

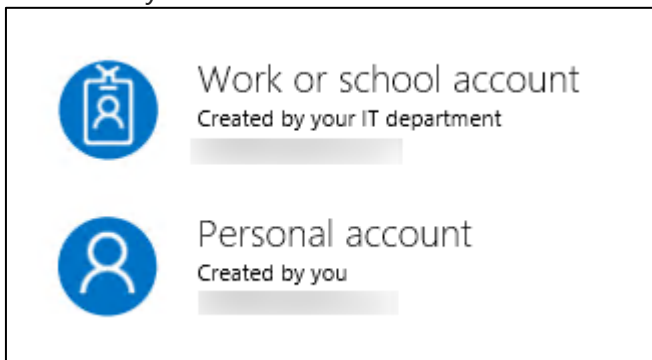
Creating an Azure VM in a Virtual Network

Lab Overview

In this lab, you will create a virtual network that will be used for several of the hands-on labs in this course. You will then create a virtual machine and specify the virtual network configuration and the availability set configuration along with storage for the virtual machine.

Exercise 1: Login to the Azure Management Portal

1. From within the RDP session (**LABVM**), open Internet Explorer and navigate to <https://portal.azure.com> and authenticate with your Organization or Microsoft Account by selecting the correct link.



Exercise 2: Create an Azure Virtual Network

1. Click **New**, **Networking**, and then click **Virtual Network**.



2. Leave the deployment model at **Resource Manager** and click **Create**.



3. Specify the following configuration:

- Name: **OpsTrainingVNET**
- Address space: **10.0.0.0/16**
- Subnet name: **Apps**
- Subnet address range: **10.0.0.0/24**
- Resource Group: **OpsVNETRmRG**
- Location: **Select a region different than the one you used for the lab virtual machine.**

* Name
OpsTrainingVNET ✓

* Address space ⓘ
10.0.0.0/16 ✓
10.0.0.0 - 10.0.255.255 (65536 addresses)

⚠ The address space '10.0.0.0/16' overlaps with '10.0.0.0/16' in virtual network 'OPSLABRG-vnet'.

* Subnet name
Apps ✓

* Subnet address range ⓘ
10.0.0.0/24 ✓
10.0.0.0 - 10.0.0.255 (256 addresses)

* Subscription
[selected] ▼

* Resource group ⓘ
☒ Create new ☐ Use existing
OpsVNETRmRG ✓

* Location
South Central US ▼

You may see a warning like this when creating the virtual network. This is just letting you know that you cannot connect these two virtual networks later using a site-to-site or ExpressRoute connection because the address range overlaps. You can ignore this warning.

4. Check the box **Pin to dashboard** and click **Create** to create the virtual network.

☒ Pin to dashboard

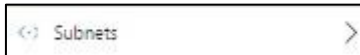
Create

Exercise 3: Update the Virtual Network

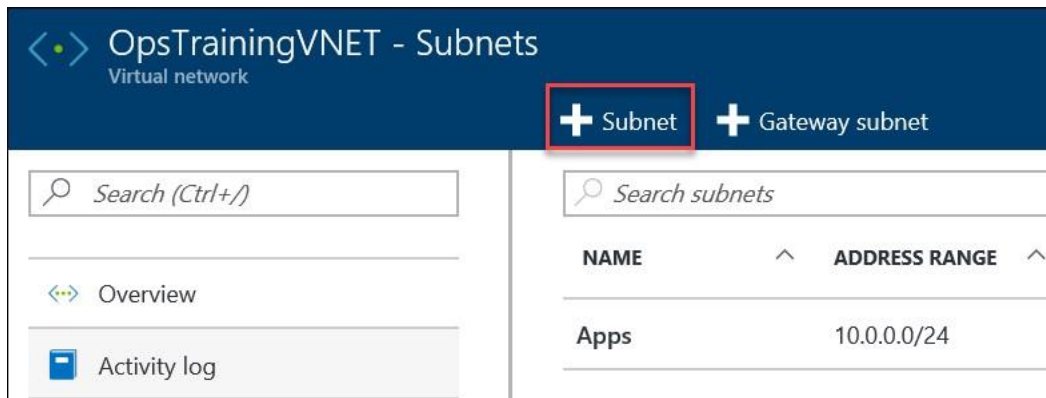
1. Click the **OpsTrainingVNET** tile to open the virtual network.



