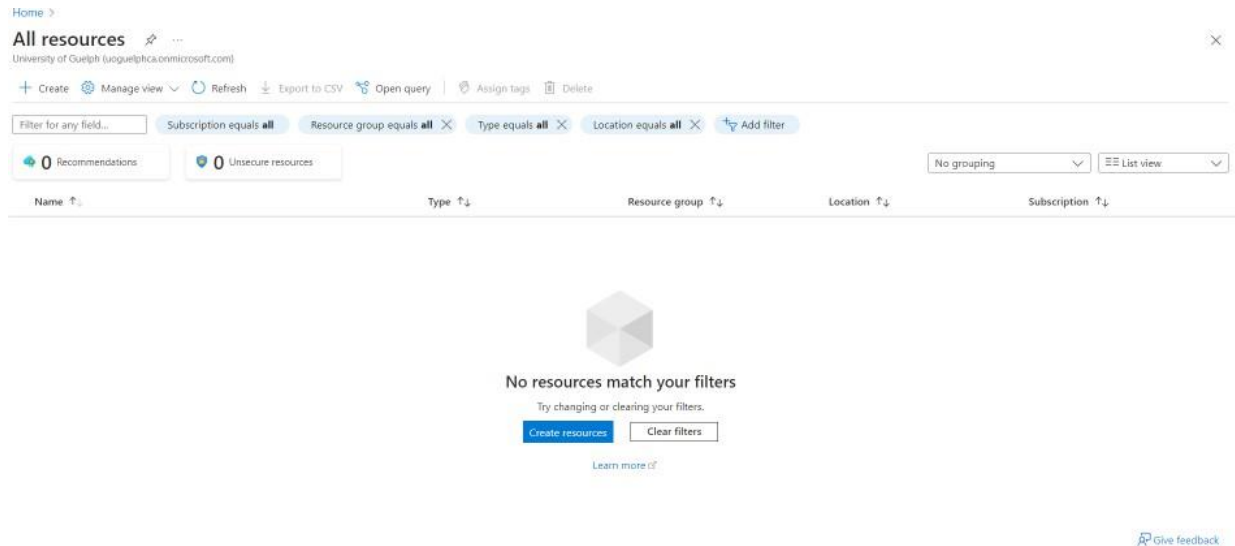


Program Flow and testing information -

- Azure Platform before VM creation -



- Using this config file –

```
[azure01]
purpose =
webserver os
= linux
name =
linuxServer01
resource-group
= images
team = Toronto Office Web
Gr1s image = Ubuntu2204
location =
canadacentral
public-ip-
address = true
computer-name =
MyAzureComputer01 admin-
username = azureuser
[azure02]
purpose =
office apps os
```

- Running the script and confirming command for 1st VM-

```
PS C:\Users\krajp\CIS4010\A2> python automate.py Azure.conf GCP.conf

MICROSOFT AZURE VM CREATION

o Executing command: az vm create --name linuxServer01 --resource-group images --image Ubuntu2204 --location canadacentral --public-ip-address true --computer-name MyAzureComputer01 --admin-username azureuser --generate-ssh-keys --verbose
Do you want to proceed with this command? (Y/N): y
Running the command to create VM...
{
  "fqdns": "",
  "id": "/subscriptions/9a74ec19-26a6-48ab-b4b2-cc822a266d82/resourceGroups/images/providers/Microsoft.Compute/virtualMachines/linuxServer01",
  "location": "canadacentral",
  "macAddress": "60-45-B0-5C-85-A4",
  "powerState": "VM running",
  "privateIpAddress": "10.0.0.4",
  "publicIpAddress": "20.151.227.78",
  "resourceGroup": "images",
  "zones": ""
}
```

- Azure platform after 1st VM creation

Home >

All resources

University of Guelph (uoguelphca.onmicrosoft.com)

+ Create Manage view Refresh Export to CSV Open query Assign tags Delete

Filter for any field... Subscription equals all Resource group equals all Type equals all Location equals all Add filter

0 Recommendations 0 Unsecure resources No grouping List view

Name	Type	Resource group	Location	Subscription
linuxServer01	Virtual machine	images	Canada Central	Azure subscription 1
linuxServer01_disk1_dfff9c329d749ba9fca476385fdcc6	Disk	IMAGES	Canada Central	Azure subscription 1
linuxServer01NSG	Network security group	images	Canada Central	Azure subscription 1
linuxServer01VMnic	Network interface	images	Canada Central	Azure subscription 1
linuxServer01VNET	Virtual network	images	Canada Central	Azure subscription 1
NetworkWatcher_canadacentral	Network Watcher	NetworkWatcherRG	Canada Central	Azure subscription 1
true	Public IP address	images	Canada Central	Azure subscription 1

linuxServer01

Virtual machine

Search

Connect Start Restart Stop Hibernate (preview) Capture Delete Refresh Open in mobile

