Overview
This course includes optional practical exercises where you can try out the techniques demonstrated in the course for yourself. This guide lists the steps for the individual practical exercises.

See the Practical Exercises > Overview page in your course for information about getting started.

You will need an Azure Subscription to complete these exercises. If you already have an Azure subscription you can use in a test or practice environment, you can use that, otherwise there are details available on the Practical Exercises > Overview page to help you set up a free trial account. There is also a step by step video available to walk you through this process at the beginning of the course in the Welcome > Start Here section, called "Setting up a Free Microsoft Azure 30-day Trial"
**Create and Manage Virtual Networks by Using Azure Portal**

In this exercise, you will be working with virtual networks within the Azure Portal. You will create a new virtual network and explore the various management options.

1. Navigate to the [Azure Portal](https://portal.azure.com) and sign in.
3. Type virtual networks in the filter to reveal the available options for managing virtual networks in the Azure Portal.
4. Mark Virtual networks as a favorite, by clicking the yellow star beside it in the menu, the star will change from clear to yellow, indicating it has been marked as a favorite and thus adding Virtual Networks to your Hub menu.
5. Click Virtual networks. If you have any existing virtual networks, they should appear in this list. Click Add.
6. On the Create virtual network blade, fill in the following values to create a new virtual network. Click Create when you are finished entering the information
   - Name: Server-VNET
   - Address space: 172.168.0.0/16
   - Subnet name: Server-Subnet
   - Subnet address range: 172.168.0.0/24
   - Subscription: <Your subscription>
   - Resource group: Create a new one named “Server-VNET”
   - Location: <Your location>
7. Notice the notifications and click the notifications icon in the top right for details, as the new virtual network is created.
8. On the Hub menu, click Virtual networks. Confirm that the new virtual network has been created. Click Server-VNET. You may need to refresh.
9. On the Server-VNET blade, review the list of available management options under Settings, such as address space, connected devices, subnets, DNS servers, and peerings.
10. When you are finished exploring the new virtual network, close the virtual networks blade.
Deploy a Virtual Machine into a virtual network

In this exercise, you will deploy a new Windows Server 2012 R2 VM to a new virtual network within the Azure Portal.

1. Navigate to the Azure Portal and sign in.
2. On the Hub menu, click New.
4. In the search results, click Windows Server 2012 Datacenter.
5. On the Windows Server 2012 R2 Datacenter blade, notice the default deployment model is set to Resource Manager. Click Create.
6. On the Create Virtual Machine blade, fill in the following values for basic settings (substituting your information for the user name, subscription, and location) and click OK.
   - Name: SERVER-05
   - VM disk type: HDD
   - User name: <Your first name>
   - Password: Pa$$w0rd12345
   - Subscription: <Your subscription>
   - Resource group: Create a new one named “ServerRG1”
   - Location: <Your location>
7. On the Choose a size blade, click View all. Click the A0 Basic size and then click Select.
8. On the Settings blade, click Network.
9. On the Choose virtual network blade, click Server-VNET (created in the previous exercise).
10. On the Settings blade, under Network, confirm that the Virtual network and Subnet reflect your selected network. Click OK.
11. On the Summary blade, review the configuration and then click OK.
12. When the notification message appears click on it to open a deploying blade. This contains details about the deployment. Close that once you are finished with it.
13. When the VM is created, click Virtual machines in the Hub menu.
14. In the Virtual machines blade, click the server name for the VM that you deployed.
15. In the Server-05 blade, click Network Interfaces under settings.
16. In the network Interfaces blade notice the name assigned to the NIC and also the IP Addresses listed.
• Public IP Address > this is a public IP to allow you to connect to the virtual machine, which is dynamically assigned by Azure.

• Private IP Address > this is within the private IP address range that you specified in the VNET subnet.

17. click **Stop** at the top of the blade to stop the VM. This ensures that you don’t consume resources unnecessarily.