PowerScribe® 360 Reporting

Microsoft SQL 2012
Installation and Configuration Manual

The latest version of this manual is available from the Nuance Healthcare Support Platform, Article 5648 Server Installation and Management.

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Best Practices

- Nuance recommends following Microsoft best practices as outlined in

  Microsoft TechNet General Security Advice and Best Practices

- ***PowerScribe 360 Reporting*** stores data containing Protected Health Information (PHI) in the product databases as well as in various locations throughout the file system. Nuance recommends encrypting ***PowerScribe 360 Reporting*** at the operating system and/or storage system levels to ensure that PHI is encrypted consistent with the customer's data encryption policies.
- ***PowerScribe 360 Reporting*** is compatible with several currently supported versions of Microsoft Windows Server operating systems, Nuance recommends using the latest compatible version listed in the ***PowerScribe 360 Reporting*** System Specifications, currently ***Windows Server 2016***.
- ***PowerScribe 360 Reporting*** is compatible with several currently supported versions of Microsoft SQL Server, Nuance recommends using the latest compatible version listed in the ***PowerScribe 360 Reporting*** System Specifications, currently ***SQL Server 2016***.
- Nuance recommend that all ***PowerScribe 360 Reporting*** network communication be secured and encrypted using Hypertext Transfer Protocol Secure (HTTPS). Nuance also recommends that the customer obtain a certificate from a trusted Certificate Authority consistent with the customer security policies.
- Nuance fully supports all third-party hardware and software updates related to critical security fixes immediately upon release. Nuance recommends that customers apply third party updates consistent with their internal security policies.
- ***PowerScribe 360 Reporting*** supports Lightweight Directory Access Protocol (LDAP). Nuance recommends the use of LDAP for end-user authentication to ***PowerScribe 360 Reporting*** to ensure consistency with the customer's authentication and password management policies.
- During the ***PowerScribe 360 Reporting*** installation process several system level users and associated passwords need to be created. Nuance recommends that the Customer's site administer provides the system level passwords consistent with the customer's internal password policies. Nuance recommends the use of strong/complex passwords consistent with the customer's password management policies.
- Nuance recommends that any Passwords created during ***PowerScribe 360 Reporting*** installation and configuration only be communicated over secure encrypted channels and/or stored in secure encrypted locations.
- Nuance recommends that customers protect ***PowerScribe 360 Reporting*** from viruses, malware, data loss, etc. consistent with their internal policies. To prevent performance degradation Nuance recommends excluding ***PowerScribe 360 Reporting*** processes from antivirus (AV), data loss prevention (DLP), or similar applications to prevent interference with application operations resulting in latency and or file manipulation. Process exclusion will protect application

performance while allowing AV, DLP, etc. to monitor file operations initiated by other processes. Specific locations and file types are available for AV applications that do not allow process exclusion, see Article 6870: *Files and Folders Acted Upon by the PS360 Client and Servers* for details.

- Nuance does not recommend exposing network services to untrusted networks unless otherwise advised by Nuance documentation or Support.

Notations

This section defines notations that may appear throughout the document.

Best Practice	This **Best Practice** icon indicates the recommended Nuance procedure to follow when installing or configuring the Nuance PowerScribe 360 application. For example: • PowerScribe 360 Reporting supports Lightweight Directory Access Protocol (LDAP). Nuance recommends the use of LDAP for end-user PS360 access. • During the PowerScribe 360 Reporting installation process several system level users and passwords need to be created. The Customer's site administer should provide system level passwords consistent with the customer's internal password policies. Passwords should only be communicated over secure encrypted channels and/or stored in secure encrypted locations. • Microsoft General Security Advice and Best Practices. • Client workstations rebooting recommendations. • Nuance Anti-Virus recommendations. • Nuance recommends the use of LDAP for end-user PS360 access.
IMPORTANT	The **IMPORTANT** icon indicates to the reader's attention to important information you don't want them to miss.
	The **NOTE** icon provides auxiliary information or further explanation to the adjacent paragraph(s).
	This **STOP** icon is an indication that a necessary requirement is to be met before you proceed to the next step.

Introduction

This manual provides instruction and setup information for System Administrator's to install Microsoft SQL 2012 for the Diagnostics PowerScribe 360 Reporting solution.

Microsoft SQL Server 2012

IMPORTANT

SQL database software media and licensing are no longer included in the PowerScribe 360 Reporting360 Reporting software purchase. Customers who wish Nuance to supply SQL must purchase our ISV SQL as a separate line item. If the customer opts to use their own Volume License Agreement (VLA) Enterprise or Standard Edition SQL server, they must provide a copy of their media, or a path to their Enterprise Edition SQL server, and a valid license key. PowerScribe 360 Reporting will function identically with Nuance or customer supplied SQL. This applies to SQL Standard and Enterprise Editions only.

Microsoft SQL Server 2012 Installation

1. Log on to Windows as an Administrator or as a domain user who has local administrative privileges.
2. Using Windows Explorer, find and note which of the non-operating system hard drives has the most unused free space.
3. Insert the Microsoft SQL Server 2012 disk.

NOTE

If the installation program does not execute automatically, locate and double-click ***setup.exe*** *from the Microsoft SQL Server 2012 disk.*

The SQL Server Installation Center dialog displays.

4. From the SQL Server Installation Center dialog, click **Installation**.

5. Click the **New Installation** or **Add features to an existing installation** option to run SQL Server Installation.

   The Setup Support Rules dialog displays.

6. Click **OK**.

   The Product Key dialog displays.

   The key should automatically display.

NOTE

If the client is supplying an SQL Key, enter the client SQL key.

7. Click **Next**.

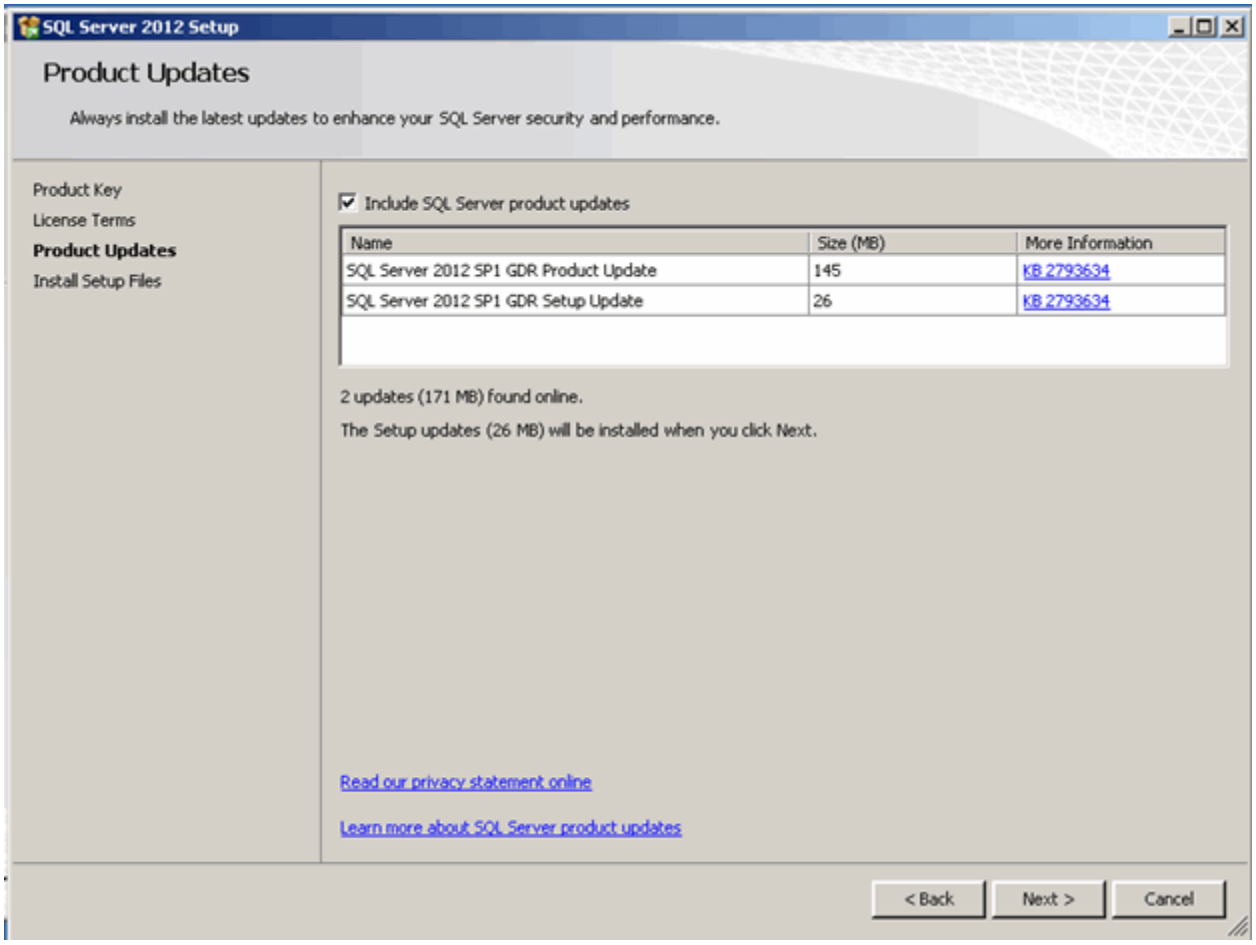
   The End User License Agreement displays.