2. Click the **Subnets** tile on the virtual network configuration blade.



3. Click **Subnet +**



4. Specify the following configuration on the new subnet and click **OK**.
 - a. Name: **Data**
 - b. Address Space: **10.0.1.0/24**

Add subnet
OpsTrainingVNET

* Name

* Address range (CIDR block) ⓘ

10.0.1.0 - 10.0.1.255 (256 addresses)

Network security group
None
>

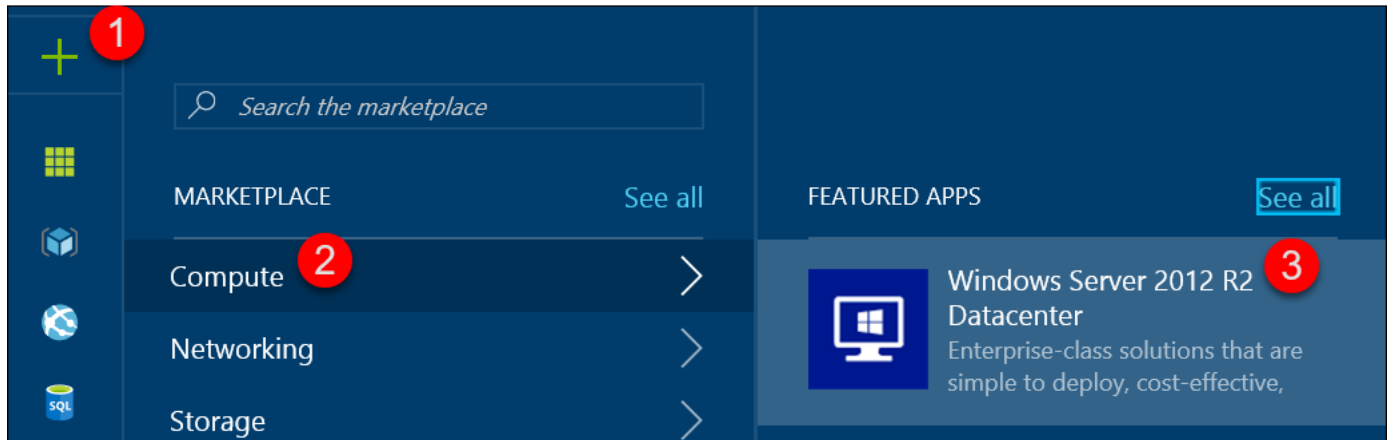
Route table
None
>

You should have two subnets with following address ranges:

+ Subnet + Gateway subnet				
<input type="text" value="Search subnets"/>				
NAME	ADDRESS RANGE	AVAILABLE ADDR...	SECURITY GROUP	
Apps	10.0.0.0/24	251	-	
Data	10.0.1.0/24	251	-	

Exercise 4: Create a Virtual Machine

- Click **New, Compute**, and then select the **Windows Server 2012 R2 Datacenter** image from the FEATURED APPS list.



3. Leave the deployment model set to **Resource Manager** and click **Create**.



4. Specify the following configuration and click **OK**.
- Name: **WebVM-1**
 - VM disk type: **HDD**
 - User name: **demouser**
 - Password: **demo@pass123**
 - Subscription: **Ensure the correct subscription is selected**
 - Resource Group: **OpsVMRmRG**
 - Location: **the same region selected for the Azure Virtual Network**

1 Basics
Configure basic settings >

2 Size
Choose virtual machine size >

3 Settings
Configure optional features >

4 Summary
Windows Server 2012 R2 Datacenter >

* Name
WebVM-1 ✓

VM disk type ⓘ
HDD ▼

* User name
demouser ✓

* Password
..... ✓

* Confirm password
..... ✓











Subscription
..... ▼

* Resource group ⓘ
☒ Create new ☐ Use existing
OpsVMRmRG ✓

Location
South Central US ▼

5. Choose **F1 Standard** and then click **Select** at the bottom of the page.

Note: You may have to click view All to see this option.

