ONLINE LAB: Setting up your first Virtual Machine Scale Set

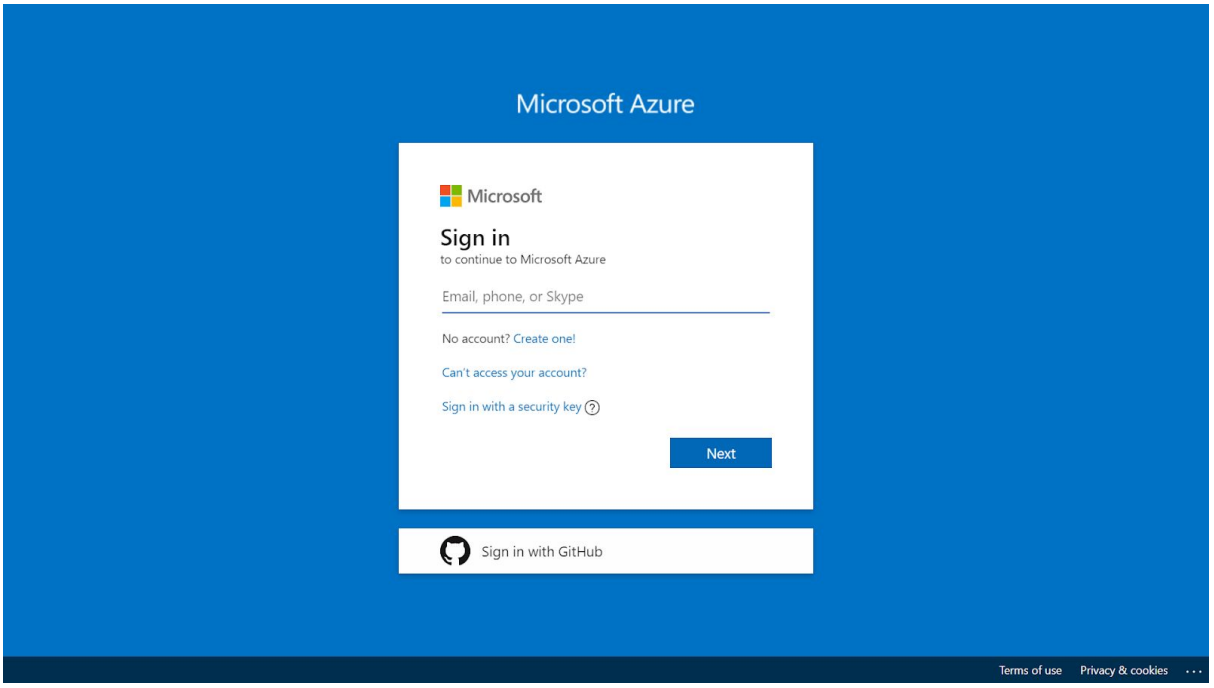
Your Challenge

- Create a resource group named **VMScale-Set-ResourceGroup.**
- Create a new virtual machine
- Create an image
- Create a new virtual machine scale set
- Configure VM's inbound port rules to RDP access
- Connect to a VM in the scale set
- Clean up all of your resources created after you're done