8. Check **I accept the licensing terms**, and click **Next**.

   The Product Updates dialog displays.

NOTE

The listed updates may be different for your installation. These are just an example.



IMPORTANT

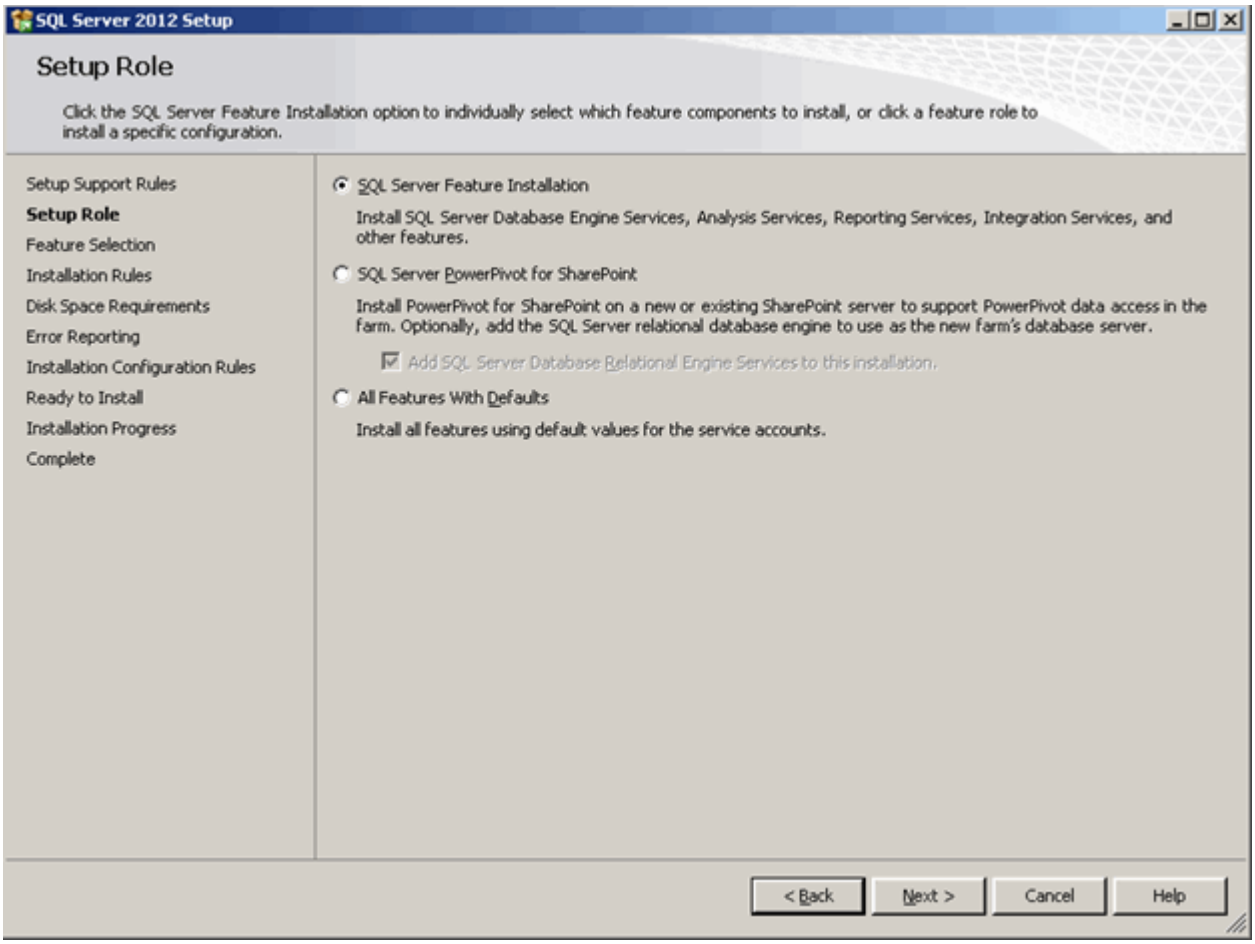
*If you are installing SQL on a server without internet access, do not check **Include SQL Server Product updates** (default setting is checked).*

9. Click **Next**.

   The Setup Support Rules dialog displays.

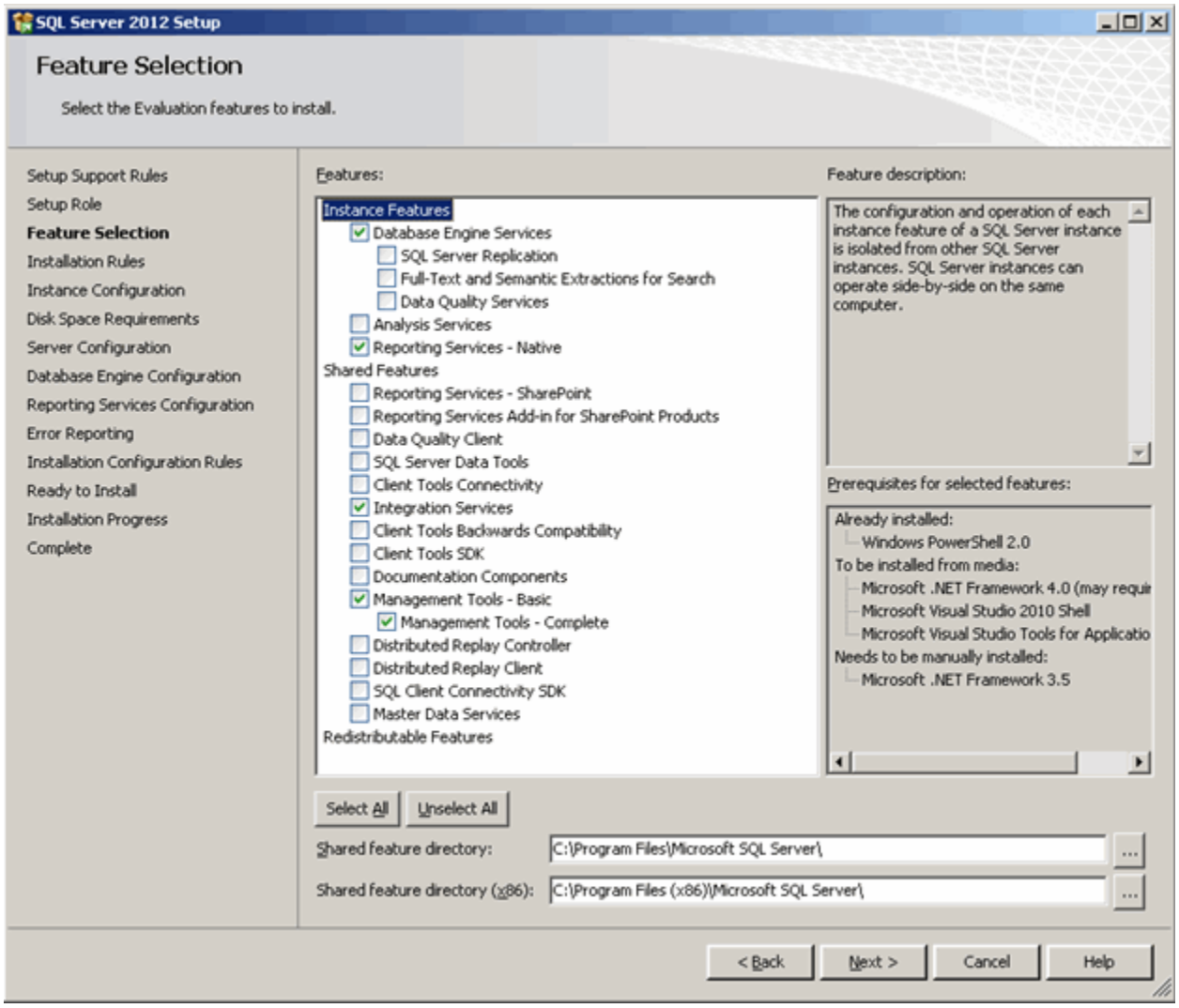
10. Click **Next**.

