Microsoft

DAT219x

Provisioning Databases

Lab 03 | Migrating SQL Server Databases

Estimated time to complete this lab is 90 minutes

Overview

In this lab, you want to move a SQL Server database from a Linux instance to an Azure SQL Database.

The labs in this course are accumulative. You cannot complete the following labs if this lab has not been successfully completed.

What You'll Need

To complete this lab, you will need the following:

- High-speed and reliable internet connectivity (for remote connections to the VM)
- A second monitor is recommended (for the Remote Desktop connection)
- A Microsoft account (such as one used for outlook.com, Hotmail, or other Microsoft services)
- A Microsoft Azure subscription
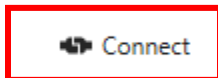- To have completed the previous labs in this course.

Exercise 1: Migrate a SQL Server Database to Linux

In this exercise, you will prepare the lab environment for future exercises.
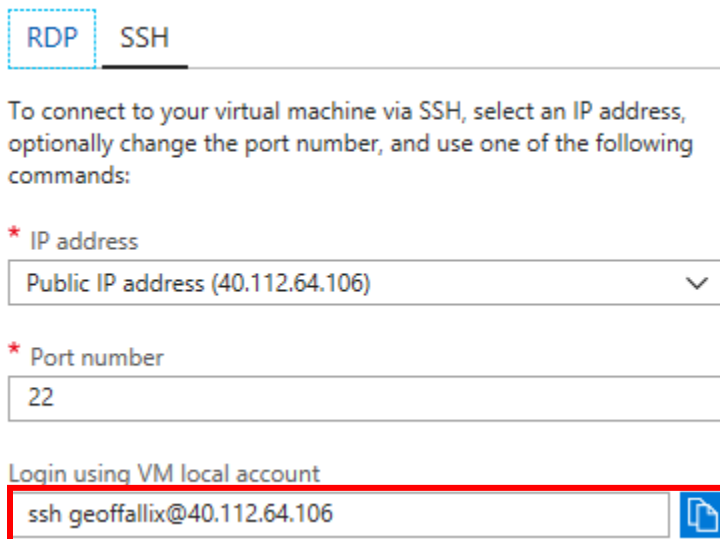
Start the Linux virtual machine

In this task, you will start the virtual machine for the lab.

1. If the virtual machine that you created in Lab 00 is not already running, open the Azure Portal, sign in, select the virtual machine, and click **Start**.

2. When the virtual machine has started, click **Connect**.

3. Copy the **ssh** command.

4. Click **Cloud shell**.

5. In Cloud shell paste the ssh command and press Enter.

6. Type your password and press Enter.

Attach a SQL Server Database

In this task, you will attach a sample database.

1. In Cloud shell, type **cd /tmp** and press Enter.

2. Type **wget https://github.com/Microsoft/sql-server-samples/releases/download/adventureworks/AdventureWorks2016.bak** and press

Enter.
Note: This is a standard SQL Server backup file. You could use this command to import a database backup that you have created on SQL Server for Windows to your Linux file system.
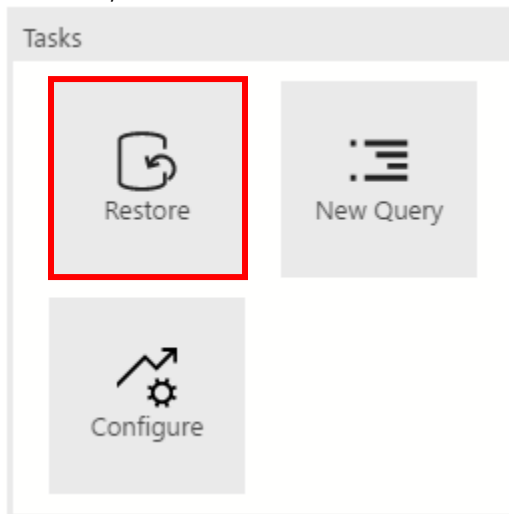
3. Wait until the download has completed.

