WebAccess SCADA - SQL Server 2014 Express Installation

WebAccess default database is MS Access, and it only allows users to save up to 2GB data to database. User can change his database from MS SQL to MS SQL Express for improving database capacity.

This FAQ contains 4 topics:

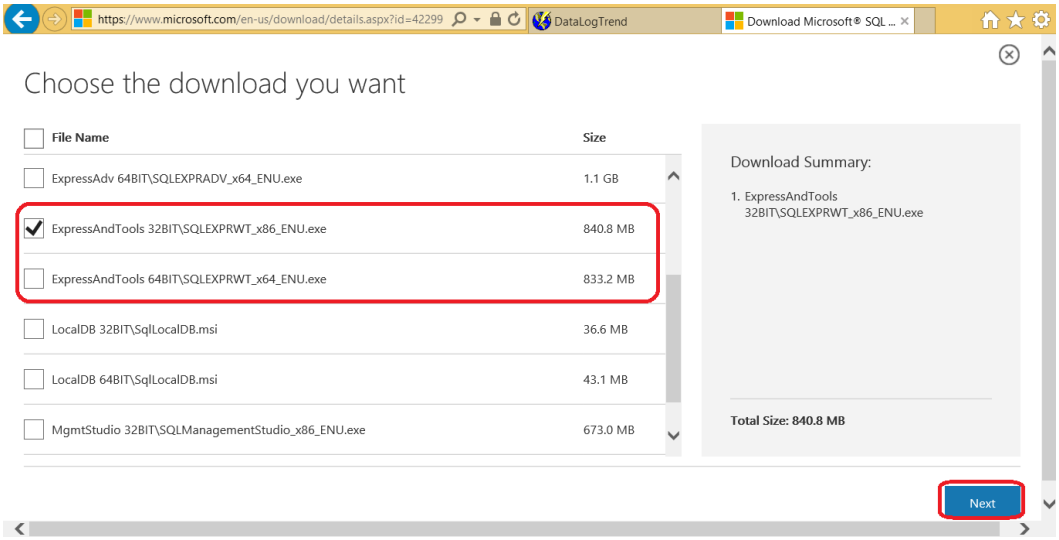
1. MS SQL Server 2014 Express Download and Installation
2. Create a SQL Server 2014 Express Database
3. ODBC Configuration
4. WebAccess Configuration

Step-by-step:

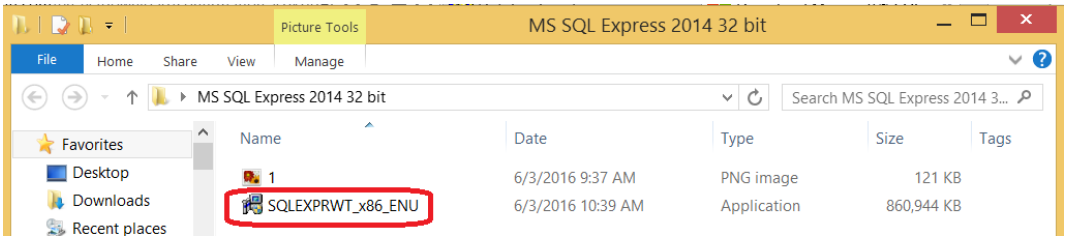
Topic 1: MS SQL Server 2014 Express Download and Installation:

1. Where to download Microsoft SQL Server 2014 Express
   https://www.microsoft.com/en-us/download/confirmation.aspx?id=42299

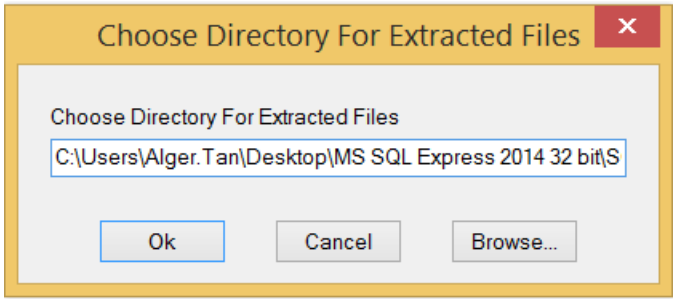
2. Download MS SQL 2014 based on Windows
   32 bit: ExpressAndTools 32BIT\SQLEXPRWT_x86_ENU.exe
   64 bit: ExpressAndTools 64BIT\SQLEXPRWT_x64_ENU.exe



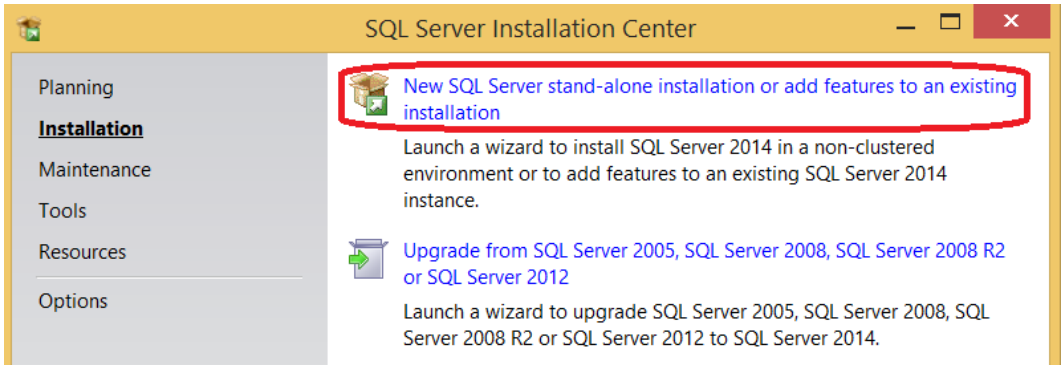
3. Here use 32bit computer for testing, so run SQLEXPRWT_x86_ENU.exe



