SQL Server 2014 Developer Installation

Introduction

SQL Server Developer is the developer edition of SQL Server that includes SQL Server Analysis Services (SSAS) and SQL Server Integration Services (SSIS). It used to cost money (only around $50 to $100), but now it is now free. However, in order to receive it for free you have to join the Visual Studio Dev Essentials network – which is also free to join.

Special Notes About SQL Server Data Tools

Once you've installed SQL Server Developer, you'll need SQL Server Data Tools (which was formerly called Business Intelligences Development Studio or BIDS). SQL Server Data Tools (SSDT) is what you'll use to create SQL Server Analysis Services (SSAS) databases, SQL Server Integration Services (SSIS) packages, and SQL Server Report Services (SSRS) reports. You can also use it to create normal SQL Server Databases (SSDE) as well.

SSDT is basically a Visual Studio Add-in tool that you use in Visual Studio to create the above through Visual Studio.

Most of the above (e.g. SSAS, SSIS, SSDE) can also be created using the SQL Server Management Studio (SSMS) application. However, typically you only use that to create normal databases and then you use SSDT to create SSAS databases and SSIS packages (again you could create those in SSMS, but you usually don't).

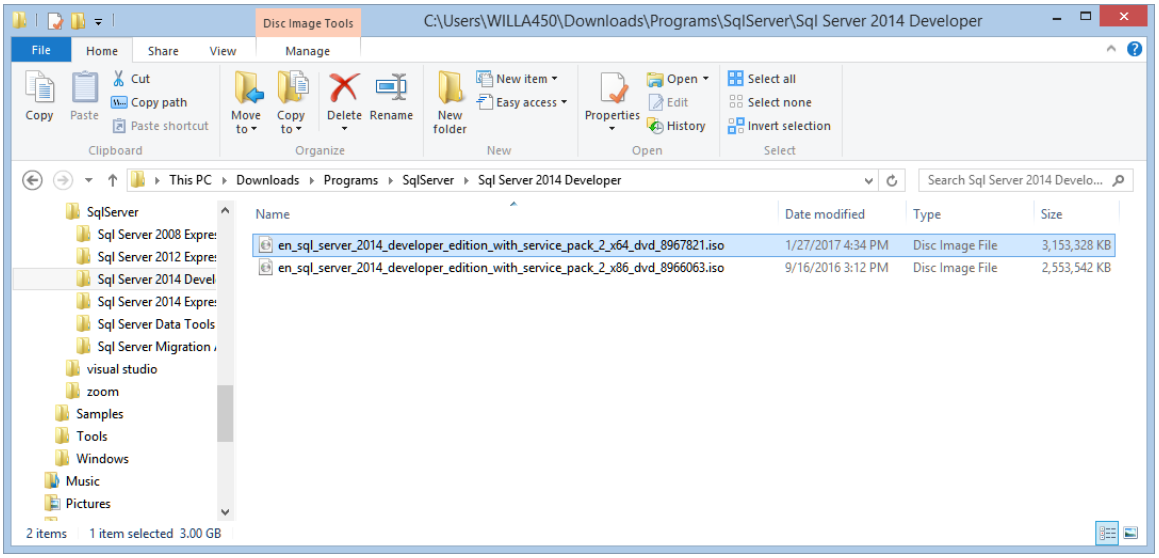
To get the relevant version, you can actually get it from the installation Planning page for SQL Server (screen shot shown below). Or you can just Google it. Once you download and install it, it will add it to your current Visual Studio installation assuming you have one. Remember, it's an add-in to Visual Studio, so it's not a "separate" application. Clear as mud?

https://msdn.microsoft.com/en-us/library/mt204009.aspx

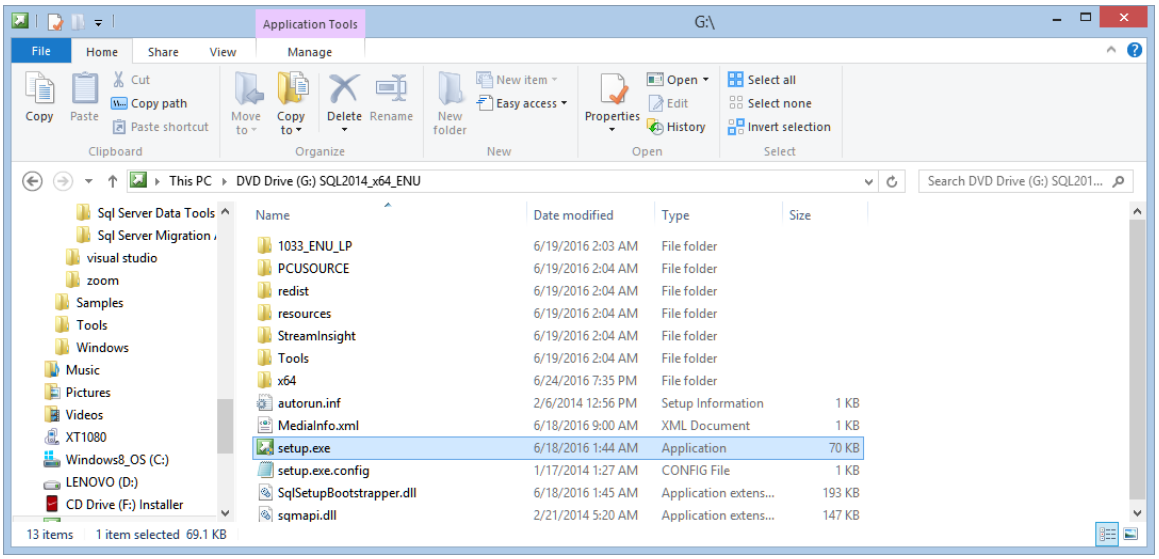
See separate instructions on how to Install SSDT

Detailed Instructions

1. Locate the download file and double-click on the "iso" file.



2. Locate and double-click the "setup.exe" file to launch the installation wizard.



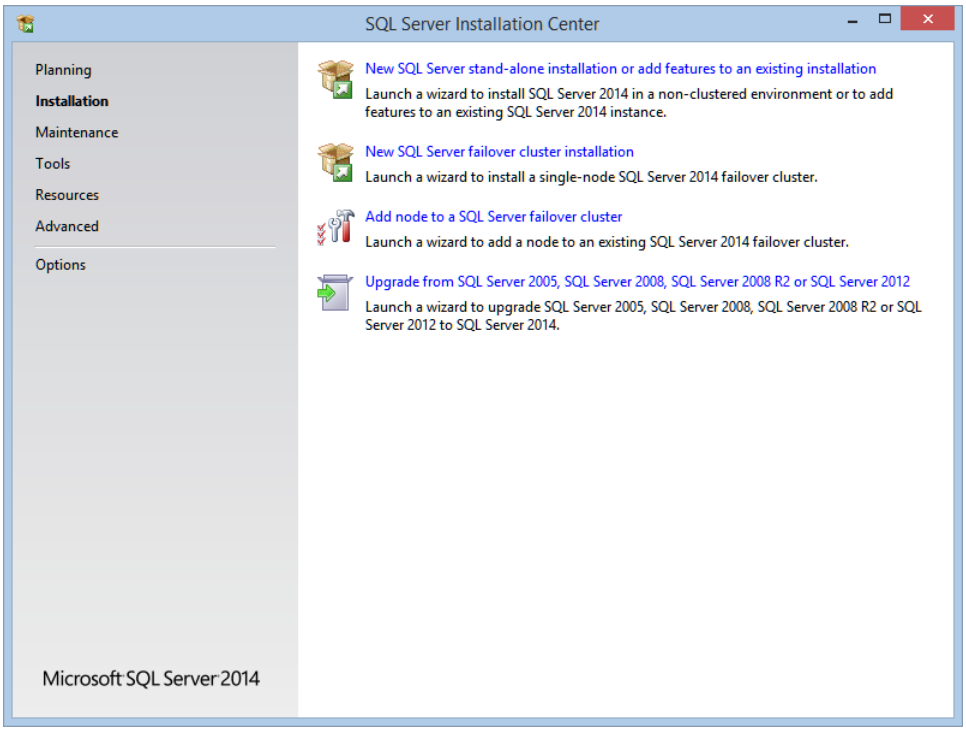
3. You may be asked to verify if you want to allow the setup program to make changes to your computer, click yes to continue.

4. The wizard will begin.

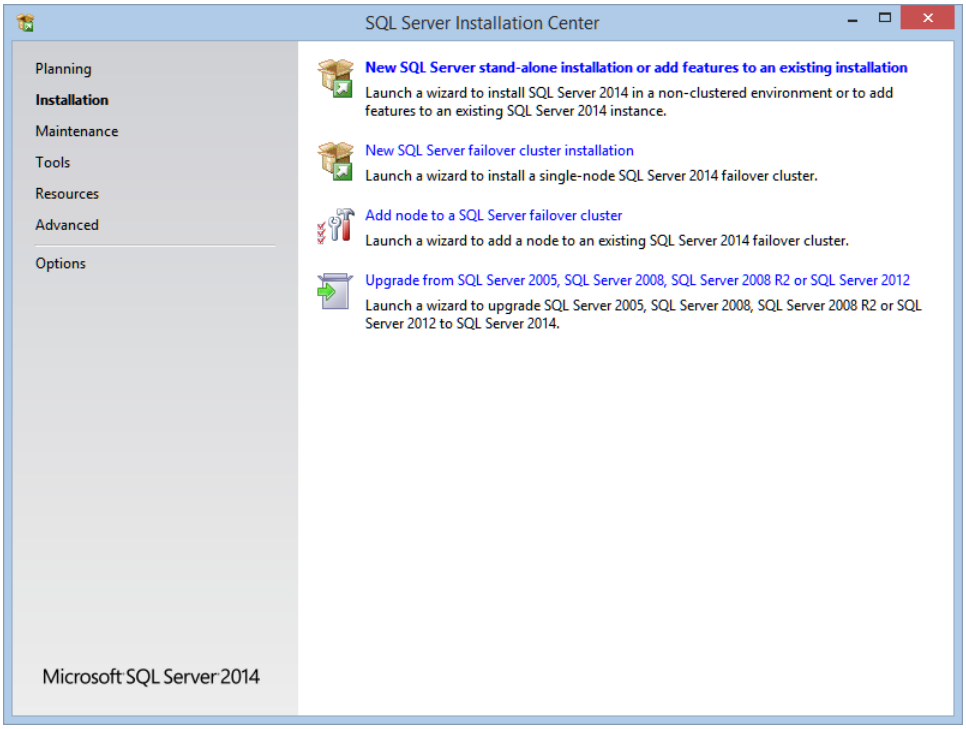
5. Under the “Planning” tab, read any topic you feel you need more information on. This step is optional