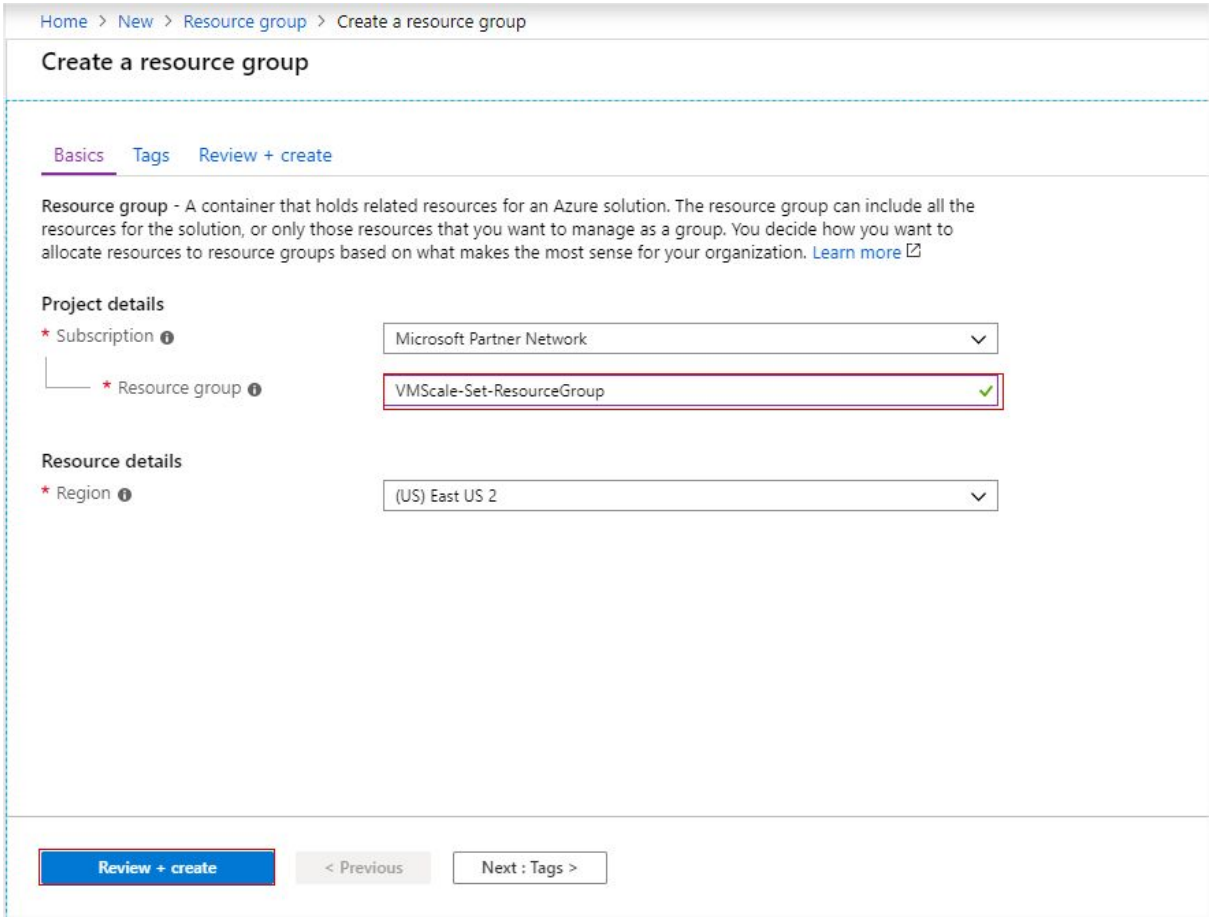
Solution

Step 1 Sign Into Azure

Sign into Azure at https://portal.azure.com/



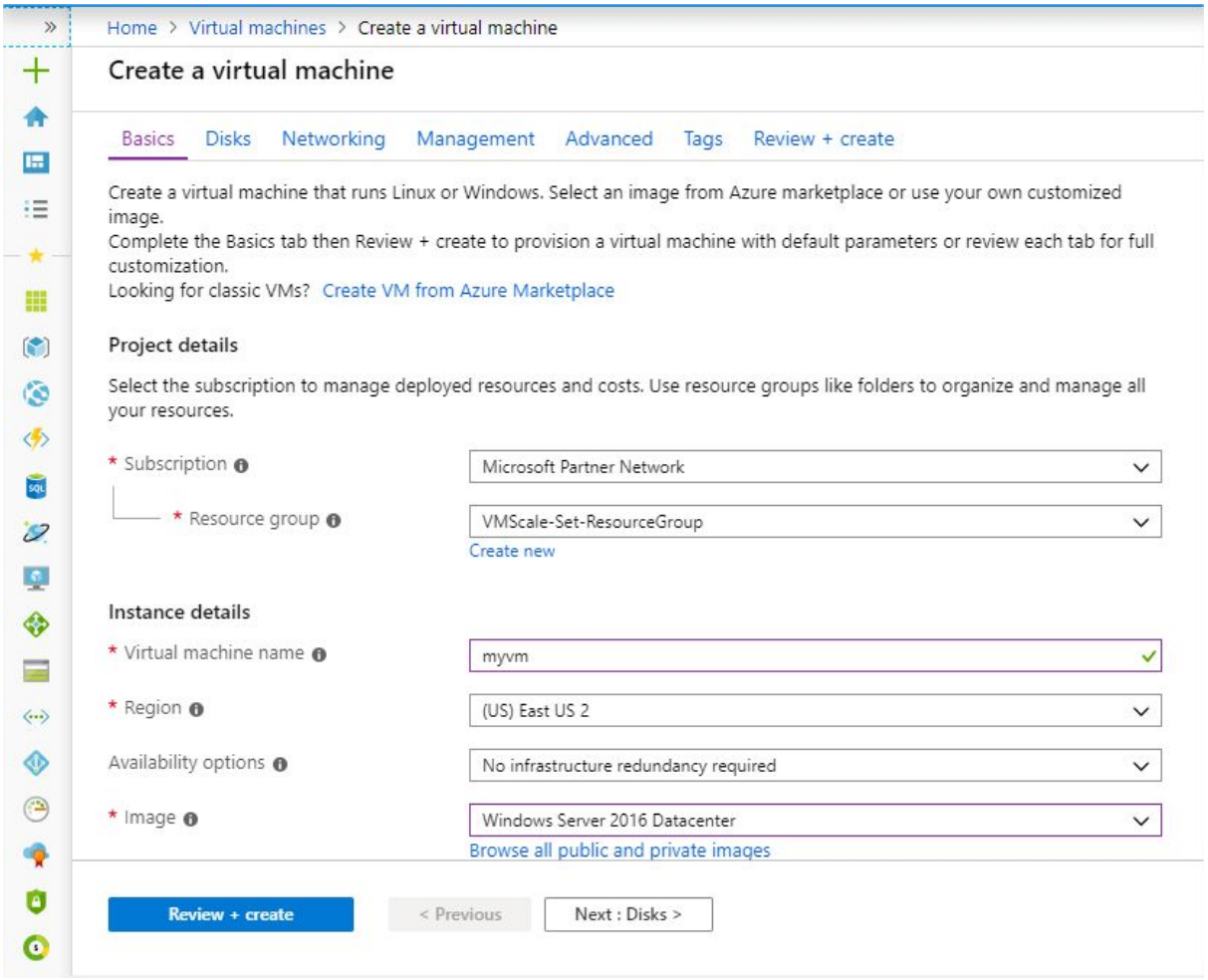
Step 2 Create a resource group



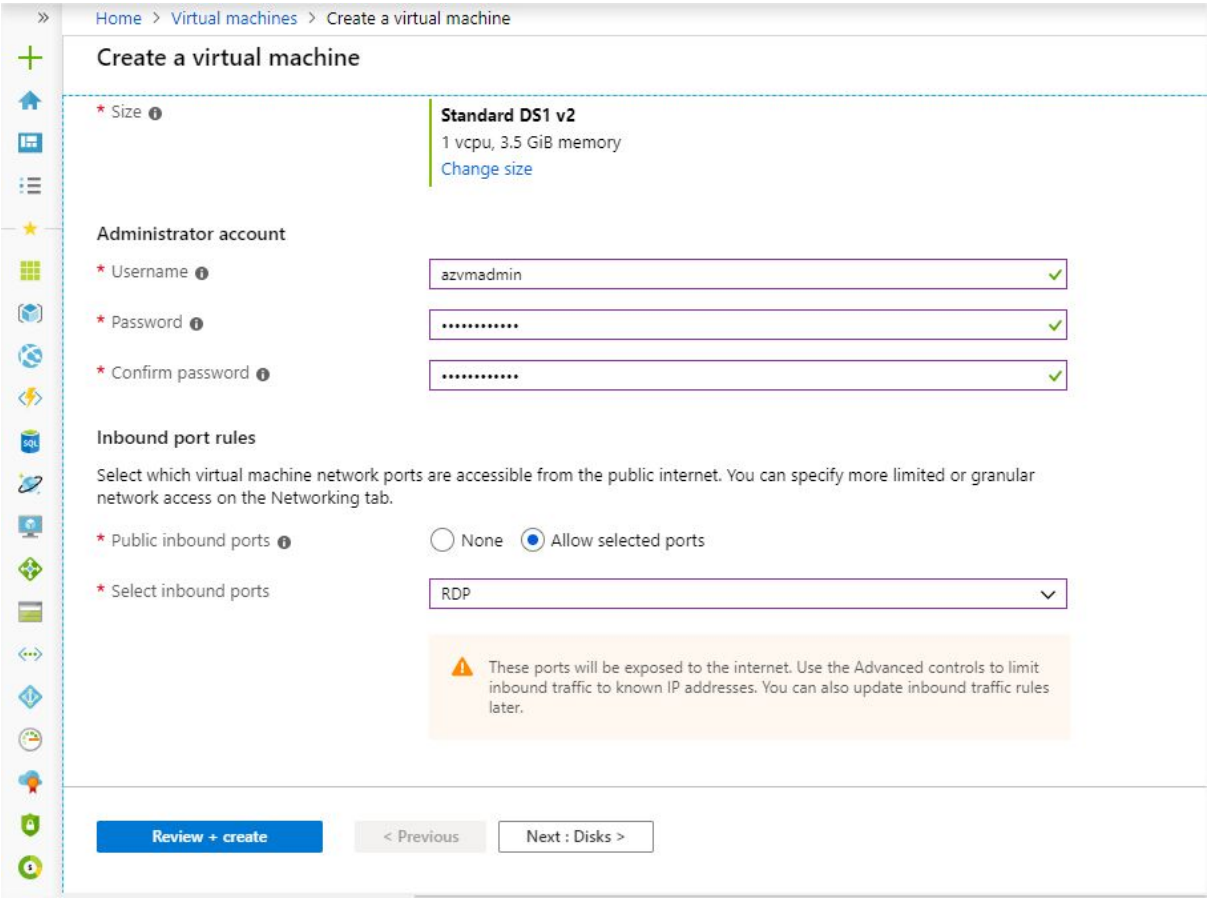
1. In the navigation list, click **Resource groups**.
2. Click **Add** to open the **Resource group** blade.
3. For **Resource group** name, enter **VMScale-Set-ResourceGroup**.
4. Select a subscription and a location.
5. Click **Review + Create** to proceed to the last step.
6. Click **Create** to create the resource group.
7. Click **Refresh** to refresh the list of resource groups.

The new resource group appears in your resource groups list.

Step 3 Create a new virtual machine



