User database directory, the Temp DB directory, and the Backup directory on a separate drive from the other folders.
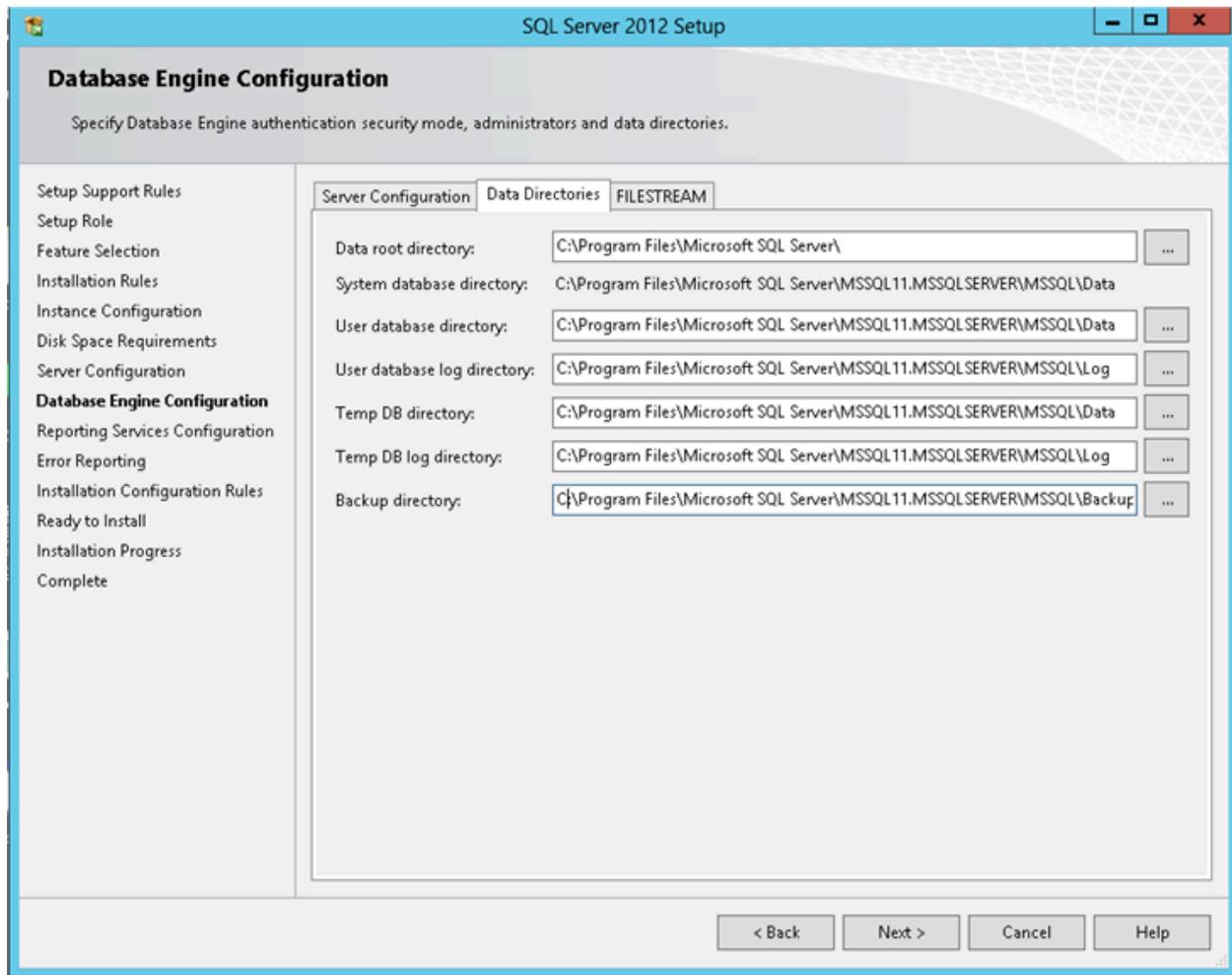
9. From the **Reporting Services Configuration** screen, select **Install the native mode default configuration**.
10. When you finish installing SQL Server, restart the machine on which you installed it.

Configuring the SQL Server Setting

After the SQL server is installed, do the following:

- Ensure that the SQL server is running
- Configure the SQL server to start automatically
- Enable both the TCP/IP and the Named Pipes protocols

> **Important**
>
> After you install SpeechMiner, you also have to deploy the CLR assembly and set its permissions. See Installing the SpeechMiner Components > Installing the SpeechMiner Database > SQL CLR.

To configure the SQL server and enable the required protocols:

1. From the **Start** menu, navigate to **Microsoft SQL Server 2008 > Configuration Tools > SQL Server Configuration Manager**. The **SQL Server Configuration Manager** opens.