6. Select the ”Installation” page

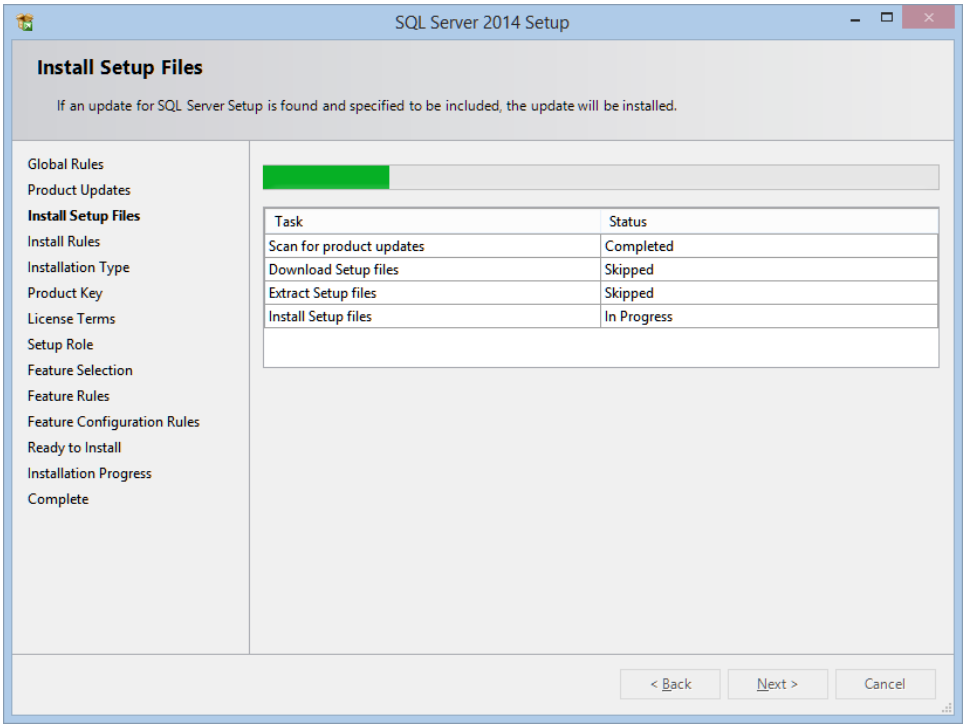


7. Select the "New SQL Server stand-alone installation or add features to an existing installation option"

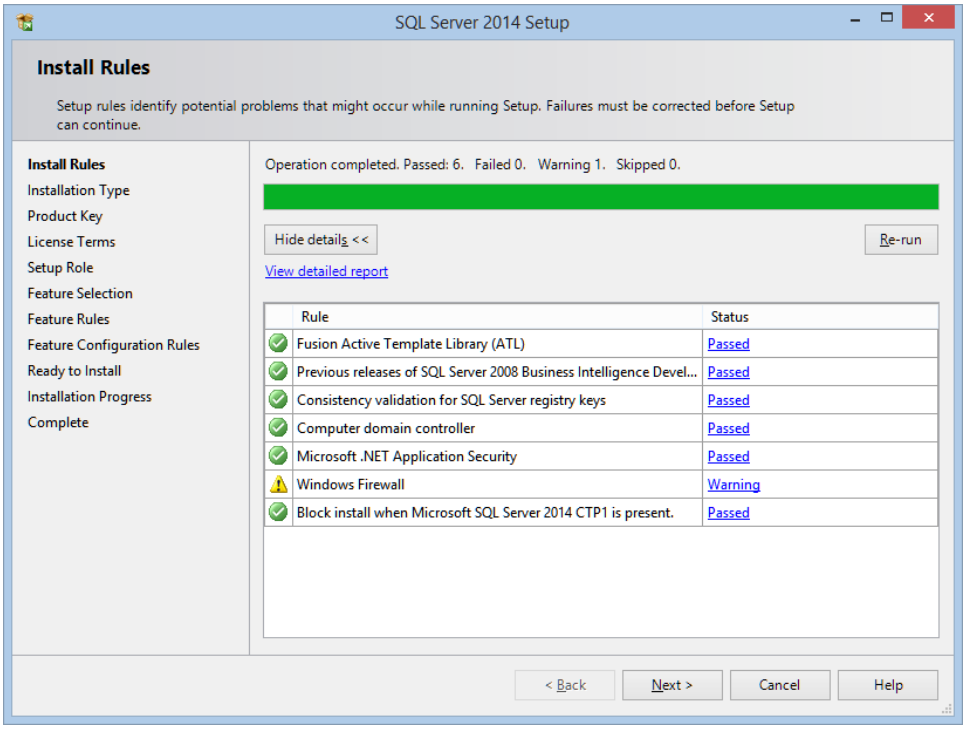


Special Note(s): Since you already have SQL Server 2014 Express installed, you select this option so you can add to an existing installation. If you were upgrading from SQL Server 2012 Express, you'd select the option "Upgrade from SQL Server....".

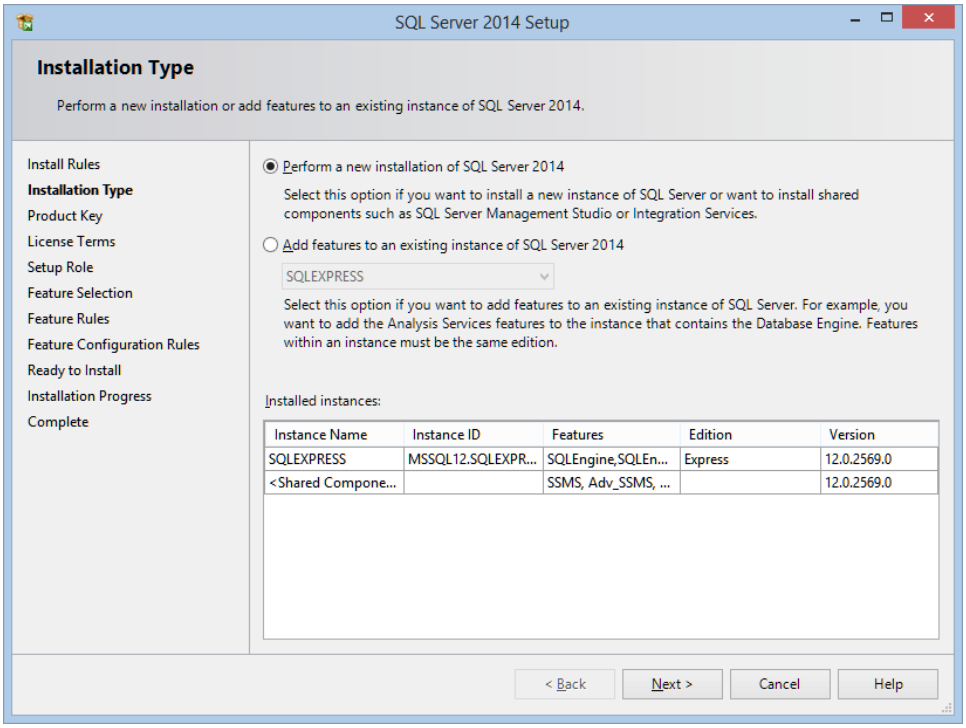
8. A new dialog box appears and the wizard will run a number of validations and checks before continuing.



9. Once successful, it will provide you message on the results. Validate all item are passed and check any failures or warnings. If everything is okay, click on the “Next” command button to continue.

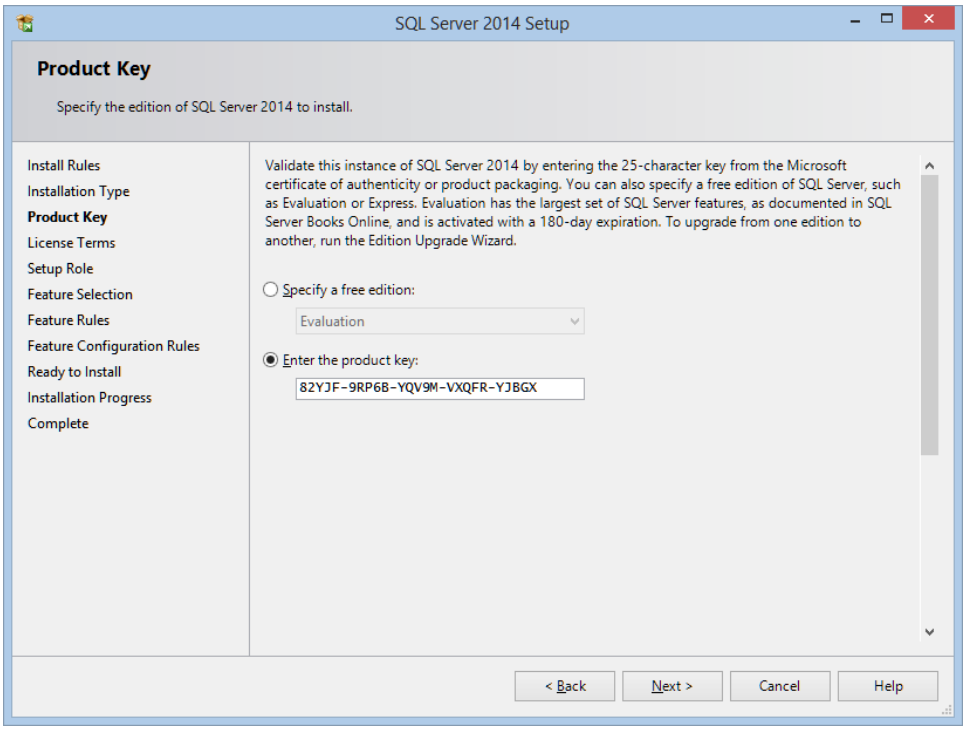


10. Select the “Perform a new installation of SQL Server 2014” and click on the “Next” command button to continue.



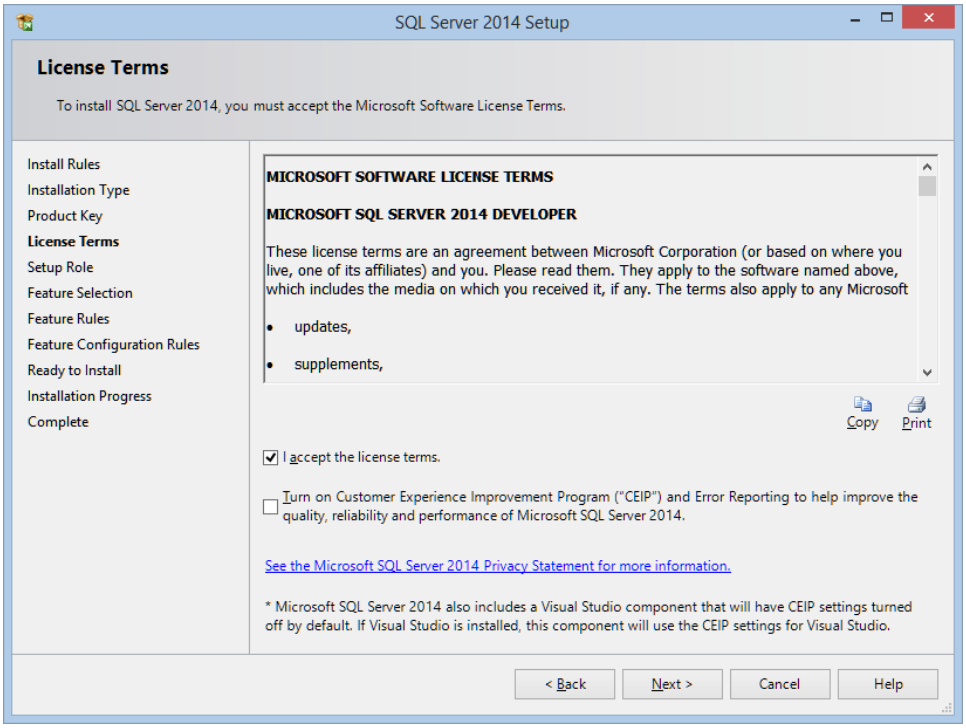
Special Note(s): Remember you are installing a different "Edition" of SQL Server. So you cannot add features to your existing "SQL Express" instance. This is a new edition, so you'll be adding a new instance.

11. Select the "Enter the product key option" and click the "Next" command button.

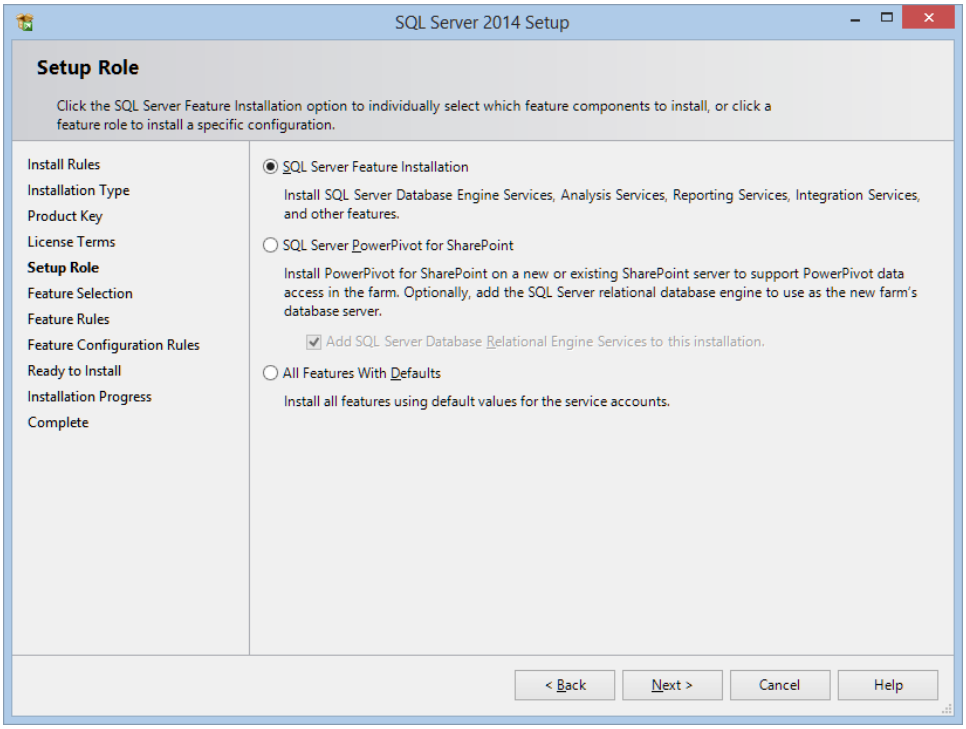


Special Note(s): The Development edition is now free, so the product key should be entered already.