1. In the list of **virtual machines,** click create a virtual machine.
2. Choose the same subscription and location as the resource group.
3. Choose a name for the virtual machine, such as “**myvm”**
4. Choose your desired Operating System, Such as **“Windows Server 2016 Datacenter”**



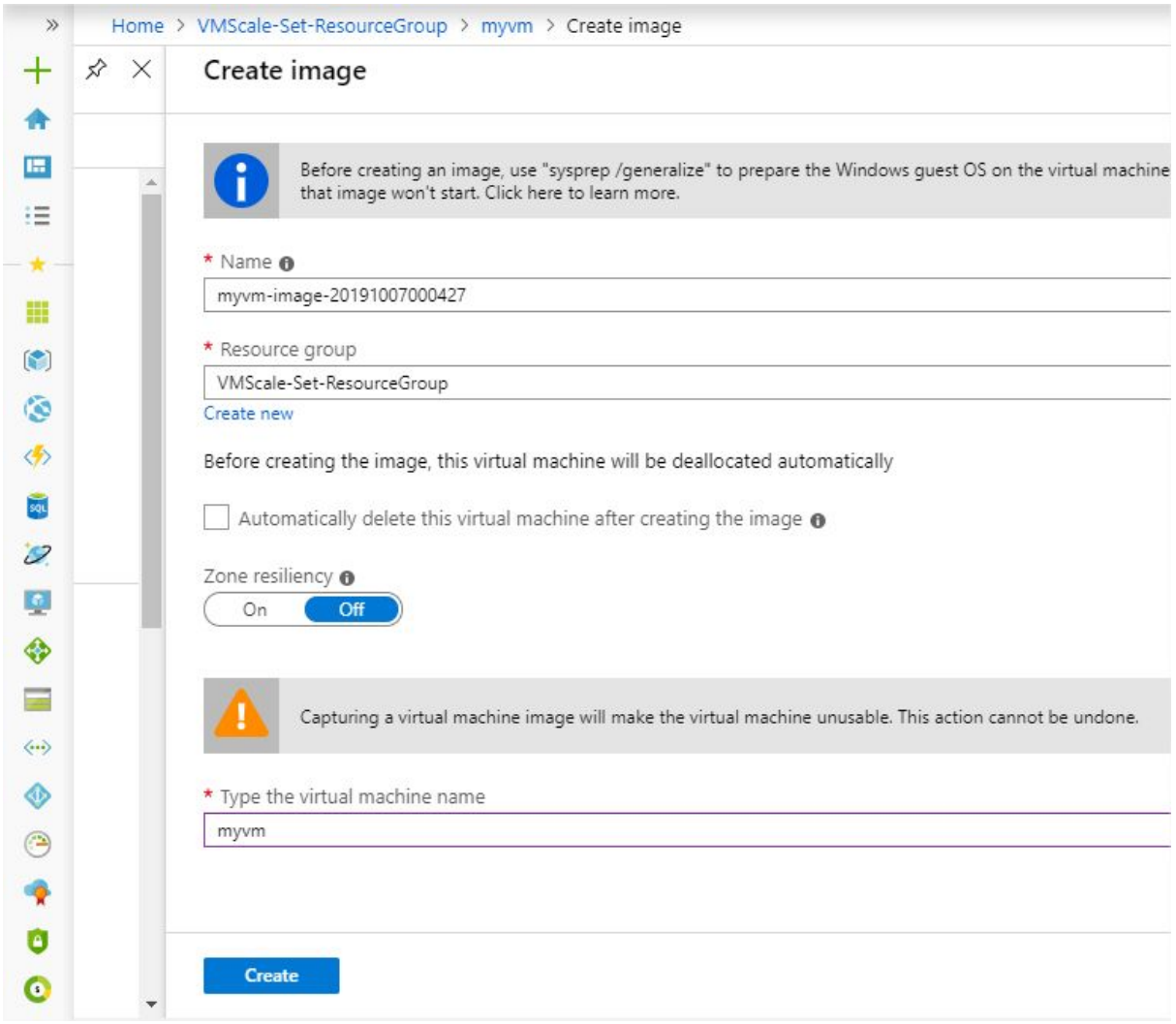
5. Enter your desired virtual machine size such as “**Standard DS1 v2**”.
6. Enter your desired username and password.
7. Optional to access your virtual machine using RDP, you have to enable inbound ports for RDP.
8. Click **Review + Create** to proceed to the last step.
9. Click **Create** to create the virtual machine.
10. Wait for the deployment to complete. It should take 3 minutes 40 seconds or so.