4. Start SQL Operations Studio.

5. Click your server in the servers list and, when it has started, right-click the server and click **Manage**.

> **Lab Check –** *You will need these answers for the module quiz – write them down!*
>
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>
> In the **Search** box, what is listed? _____

6. In **Tasks**, click **Restore**.

7. In **Restore from**, click **Backup File**.

8. Click the build button for **Backup file path**.

9. Expand **tmp** and select **Adventureworks2016.bak**.

10. Click **OK**.

11. Click **Restore**.
    Note: You might need to click on the **Database** drop-down button to make the **Restore**

button active.

12. When the restore has completed, click **Servers**.
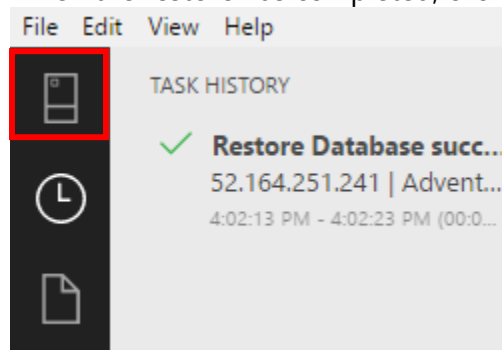
13. Expand **Databases** and note that there is now an **AdventureWorks2016** database.

14. Expand **AdventureWorks2016**.

15. Expand **Tables**.

Lab Check – *You will need these answers for the module quiz – write them down!*

16. Right-click **AdventureWorks2016** database and click **New Query**.

17. Type **SELECT * FROM Person.Person** and click **Run**.

18.

You have now completed the lab.

If you are not immediately continuing with the next lab, you should complete the ***Finishing Up*** *exercise to shut down and stop the VM.*

Finishing Up

In this exercise, you will shut down and stop the VMs.

1. Deallocate the Linux VM by clicking **Stop**.

   Deallocation will take some minutes to complete, and also extends the time required to restart the VM. Consider deallocating the VM if you want to reduce costs, or if you choose to complete the next lab after an extended period.
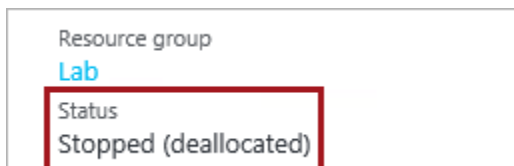

2. When prompted to stop the VM, click **Yes**.
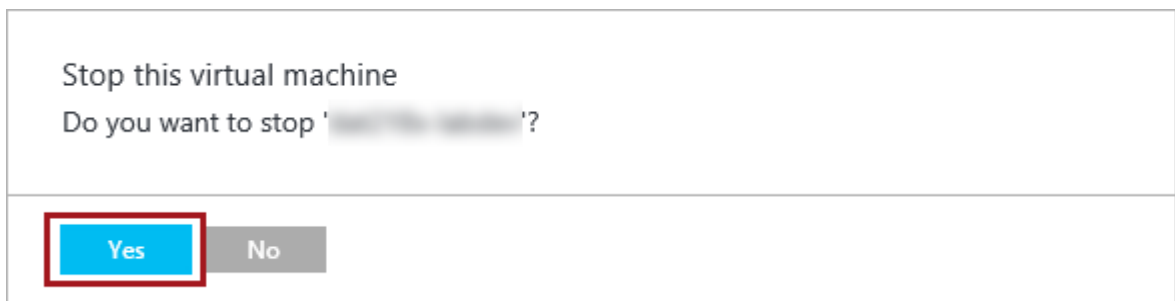
   The deallocation can take several minutes to complete.

3. Verify that the VM status updates to **Stopped (Deallocated)**.

   In this state, the VM is now not billable—except for a relatively smaller storage cost.

   Note that a deallocated VM will likely acquire a different IP address the next time it is started.

4. Sign out of the **Azure Portal**.