The Setup Role dialog displays.



11. Select **SQL Server Feature Installation**, and click **Next**.

The Feature Selection dialog displays.

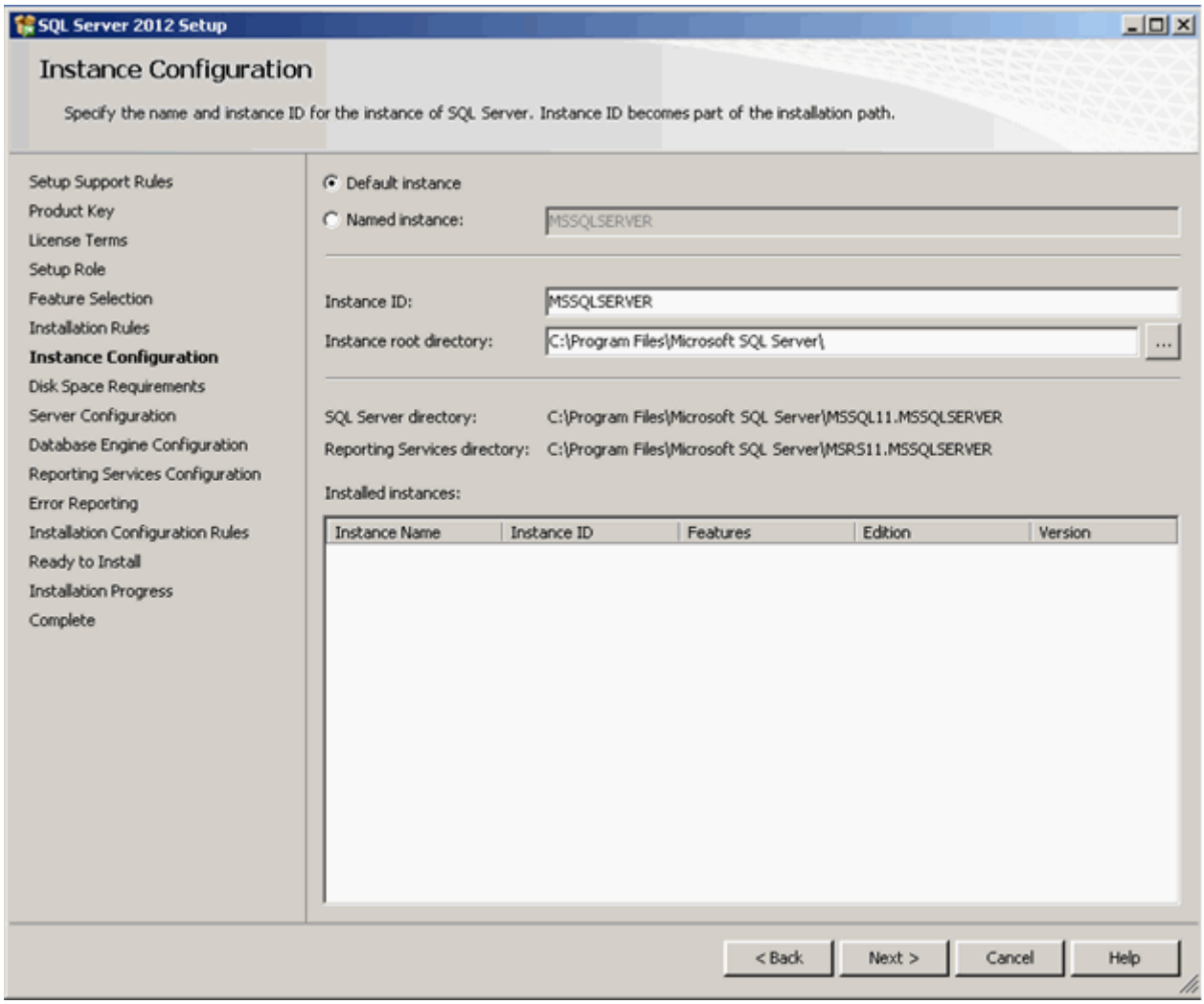


12. From the Features Selection dialog, check only the features selected above, then click **Next**.

    The Installation Rules dialog displays.

13. Click **Next**.

The Instance Configuration dialog displays.



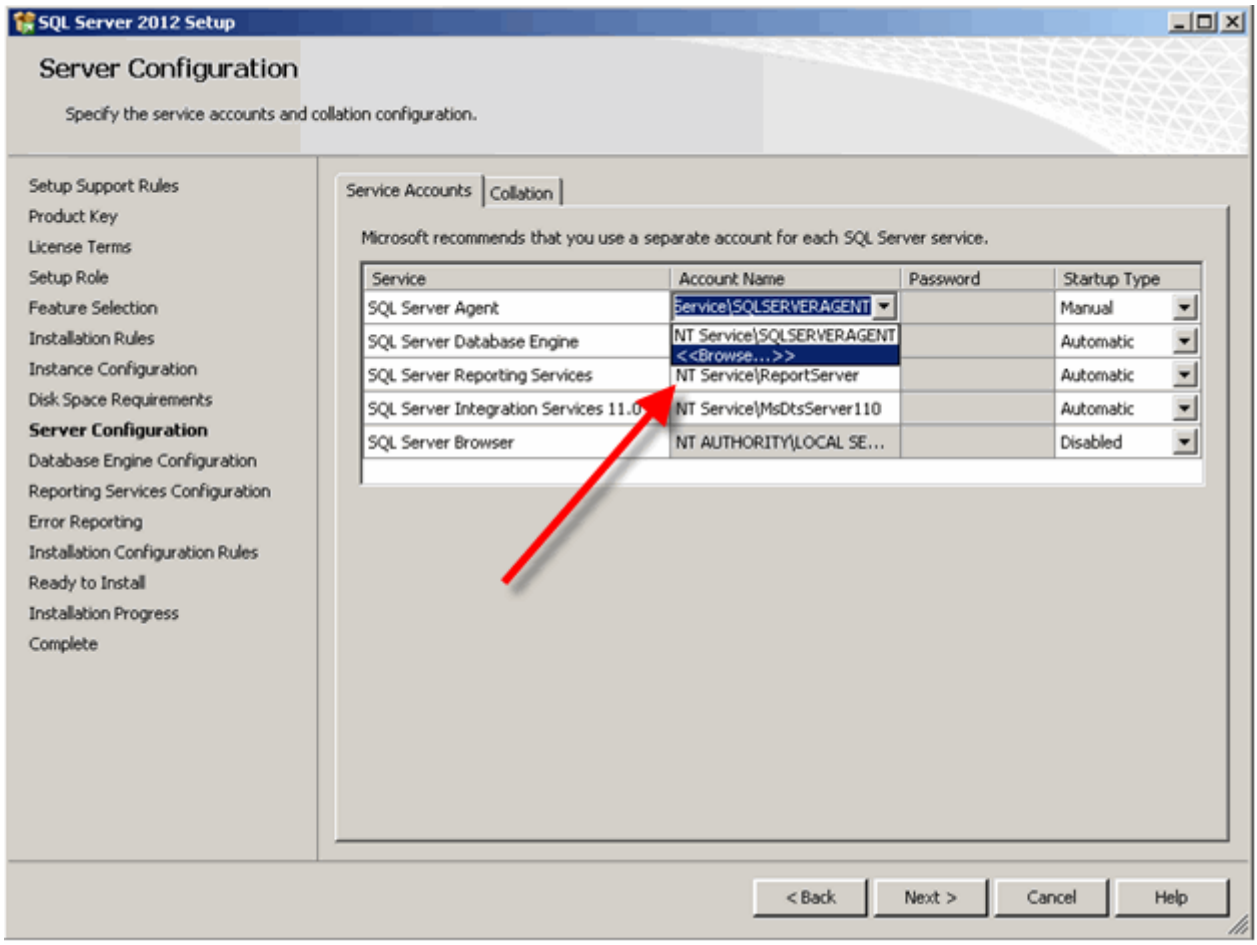
14. Leave the Instance Configuration with the Default instance option, and click **Next**.