NEW Step 3B Generalize the VM with Sysprep

Note that running **sysprep with **generalize** on an Azure VM makes it **unusable** after. Do not generalize a VM that you want to keep. Instead, make a copy and generalize the copy.**

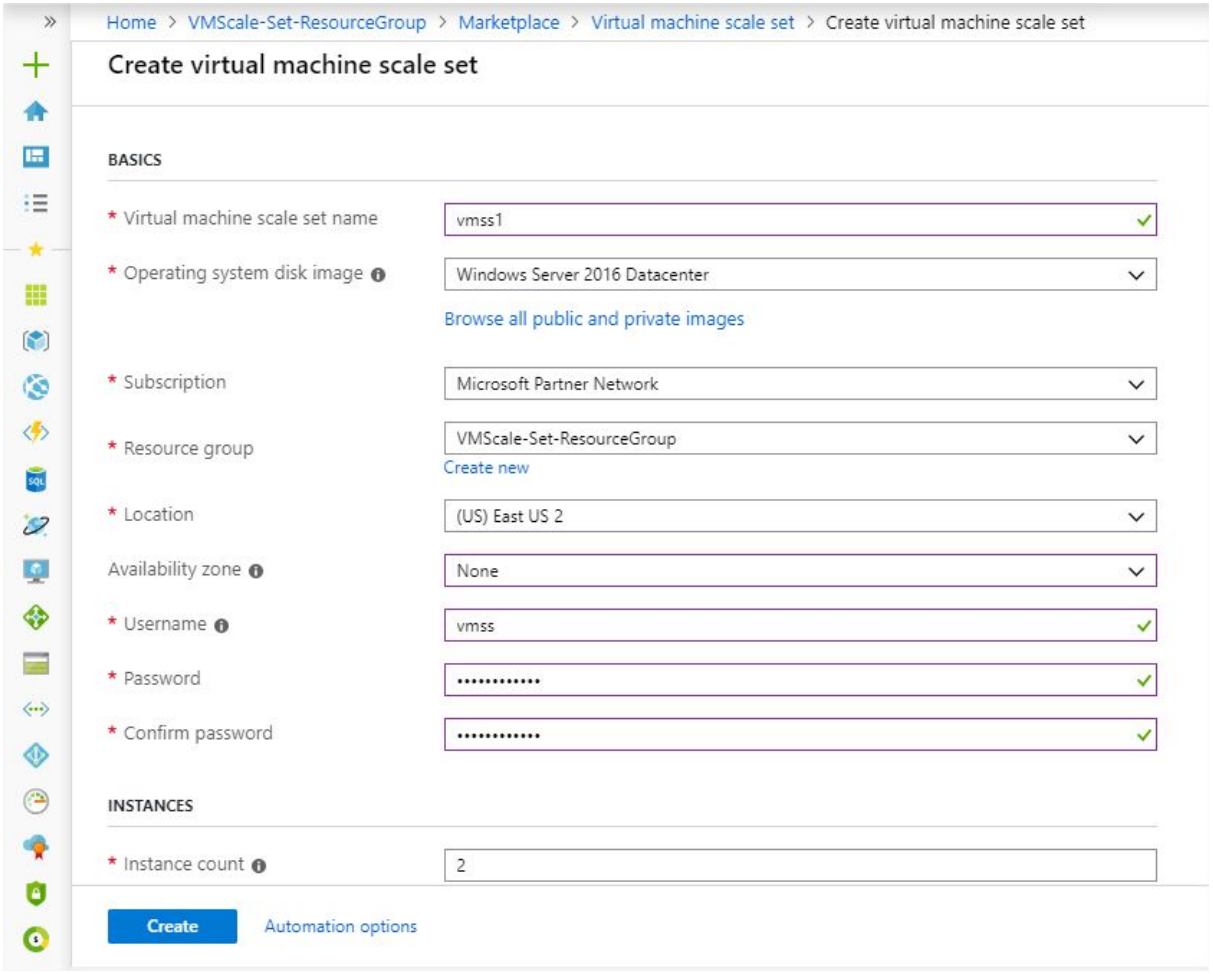
1. Use RDP to connect to the new VM
2. If this was a real example, you'd want to set up any applications, code, files, etc that you want this image to contain
3. Run **%windir%\system32\sysprep\sysprep.exe**
4. Select **OBOE** and **generalize**
5. Select **Shutdown after running**
6. Click **OK** and disconnect from the VM
7. Wait for the machine to shut down