12. Select the "I accept the license terms" checkbox and then click the "Next" command button to continue.

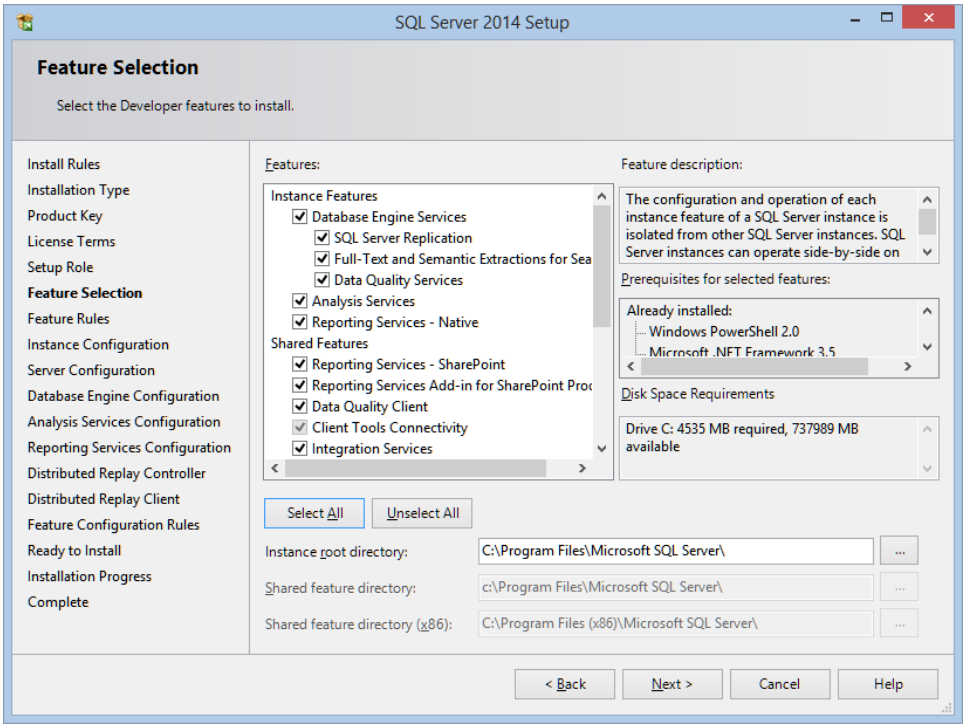


13. Select the "SQL Server Feature Installation" option and then click the "Next" command button.

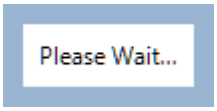


Special Note(s): I've selected not to add anything for SharePoint at this point. SharePoint isn't installed and I'm not ready for that yet. Plus, when I do SharePoint, I want to let SharePoint install all the components necessary.

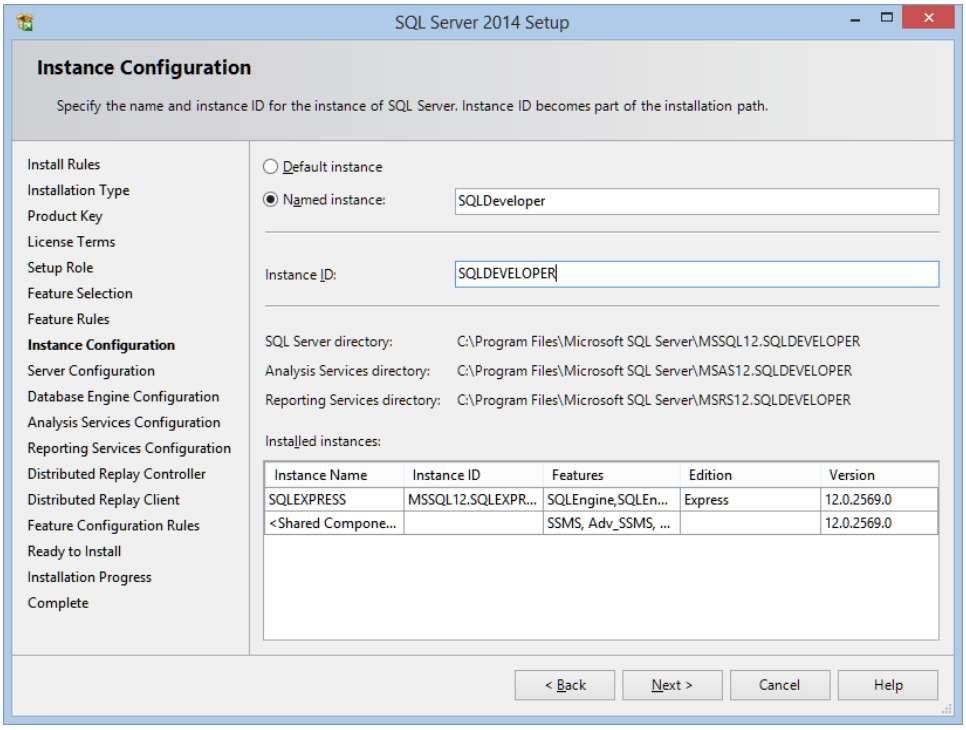
14. Click on the "Select All" command button to select all the features (or select the individual features you want added).



It does something....



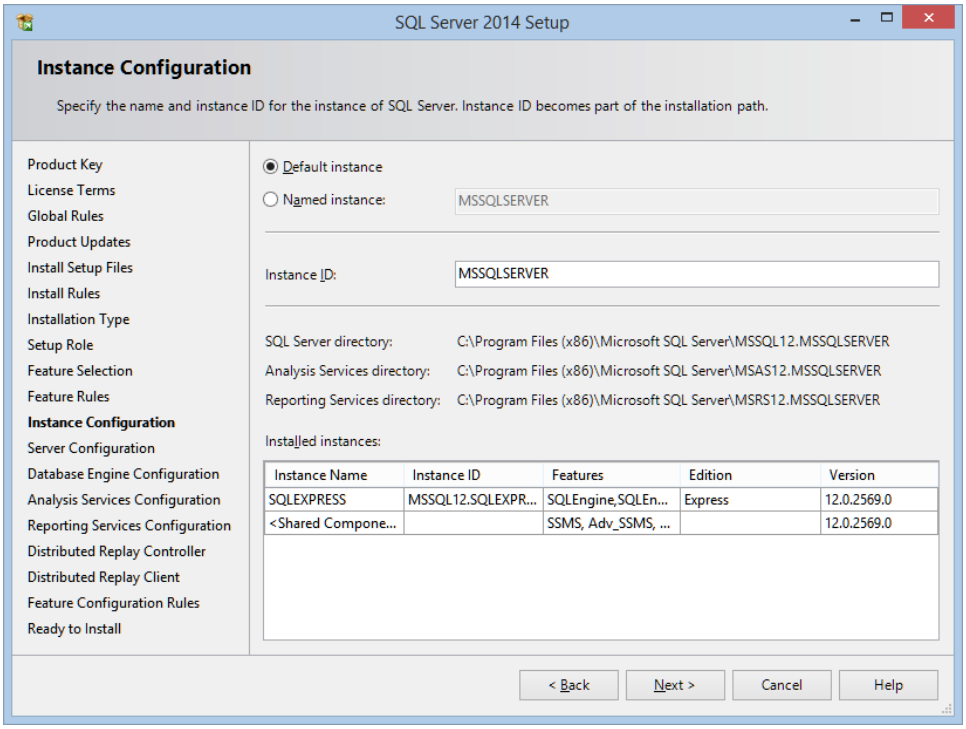
15. Enter the name of the instance of SQL Server you are installing.



Special Note(s): It automatically assumes you want the “Instance ID” to be the same as the instance name (but in all caps instead). However, note that the ID and the Name don’t need to be the same and you can change it if you want. I typically don’t like to do that, because it makes it easier to remember and work with when the names are the same. There is no advantage of either.. it’s just your preference.

Special Note(s): I typically like to name the instance after the edition I'm installing. In this case I'm installing the Developer edition so I've named the instance "SQLDeveloper". If you look at the screen shot closely, you'll notice that I've already installed the SQL Server Express edition which I've named "SQLExpress" which becomes the ID "SQLEXPRESS"

Special Note(s): Alternatively, you could allow the wizard to name the "Instance" of SQL Server. Select the "Default Instance" option to allow the installation wizard to use the default name for the instance.



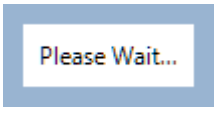
Special Note(s): When you first enter this page, it will default to the "Named Instance" option. All this does is allows you to come up with your own custom name. You could have just entered "MSSQLSERVER". However, I use the default because this is a development server.

Special Note(s): If you previously set up SQL server, you may already have an instance installed (see below). In that case you may need to choose a different instance name, or delete the instance (search internet how to do that).

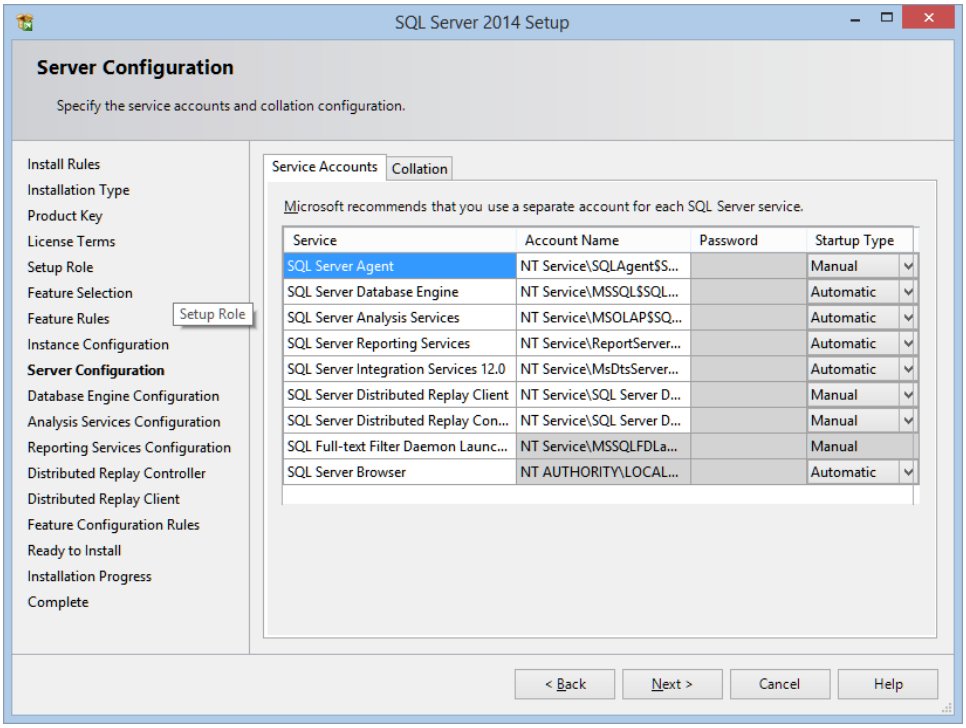
Special Note(s): If you previously set up SQL server, you may already have an instance installed (see below). In that case you may need to choose a different instance name, or delete the instance (search internet how to do that).

Special Note: You can install different copies of the product/software on one computer (without have to buy multiple software to put on different computers). That way you can have different instances for (e.g.) development, testing (sandbox), or production servers on the same physical computer instead of putting them on different computers (like I normally do).

It does something...



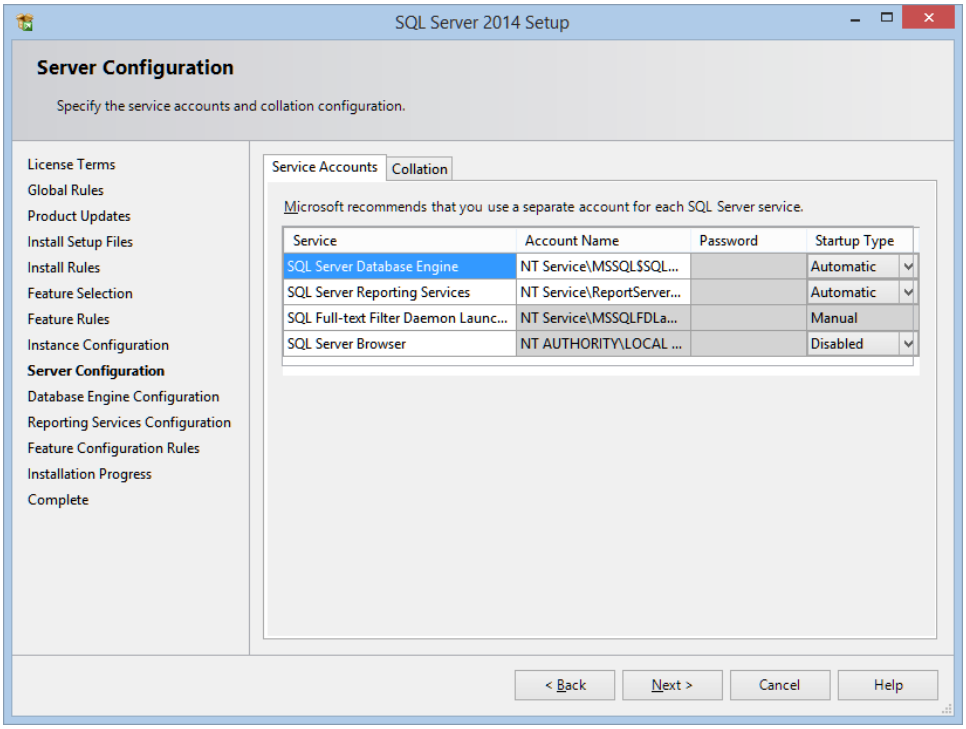
16. Review the "Service" that will be installed and their associated "Startup Type" and click on the "Next" command button to continue. You can leave the defaults.