2. On the left side of the window, select **SQL Server Services**.
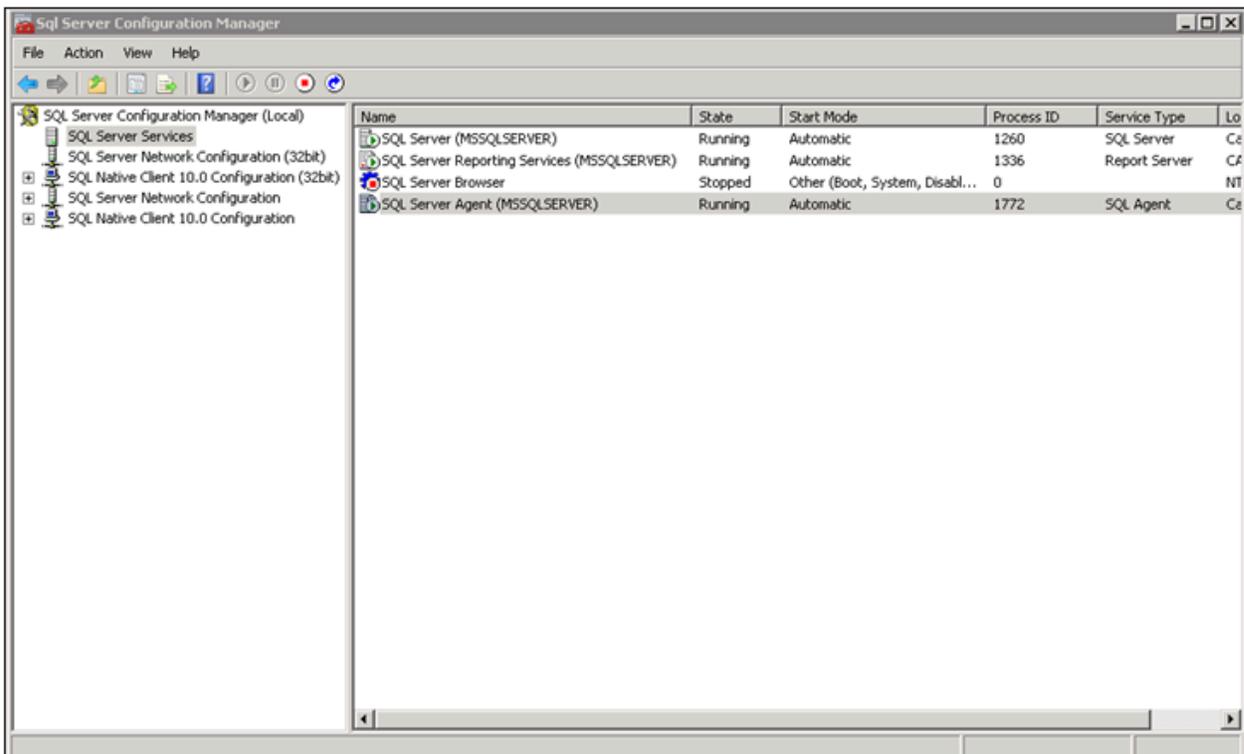
3. On the right side of the window, for **SQL Server Agent**, check that the **Status** is **Running**, and the **Start Mode** is **Automatic**.

4. If one or both of these values are not as they should be, do the following:

   • Double-click the row. The **Properties** window opens.

   • In the **Service** tab, set the **Start Mode** to **Automatic**.

   • If the service is not running, in the **Log On** tab, select **Start**.

   • Click **OK** to implement the changes.

5. On the left side of the **SQL Server Configuration Manager** window, select **SQL Server Network Configuration > Protocols for MSSQLSERVER**.
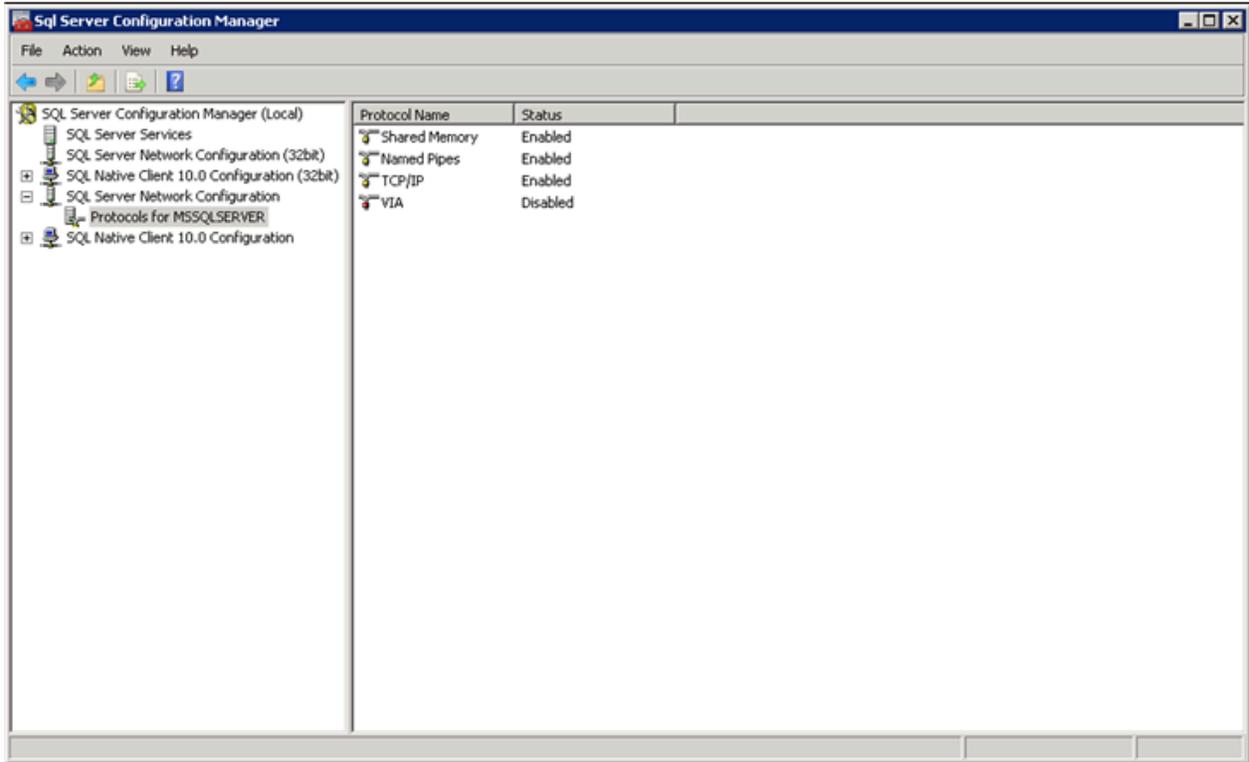
6. On the right side of the window, for **TCP/IP** and for **Named Pipes**, check that the **Status** is **Enabled**.