Step 4 Create an image for virtual machine



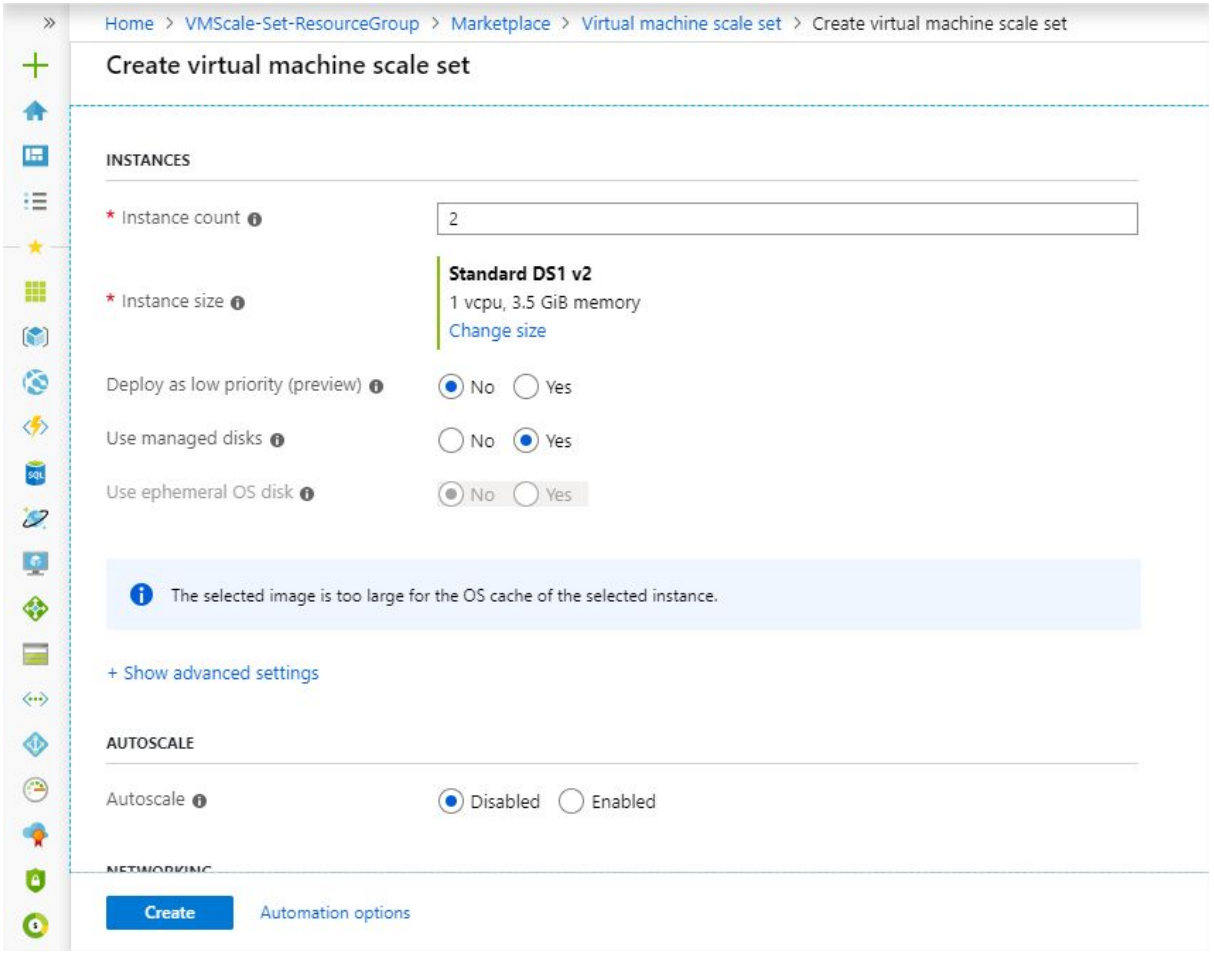
1. In the list of Resource groups, click the **VMScale-Set-ResourceGroup** resource group.
2. Click on your virtual machine, overview.
3. On the top-side click **capture**.
4. Write the name of your virtual machine.
5. Click **Create** to create the image virtual machine.

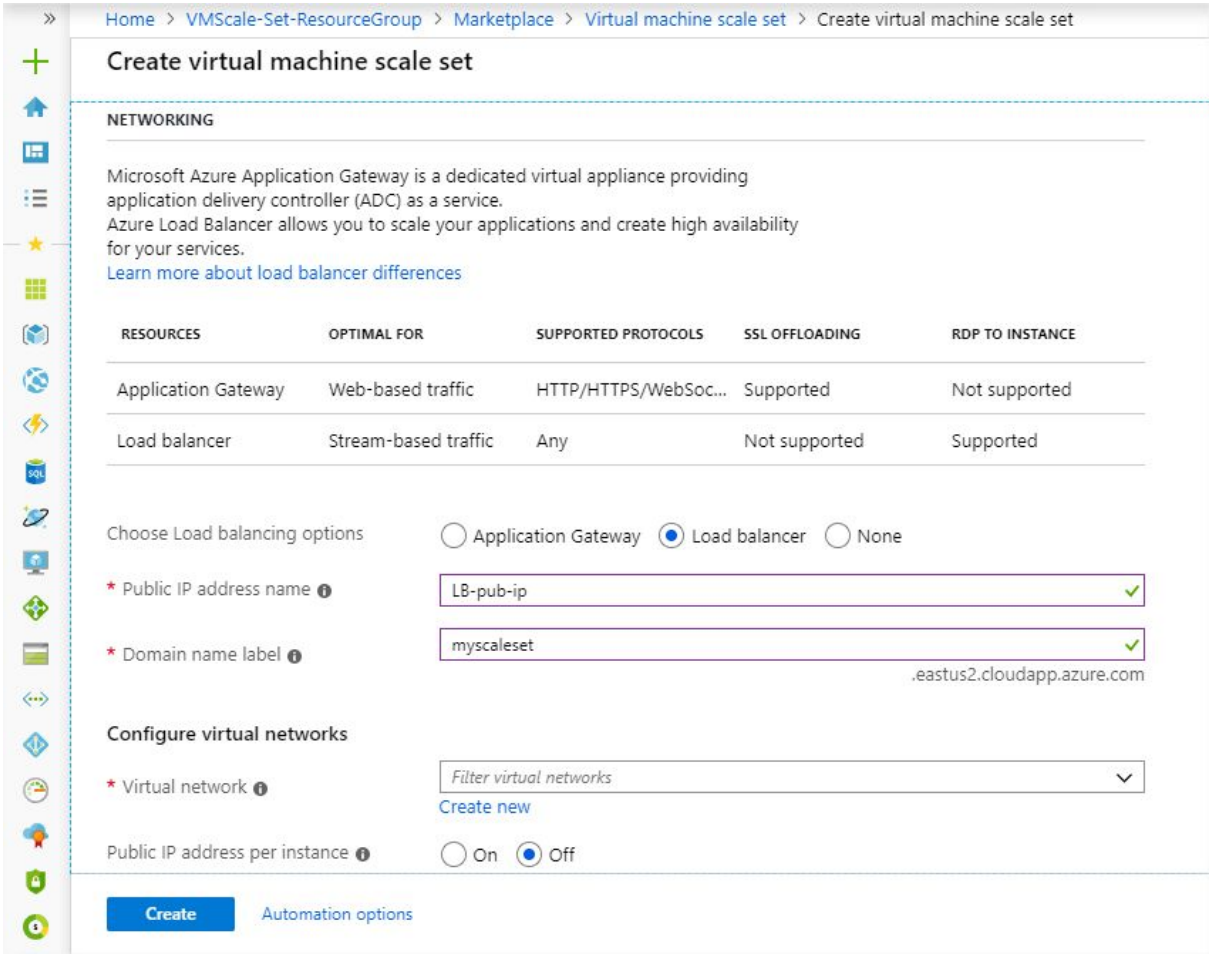
Step 5 Create a new virtual machine scale set