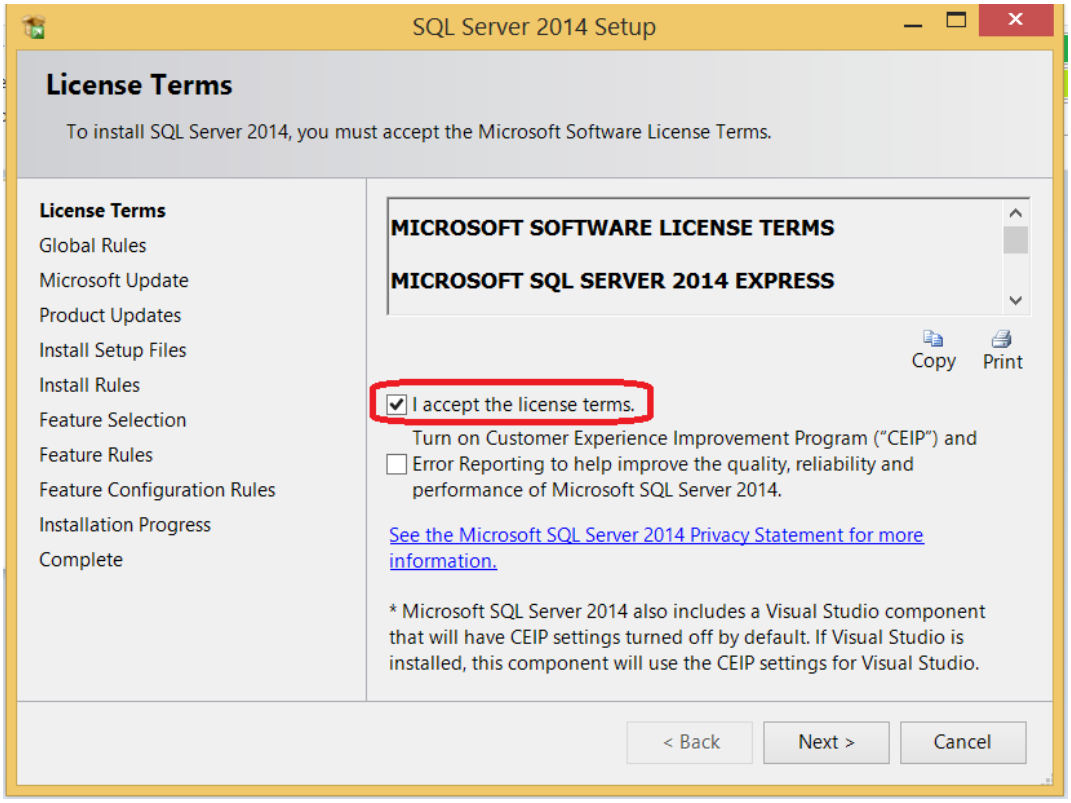
4. Extracted files



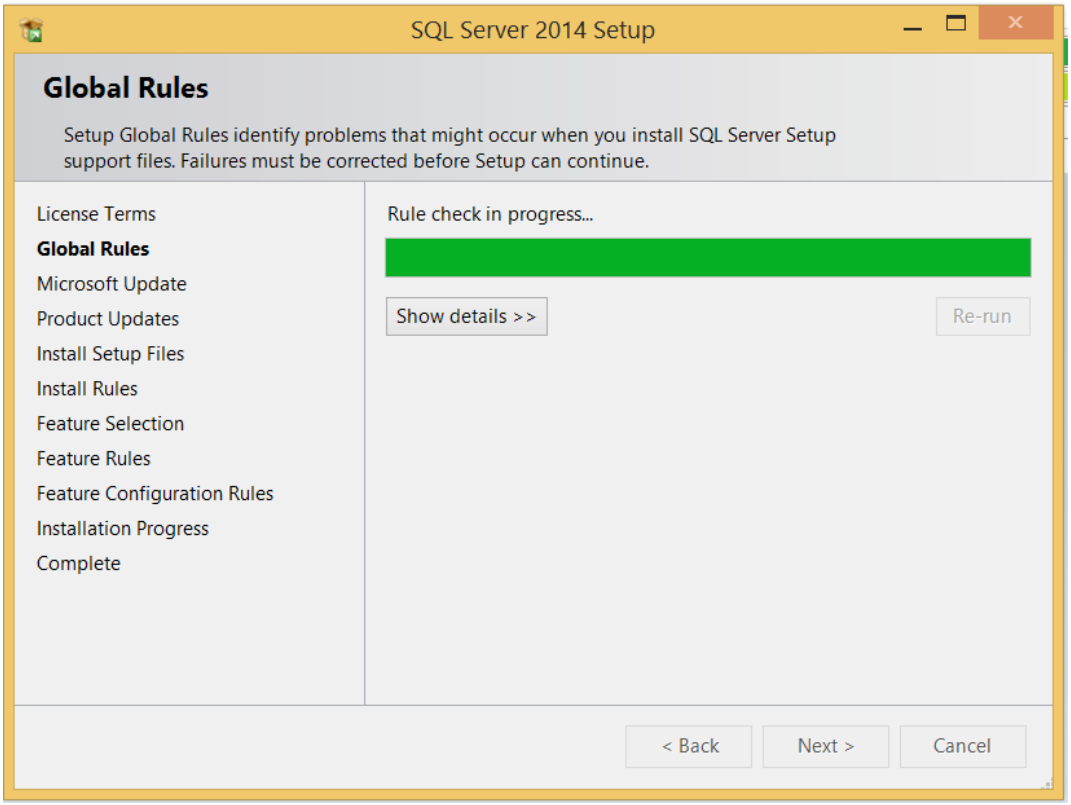
5. Click “New SQL Server Stand-alone installation or add features to an existing installation” to start installation process.



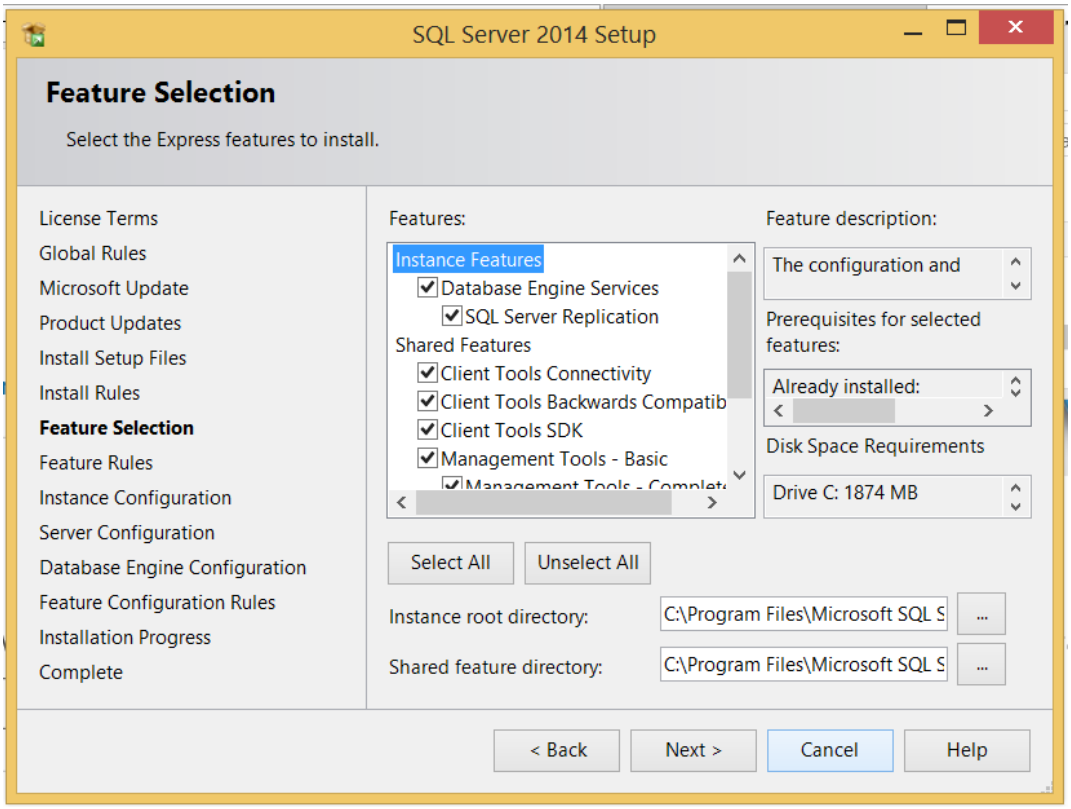
6. Click “I accept the license terms” and then click “Next >” button