7. For each of these protocols, if it is not enabled, do the following:

    - Double-click the row. The **Properties** window opens.

    - In the **Protocol** tab, under **Enabled**, select **Yes**.

    - Click **OK** to implement the changes.

Configuring the Reporting Services

The SQL reporting services should be configured as explained below.

> **Tip**
>
> The default configuration for mhtml rendering is html3.2. This configuration does not support padding. In order to render web archive open the Report Server config file (for example C:\Program

Files\Microsoft SQL Server\MSRS10_50.MSSQLSERVER\Reporting Services\ReportServer\rsreportserver.config) and change RenderingExtension (under EmbeddedRenderFormats) to HTML4.0. Once you are done, restart the report server.

To configure the SQL reporting services:

1. In the **Start** menu, under **All Programs**, select **SQL Server 2008 R2 > Configuration Tools > Reporting Services Configuration Manager**. The **Reporting Services Configuration Connections** window opens.

2. Enter the report server name and the instance name (if they are not already there), and click **Connect**. The **Reporting Services Configuration Manager** opens, with the **Report Server Status** screen displayed.
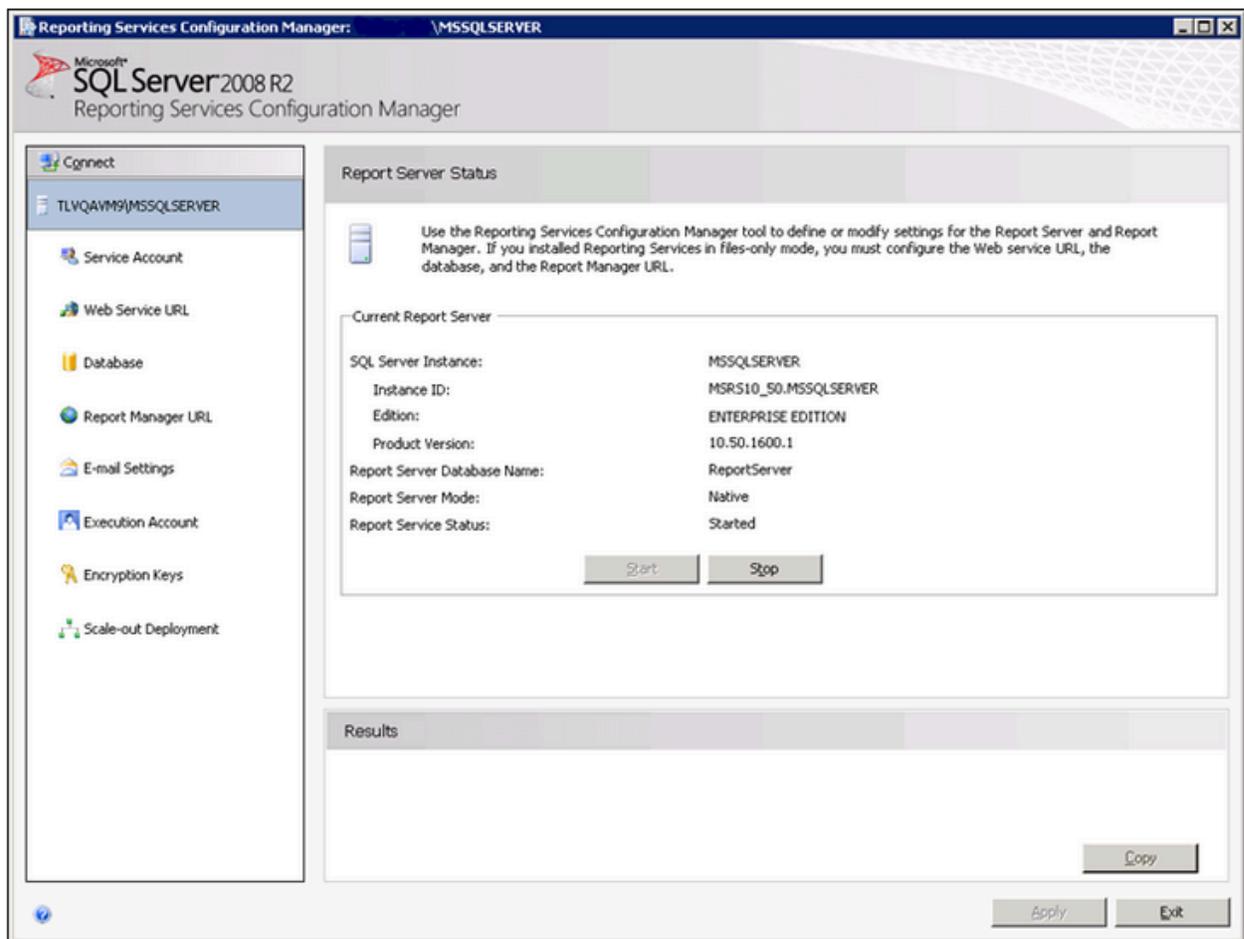
3. Check whether the report server is running. If it is not, click **Start**.