*If the site has specific requirements to use a Named instance, then select the Named instance option, enter the name of the instance, and then click **Next**.*

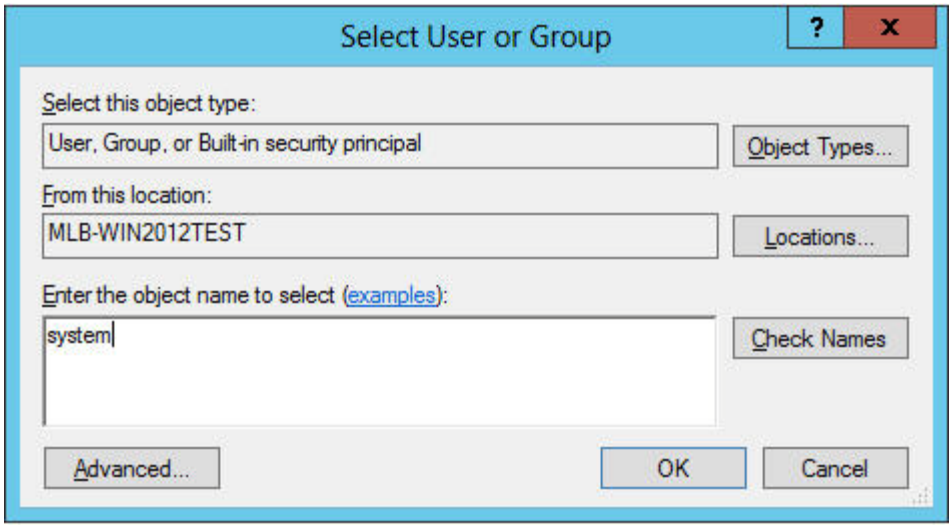
The Disk Space Requirements dialog displays.

15. Click **Next**.

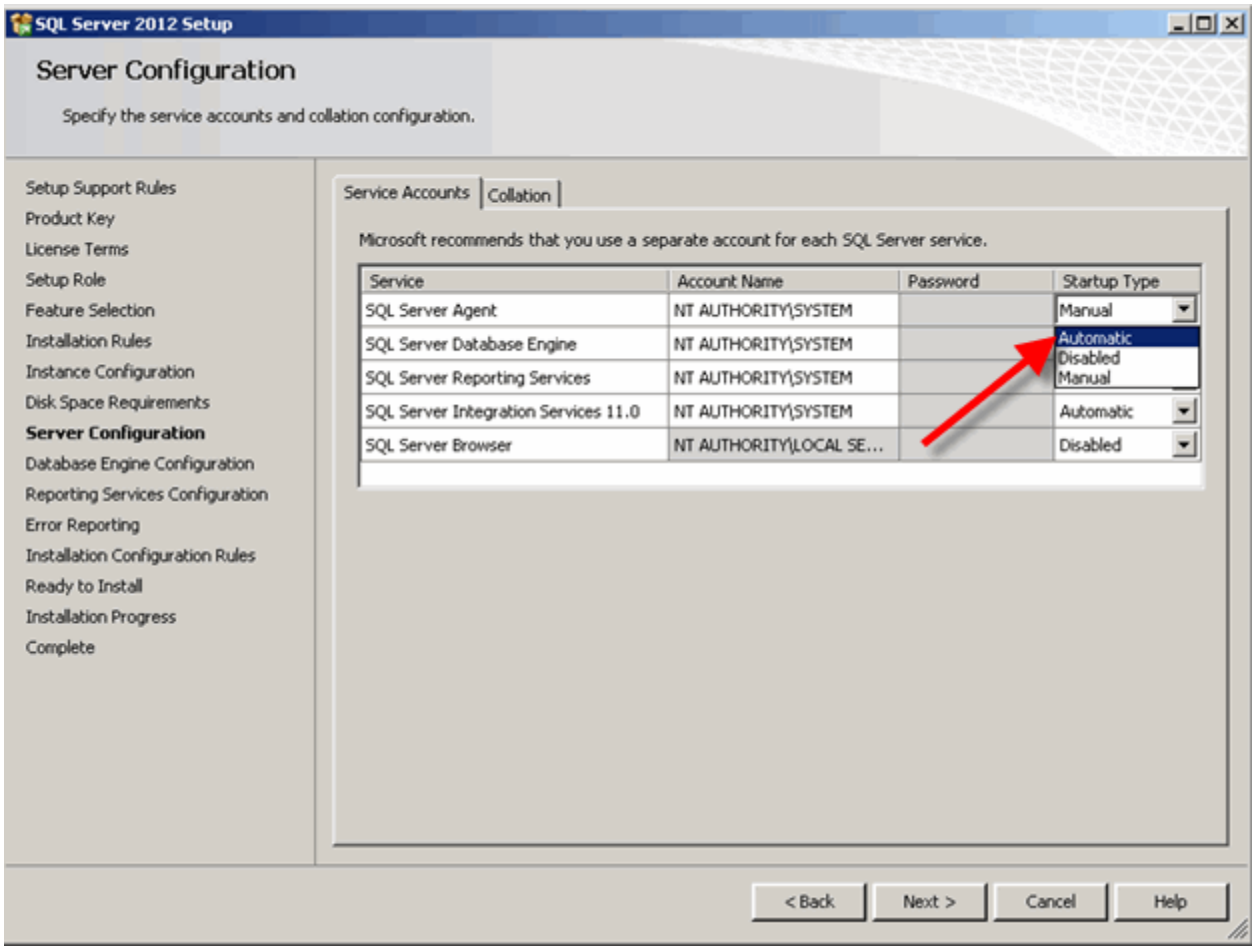
The Server Configuration dialog displays.



16. From the Service Accounts tab for each Service listed, click **Browse**.
17. From the Select User or Group dialog, type **system** in the Enter the object name to select field to set the Account Name to **NT AUTHORITY\SYSTEM**, and click **OK**.



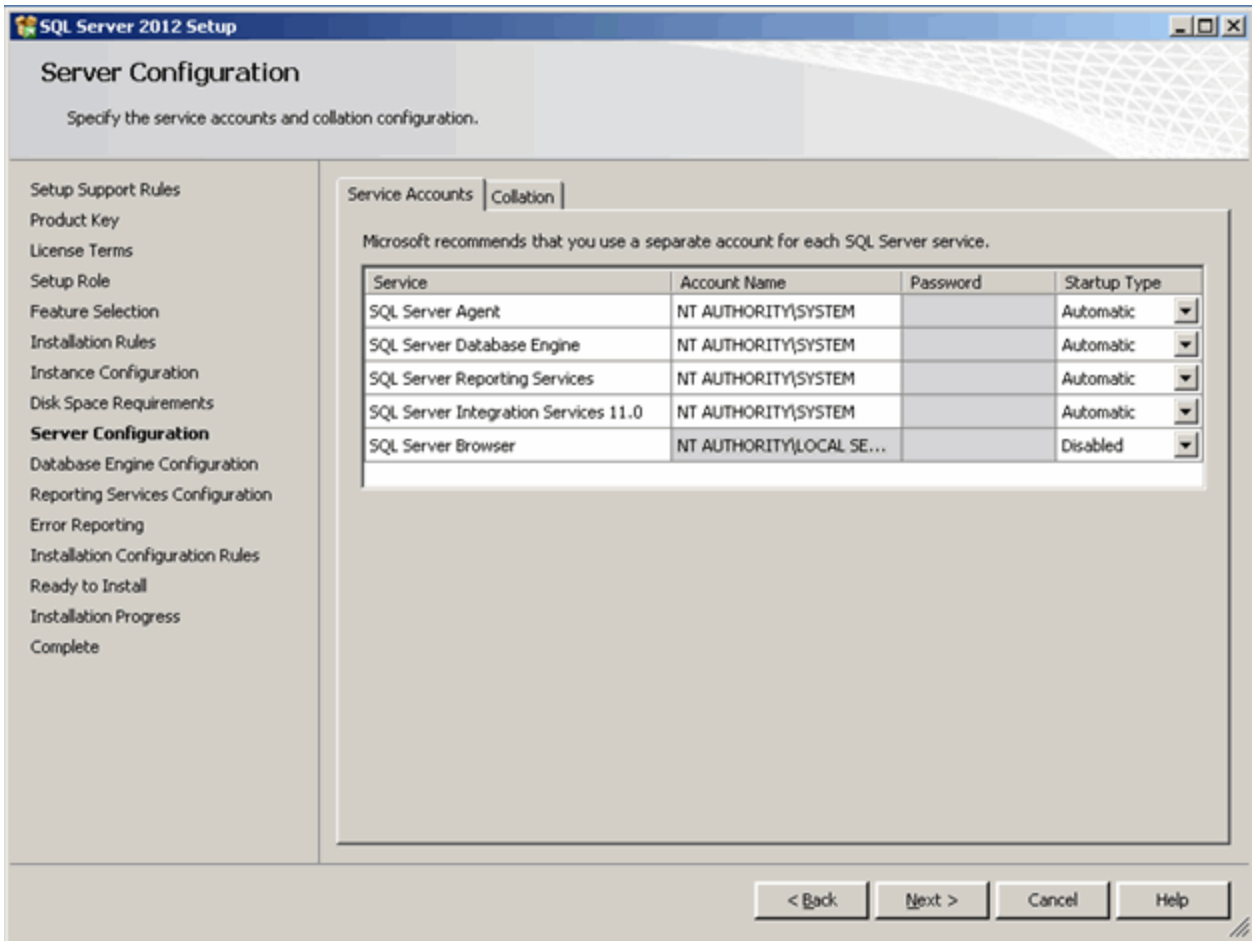
The Server Configuration dialog displays again.