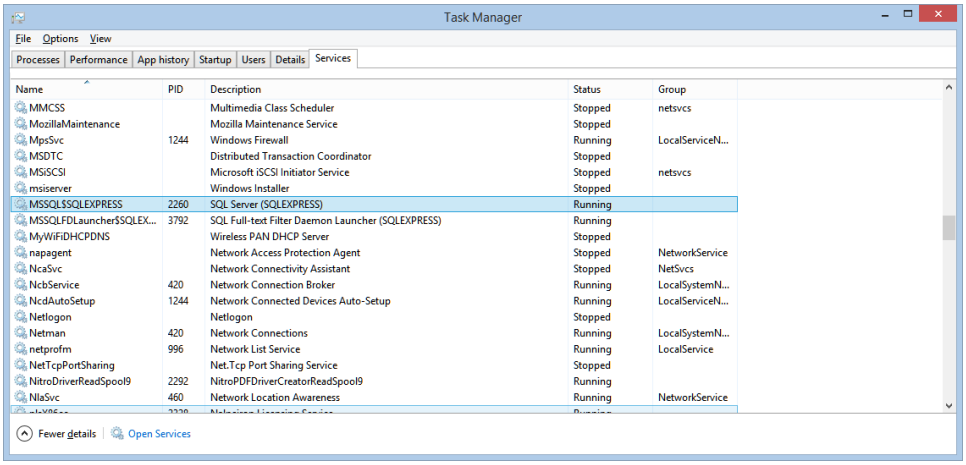


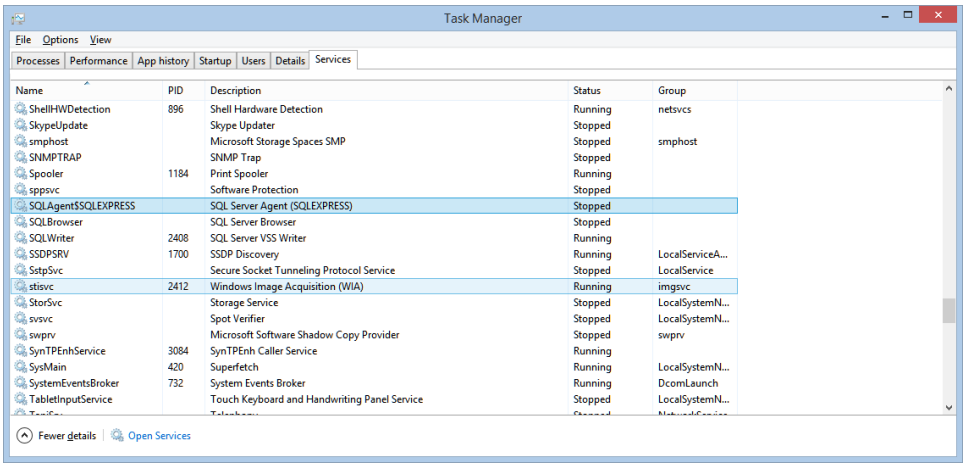
Special Note(s): These are the services that run in the back-ground that make it all work. You must have these applications (called services) running in order to use SQL server. In other words, this is MUCH different than MS Access. The application is only running when you open MS Access. SQL Server is always running in the background as a service.

Special Note(s): Not sure what "Collation" really is. Look it up! I just left the defaults.

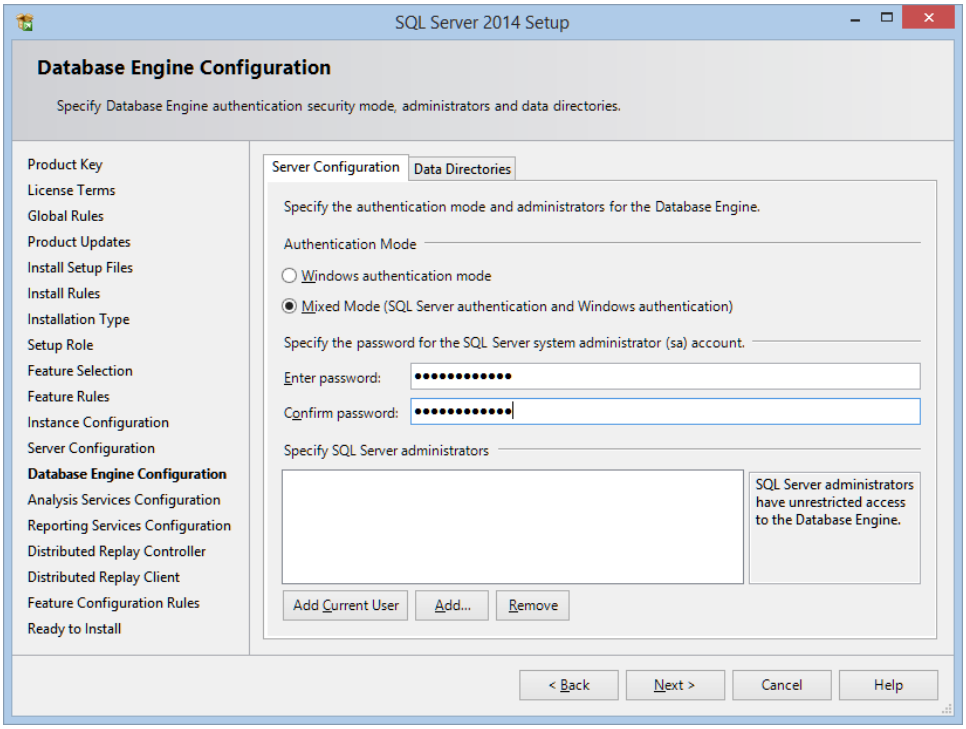
Special Note(s): Below is an example of what was installed when you installed SQL Server Express as well as the what the final looks like. It installed these as "services" which you can view in the "Services" tab under task manger (or in the Windows services application). Not how the "Startup Type" will match what is in the "Services" tab.







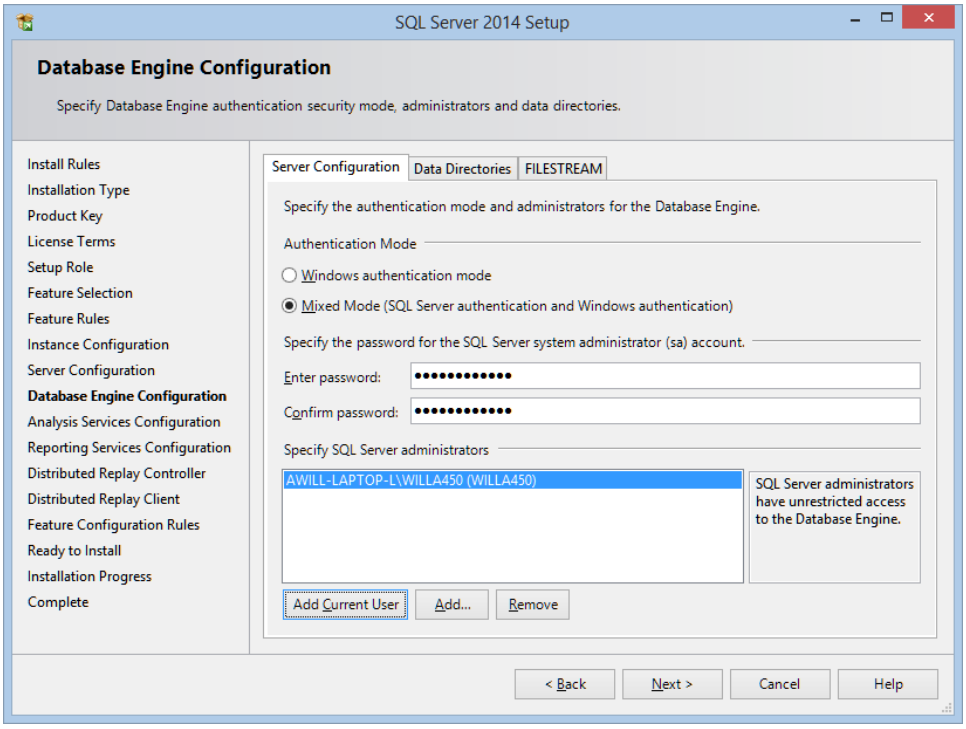
17. Change the “Authentication Mode” to "Mixed Mode". This creates a “sa” user which will be the main administrator user account and allows you to set an administrative password



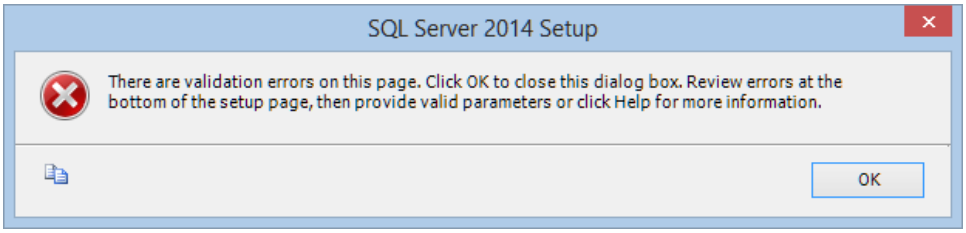
Special Note(s): The “sa” account is used to accessing SQL server using a different account than your windows login. Note, however, that you will still be able to use your “Windows” login account to log in SQL Server as well. This just adds a administration account that is not tied to your Windows account. Also, the Windows account will be an

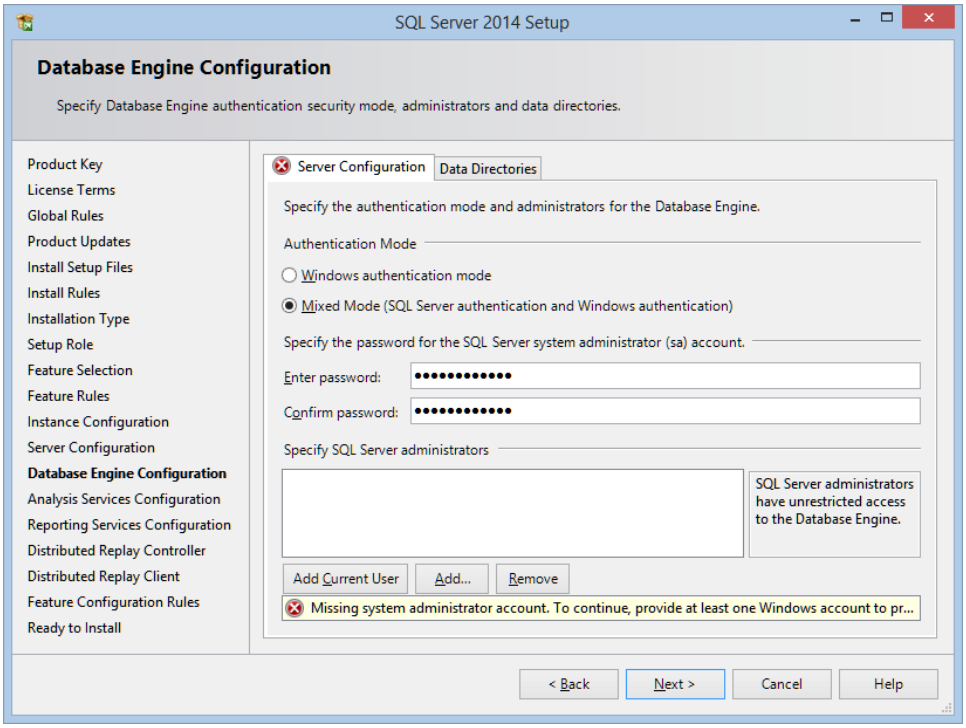
administrator/owner as well with the same levels at the “sa” account. I always think it’s good to have a separate login as well so that other applications or users can log into SQL server without having to have their login ID added to the server instance.

18. Click on the “Add Current User” command button to add the current windows login that you’re in right now as an administrator account and click on the “Next” command button. This is the account that is used when “Windows Authentication” is used as a log in.



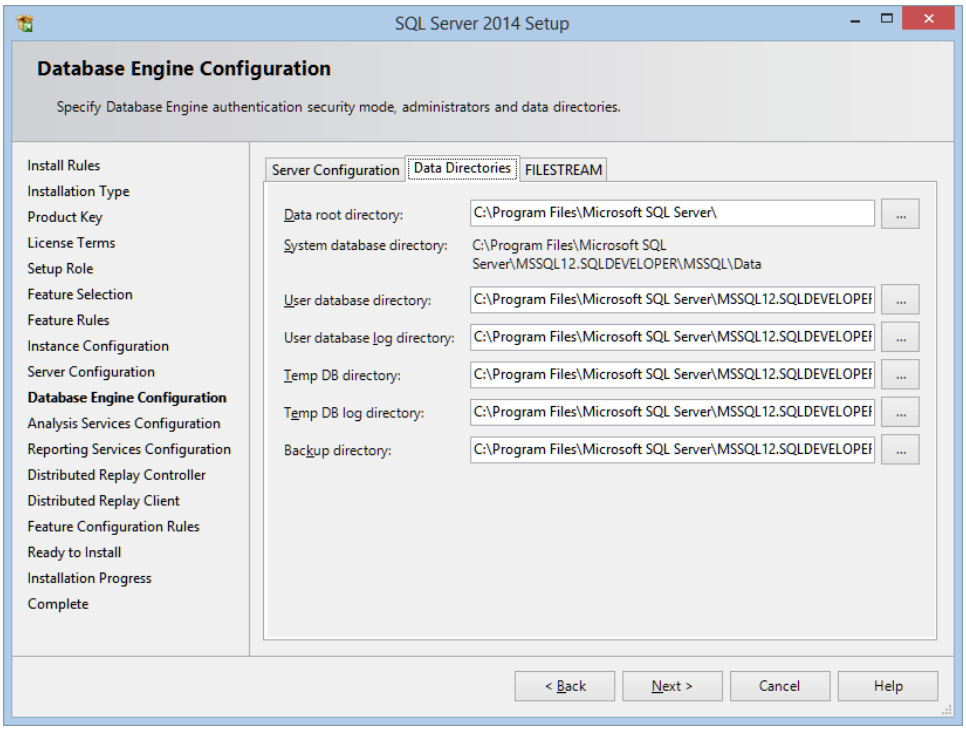
Special Note(s): If you don’t add the existing user you’ll get this message