4. On the left side of the window, select **Service Account**.
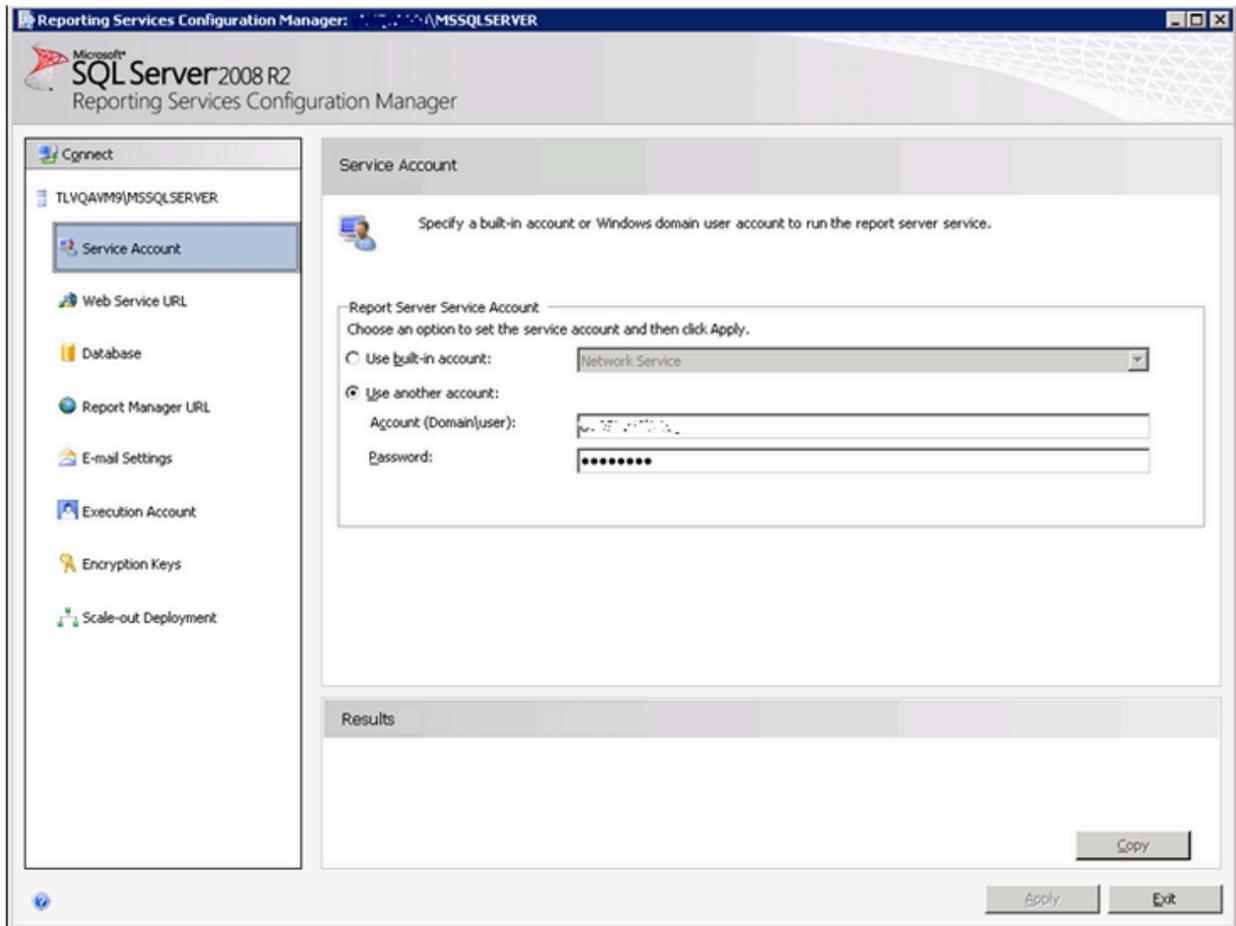

5. Configure the account name and password of the service account that will be used to run the report-server service, as required. Use either a local administrator account or an account that can log in as a service and run services on the local machine.

   The user must be a **Domain user**.