18. From the **Startup Type** list, select **Automatic** to set the SQL Server Agent, and click **Next**.

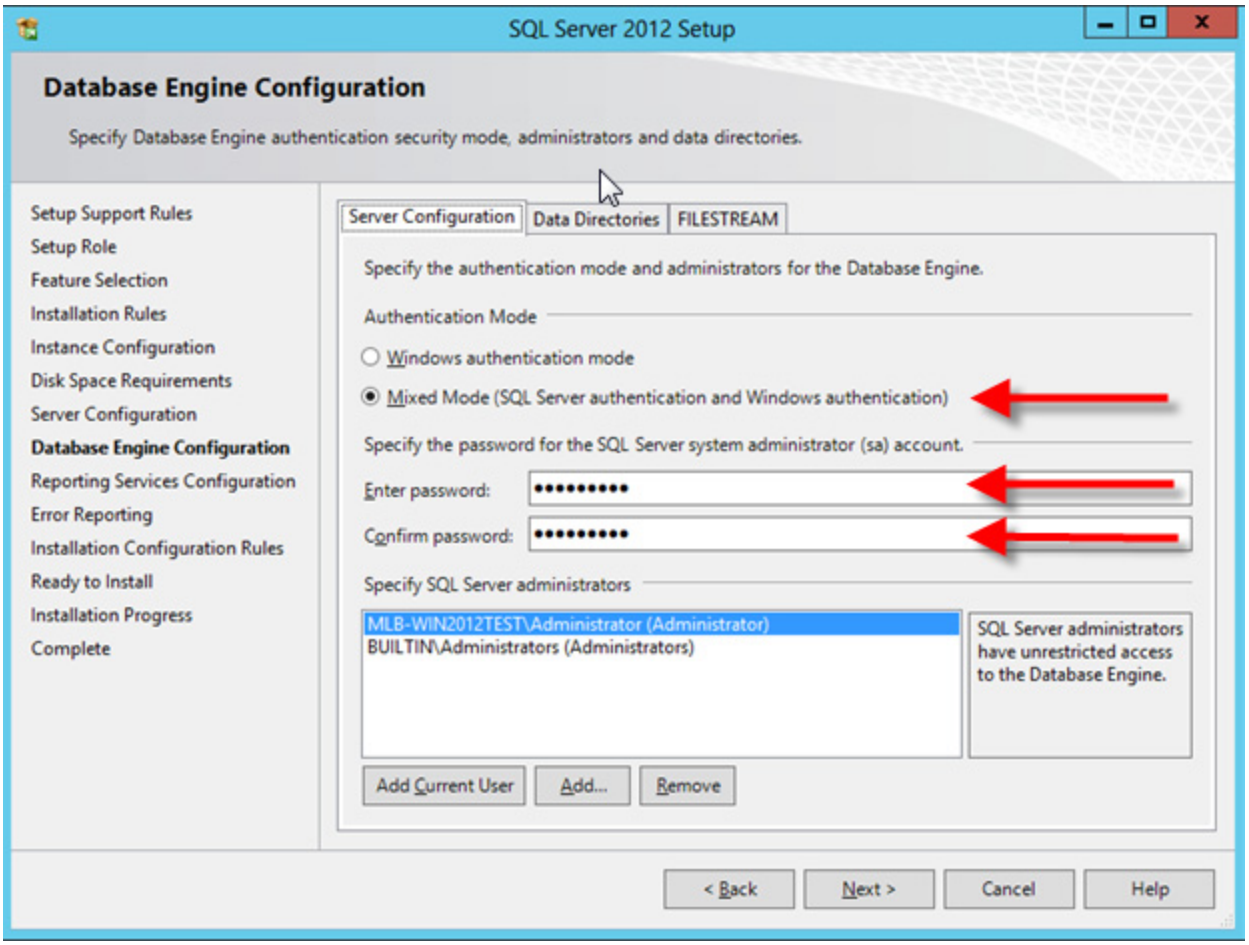
*If ALL the Services Startup Types are **not** set to Automatic by default, change the Startup Types to Automatic.*

The Server Configuration dialog should display as follows:



19. Click **Next**.

The Database Engine Configuration dialog displays.



20. On the Server Configuration tab, set the following Authentication Mode options:

    a. Select **Mixed Mode (SQL Server authentication and Windows authentication)**.

Best Practice

- The ***"password name"*** password entered should be provided by the customer's site administrator consistent with the customer's internal password policies. Nuance recommends the use of strong/complex passwords.
- Passwords should only be communicated over secure encrypted channels and/or stored in secure encrypted locations.

    b. Enter the sa password for the Built-in SQL Server system administrator account.

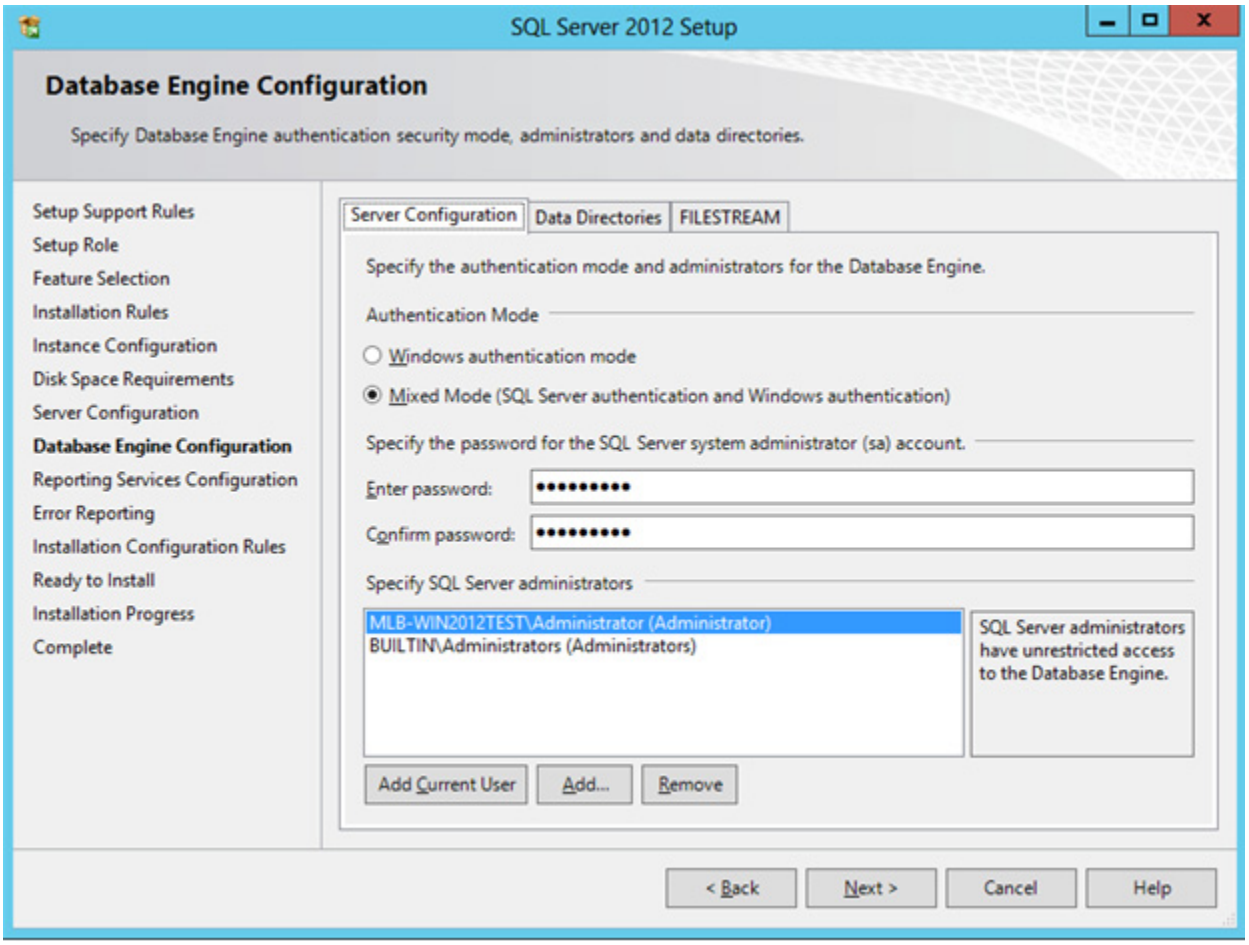
    c. Confirm the sa password.