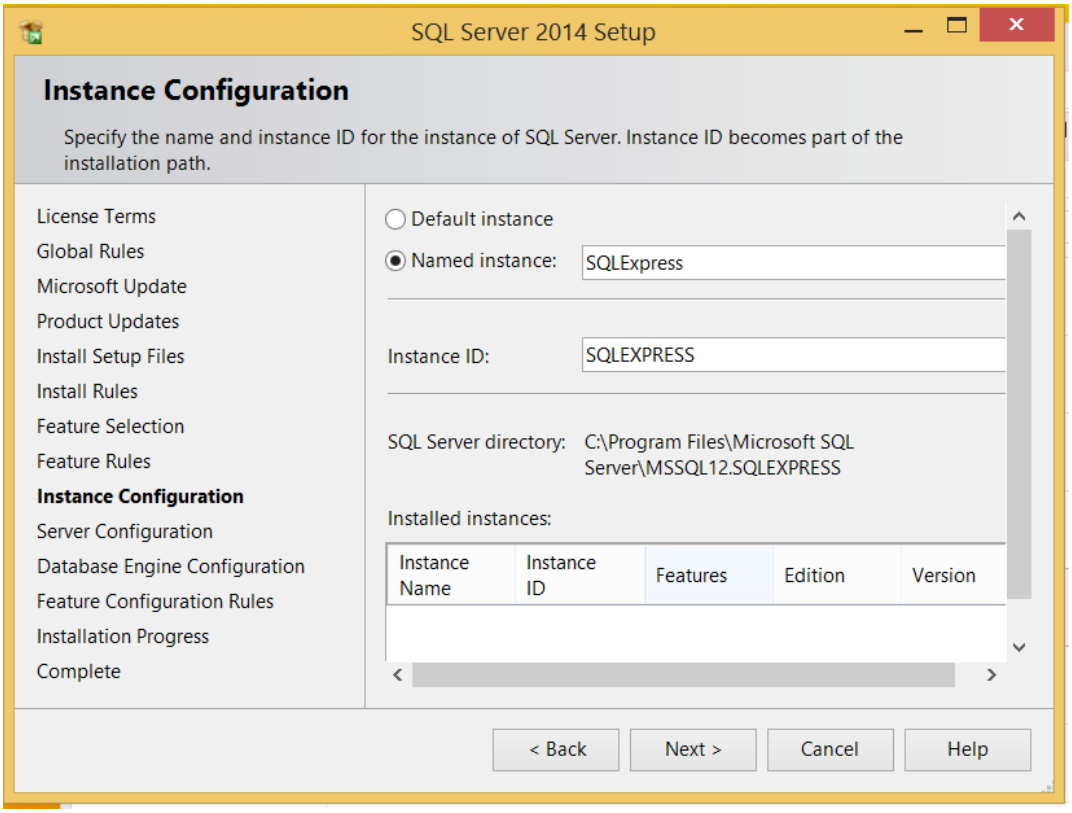
7. SQL Server setup program continues installation.



