QA Consulting

Azure CLI Virtual Machines

TRAINING MATERIALS - MODULE HANDOUT

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Overview

Linux and Windows Virtual Machines can be managed in Azure using the CLI. Virtual Machines are provisioned in Azure's infrastructure using Hypervisors. When you create a Virtual Machine you can manage many different properties such as the Operating System, Size (CPUs &), Disks and Networking properties.

Creating

Basic Usage

The name, Operating System Image and Resource Group must be provided when creating a Virtual Machine. If only the minimum required properties are supplied, Azure will create the, VNet, Subnet, Network Interface, Operating System Disk and Public IP Address for you.

```
az vm create --resource-group [RESOURCE_GROUP_NAME] --name
[VIRTUAL_MACHINE_NAME] --image [IMAGE_URN]
```

```
az vm create --resource-group MyResourceGroup --name MyVirtualMachine
--image CentOS
```

Finding Operating System Images

There are ready to go Operating System Images that you can select when you are creating your Virtual Machine, which are popular distributions of Linux and Windows Server. When providing an Image to create a Virtual Machine with, the Azure CLI is expecting either the Image **URN** (longer) or **URN Alias** (shorter).

```
az vm image list -o table
```

Creating with a Network Interface

By creating a Virtual Machine with a Network Interface, the VM can be apart of the same VNet and Subnet that the Network Interface is on. All NSG Rules applied to the NIC and the Public IP will effectively be applied to the VM.

```
az vm create --resource-group [RESOURCE_GROUP_NAME] --name
[VIRTUAL_MACHINE_NAME] --image [IMAGE_URN] --nics [NETWORK_INTERFACES]
```

```
az vm create --resource-group MyResourceGroup --name MyVirtualMachine
--image CentOS --nics MyNetworkInterface
```

Deleting

Basic Usage

Provide the name and Resource Group of the Virtual Machine to delete it.

```
az vm delete --resource-group [RESOURCE_GROUP_NAME] --name
[VIRTUAL_MACHINE_NAME]
```

```
az vm delete --resource-group MyResourceGroup --name MyVirtualMachine
```

Tasks

- Create a resource group called **VirtualMachineExercises**.
- Create a new Virtual Machine called **MyVirtualMachine**.
- Create a Virtual Network called **MyVirtualNetwork**, with a Subnet called **MySubnet**.
- Create a Network Security Group called **MyNetworkSecurityGroup**.
- Create a Rule for your new NSG to allow incoming traffic from anywhere on port 22.
- 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** and add the NSG that you created.
- Create a VM and attach the Network Interface that you created
- SSH into the VM
- Delete the **VirtualMachineExercises** Resource Group.