Overview

- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems

Settings

- Networking
- Connect
- Disks
- Size
- Microsoft Defender for Cloud
- Advisor recommendations
- Extensions + applications
- Availability + scaling
- Configuration
- Identity
- Properties

Essentials

Resource group (move) [images](#)

Status Running

Location Canada Central

Subscription (move) [Azure subscription 1](#)

Subscription ID 9a74ec19-26a6-48ab-b4b2-cc822a266d82

Tags (edit) [Add tags](#)

Operating system Linux (ubuntu 22.04)

Size Standard DS1 v2 (1 vcpu, 3.5 GiB memory)

Public IP address [20.151.227.78](#)

Virtual network/subnet [linuxServer01VNET/linuxServer01Subnet](#)

DNS name [Not configured](#)

Health state -

JSON View

Properties Monitoring Capabilities (7) Recommendations Tutorials

Virtual machine

Computer name	MyAzureComputer01
Operating system	Linux (ubuntu 22.04)
Image publisher	Canonical
Image offer	0001-com-ubuntu-server-iammu

Networking

Public IP address	20.151.227.78 (Network interface linuxServer01VMnic)
Public IP address (IPv6)	-
Private IP address	10.0.0.4

- Gcloud platform before creating VMs –

INSTANCES OBSERVABILITY INSTANCE SCHEDULES								
VM instances								
Filter Enter property name or value								
<input type="checkbox"/>	Status	Name ↑	Zone	Recommendations	In use by	Internal IP	External IP	Connect
<input type="checkbox"/>	✓	vm-demo-001	northamerica-northeast2-a			10.188.0.2 (nic0)	34.130.201.116 (nic0)	SSH ▾ ⋮

- Running first command –

```
Executing command: gcloud compute instances create linuxserver01 --image debian-10-buster-v20240110 --image-project debian-cloud --zone northamerica-northeast2-a --subnet=default
Do you want to proceed with this command? (Y/N): y
Running the command to create VM...
NAME          ZONE          MACHINE_TYPE  PREEMPTIBLE  INTERNAL_IP  EXTERNAL_IP  STATUS
linuxserver01 northamerica-northeast2-a  n1-standard-1      10.188.0.6   34.130.207.35  RUNNING
```

VM instances								
Filter Enter property name or value								
<input type="checkbox"/>	Status	Name ↑	Zone	Recommendations	In use by	Internal IP	External IP	Connect
<input type="checkbox"/>	✓	linuxserver01	northamerica-northeast2-a			10.188.0.6 (nic0)	34.130.207.35 (nic0)	SSH ▾ ⋮
<input type="checkbox"/>	✓	vm-demo-001	northamerica-northeast2-a			10.188.0.2 (nic0)	34.130.201.116 (nic0)	SSH ▾ ⋮

- Running second command for GCP VM –

```
Executing command: gcloud compute instances create linuxserver02 --image ubuntu-pro-1604-xenial-v20240126 --image-project ubuntu-os-pro-cloud --zone northamerica-northeast2-b --subnet=default
Do you want to proceed with this command? (Y/N): y
Running the command to create VM...
NAME          ZONE          MACHINE_TYPE  PREEMPTIBLE  INTERNAL_IP  EXTERNAL_IP  STATUS
linuxserver02 northamerica-northeast2-b  n1-standard-1      10.188.0.7   34.130.200.191  RUNNING
```

VM instances								
Filter Enter property name or value								
<input type="checkbox"/>	Status	Name ↑	Zone	Recommendations	In use by	Internal IP	External IP	Connect
<input type="checkbox"/>	✓	linuxserver01	northamerica-northeast2-a			10.188.0.6 (nic0)	34.130.207.35 (nic0)	SSH ▾ ⋮
<input type="checkbox"/>	✓	linuxserver02	northamerica-northeast2-b			10.188.0.7 (nic0)	34.130.200.191 (nic0)	SSH ▾ ⋮
<input type="checkbox"/>	✓	vm-demo-001	northamerica-northeast2-a			10.188.0.2 (nic0)	34.130.201.116 (nic0)	SSH ▾ ⋮

- GCP config being used –

```
[gcp01]
• name = linuxserver01
• project = Web Presence Canada
• team = Toronto Office Web Team
• purpose = webserver
• os = linux
• image = debian-10-buster-v20240110
• imageproject = debian-cloud
• zone = northamerica-northeast2-a
```

- [gcp02]
- `name` = linuxserver02
- `project` = Containers Are Us
- `team` = Toronto Office Container Team
- `purpose` = containers
- `os` = linux
- `image` = ubuntu-pro-1604-xenial-v20240126
- `imageproject` = ubuntu-os-pro-cloud
- `zone` = northamerica-northeast2-b