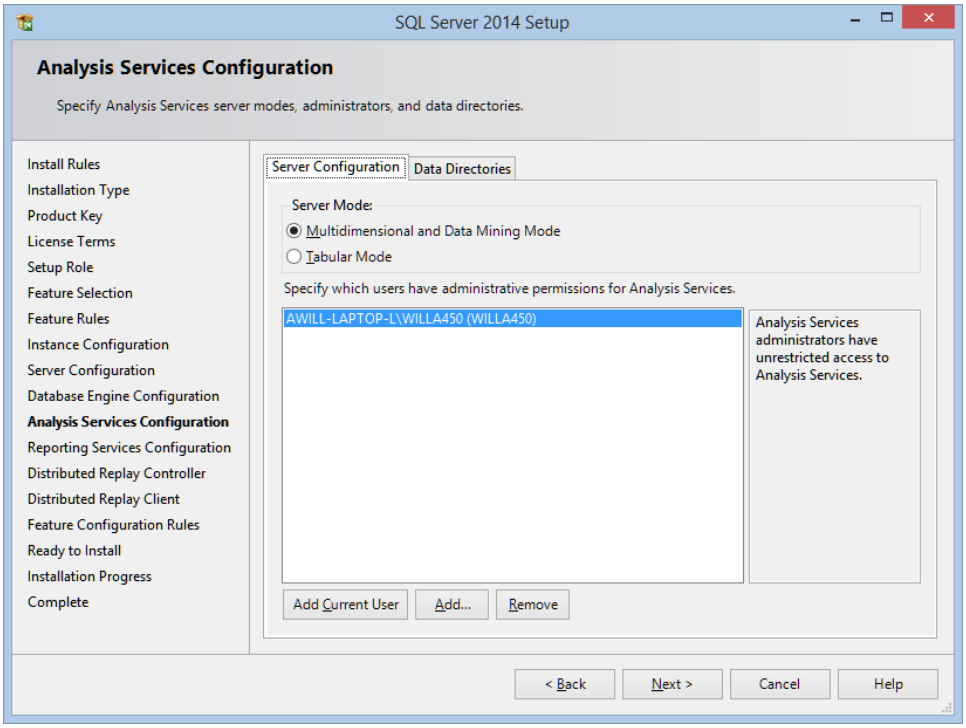


This means you need to add another user besides the "sa" account.

Verify the "Data Directories". You can change this, but I leave the defaults. This is where your SQL Server Database engine files are stored along with where the "tempdb" is, the log files, and the backups are done.

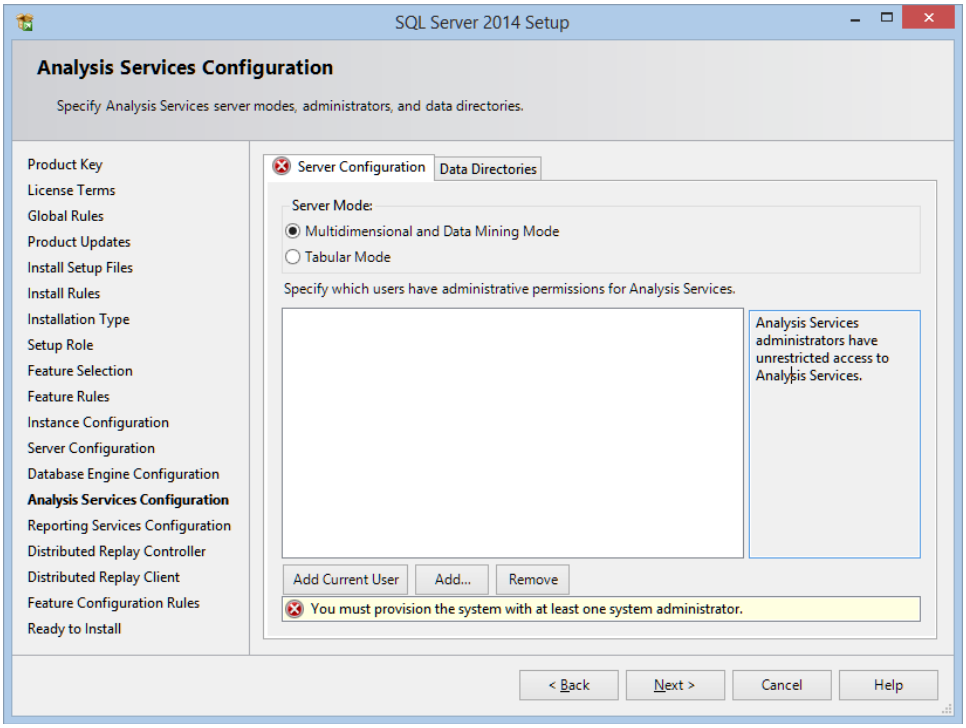


19. Select the "Multidimensional and Data Mining Mode" option and click on the "Add Current User" button to add the current windows login that you're in right now as an administrator account and click on the "Next" command button. This is the account that is used when "Windows Authentication" is used as a log in for SQL Server Analysis Services

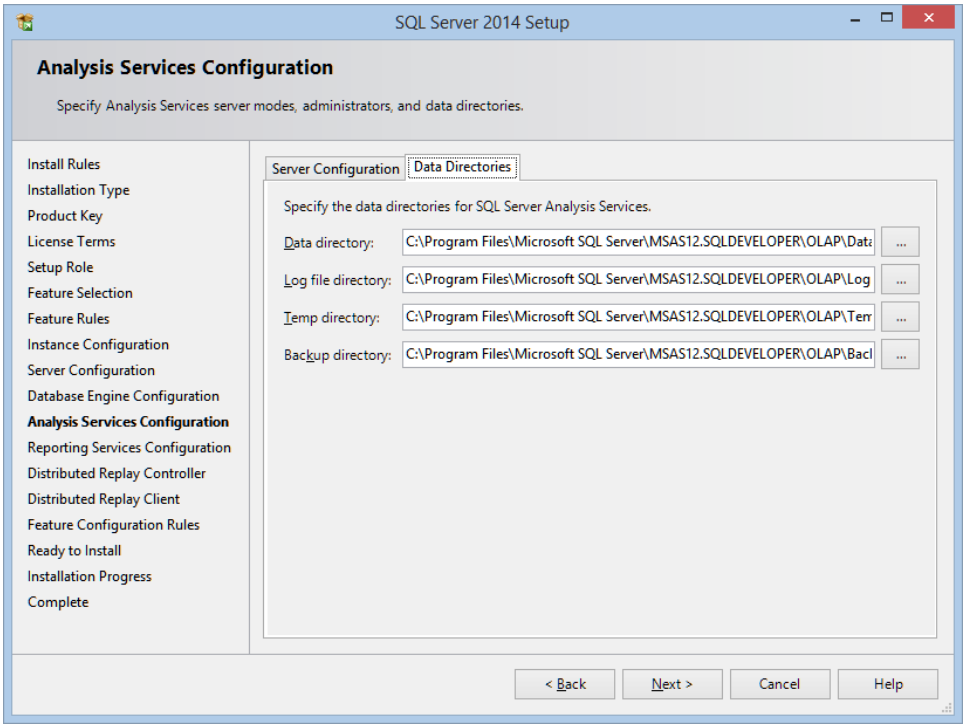


Special Note(s): The whole point of you using SQL Server Analysis Services is to use it's multidimensional capabilities. However, you have the option of using Tabular Mode instead which is more intuitive for some, but not as powerful. Read this for more information:
Special References:
https://msdn.microsoft.com/en-us/library/hh212940.aspx

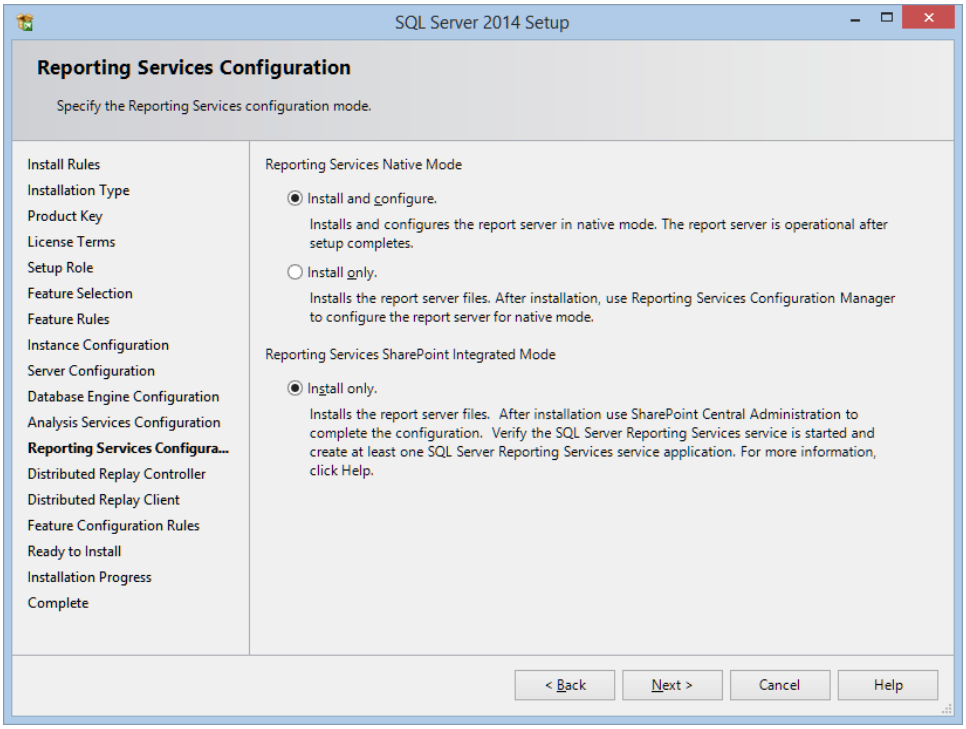
Special Note(s): Again you have to add a user or you'll get an error message.



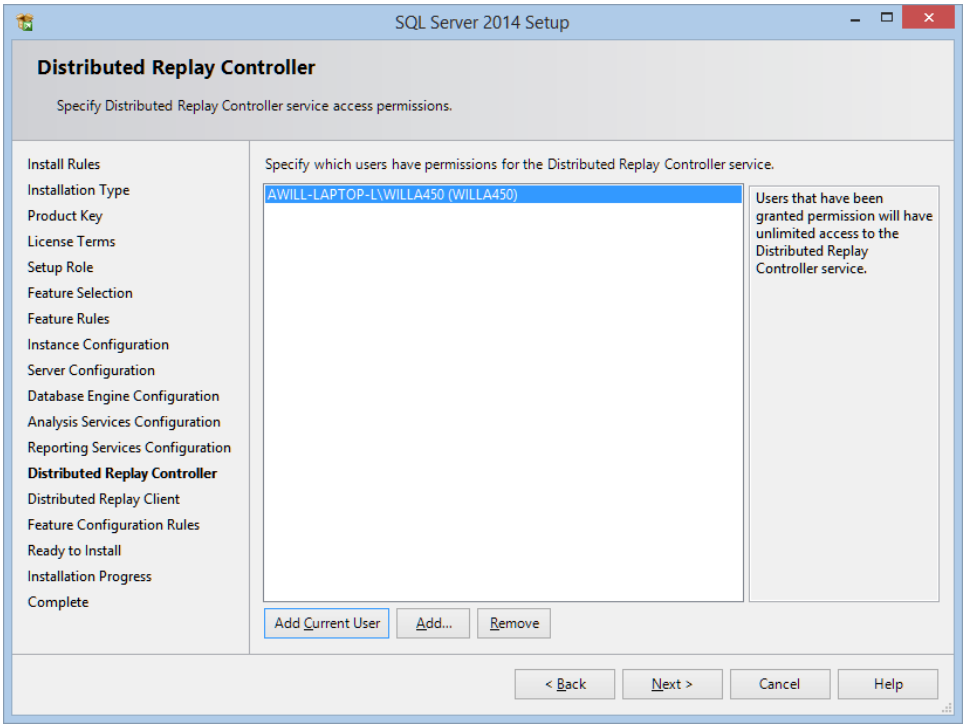
Special Note(s): Review the data directories (like above).