6. On the left side of the window, select **Web Service URL**; make sure the settings in the screen match the settings as follows:
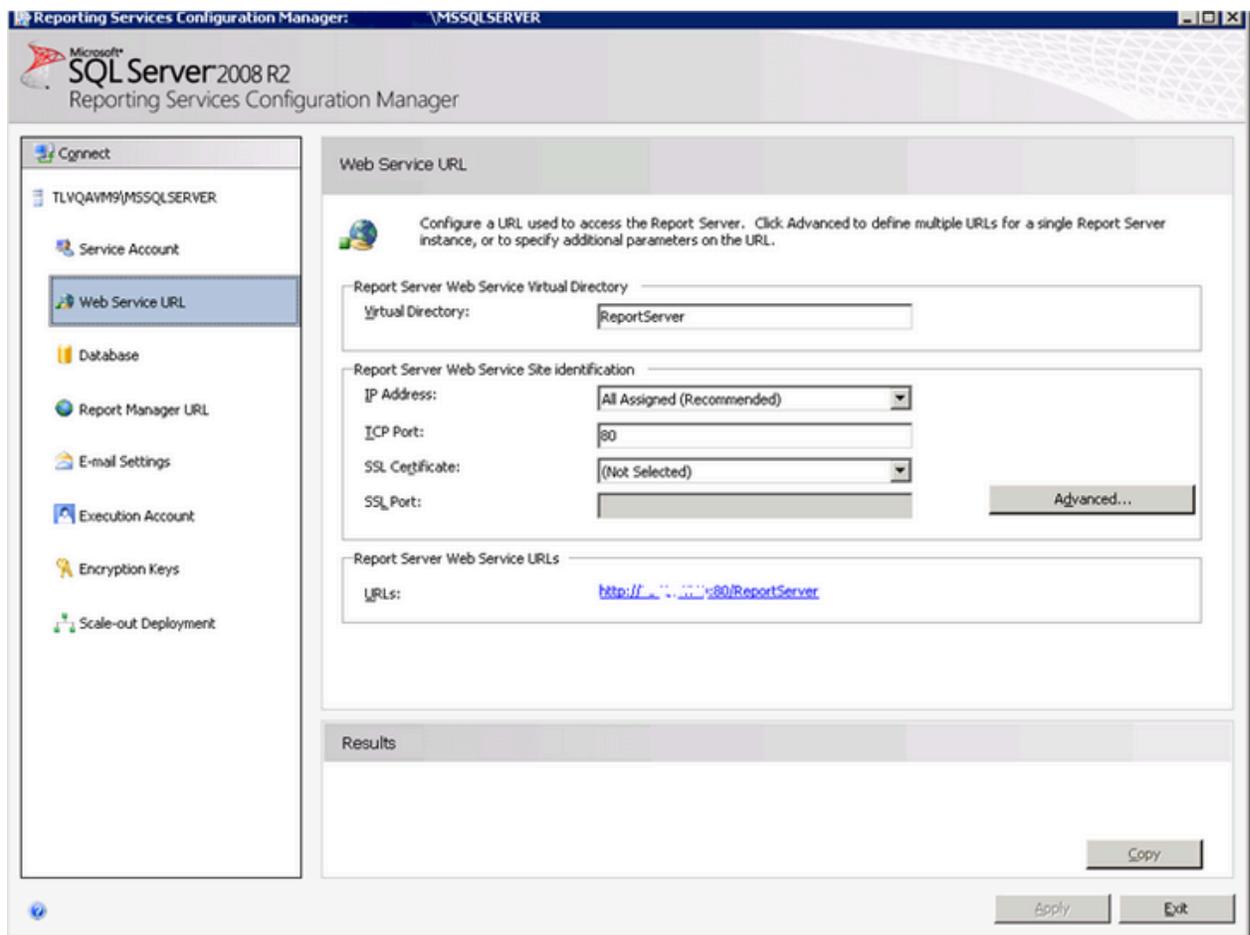
7. On the left side of the window, select **Database**. If you created a report-server database when you installed SQL Server, it appears under **Current Report Server Database**. If you did not, create it now.
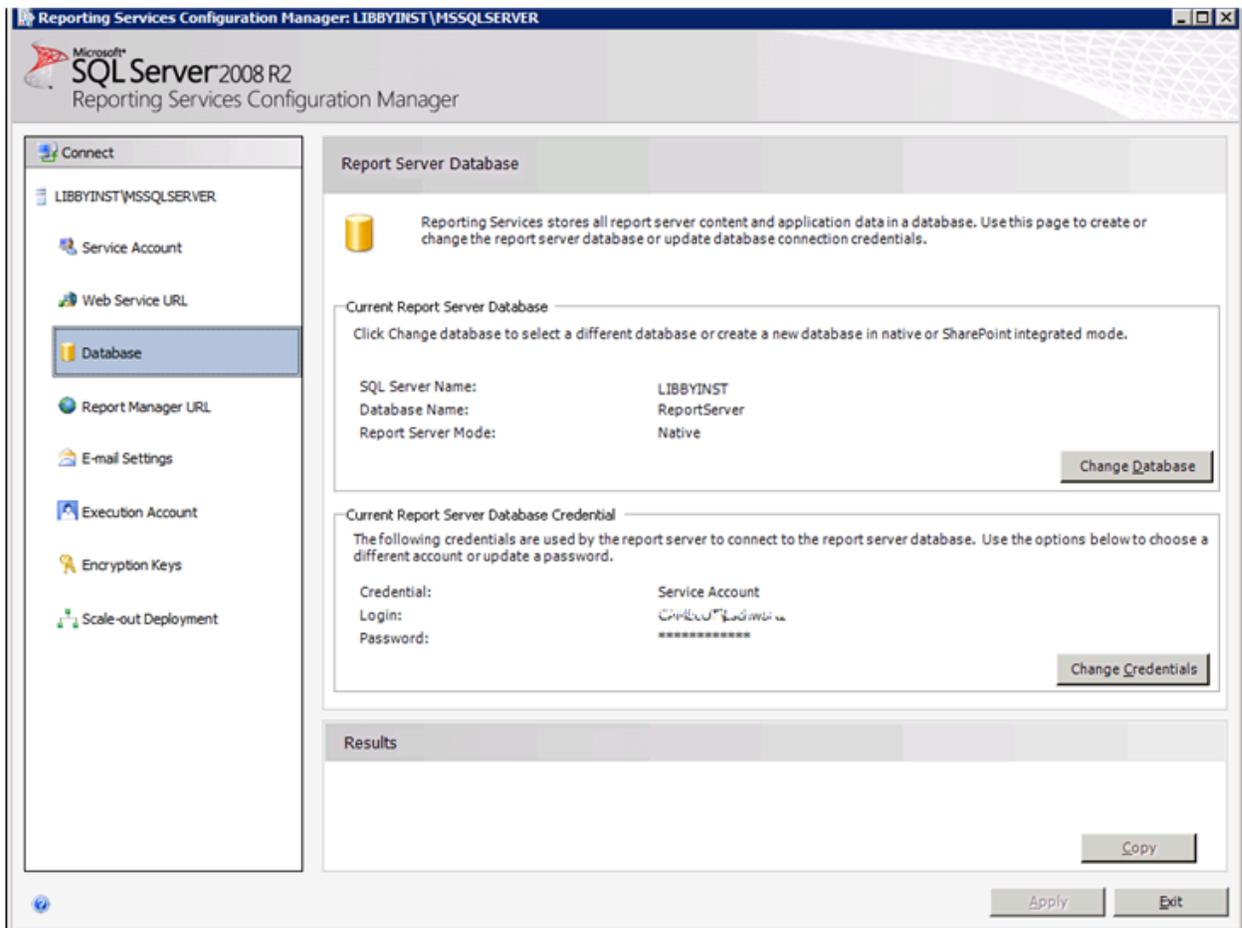
8. On the left side of the window, select **Report Manager URL**; make sure the settings in the screen match the settings as follows:
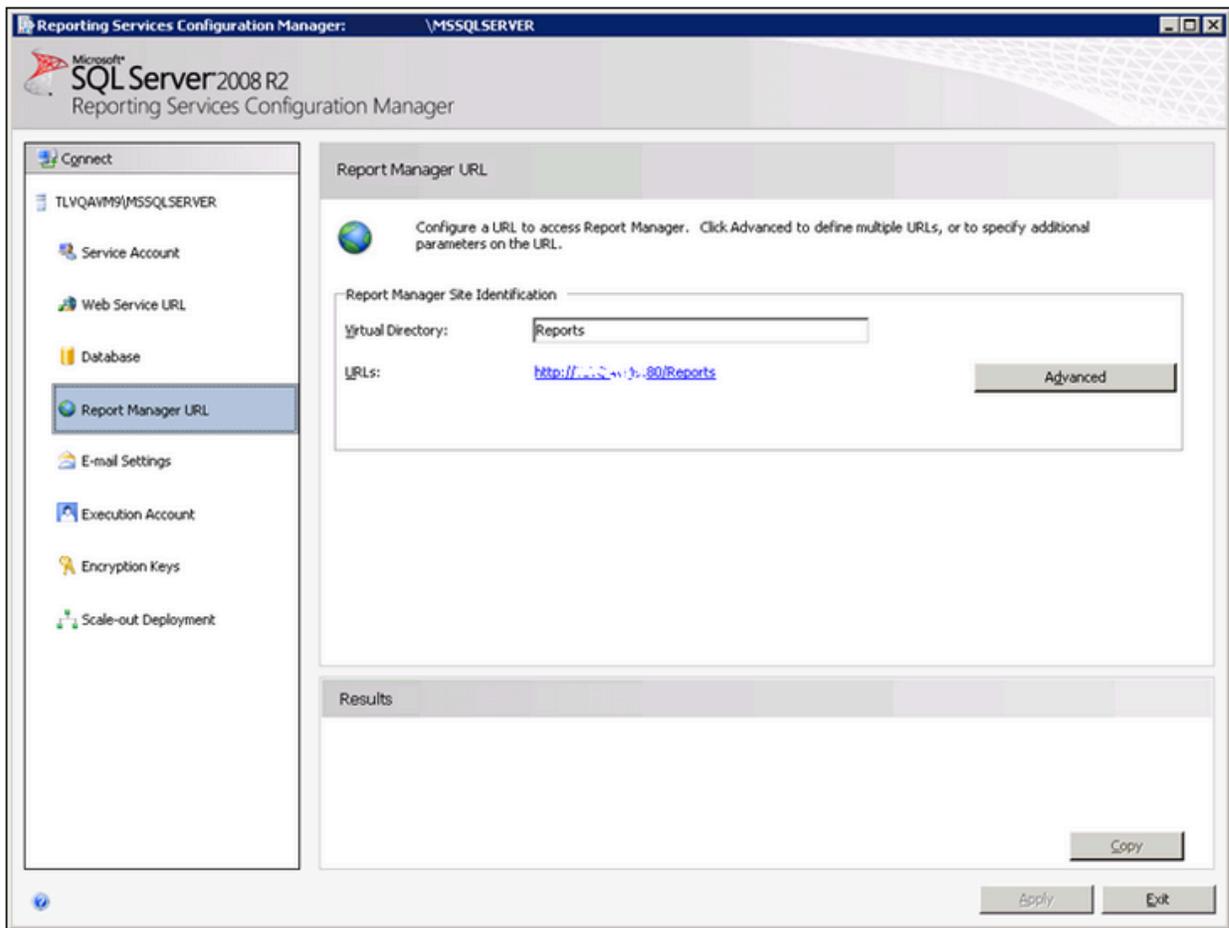
9. On the left side of the window, select **E-mail Settings**.