F8S Standard		F1 Standard		F2 Standard	
8	Cores	1	Cores	2	Cores
16	GB	2	GB	4	GB
 16 Data disks		 2 Data disks		 4 Data disks	
 25600 Max IOPS		 2x500 Max IOPS		 4x500 Max IOPS	
 Load balancing		 Load balancing		 Load balancing	
 Premium disk support					
660.67 USD/MONTH (ESTIMATED)		82.58 USD/MONTH (ESTIMATED)		165.17 USD/MONTH (ESTIMATED)	
<div>Select</div>					

6. Specify the following configuration options:

- Virtual network: Click the Virtual Network tile to change it to **OpsTrainingVNET** (if it is not already selected).
- Subnet: Click the Subnet tile to change it to the **Apps** subnet (if it is not already selected)
- Click the **Network security group** tile (see next step)

7. Change the name of the network security group to **APPSNSG**.

8. Click the **Add an Inbound Rule** link and specify the following configuration, and click **OK** twice to get back to the **Settings** blade.

- Name: **HTTP**
- Priority: **100**
- Source: **Any**

- Service: **HTTP**
- Protocol: Fixed value
- Port range: Fixed value □ Action: **Allow**

Create network security...	Add inbound security rule
<p>* Name</p> <p>APPSNSG ✓</p> <p>Inbound rules ⓘ</p> <p>1000: default-allow-rdp ✓</p> <p>Any ✓</p> <p>RDP (TCP/3389)</p> <p>+ Add an inbound rule</p> <p>Outbound rules ⓘ</p> <p>No results</p> <p>+ Add an outbound rule</p> <p>OK</p>	<p>* Name</p> <p>HTTP ✓</p> <p>* Priority ⓘ</p> <p>100 ✓</p> <p>* Source ⓘ</p> <p>Any CIDR block Tag</p> <p>Service ⓘ</p> <p>HTTP ▼</p> <p>* Protocol</p> <p>Any TCP UDP</p> <p>* Port range ⓘ</p> <p>80</p> <p>* Action</p> <p>Deny Allow</p> <p>OK</p>

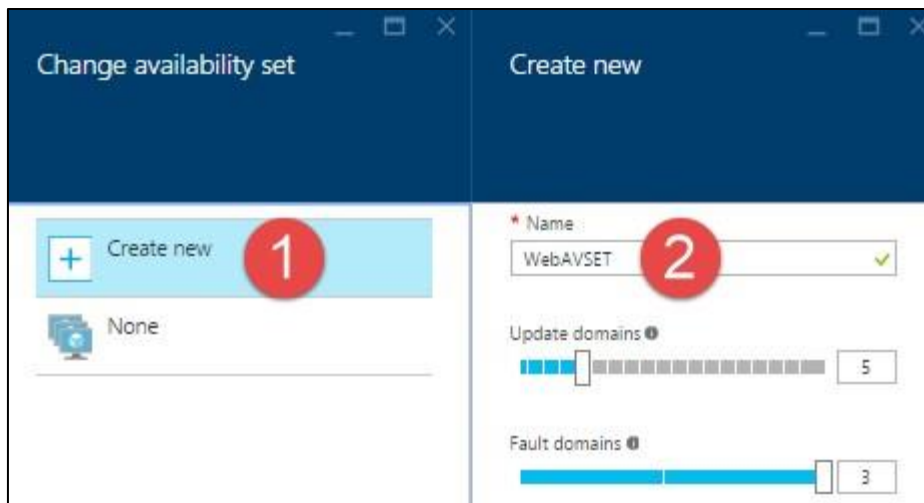
9. Scroll down and click the **Availability set** tile.

Availability

* Availability set ⓘ

None >

10. Click **Create new**, and name the availability set **WebAVSet** and then click **OK**.



11. Click **OK** until all blades are closed and the virtual machine starts to provision.

Lab Summary

In this lab, you created a virtual network that will be used for several of the hands on labs in this course. You then created a virtual machine and specified the virtual network configuration and the availability set for the virtual machine.