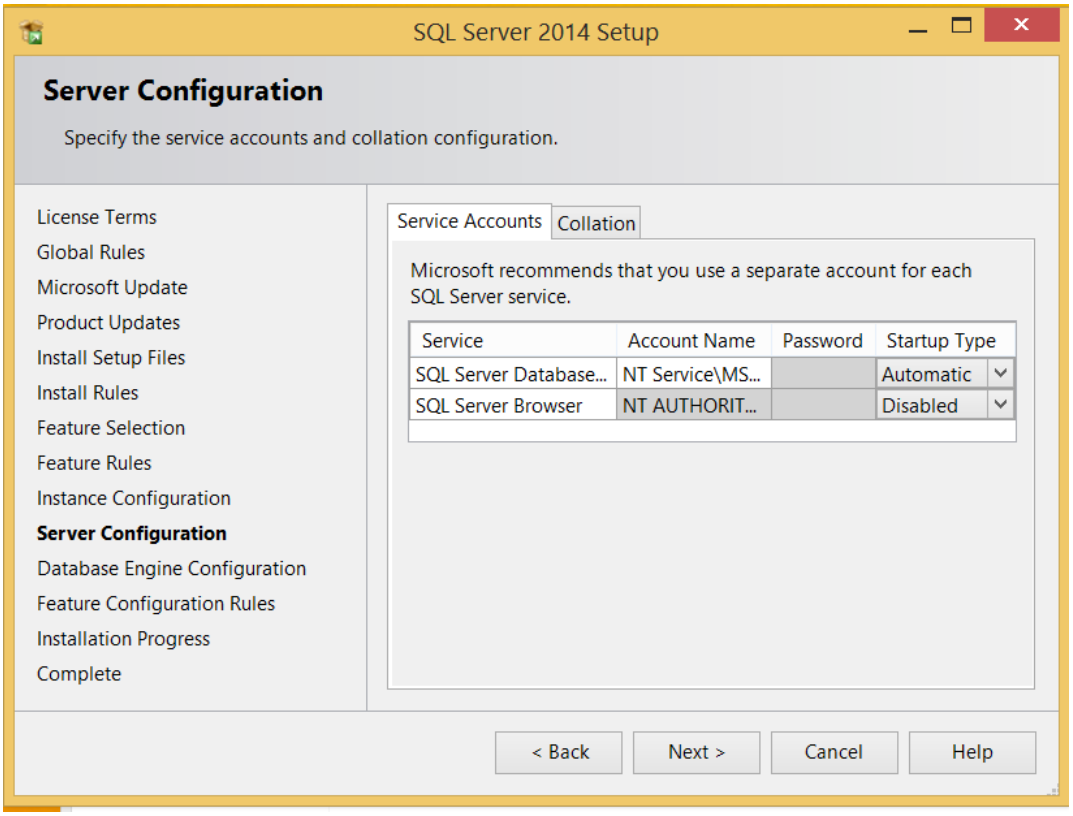
8. Click "Next" for Feature Selection



9. Click “Next” to continue



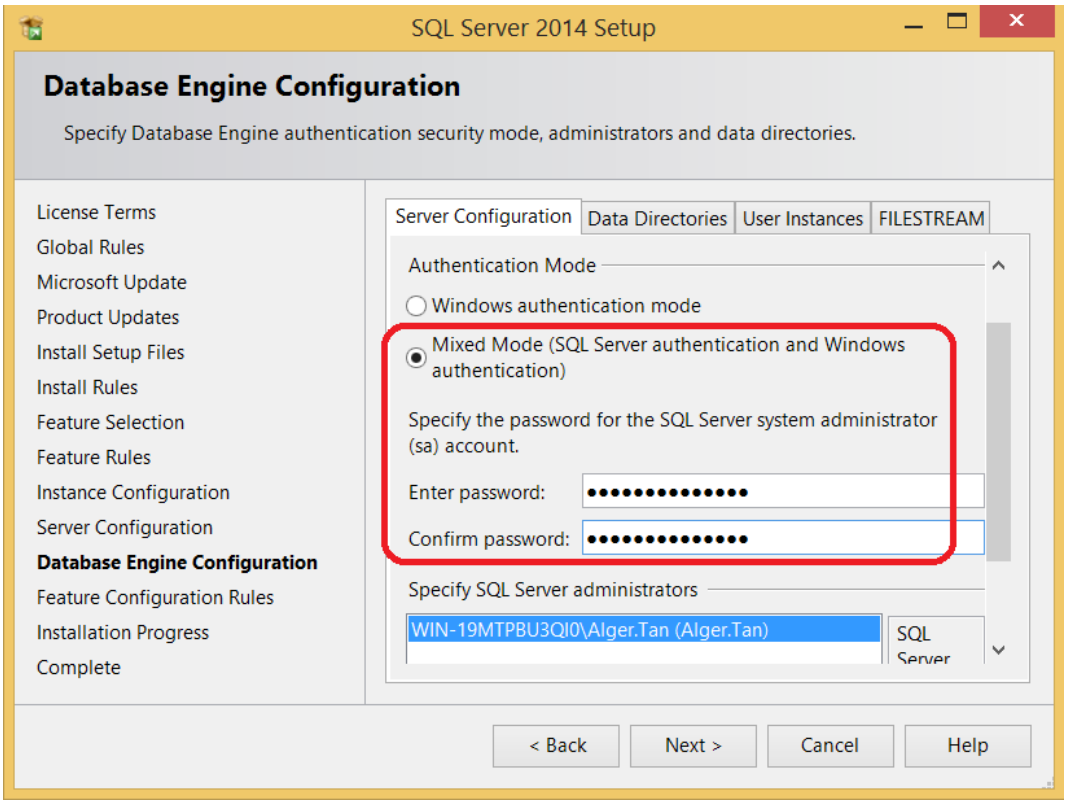
10. Click “Next” to continue



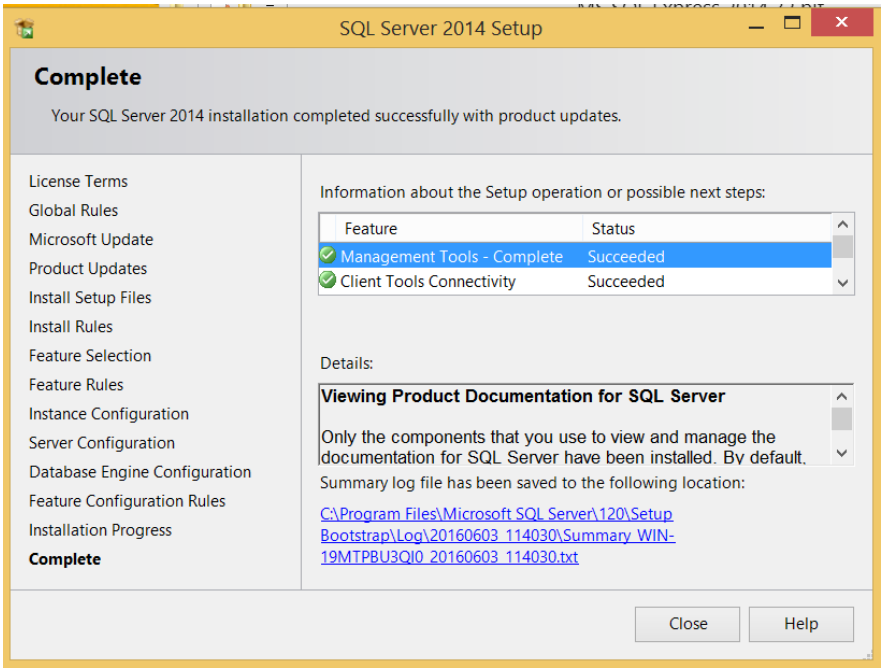
11. Select “Mixed Mode” and setup system administrator (sa) password

E.g. User name: sa

Password: Advantech12345

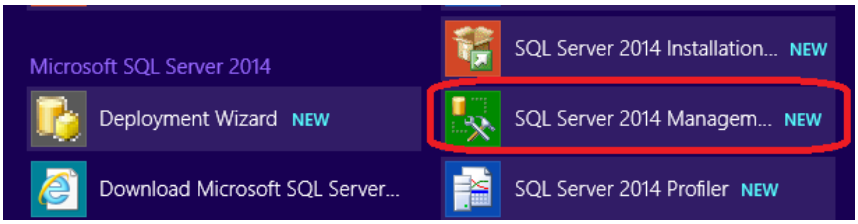


12. Click “Close” when installation complete.



Topic 2: Create a SQL Server Express Database:

13. Run “SQL Server 2014 Management Studio”

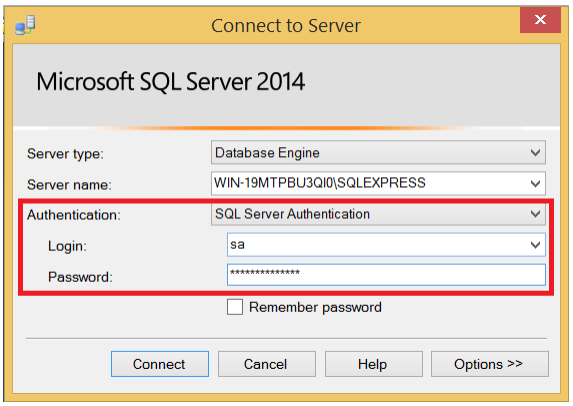


14. Login to SQL Server 2014

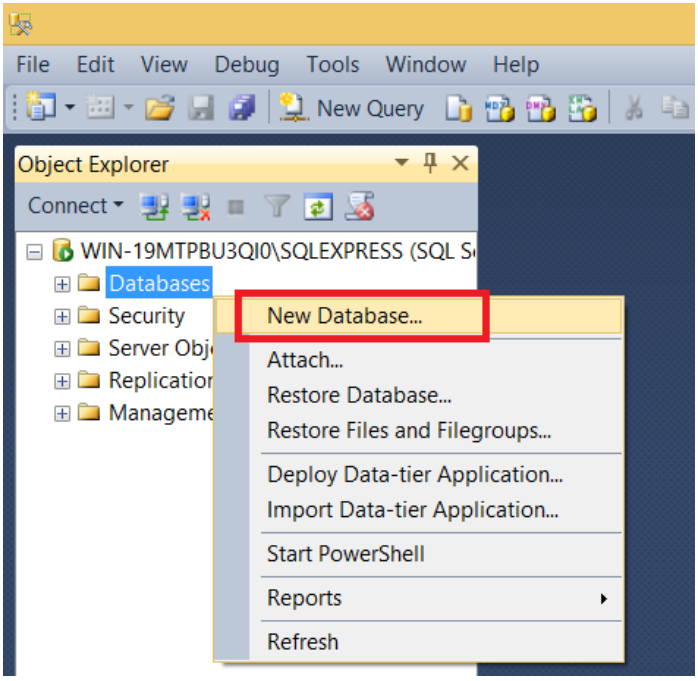
    Authentication: SQL Server Authentication