10. Enter the settings for the e-mail account you want the report server to use to send reports to SpeechMiner users.
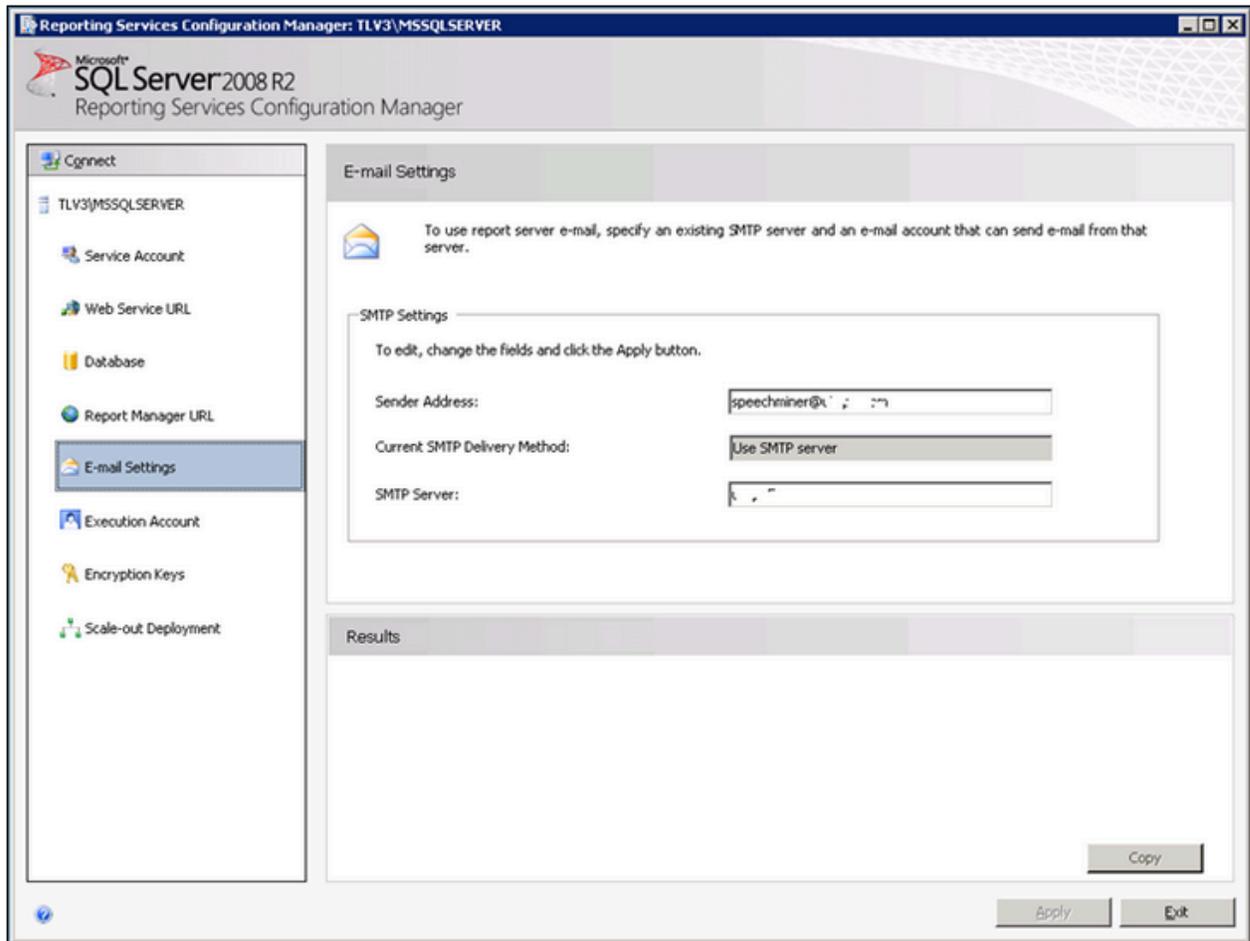
11. Click **Exit** to close the **Reporting Services Configuration Manager**.

