**TRAINING MATERIALS - MODULE HANDOUT**

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# Overview

Network Interfaces can be attached to Virtual Machines and just like a Network Interface Card (NIC) on your computer and phone such as an ethernet port or wireless adapter, this allows Virtual Machines to communicate over networks including the internet. A NIC can exist before the virtual machine.

# Creating

## Basic Usage

The name, Virtual Network, Subnet and Resource Group need to be provided when creating a virtual network.

|  |
| --- |
| az network nic create --resource-group **[RESOURCE\_GROUP\_NAME]** --name **[NETWORK\_INTERFACE\_NAME]** --vnet-name **[VIRTUAL\_NETWORK\_NAME]** --subnet **[SUBNET\_NAME]** |
| az network nic create --resource-group MyResourceGroup --name MyNetworkInterface --vnet-name MyVirtualNetwork --subnet MySubnet |

## Creating with a Network Security Group

Network Security Group rules can be applied to the new NIC, remember NSG’s can also be applied to Subnets instead of every NIC.

|  |
| --- |
| az network nic create --resource-group **[RESOURCE\_GROUP\_NAME]** --name **[NETWORK\_INTERFACE\_NAME]** --vnet-name **[VIRTUAL\_NETWORK\_NAME]** --subnet **[SUBNET\_NAME]** --network-security-group **[NETWORK\_SECURITY\_GROUP\_NAME]** |
| az network nic create --resource-group MyResourceGroup --name MyNetworkInterface --vnet-name MyVirtualNetwork --subnet MySubnet --network-security-group MyNetworkSecurityGroup |

## Creating with a Public IP Address

Subnets can be created with your new Virtual Network in the same command.

|  |
| --- |
| az network nic create --resource-group **[RESOURCE\_GROUP\_NAME]** --name **[NETWORK\_INTERFACE\_NAME]** --vnet-name **[VIRTUAL\_NETWORK\_NAME]** --subnet **[SUBNET\_NAME]** --public-ip-address **[PUBLIC\_IP\_ADDRESS\_NAME]** |
| az network nic create --resource-group MyResourceGroup --name MyNetworkInterface --vnet-name MyVirtualNetwork --subnet MySubnet --public-ip-address MyPublicIP |

# Deleting

## Basic Usage

Provide the name and Resource Group of the Network Interface.

|  |
| --- |
| az network nic delete --resource-group **[RESOURCE\_GROUP\_NAME]** --name **[NETWORK\_INTERFACE\_NAME]** |
| az network nic delete --resource-group MyResourceGroup --name MyNetworkInterface |

# Tasks

* Create a resource group called **NetworkInterfaceExercises**
* Create a Virtual Network called **MyVirtualNetwork**, with a Subnet called **MySubnet**
* Create a Network Interface with Public IP, which also has a Fully Qualified Domain Name. When creating the new NIC, create it in the Virtual Network and Subnet that you created in the previous step. Call the Network Interface **MyNetworkInterface**.
* Create a Network Security Group called **MyNetworkSecurityGroup**
* Create a Rule for your new NSG to allow incoming traffic from anywhere on port 22
* Delete the Network Interface you created and create it again the same, but with the new NSG applied to it.
* Delete the **NetworkInterfaceExercises** Resource Group.