    Login: sa

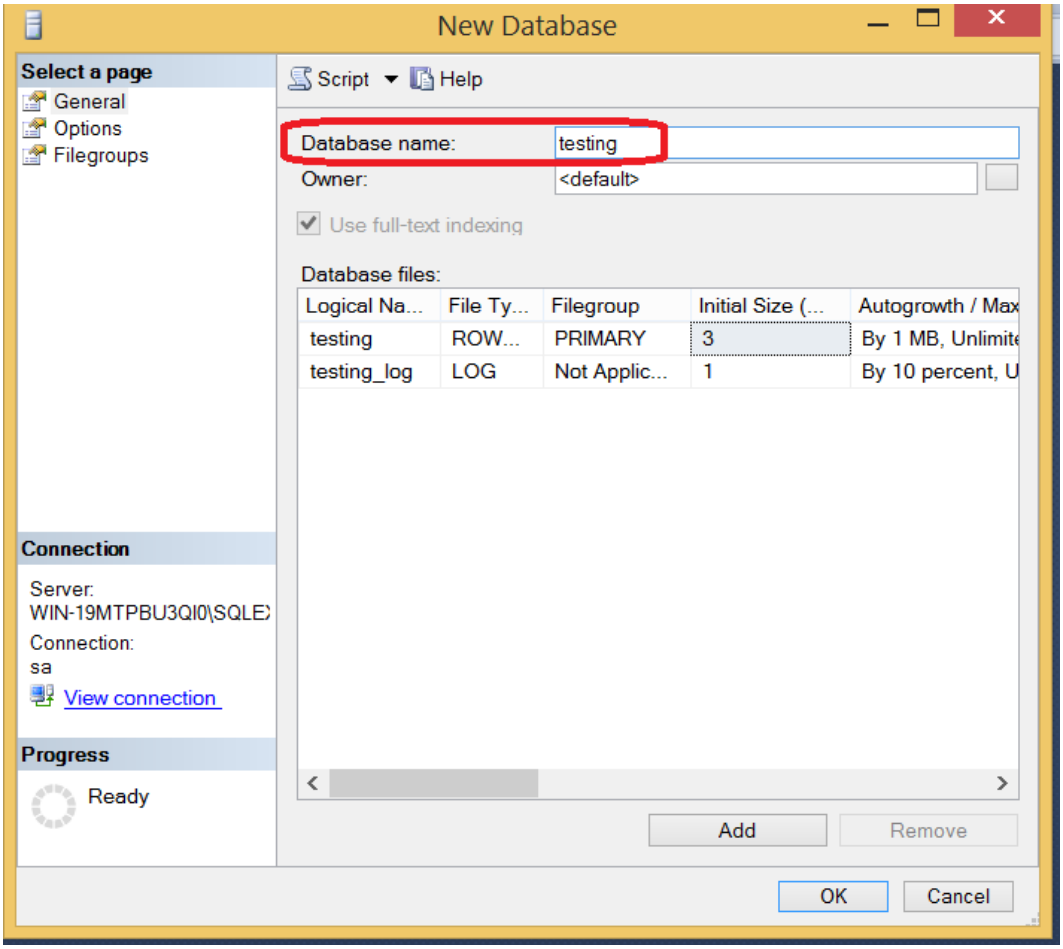
    Password: Advantech12345



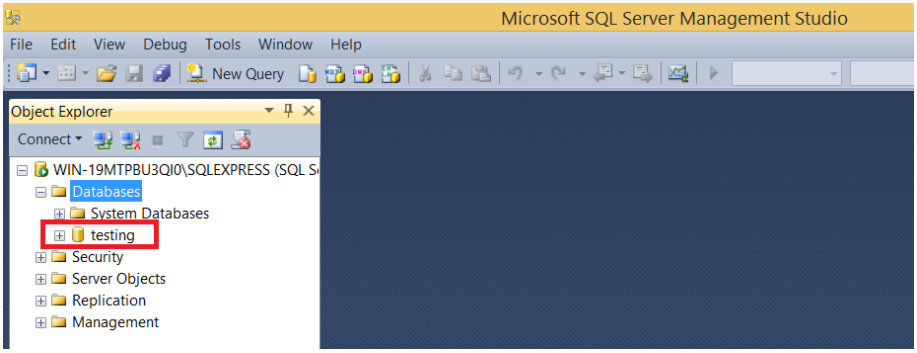
15. Create a Database (WebAccess SCADA will create tables automatically)
    WIN-19MTPBU3QI0\SQLEXPRESS -> Databases -> New Database



16. Enter Database name: testing (could be any name), then click “ok” button



17. Database “testing” is created successfully.



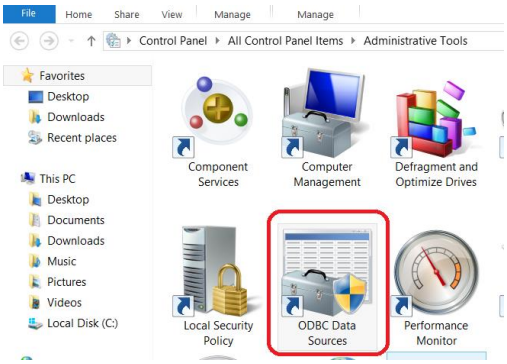
Topic 3: ODBC Data Source Configuration

The purpose of having ODBC is to create a bridge between WebAccess SCADA and MS SQL Database.

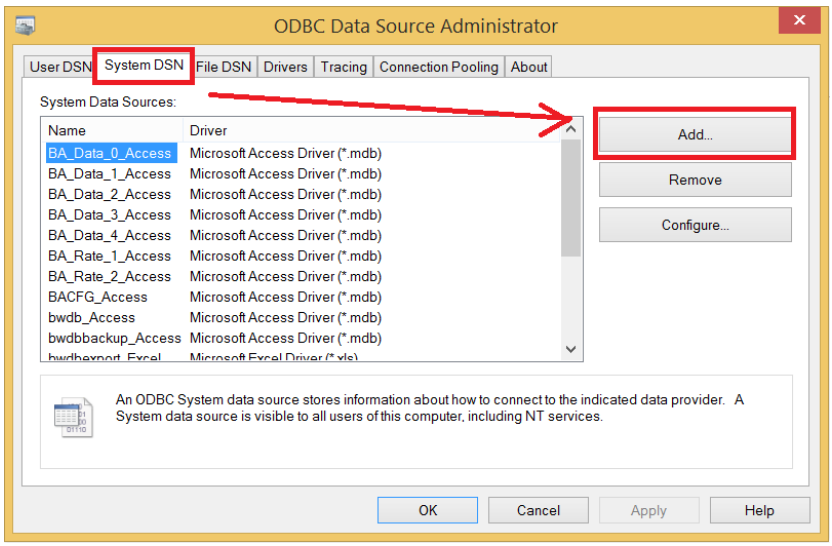
18. ODBC Data Source locates in different location depends on 32/64 bit

32bit Windows: Control Pane -> Administrative Tools -> ODBC Data Sources

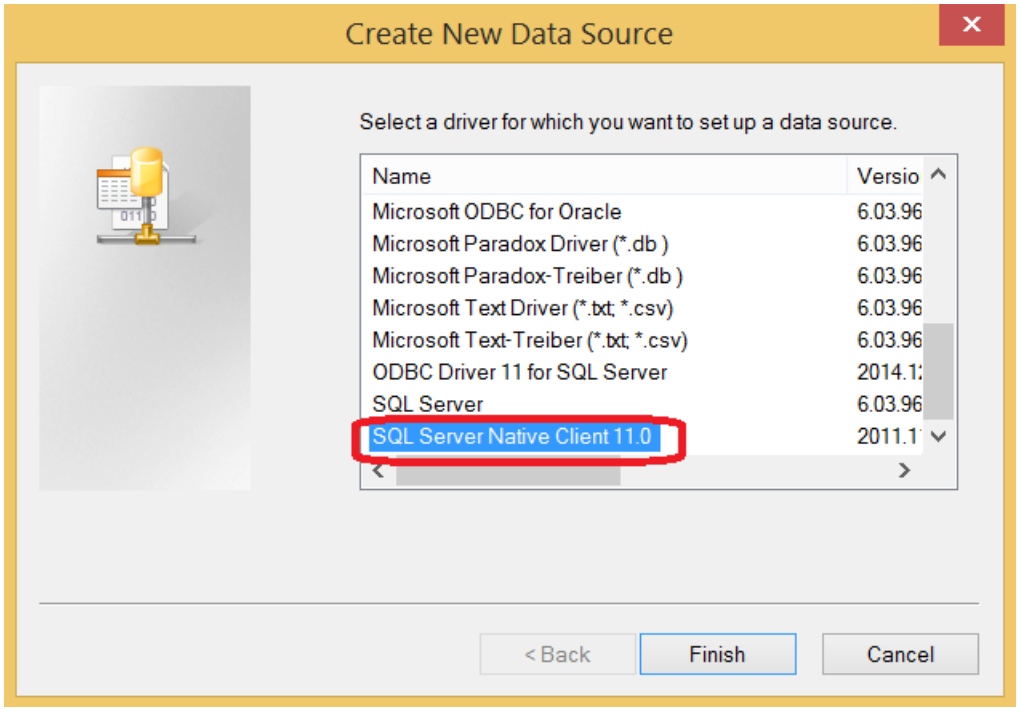
64 bit windows: C:\Windows\SysWOW64\odbcad32