12. In the **Report Server config** file (rsreportserver.config) change the **MaxActiveReqForOneUser** parameter value from 20 to 250.

For more details see: http://msdn.microsoft.com/en-us/library/ms157273.aspx

Creating the Report-Server Database

If the report-server database was not created automatically when you installed SQL Server, you can create it in the **Report Server Database Configuration Wizard**. To create the report-server database:

1. Open the **Reporting Services Configuration Manager**.

2. From the **Database** screen, under **Current Report Server Database**, click **Change Database**. The **Report Server Database Configuration Wizard** opens.

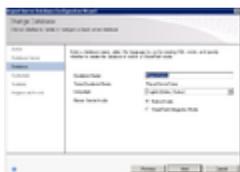3. In the wizard, fill in the fields as they are filled in in the examples shown (except, of course, for the server name and the credentials, which you must specify as appropriate for your system). Click **Next** to progress from screen to screen until you have finished creating the database.

*

    Action

*
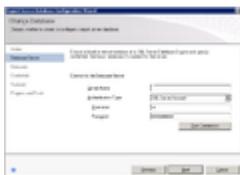
    Database Server

*

    Database

*

    Credentials

Click on the image to enlarge.

Setting the Maximum Memory Usage

If the SQL-server's memory usage is not limited, it will consume all of the available memory. Therefore, it is recommended to limit the memory usage of the SQL Server by setting the max server memory value.

