Lab Answer Key: Module 2: Installing and Configuring SQL Server 2014

Lab: Installing SQL Server 2014

Exercise 1: Preparing to Install SQL Server

Task 1: Prepare the Lab Environment

1. Ensure that the MSL-TMG1, 20462C-MIA-DC and 20462C-MIA-SQL virtual machines are running, and then log on to 20462C-MIA-SQL as **ADVENTUREWORKS\Student** with the password **Pa$$w0rd**.
2. In the D:\Labfiles\Lab02\Starter folder, right-click **Setup.cmd** and then click **Run as administrator**.
3. Click **Yes** when prompted to confirm that you want to run the command file, and then wait for the script to finish.

Task 2: View Hardware and Software Requirements

1. In the C:\SQLServer2014-x64-ENU folder, run **Setup.exe**. In the User Access Control message box, click **Yes**.
2. In the SQL Server Installation Center, on the **Planning** page, click **Hardware and Software Requirements**.
3. In Internet Explorer, note that the documentation provides detailed information about hardware and software requirements for SQL Server 2014. Then close Internet Explorer.

Task 3: Run the System Configuration Checker

1. In the SQL Server Installation Center, on the **Tools** lab, click **System Configuration**

Checker, and wait for the tool to start.

2. When the tool has run, click Show Details to view the checks that were performed.
3. Click **OK** to close SQL Server 2014 Setup.
4. Keep the SQL Server Installation Center window open. You will use it again in a later exercise.

Result: After this exercise, you should have run the SQL Server setup program and used the tools in the SQL Server Installation Center to assess the computer's readiness for SQL Server installation.

Exercise 2: Installing SQL Server

Task 1: Review the Installation Requirements

1. Review the requirements in the exercise scenario.
2. Verify that the M:\SQLTEST\Data and L:\SQLTEST\Logs folders exist (if not, create them).

Task 2: Install the SQL Server Instance

1. In the SQL Server Installation Center window, on the **Installation** tab, click **New SQL Server stand-alone installation or add features to an existing installation** wait for SQL Server setup to start.
2. If the **Microsoft Updates** and **Product Updates** pages are displayed, clear any checkboxes and click **Next**.
3. On the **Install Rules** page, click **Show details** and note that the list of rules that has been checked. If a warning about Windows Firewall is displayed, you can ignore it.
4. On the **Install Rules** page, click **Next**.

5. On the **Installation Type** page, ensure that **Perform a new installation of SQL Server 2014** is selected and then click **Next**.

6. On the **Product Key** page, select **Evaluation** and click **Next**.

7. On the **License Terms** page, note the Microsoft Software License Terms and check **I accept the license terms**, and then click **Next**.

8. On the **Setup Role** page, ensure that **SQL Server Feature Installation** is selected, and then click **Next**.

9. On the **Feature Selection** page, under the **Instance Features**, select **Database Engine Services**, and then click **Next**.

10. On the **Instance Configuration** page, ensure that **Named instance** is selected, type **SQLTEST** in the **Named instance** box, and then click **Next**.

11. On the **Server Configuration** page, on the **SQL Server Agent** and **SQL Server Database Engine** rows, enter the following values:

    - **Account Name**: ADVENTUREWORKS\ServiceAcct
    - **Password**: Pa$$w0rd
    - **Startup Type**: Manual

12. On the **Collation** tab, ensure that **SQL_Latin1_General_CP1_CI_AS** is selected and click **Next**.

13. On the **Database Engine Configuration** page, on the **Server Configuration** tab, in the **Authentication Mode** section, select **Mixed Mode(SQL Server authentication and Windows authentication)**. Then enter and confirm he password **Pa$$w0rd**.

14. Click **Add Current User**, this will add the user **ADVENTUREWORKS\Student (Student)** to the list of Administrators.

15. On the **Data Directories** tab, change the **User database directory** to **M:\SQLTEST \Data**.

16. Change the **User database log directory** to **L:\SQLTEST\Logs**.
17. On the **FILESTREAM** tab, and ensure that **Enable FILESTREAM for Transact-SQL access** is not selected, and then click **Next**.
18. On the **Ready to Install** page, review the summary, and then click **Install** and wait for the installation to complete.
19. On the **Complete** page, click **Close**.
20. Close the SQL Server Installation Center window.

Result: After this exercise, you should have installed an instance of SQL Server.

Exercise 3: Performing Post-Installation Configuration

Task 1: Start the SQL Server Service

1. On the Start screen, click **SQL Server 2014 Configuration Manager**. In the User Account Control dialog box, click **Yes**.
2. In the left-hand pane of the SQL Server Configuration Manager window, click **SQL Server Services**.
3. In the right-hand pane, double-click **SQL Server (SQLTEST)**.
4. In the **SQL Server (SQLTEST) Properties** dialog box, verify that the service is configured to log on as **ADVENTUREWORKS\ServiceAcct** and click **Start**. Then, when the service has started, click **OK**.

Task 2: Configure Network Protocols and Aliases

1. In SQL Server Configuration Manager, expand **SQL Server Network Configuration**, click **Protocols for SQLTEST**, and verify that the **TCP/IP** protocol is enabled for this instance of SQL Server.

2. In SQL Server Configuration Manager, expand **SQL Native Client 11.0 Configuration (32bit)**, click **Client Protocols**, and verify that the **TCP/IP** protocol is enabled for 32-bit client applications.

3. Click **Aliases**, and note that there are currently no aliases defined for 32-bit clients. Then right-click **Aliases** and click **New Alias**.

4. In the **Alias – New** window, in the **Alias Name** text box, type **Test**.

5. In the **Protocol** drop-down list box, ensure that **TCP/IP** is selected.

6. In the **Server** text box, type **MIA-SQL\SQLTEST** and click **OK**.

7. In SQL Server Configuration Manager, expand **SQL Native Client 11.0 Configuration**, click **Client protocols**, and verify that the **TCP/IP** protocol is enabled for 64-bit client applications.

8. Click **Aliases**, and note that there are currently no aliases defined for 64-bit clients. Then right-click **Aliases** and click **New Alias**.

9. In the **Alias – New** window, in the **Alias Name** text box, type **Test**.

10. In the **Protocol** drop-down list box, ensure that **TCP/IP** is selected.

11. In the **Server** text box, type **MIA-SQL\SQLTEST** and click **OK**.

12. Close SQL Server Configuration Manager.

Task 3: Verify Connectivity to SQL Server

1. Right-click the Start button and click **Command Prompt**.

2. At the command prompt, enter the following command to connect to the MIA-SQL\SQLTEST instance of SQL Server:

```
sqlcmd -S MIA-SQL\SQLTEST -E
```

3. At the sqlcmd prompt, enter the following command to display the SQL Server instance

name:

```
SELECT @@ServerName;
GO
```

4. Close the command prompt window.
5. Start SQL Server Management Studio, and when prompted, connect to the database engine named **Test** using Windows Authentication.
6. In Object Explorer, right-click **Test** and click **Properties**. Then verify that the value of the **Name** property is **MIA-SQL\SQLTEST** and click **Cancel**.
7. In Object Explorer, right-click **Test** and click **Stop**. In the User Account Control message box, click **Yes**. Then when prompted to confirm that you want to stop the **MSSQL$SQLTEST** service, click **Yes**.
8. When the service has stopped, close SQL Server Management Studio.

Result: After this exercise, you should have started the SQL Server service and connected using SSMS.