19. System DSN -> click “Add” button



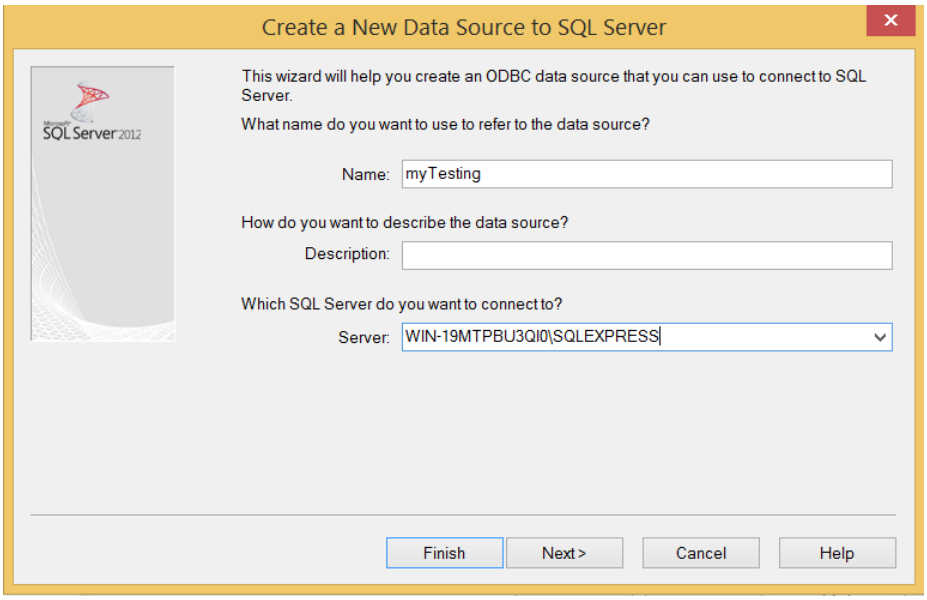
20. Select “SQL Server Native Client 11.0” and click “Finish” button



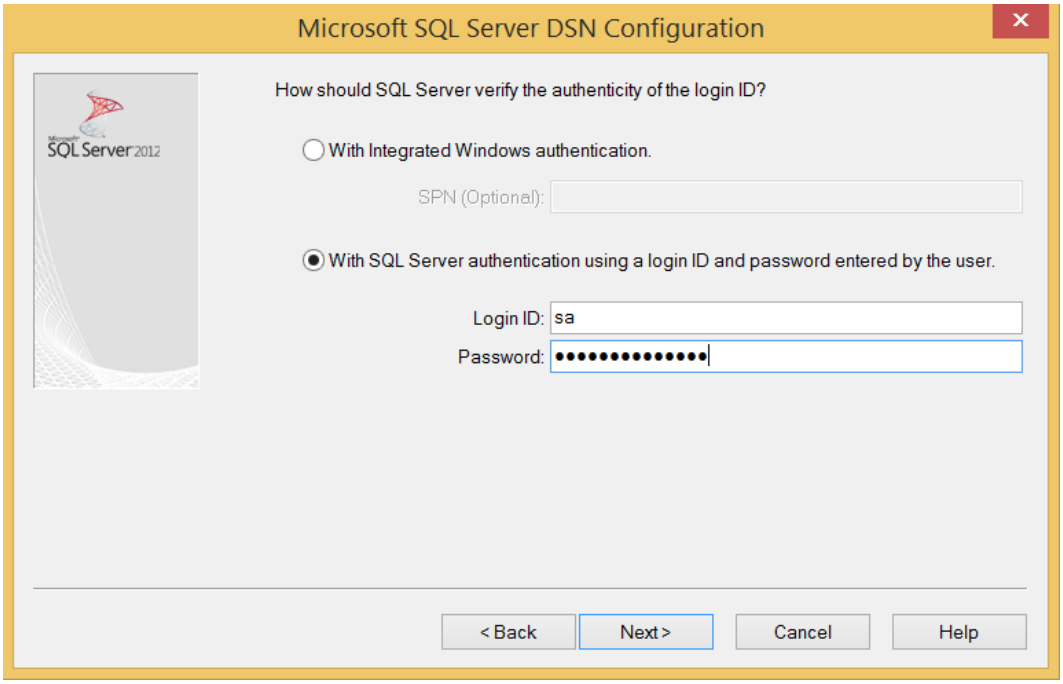
21. Create a DSN name and select the Server

    Name: myTesting

    Server: WIN-19MTPBU3QI0/SQLEXPRESS

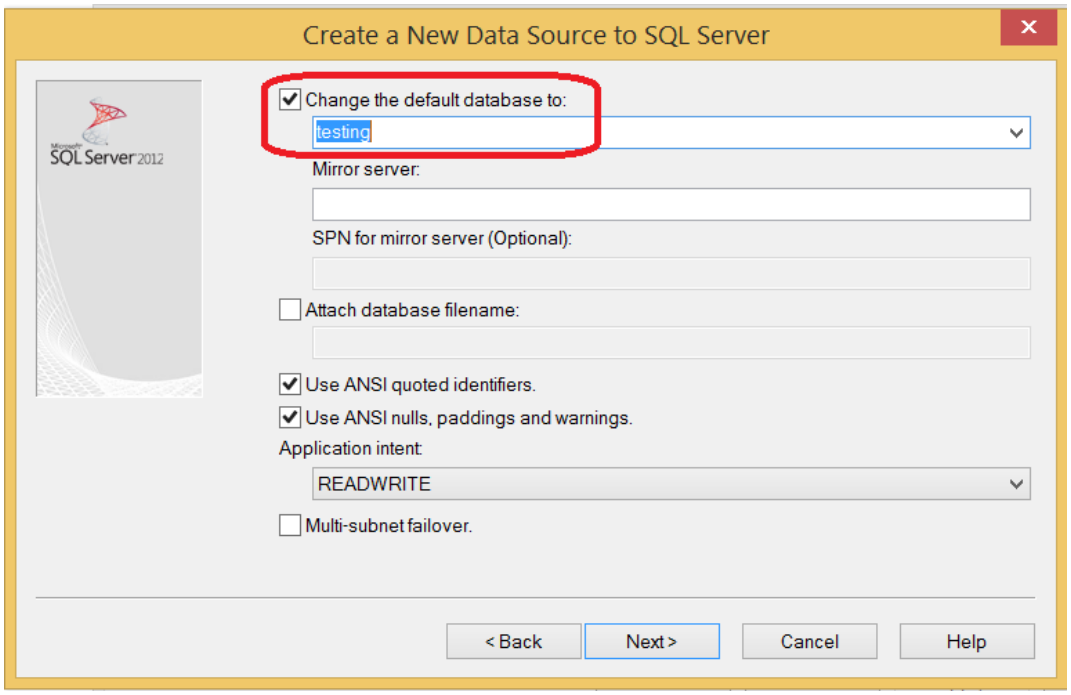


22. Select “With SQL Server authentication using a login ID and password entered by the user.”
    LoginI: sa
    Password: Advantech12345 (based on your SQL Server Express setup)