> ### Important
>
> In addition to the "server memory" that is limited by this value, the SQL server uses 2-4 GB of other memory. For this reason, it is recommended to set the max server memory to a value that is 2-4 GB lower than the maximum memory you want to allow the server to use. For additional details, see http://msdn.microsoft.com/en-us/library/ms178067.aspx.

You can see the current max server memory value, and modify it as required, in the **SQL Server Management Studio**.

To view or modify the max server memory value:

1. From the SQL server, open the **SQL Server Management Studio**. (For example, in the **Start** menu, under **All Programs**, select **Microsoft SQL Server 2008 R2 > SQL Server Management Studio**.)

2. On the left side of the window, right-click the SQL server and then select **Properties**. The **Server Properties** window opens.
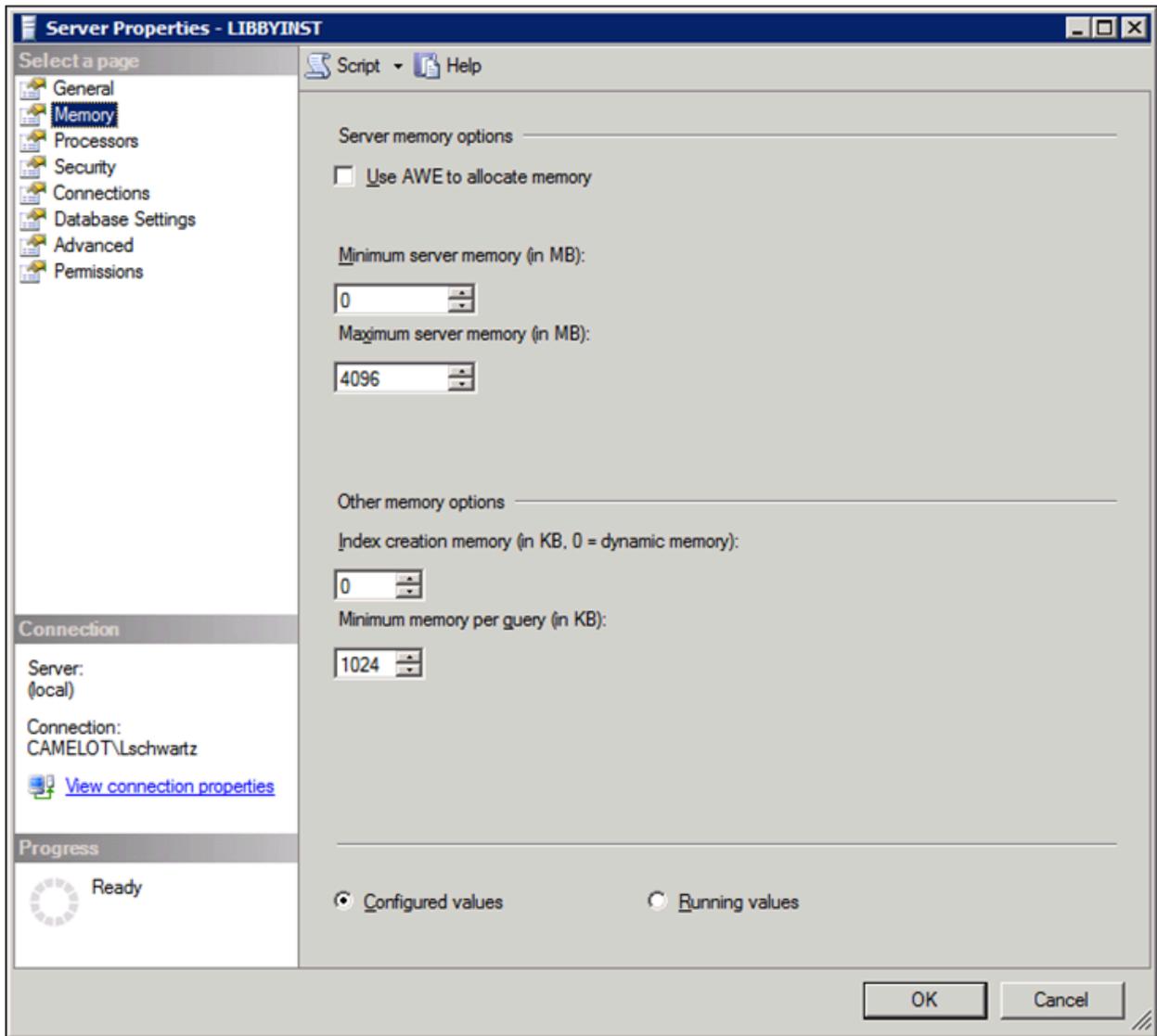
3. On the left side of the window, select **Memory**. The memory settings are displayed.

4. Under **Maximum server memory (in MB)**, enter the value you want to use.

5. Click **OK**. The setting is implemented, and the window closes.

If you prefer, you can also set the max server memory property by executing a query:

To set the max server memory by executing a query:

1. On the SQL server, open the **SQL Server Management Studio**. (For example, in the **Start** menu, under **All Programs**, select **Microsoft SQL Server 2008 R2 > SQL Server Management Studio**.)

2. On the left side of the window, right-click the SQL server and then select **New Query**. A blank text area opens on the right side of the window.

3. Copy the following commands and paste them into the text area:

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

4. The code sets the max server memory to 4GB (4096MB). If you want to set it to a different value, in the text area, change 4096 to the required value.

5. Above the text area, select **Execute**. The commands are executed. When the process is completed successfully, **Query executed successfully** appears at the bottom of the window.