IMPORTANT

The built-in sa account and password must be used after initial installation anytime you update the software. ***This account must***

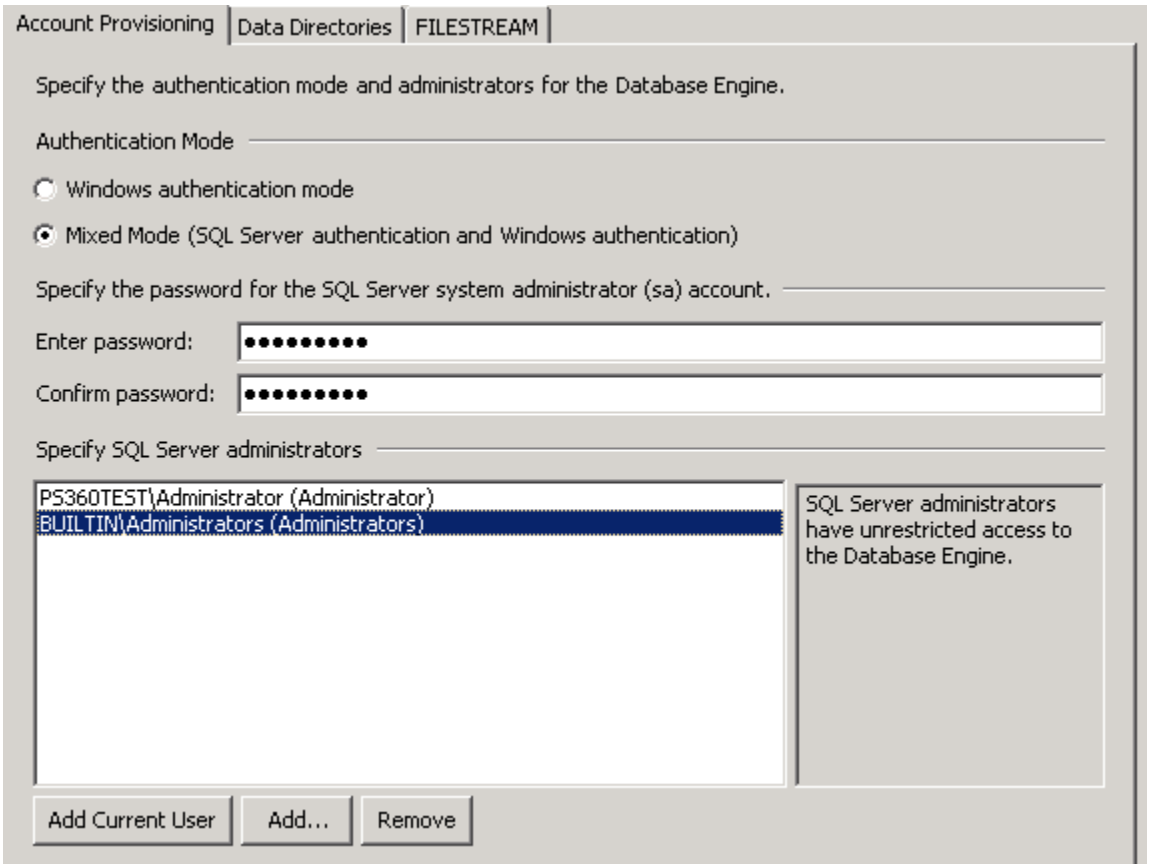
NEVER be deleted! *The SA account will be required when installing or upgrading the PowerScribe 360 database.*

You must now add an SQL Server administrator on the Account Provisioning tab.



21. Click **Add Current User**.

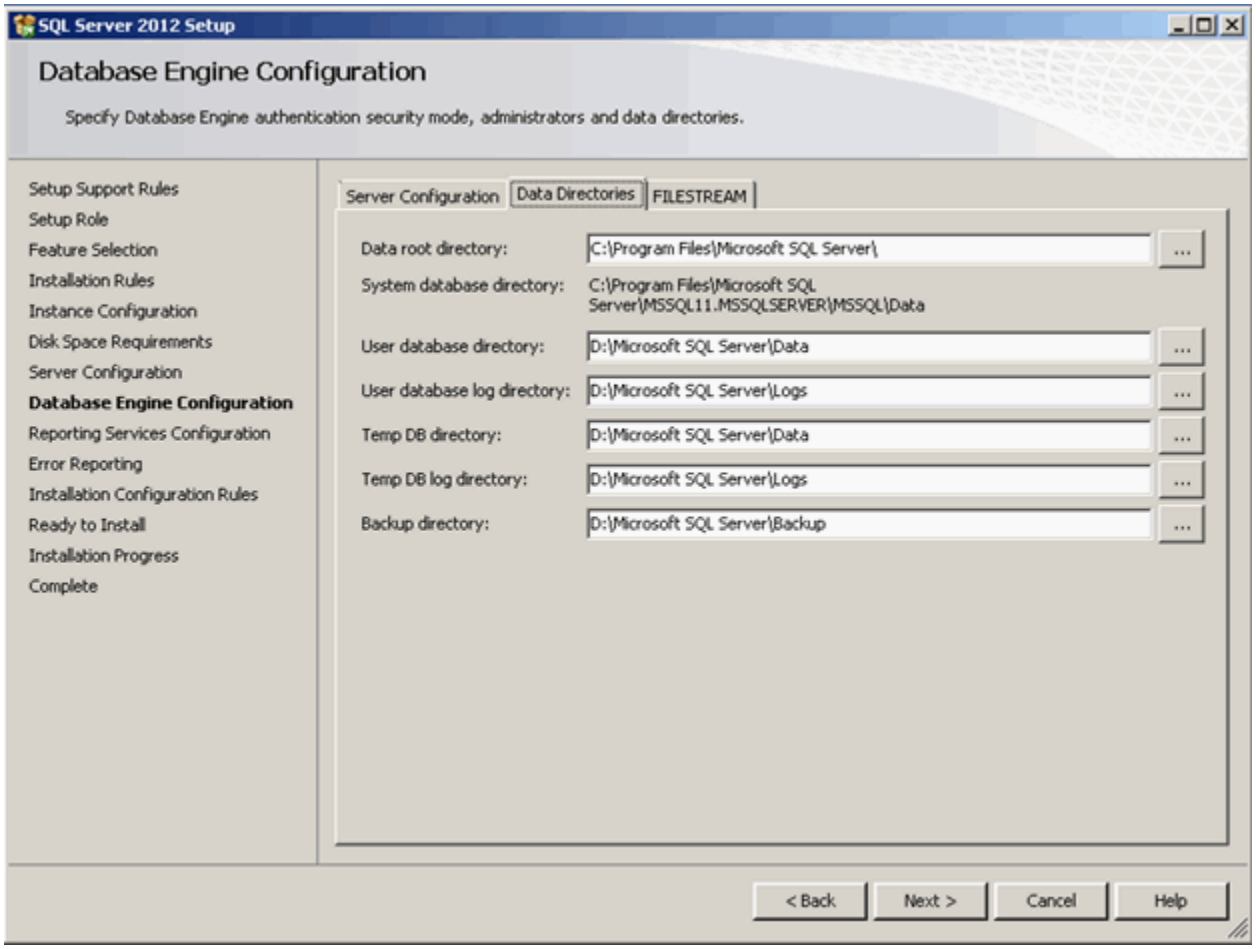
22. Click **Add**, and add the local Administrators Group.



23. Click the **Data Directories** tab.
24. Set the following recommended default data directory locations:
    a. Set the default location for the data files and transaction log files so that any database that is created within SQL inherits the defaults.
    b. Change the drive letter from **D:** to an appropriate letter for your installation.