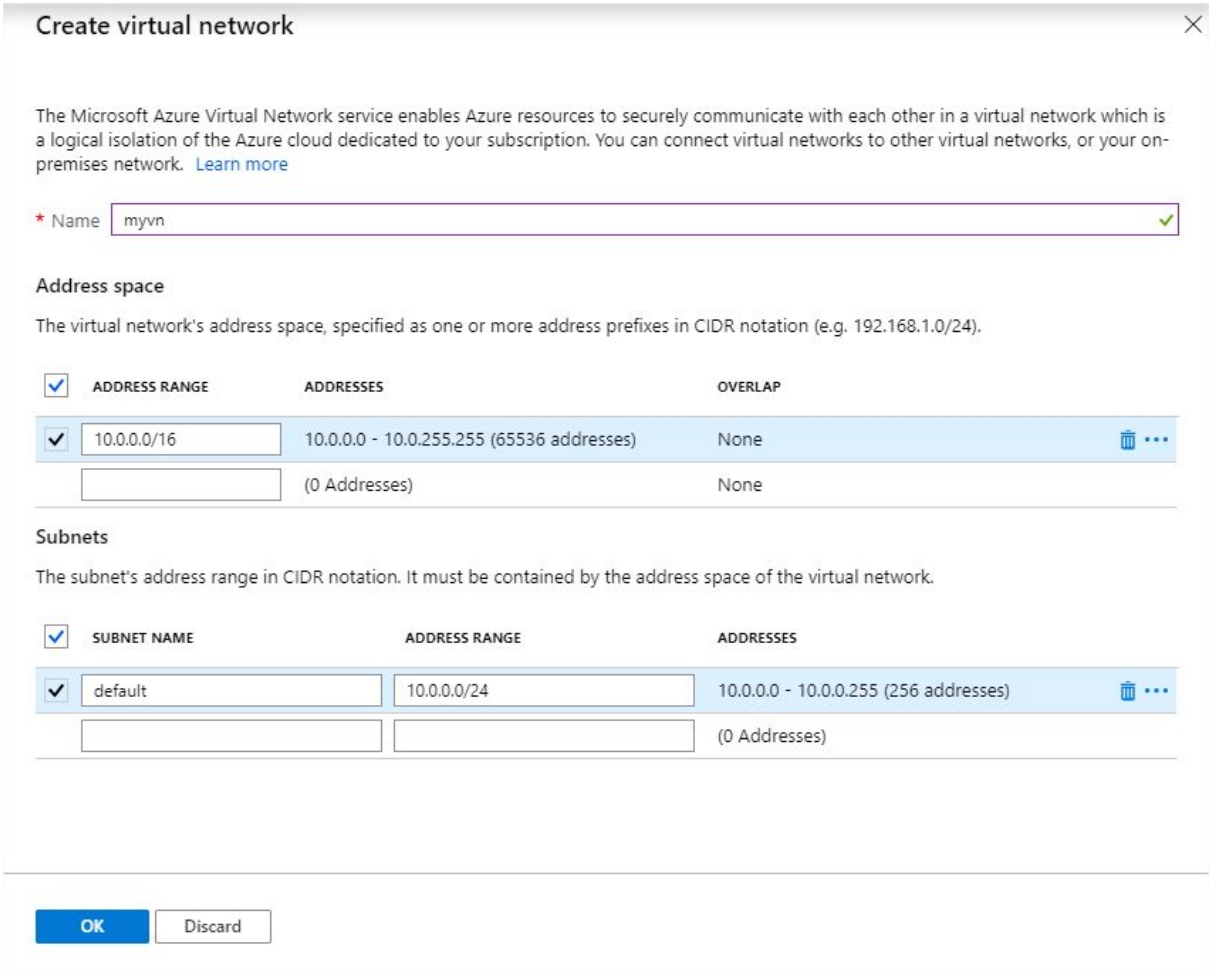
1. In the list of Resource groups, click the **VMScale-Set-ResourceGroup** resource group.
2. Click **Add** to open the Azure Marketplace.
3. Enter "**Virtual machine scale set**" in the search box and choose **Virtual machine scale set** as a result.
4. Click **Create**.
5. Give the virtual machine scale set name **a unique name**.
6. Choose your desired Operating System, such as **"Windows Server 2016 Datacenter".** Or you can use one of your private images. Click on **Browse all public and private images.**
7. Choose the same subscription and location as the resource group.
8. Choose the **VMScale-Set-ResourceGroup** from the resource group dropdown.