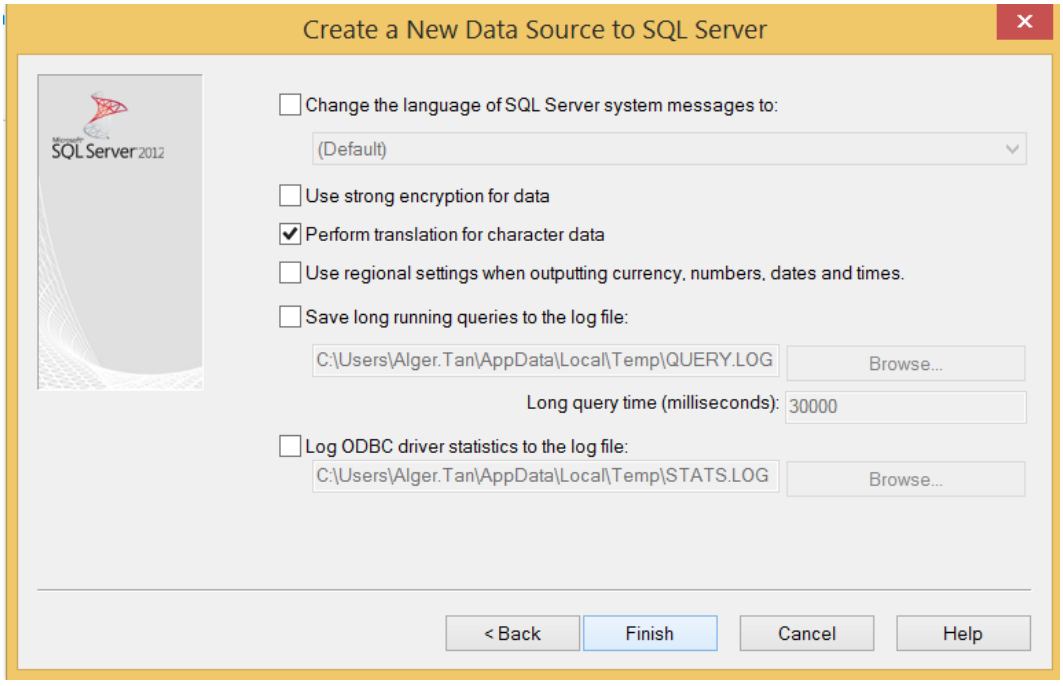


23. Select the SQL Express table

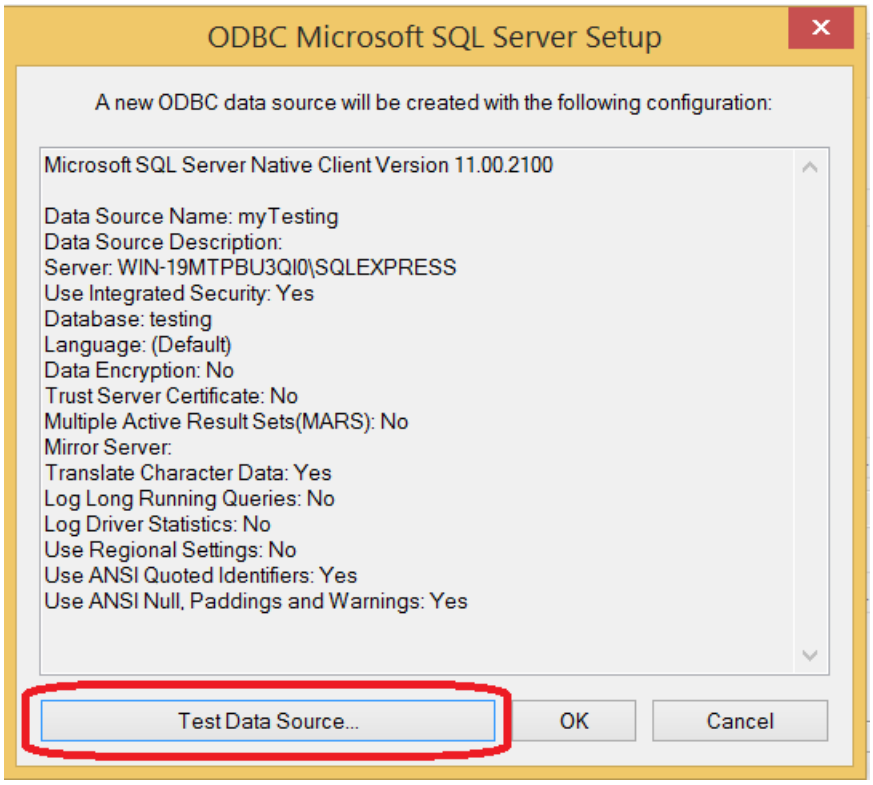
    E.g. testing (created in SQL Server 2014 Management Studio)