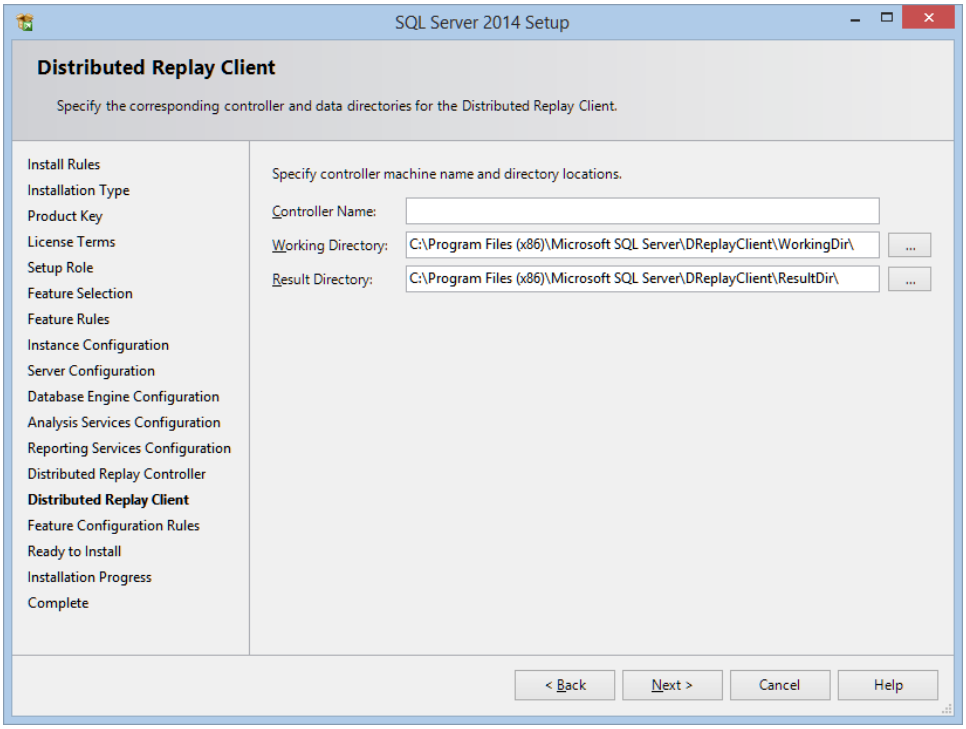
20. Select the “Install and configure” option and then click the “Next” command button.



21. Click on the “Add Current User” command button to add the current user login as the administrator of thee “Distributed Replay Controller” feature. Not sure what this is. Look it up!



22. Review the defaults and click the “Next” command button to continue.



Special Note(s): Controller Name is an optional parameter, and the default value is <blank>. Enter the name of the controller that the client computer will communicate with for the Distributed Replay client service.

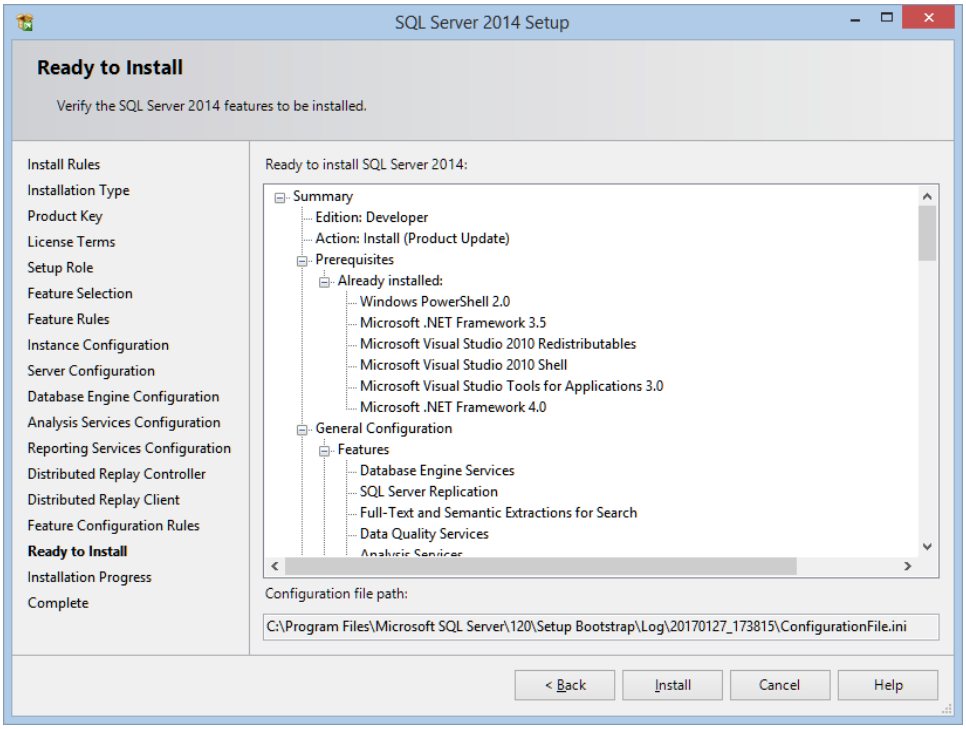
SQL Server Profiler and Distributed Replay provide some overlap in functionality.

You may use SQL Server Profiler to replay a captured trace against an upgraded test environment. You can also analyze the replay results to look for potential functional and performance incompatibilities. However, SQL Server Profiler can only replay a workload from a single computer. When replaying an intensive OLTP application that has many active concurrent connections or high throughput, SQL Server Profiler can become a resource bottleneck.

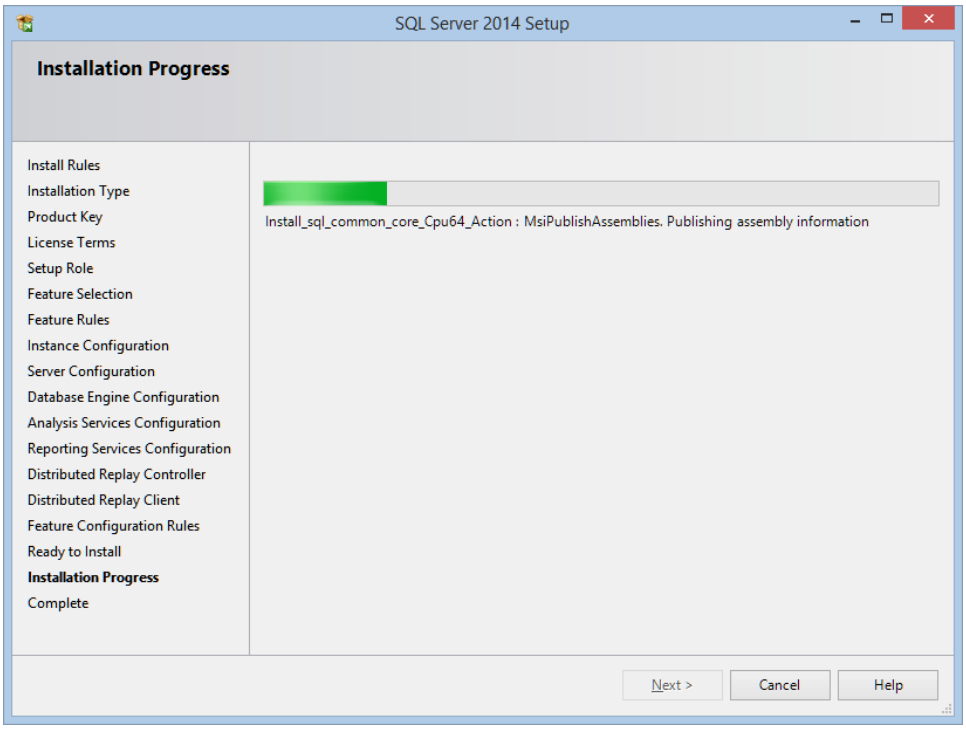
Distributed Replay offers a more scalable solution than SQL Server Profiler. Use Distributed Replay to replay a workload from multiple computers and better simulate a mission-critical workload.

For more information:
https://msdn.microsoft.com/en-us/library/ff878183.aspx
https://msdn.microsoft.com/en-us/library/ms143219.aspx

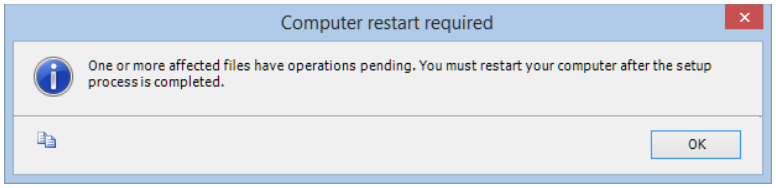
23. Verify the items you selected and click on the “Install” command button to begin the installation.



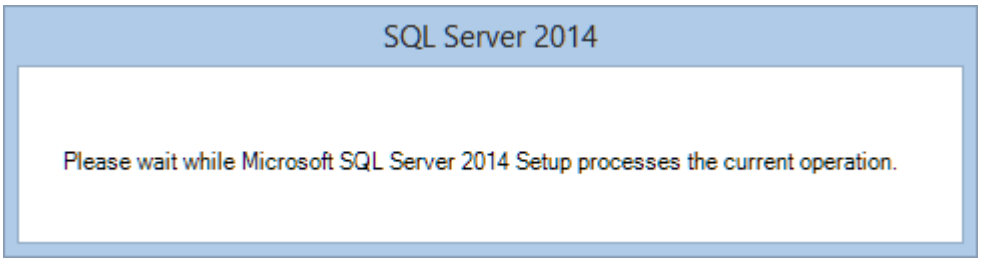
24. The installation will begin.



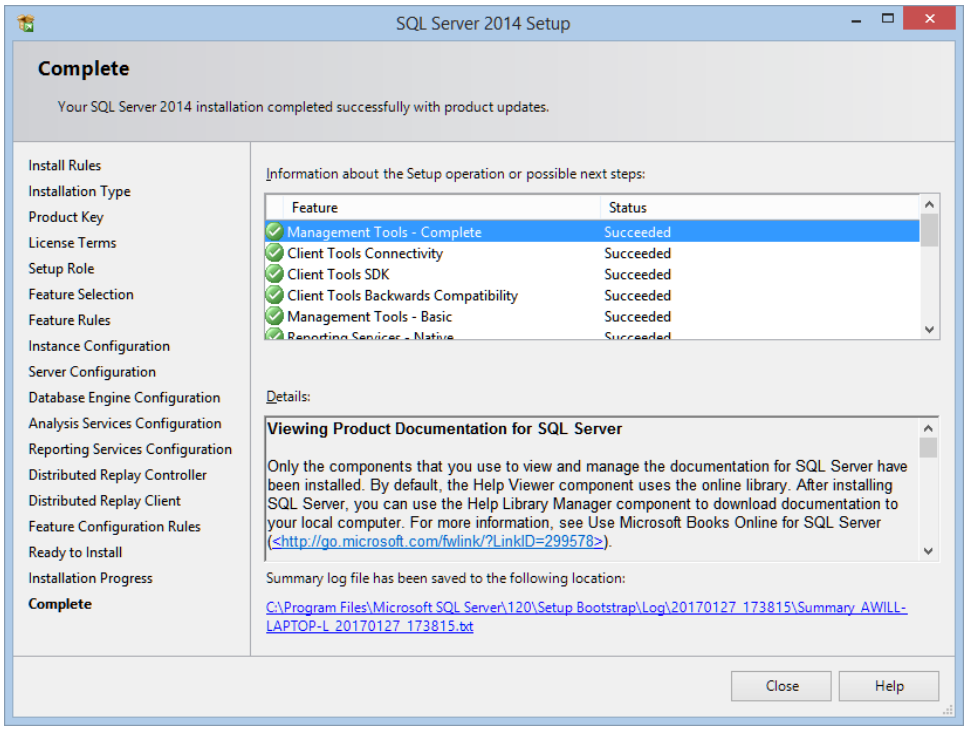
25. You will get a message saying you need to restart



It will do something...



26. You will get message to show it's successful... blah, blah, blah,... set other version



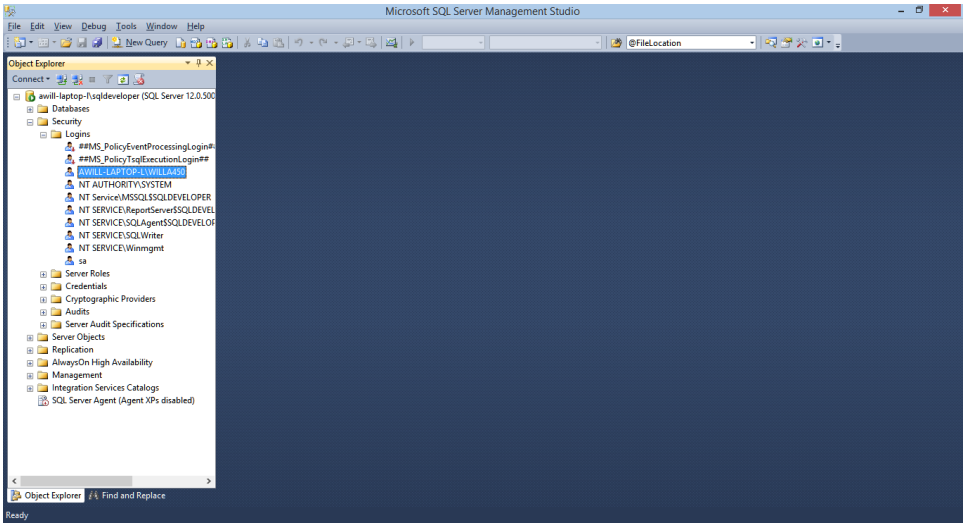
27. All Done!