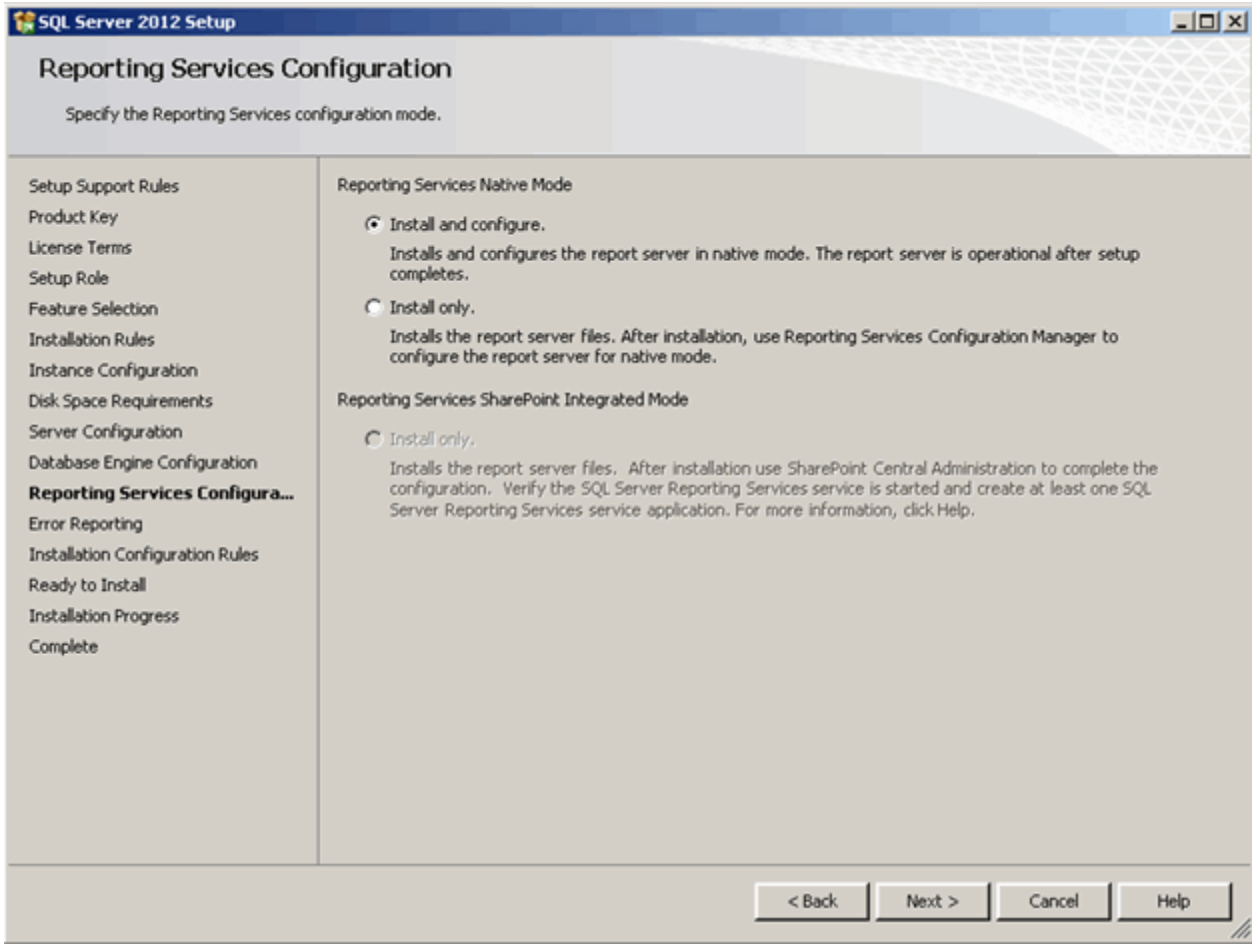
These paths will also be used to setup the Database Maintenance Plan.

The Comm4 database will now be created in the D:\Nuance\Database folder by the Database Installer program.



25. Click **Next**.

The Reporting Services Configuration dialog displays.



26. Click **Next**.

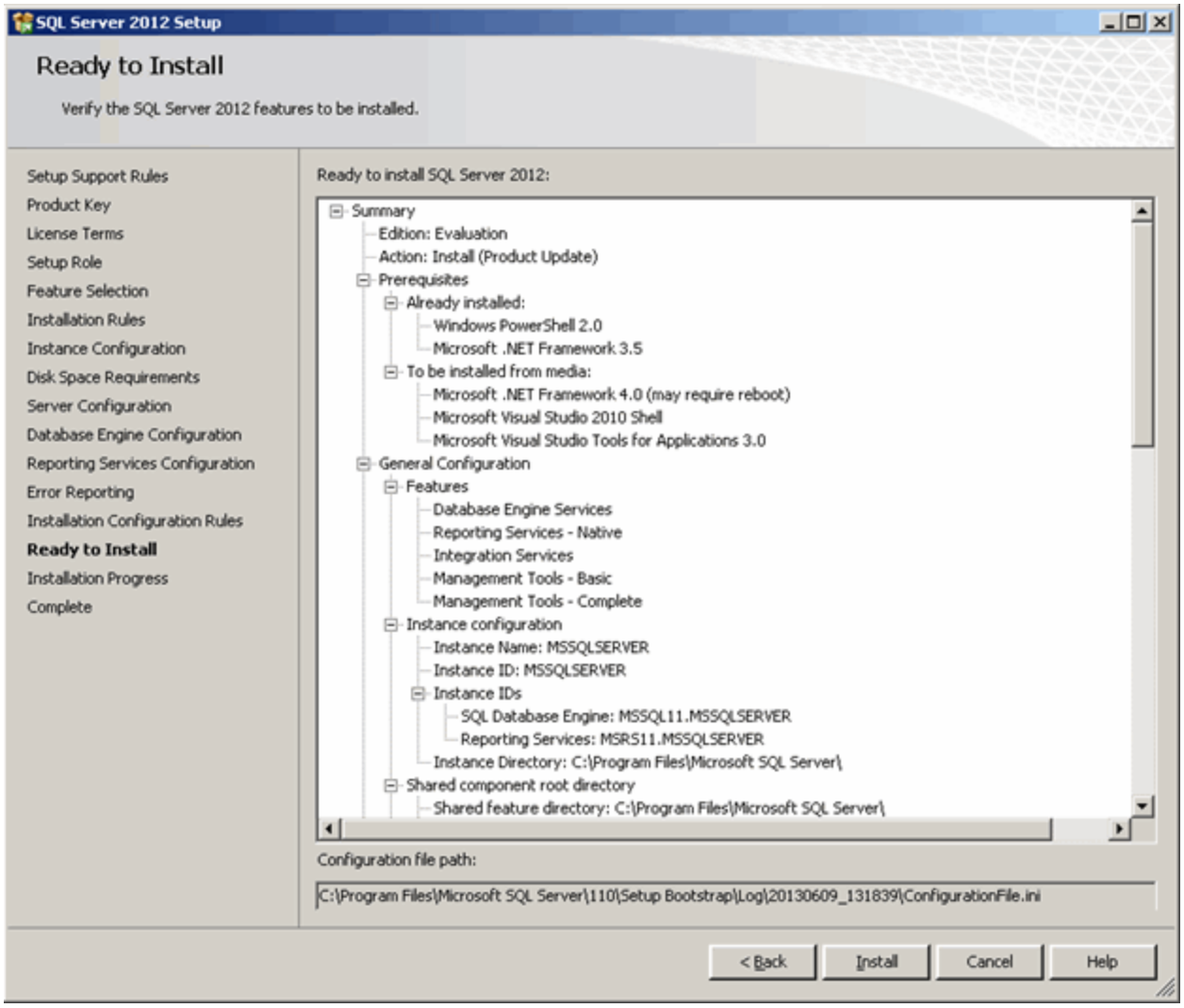
    The Error Reporting dialog displays.

27. Click **Next**.

    The Installation Configuration Rules dialog displays.