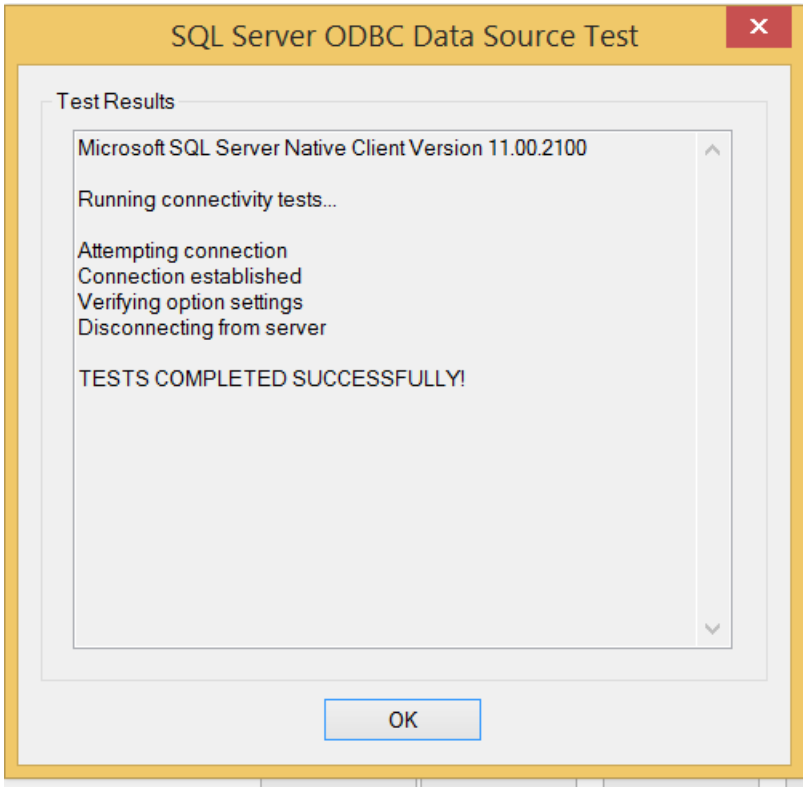
24. Click “Finish” button



25. Click “Test Data Source” to test the connection between ODBC and MS SQL Database.

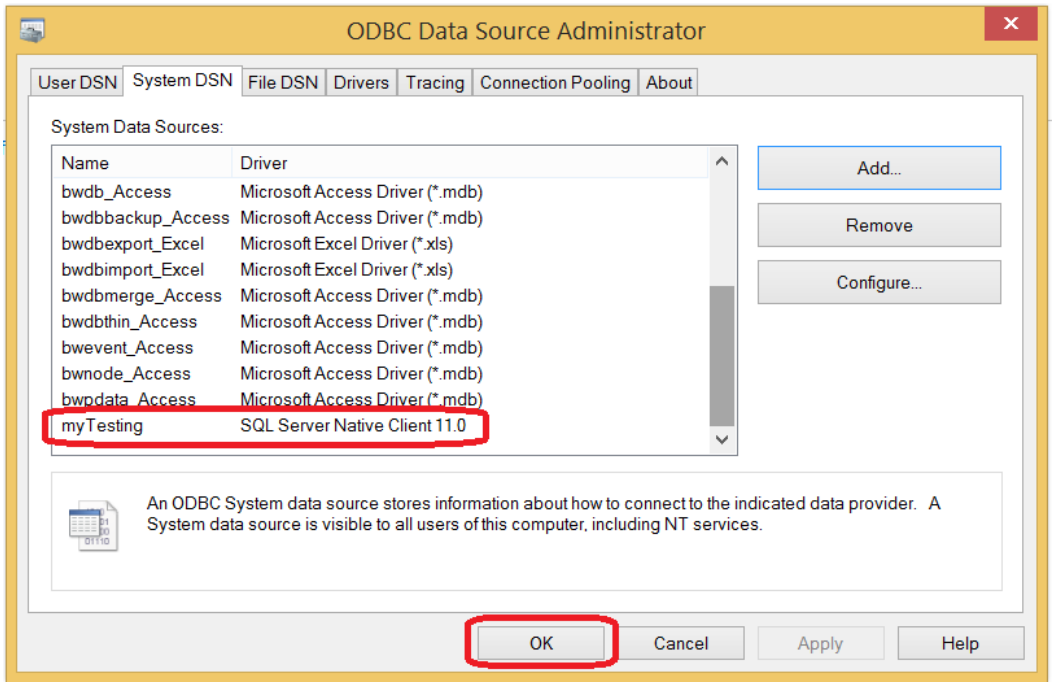


26. Test Successfully message in ODBC.



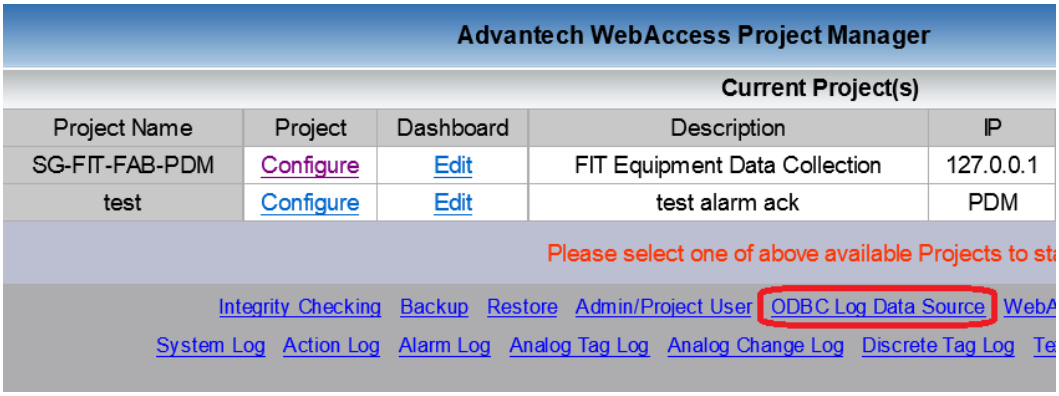
27. Result in ODBC Data Source Administrator

Click “OK” to complete the configuration,



Topic 4: WebAccess Configuration:

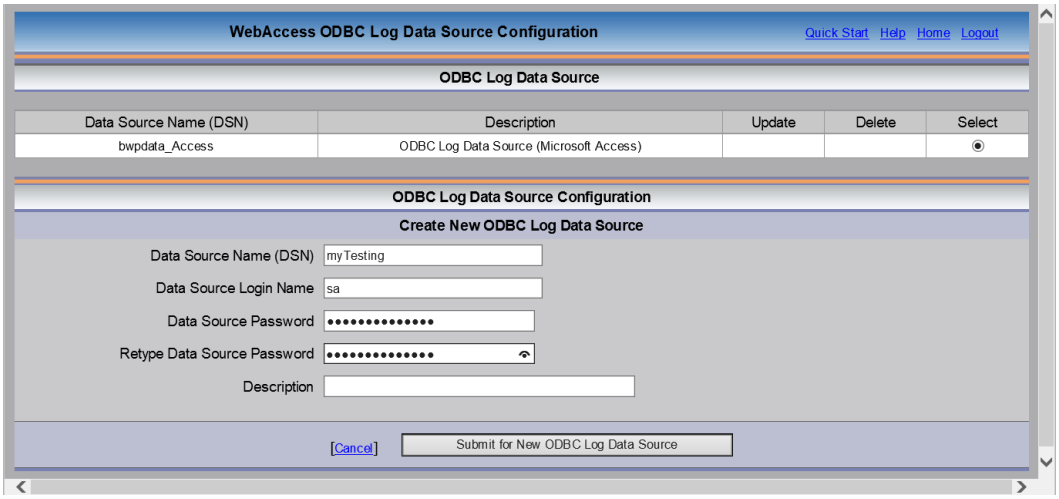
28. Click “ODBC Log Data Source”



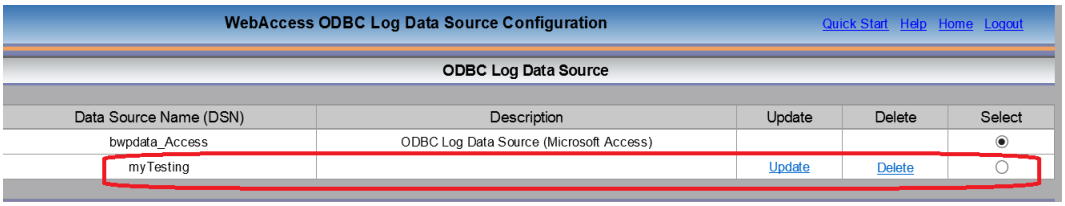
29. Enter ODBC Log Data Source

- Data Source Name (DSN): myTesting
- Data Source Login Name: sa
- Data Source Password: Advantech12345
- Retype Data Source Password: Advantech12345

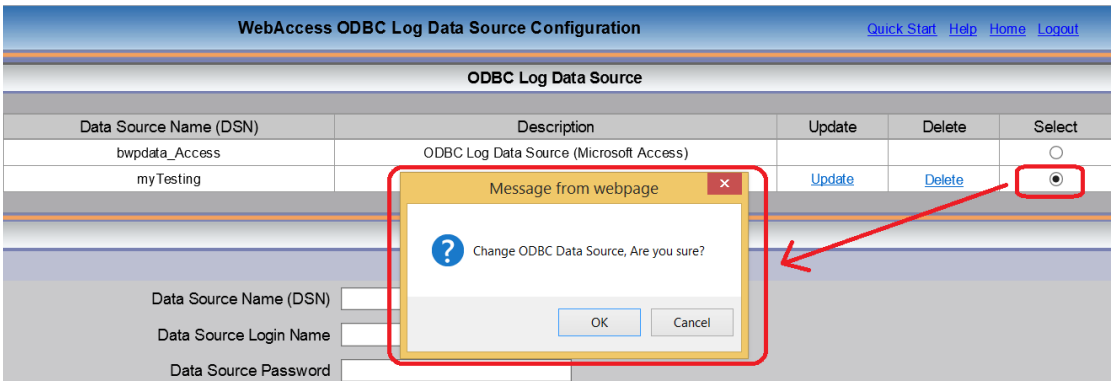
Click “Submit for New ODBC Log Data Source” button



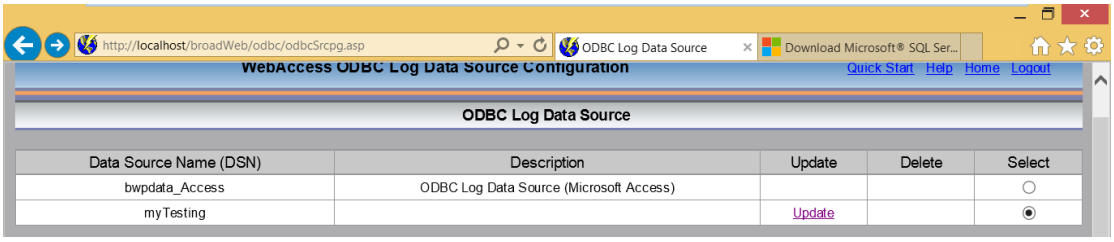
30. myTesting DSN is created, click “Select” radio button



31. A confirmation box pop up, click “OK”



32. ODBC log data source successfully changes from default MS Access to MS SQL Server 2014 Express



33. Go to SQL Server Management Studio, tables in “testing” database are created automatically.