9. Enter your desired username and password.

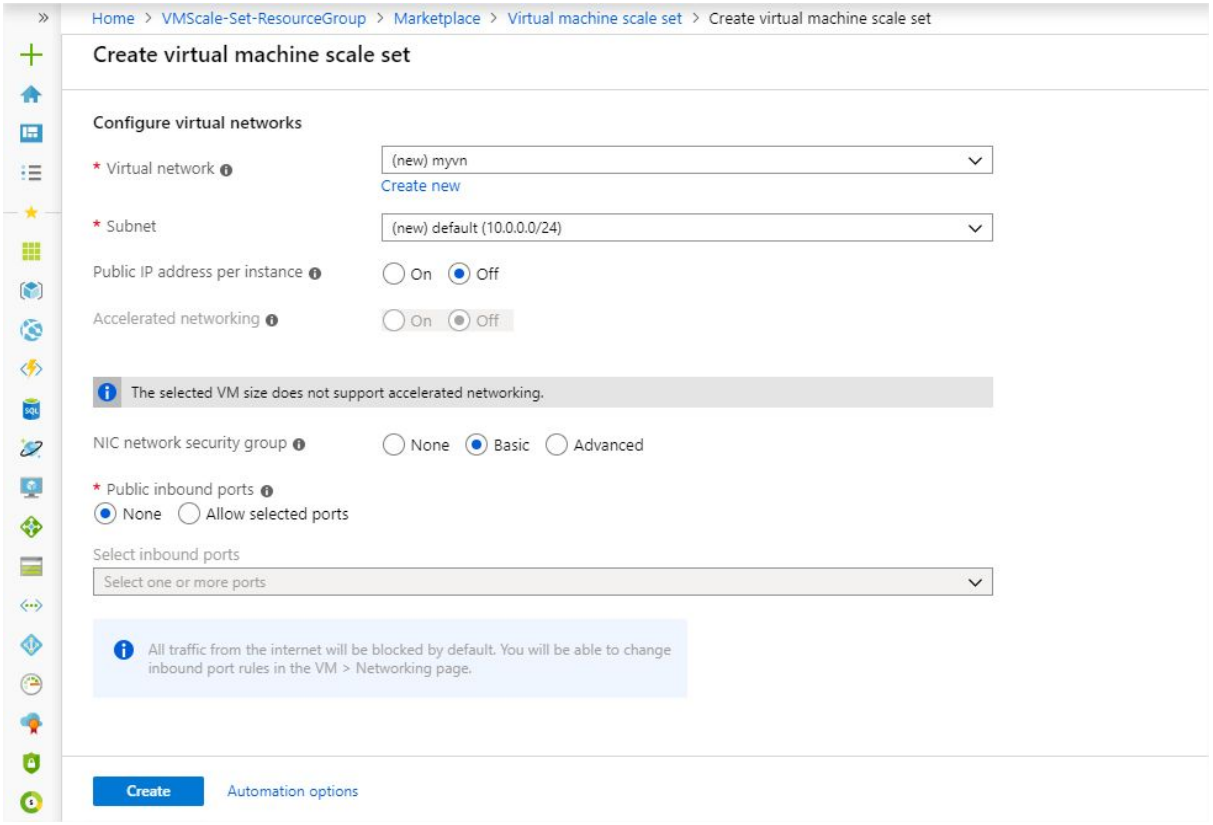




10. Select load balance options such as “**Load balancer**” from Choose Load balancing options.
11. Give the Public IP address name **a unique name**.
12. Give the Domain name label **a unique name**.
13. Create a new Virtual network



14. Give the new virtual network a **name**, and a new subnet, default.
15. Click **OK**.

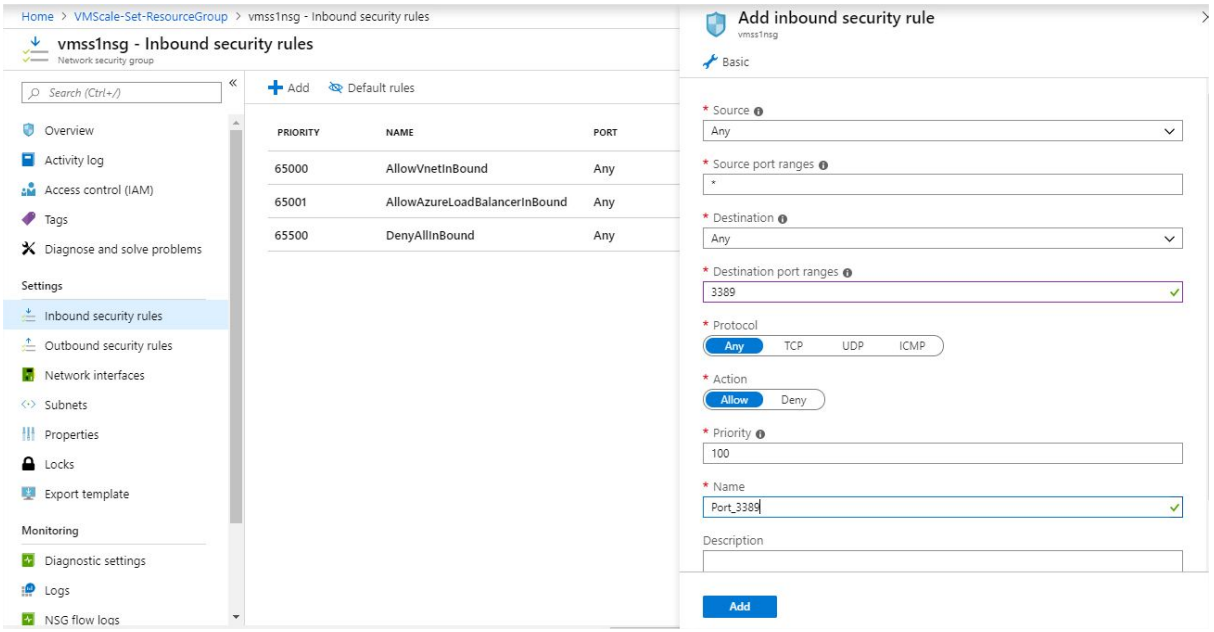


16. Click **Create** to create the virtual machine scale set.
17. Wait for the deployment to complete. It should take 3 minutes or so.

The new virtual machine scale set appears in your resource group.