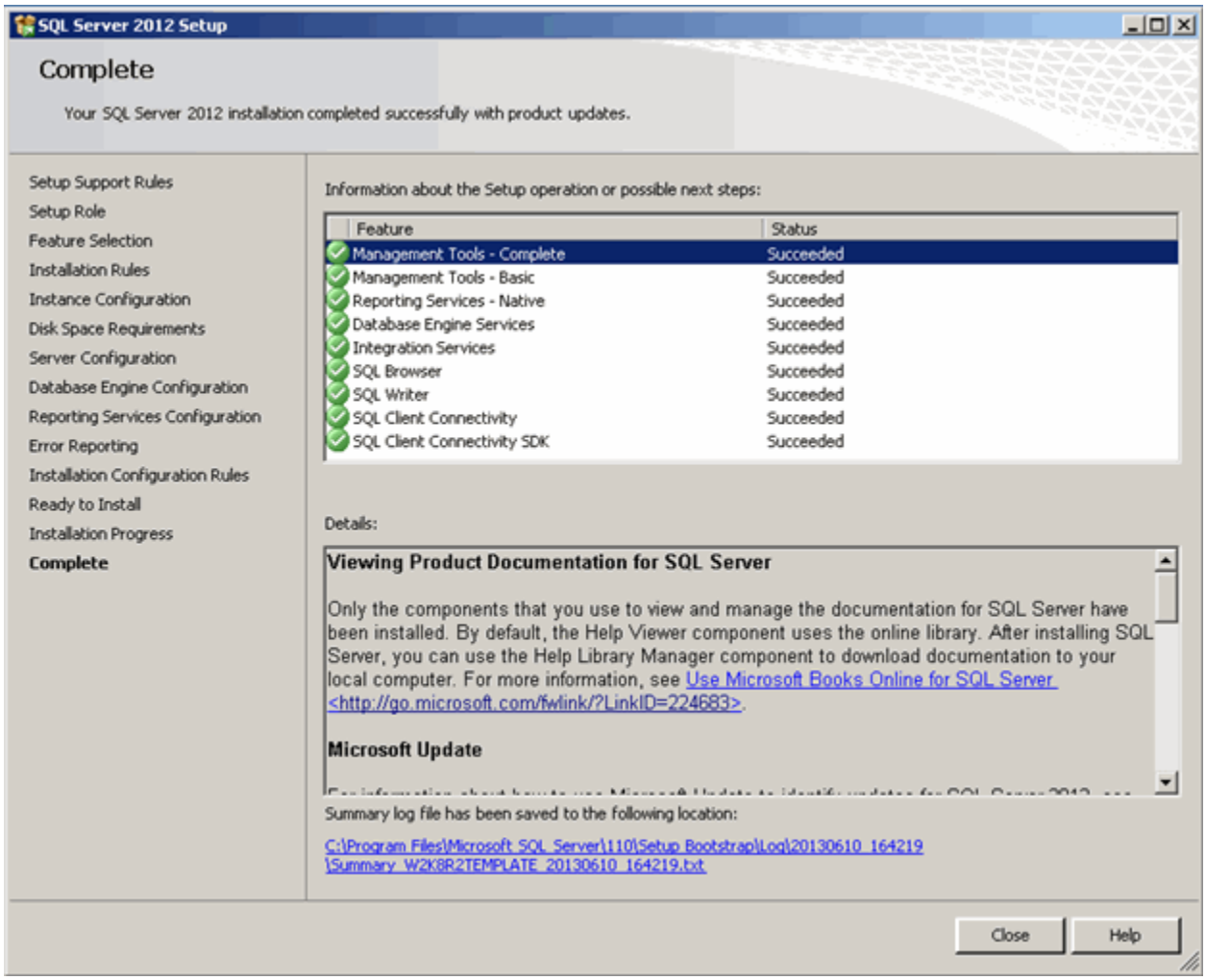
28. Click **Next**.

The Ready to Install dialog displays.



29. Verify the information, then click **Install**.

The Complete dialog displays.



30. Click **Close**.

Set Max Degree of Parallelism to "1"

To confirm the **Parallelism** setting for an instance of SQL Server, follow these steps:

1. Click **Start**, point to **Programs**, point to **Microsoft SQL Server 200*x***, and then click **SQL Server Management Studio**.
2. Connect to the instance of SQL Server that you want.
3. Right-click the target server, and then click **Properties**.
4. Click **Advanced**. Note the **Max Degree of Parallelism** setting in the right pane.
5. If it is not set to **"1"**. Change the setting.

You can also view the **Parallelism** setting for an instance of SQL Server by executing the following Transact-SQL statement against the instance of SQL Server.

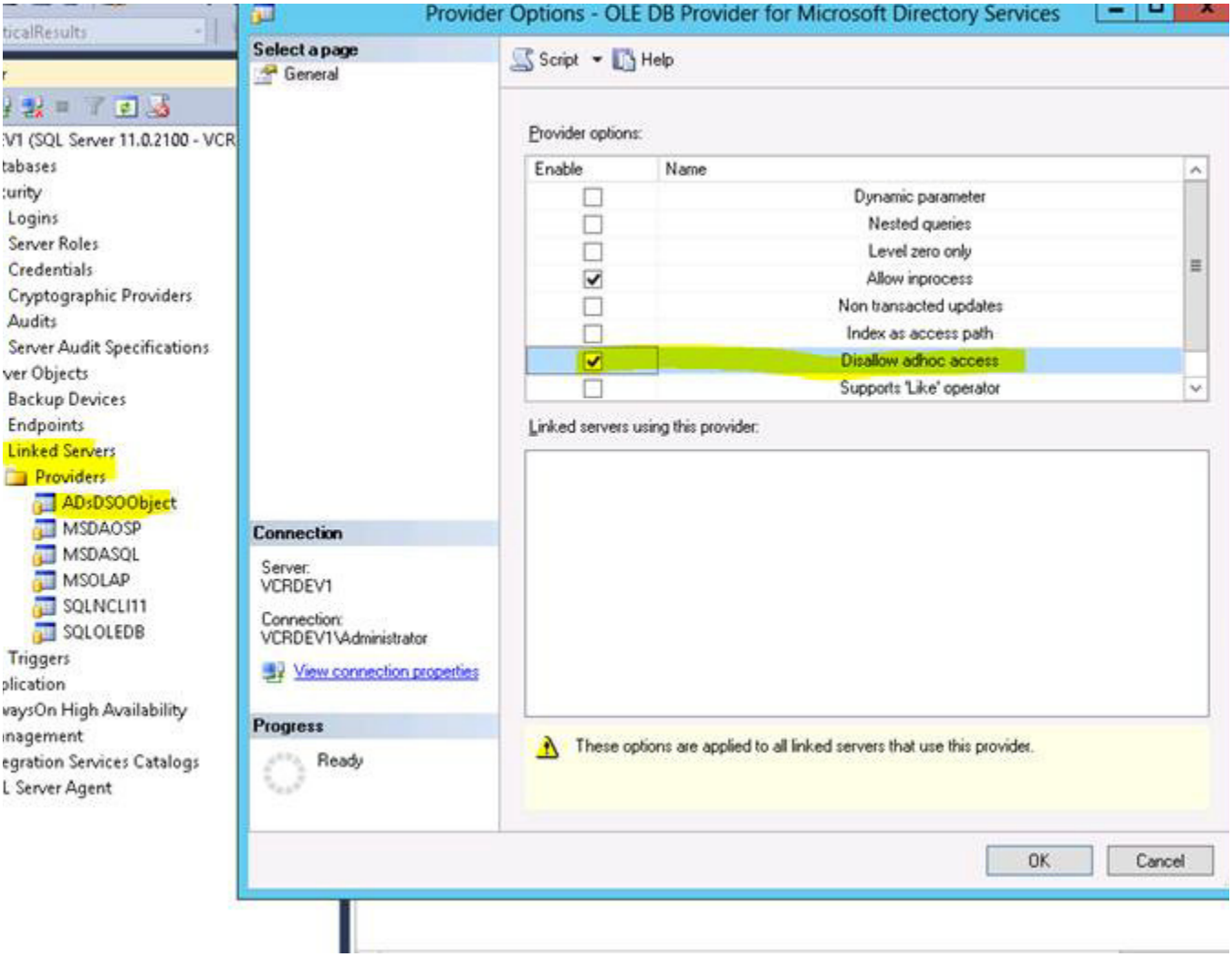
```
USE master
EXEC sp_configure 'max degree of parallelism'
```

If the value is not set to 1, execute the following Transact-SQL statement against the instance of SQL Server:

```
USE master
EXEC sp_configure 'max degree of parallelism', '1'
reconfigure with override
```

SQL Server Setup Disallow Adhoc Access

1. From Server Objects, select, LinkedServers, and then Providers.
2. Right-click ADsDSOObject, select **Disallow adhoc access**.



Install the Latest Service Pack

After installing Microsoft SQL Server 2012, install the latest Nuance-supported Service Pack and any supported Hotfix(es).

Manual Revision History

Note: In this table the most recent changes are first by date.

Date	Sec	Page	Change (Paragraph, Sentence, Figure, Table, etc.)	Initials
09/28/18	All	All	Added Best Practices	BW