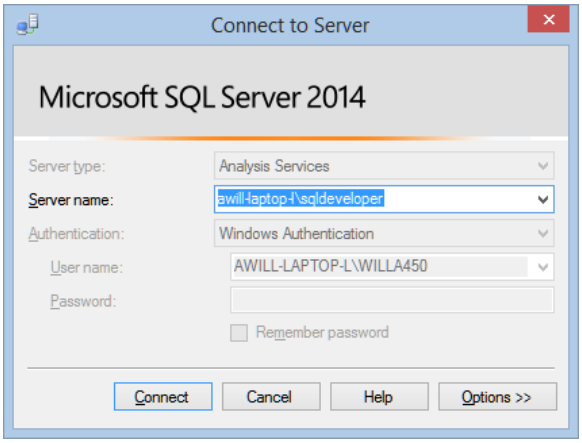
References

https://blogs.technet.microsoft.com/dataplatforminsider/2016/03/31/microsoft-sql-server-developer-edition-is-now-free/

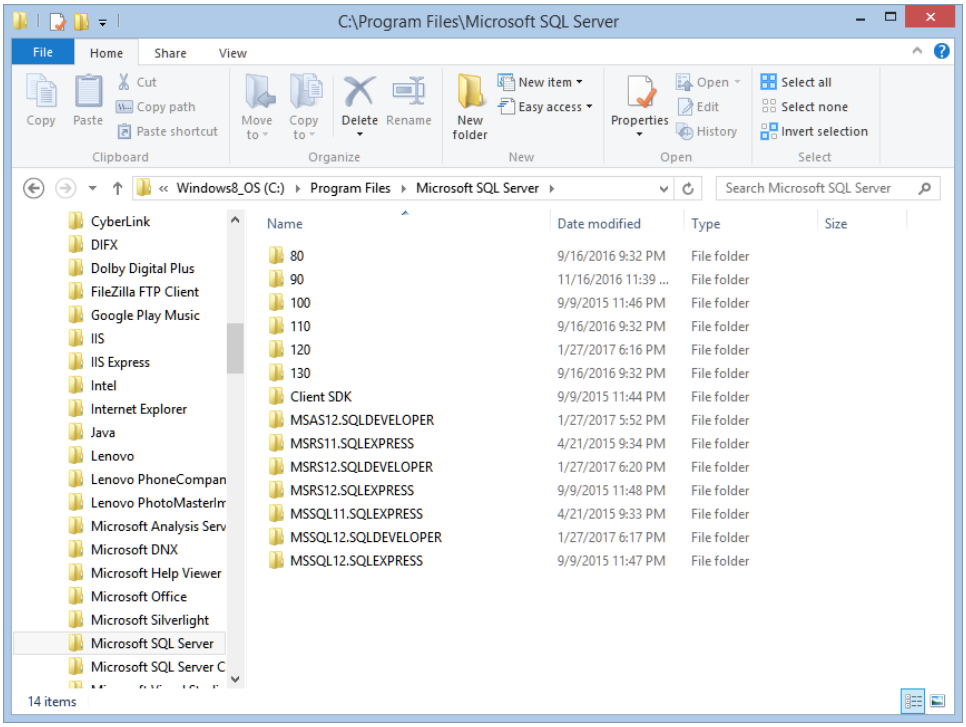
Appendix

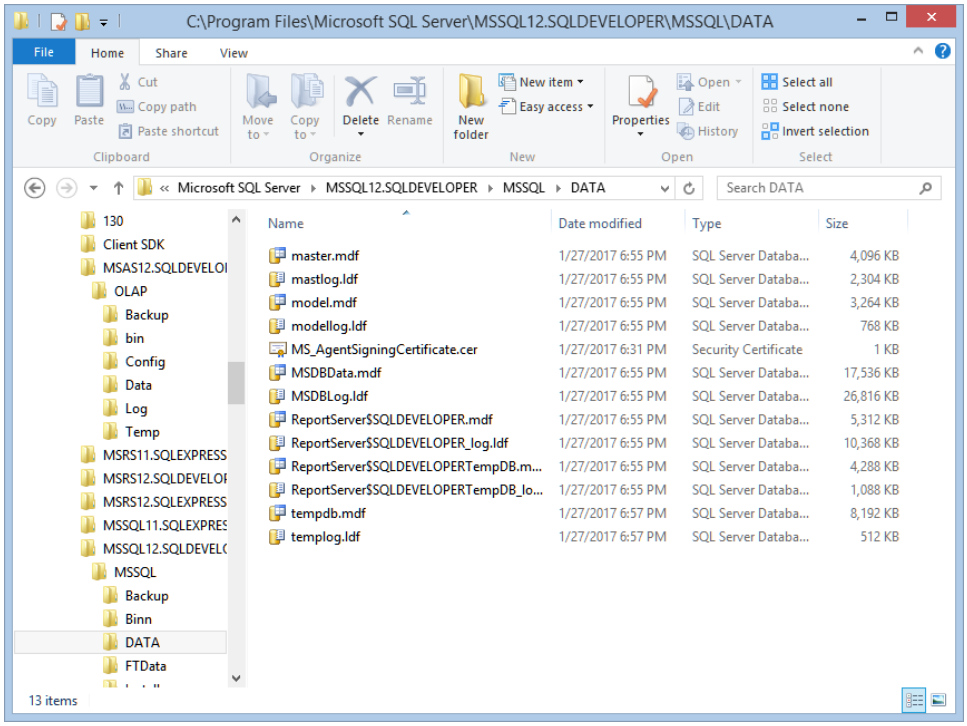
Note the "Current User" accounts you added steps above for the database engine and SSAS:

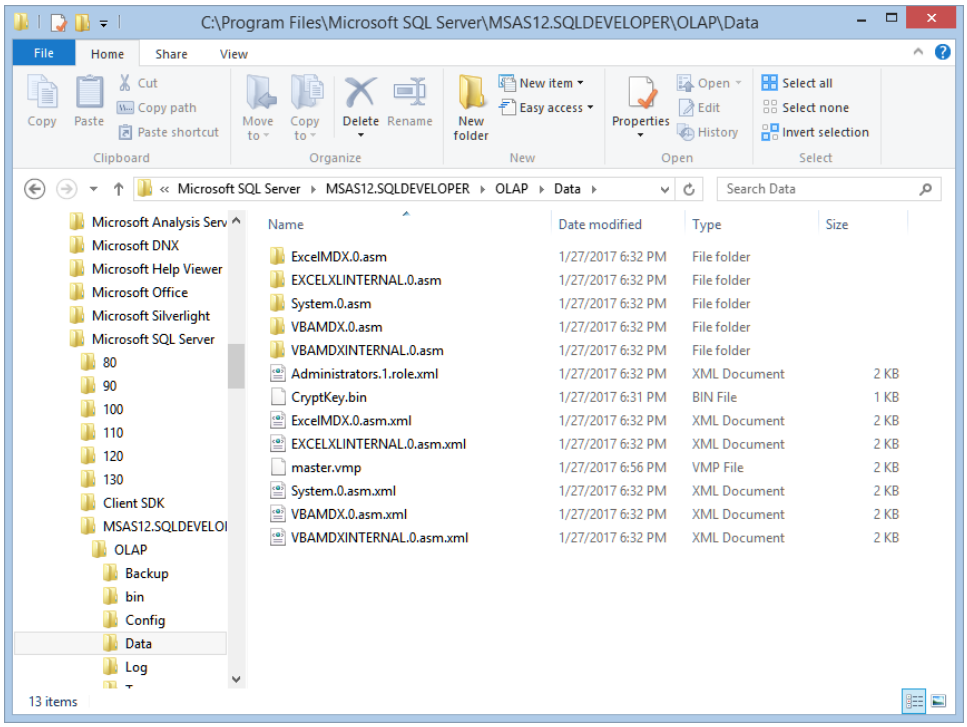




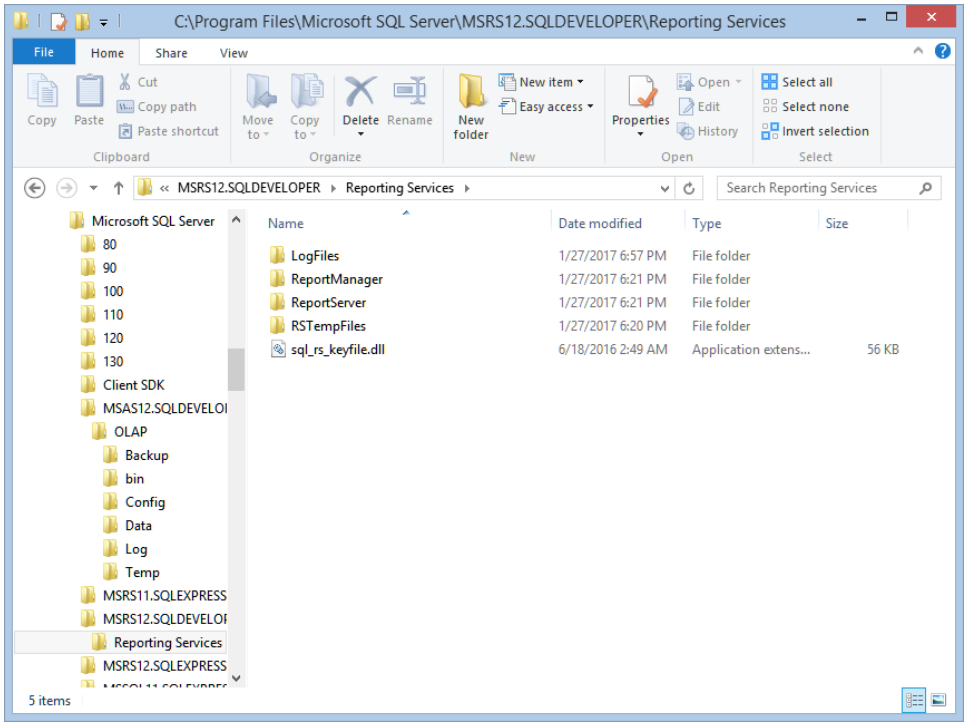
Note the location of the database files and directories for the database engine and SSAS:



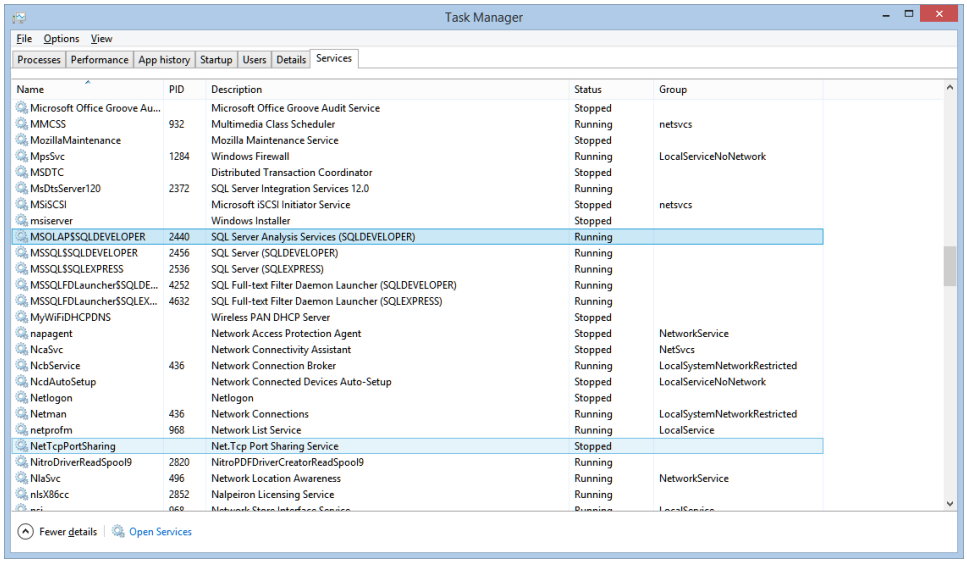




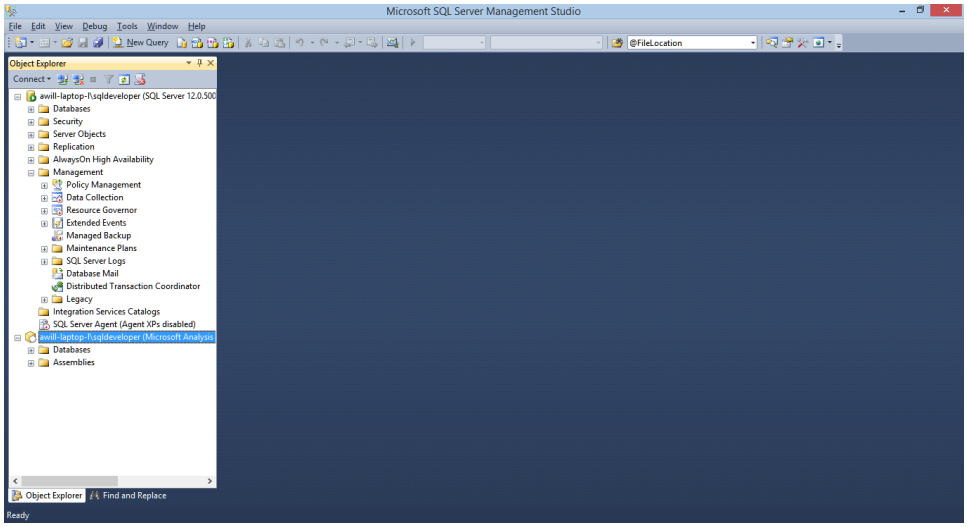
Note the location of the SSRS Application (front-end) files