Step 6 Configure VM’s inbound port rules to RDP access

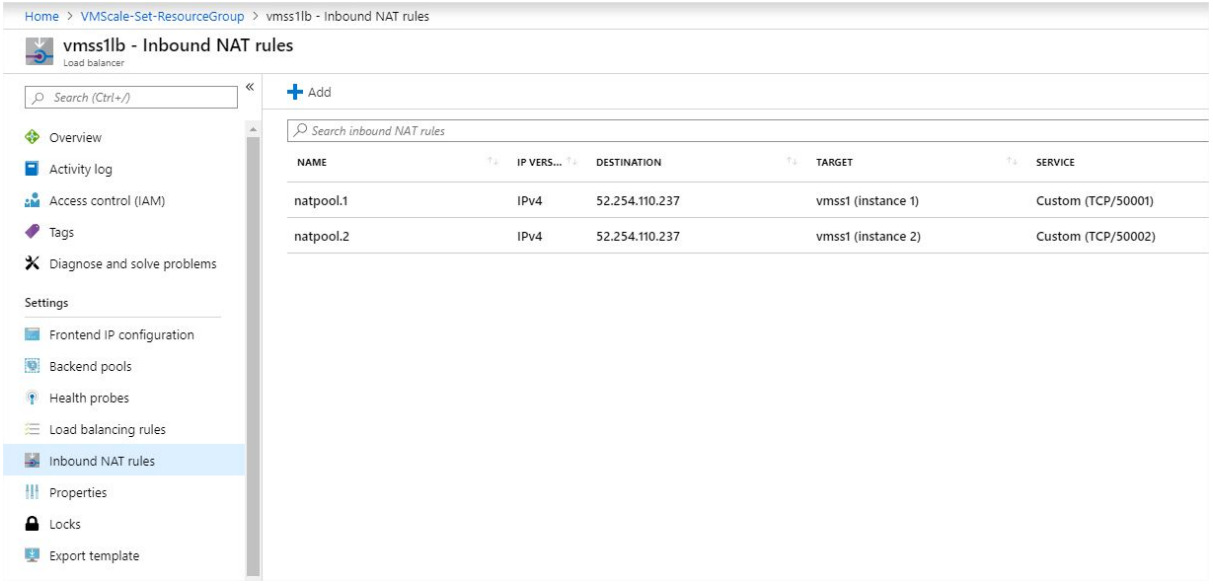
1. In the list of Resource groups, click the **VMScale-Set-ResourceGroup** resource group.
2. Select your **network security group** vmss1nsg



3. From the left-hand menu, Choose **Inbound security rules,** click Add.
4. For **Destination port ranges** 3389, give this rule name such as Port_3389.
5. Click **Add**.

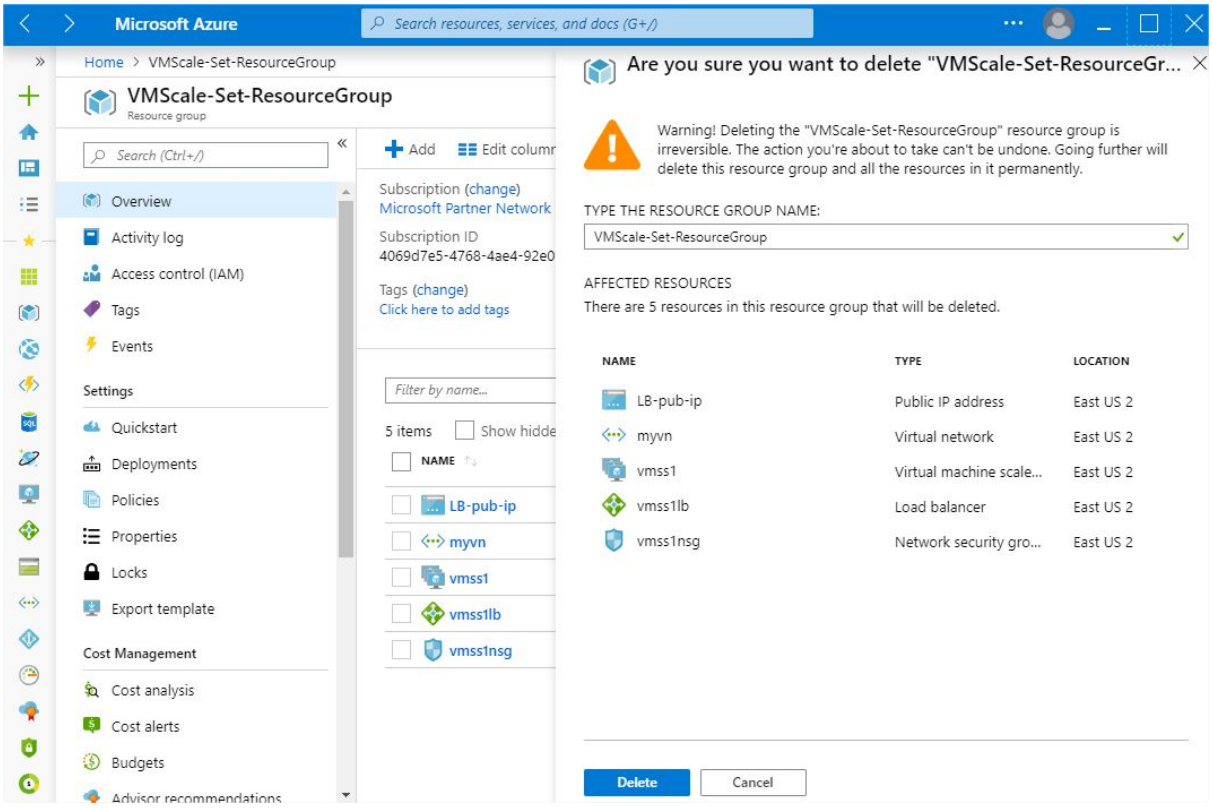
Step 7 Connect to a VM in the scale set

1. In the list of Resource groups, click the **VMScale-Set-ResourceGroup** resource group.
2. Select your Load balancer, click the **vmss1lb**.



3. From the left-hand menu, Choose **Inbound NAT rules.**
4. Using these NAT rules you can connect to your VMs using RDP to 52.254.110.237:50001 or 52.254.110.237:50002
5. Using your credentials on the prompt screen.

Step 8 Clean up



1. In the navigation list, click **Resource groups**.
2. Click **VMScale-Set-ResourceGroup** to open the resource group.
3. Click **Delete resource group** to delete the resource group.
4. On the **Are you sure you want to delete** blade, type the resource group name: **VMScale-Set-ResourceGroup**.
5. Click **Delete** to delete the resource group.