Day 3 - Create VM using Azure CLI

Overview

The Nautilus DevOps team is in the process of migrating some of their workloads to Azure. One of the tasks involves creating a new Virtual Machine (VM) using the Azure CLI. The team does not have access to the Azure portal but can manage Azure resources via the `azure-client` host (the landing host for this lab).

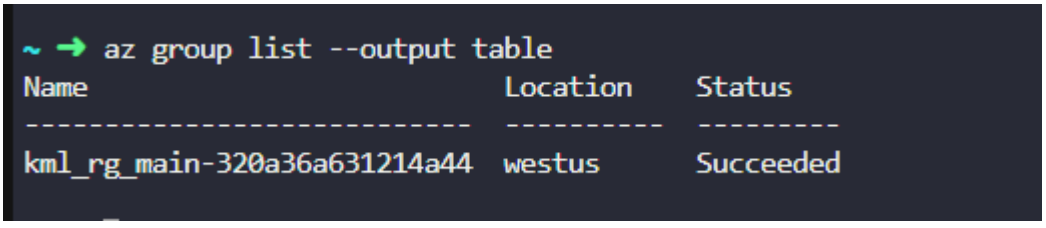
1. Create a new Azure Virtual Machine named `xfusion-vm` using the Azure CLI.
2. Use the `Ubuntu2204` image and set the VM size to `Standard_B2s`.
3. Make sure the admin username is set to `azureuser` and SSH keys are generated for secure access.
4. Use `Standard_LRS` storage account, disk size must be `30GB` and ensure the VM `xfusion-vm` is in the `running` state after creation.

Solution

Creating a VM from CLI is much more quicker and efficient. Using the CLI allows for version control deployment, scripts to automate and can help with reducing the migration time.

We can use a resource group that is already created by default:

```
az group list --output table
```

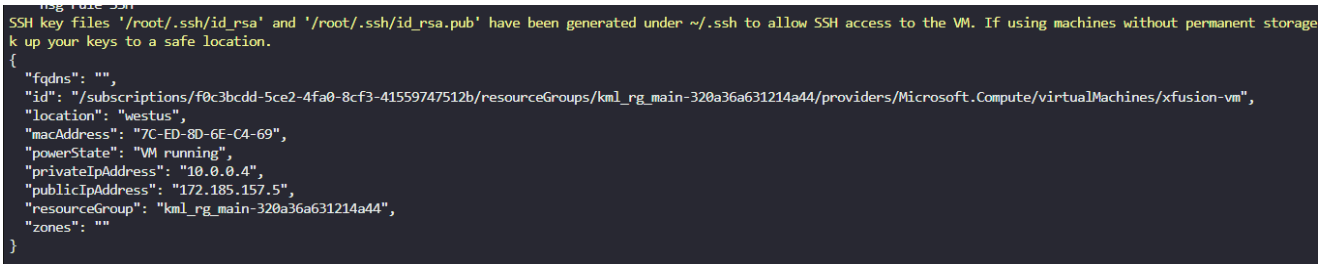


We can copy this all in one to get the VM created within seconds

```
az vm create \
  --resource-group kml_rg_main-320a36a631214a44 \
  --name xfusion-vm \
  --image Ubuntu2204 \
  --size Standard_B2s \
  --admin-username azureuser \
  --generate-ssh-keys \
  --storage-sku Standard_LRS \
```

```
    --os-disk-size-gb 30 \
    --public-ip-sku Standard \
    --nsg-rule SSH
```

Once this has been done, we can see that the VM is running:

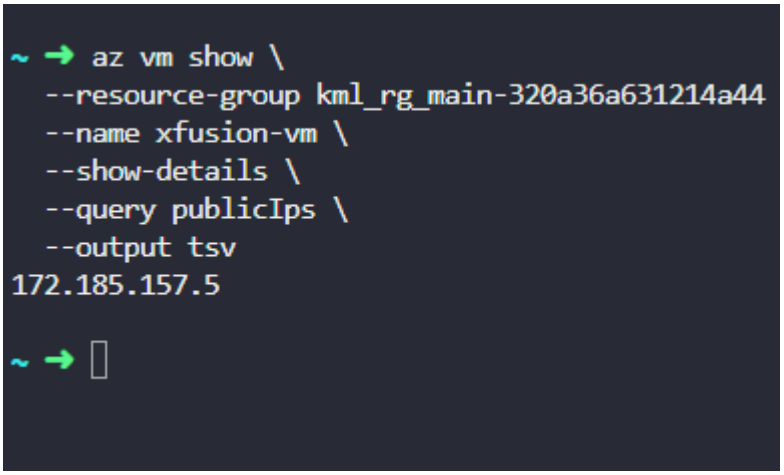


To ensure we can SSH into the machine, we need to change the permissions of our `id_rsa` key:

`chmod 600 /root/.ssh/id_rsa`

Now we need to find the IP of our VM so we know which IP to use to SSH, we can do this with the following command:

```
az vm show \
  --resource-group kml_rg_main-320a36a631214a44 \
  --name xfusion-vm \
  --show-details \
  --query publicIps \
  --output tsv
```



The IP is `172.185.157.5`. Now we can SSH in:

`ssh -i /root/.ssh/id_rsa azureuser@172.185.157.5`

It is successful logging in:

```
~ ➜ ssh -i /root/.ssh/id_rsa azureuser@172.185.157.5
The authenticity of host '172.185.157.5 (172.185.157.5)' can't be established.
ECDSA key fingerprint is SHA256:Prl1dNfjigHsw14qb+bPngVXmDuVRwvH282iSi2jbNs.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '172.185.157.5' (ECDSA) to the list of known hosts.
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1044-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

 System information as of Mon Jan 12 18:09:09 UTC 2026

  System load:  0.0               Processes:             114
  Usage of /:   5.5% of 28.89GB   Users logged in:       0
  Memory usage: 7%                IPv4 address for eth0: 10.0.0.4
  Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status


The list of available updates is more than a week old.
To check for new updates run: sudo apt update


The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azureuser@xfusion-vm:~$
```