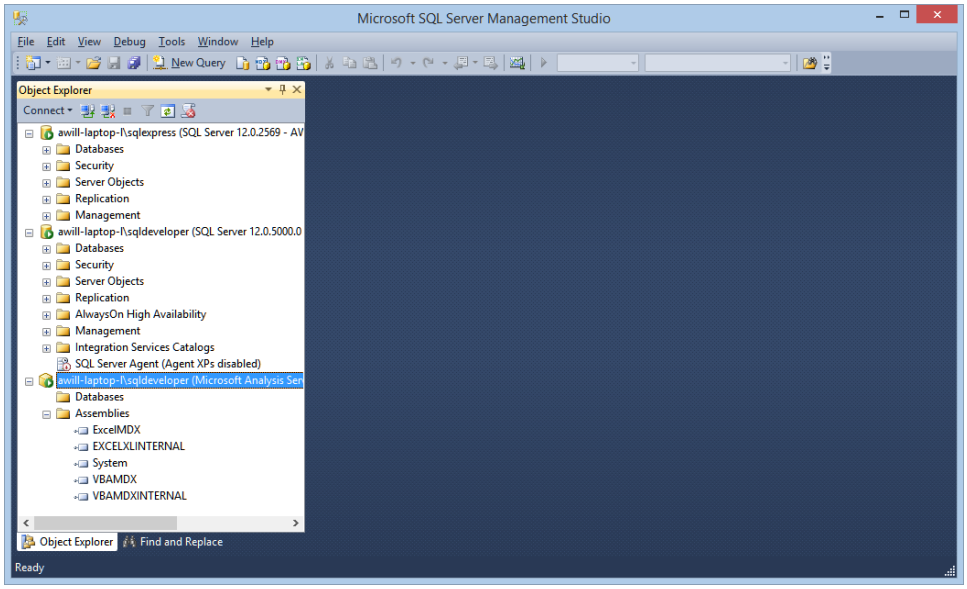


Note the services that you added:

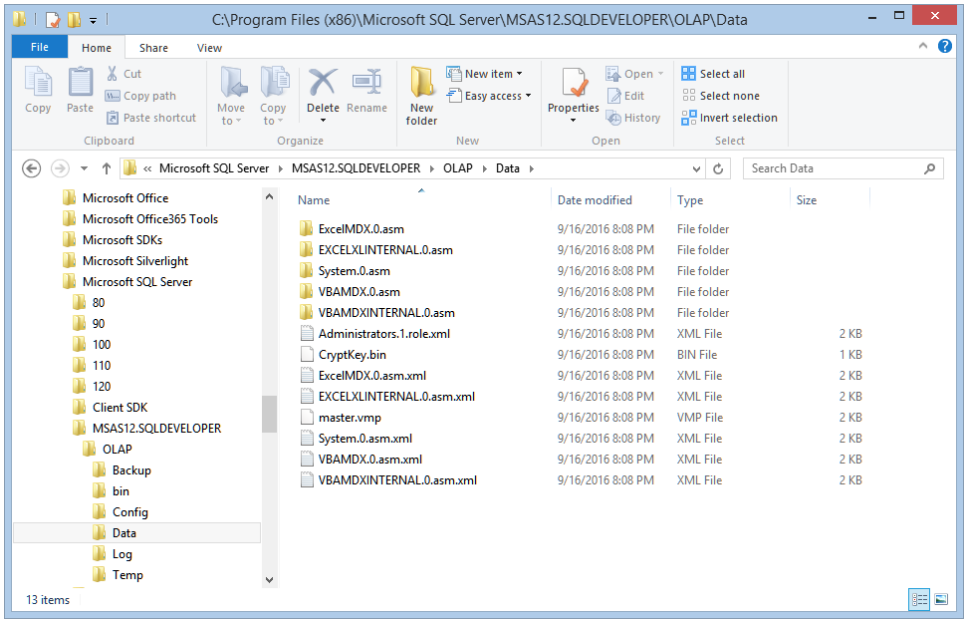


Check out all the new things you have!





Note the assemblies are the same as the folders:

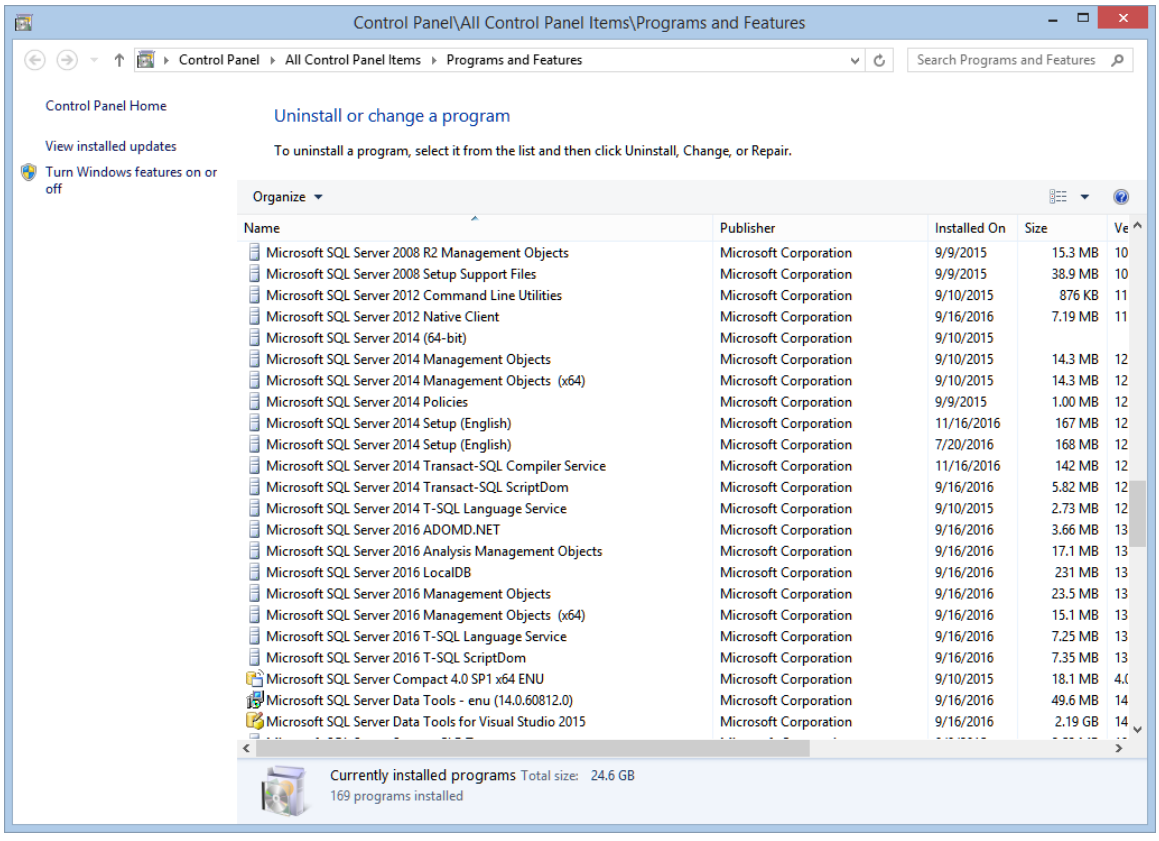


Assemblies are library file which are referenced in SQL server Analysis services that allow you to gain access to programming languages like VB.NET. Just like you would reference a library or assembly in Visual Studio ASP.NET. Never used this, but interesting thing to consider in future.

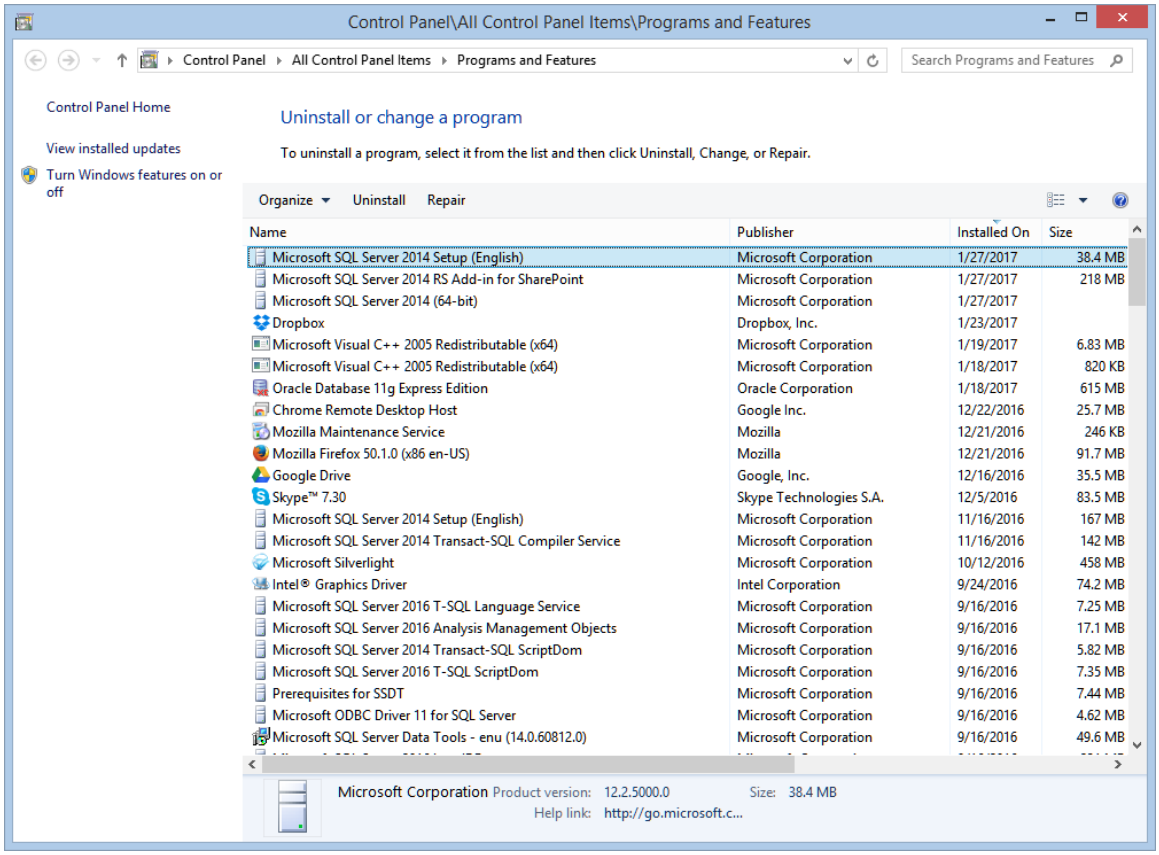
Basically can call functions from these assemblies in a stored procedure or SSAS command script

Note the programs you added:

Before



After


Control Panel\All Control Panel Items\Programs and Features
Control Panel ▸ All Control Panel Items ▸ Programs and Features
Search Programs and Features
Control Panel Home
View installed updates
Turn Windows features on or off
Uninstall or change a program
To uninstall a program, select it from the list and then click Uninstall, Change, or Repair.
Organize
Uninstall
Repair
Name
Publisher
Installed On
Size
Microsoft SQL Server 2014 Setup (English) Microsoft Corporation 1/27/2017 38.4 MB
Microsoft SQL Server 2014 RS Add-in for SharePoint Microsoft Corporation 1/27/2017 218 MB
Microsoft SQL Server 2014 (64-bit) Microsoft Corporation 1/27/2017
Dropbox Dropbox, Inc. 1/23/2017
Microsoft Visual C++ 2005 Redistributable (x64) Microsoft Corporation 1/19/2017 6.83 MB
Microsoft Visual C++ 2005 Redistributable (x64) Microsoft Corporation 1/18/2017 820 KB
Oracle Database 11g Express Edition Oracle Corporation 1/18/2017 615 MB
Chrome Remote Desktop Host Google Inc. 12/22/2016 25.7 MB
Mozilla Maintenance Service Mozilla 12/21/2016 246 KB
Mozilla Firefox 50.1.0 (x86 en-US) Mozilla 12/21/2016 91.7 MB
Google Drive Google, Inc. 12/16/2016 35.5 MB
Skype™ 7.30 Skype Technologies S.A. 12/5/2016 83.5 MB
Microsoft SQL Server 2014 Setup (English) Microsoft Corporation 11/16/2016 167 MB
Microsoft SQL Server 2014 Transact-SQL Compiler Service Microsoft Corporation 11/16/2016 142 MB
Microsoft Silverlight Microsoft Corporation 10/12/2016 458 MB
Intel® Graphics Driver Intel Corporation 9/24/2016 74.2 MB
Microsoft SQL Server 2016 T-SQL Language Service Microsoft Corporation 9/16/2016 7.25 MB
Microsoft SQL Server 2016 Analysis Management Objects Microsoft Corporation 9/16/2016 17.1 MB
Microsoft SQL Server 2014 Transact-SQL ScriptDom Microsoft Corporation 9/16/2016 5.82 MB
Microsoft SQL Server 2016 T-SQL ScriptDom Microsoft Corporation 9/16/2016 7.35 MB
Prerequisites for SSDT Microsoft Corporation 9/16/2016 7.44 MB
Microsoft ODBC Driver 11 for SQL Server Microsoft Corporation 9/16/2016 4.62 MB
Microsoft SQL Server Data Tools - enu (14.0.60812.0) Microsoft Corporation 9/16/2016 49.6 MB
Microsoft Corporation Product version: 12.2.5000.0 Size: 38.4 MB
Help link: http://go.microsoft.c...