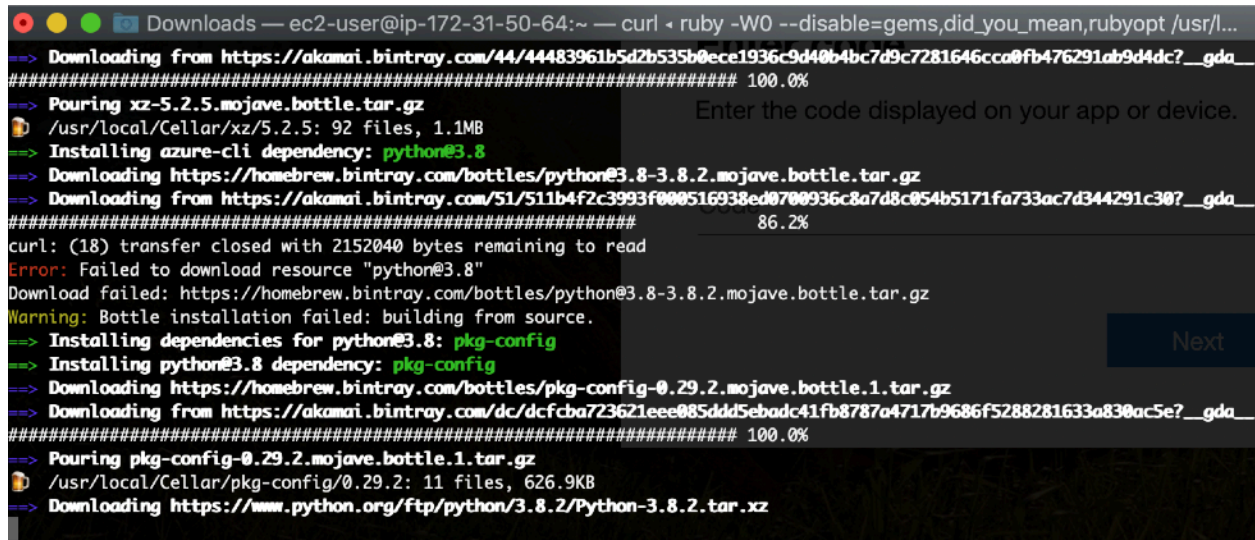


Step 1 - CONFIGURE YOUR ENVIRONMENT

Install Azure CLI (Homebrew) for MAC

- Inside the Mac terminal run the following command:

```
# brew update && brew install azure-cli
```



```
Downloads — ec2-user@ip-172-31-50-64:~ — curl < ruby -W0 --disable=gems,did_you_mean,rubyopt /usr/l...
==> Downloading from https://akamai.bintray.com/44/44483961b5d2b535b0ece1936c9d40b4bc7d9c7281646cca0fb476291ab9d4dc?__gda_
##### 100.0%
==> Pouring xz-5.2.5.mojave.bottle.tar.gz
/usr/local/Cellar/xz/5.2.5: 92 files, 1.1MB
==> Installing azure-cli dependency: python@3.8
==> Downloading https://homebrew.bintray.com/bottles/python@3.8-3.8.2.mojave.bottle.tar.gz
==> Downloading from https://akamai.bintray.com/51/511b4f2c3993f000516938ed0700936c8a7d8c054b5171fa733ac7d344291c30?__gda_
##### 86.2%
curl: (18) transfer closed with 2152040 bytes remaining to read
Error: Failed to download resource "python@3.8"
Download failed: https://homebrew.bintray.com/bottles/python@3.8-3.8.2.mojave.bottle.tar.gz
Warning: Bottle installation failed: building from source.
==> Installing dependencies for python@3.8: pkg-config
==> Installing python@3.8 dependency: pkg-config
==> Downloading https://homebrew.bintray.com/bottles/pkg-config-0.29.2.mojave.bottle.1.tar.gz
==> Downloading from https://akamai.bintray.com/dc/dcfcb723621eee085ddd5ebadc41fb8787a4717b9686f5288281633a830acSe?__gda_
##### 100.0%
==> Pouring pkg-config-0.29.2.mojave.bottle.1.tar.gz
/usr/local/Cellar/pkg-config/0.29.2: 11 files, 626.9KB
==> Downloading https://www.python.org/ftp/python/3.8.2/Python-3.8.2.tar.xz
```

Install Azure CLI for Windows

The MSI distributable is used for installing or updating the Azure CLI on Windows.

<https://aka.ms/installazurecliwindows>

Step 2 - Connect to Your Azure Subscription

1. Use the **interactive login** to log in to Azure using your enterprise credentials or Microsoft account identity:

az login

1. Sign in using your identity associated with your Azure subscription.

```
SJCMAC17JJHD4:Downloads lcastro$ az login
You have logged in. Now let us find all the subscriptions to which you have access...
[
  {
    "cloudName": "AzureCloud",
    "homeTenantId": "66b66353-3b76-4e41-9dc3-fee328bd400e",
    "id": "6bcf9eb8-9994-44d8-bd69-4bad91926bb5",
    "isDefault": true,
    "managedByTenants": [],
    "name": "Visual Studio Professional",
    "state": "Enabled",
    "tenantId": "66b66353-3b76-4e41-9dc3-fee328bd400e",
    "user": {
      "name": "lcastro@paloaltonetworks.com",
      "type": "user"
    }
  }
]
```

Step 3 - CREATE YOUR NETWORK RESOURCES

Create a Resource Group

1. Use the following command to create a new resource group with the following details:

- **Name:** username
- **Location:** designated location

az group create --name <username> --location <designated>

Eg: # az group create --name lcastro --location eastus

```
SJCMAC17JJHD4:Downloads lcastro$ az group create --name lcastro --location eastus
{
  "id": "/subscriptions/6bcf9eb8-9994-44d8-bd69-4bad91926bb5/resourceGroups/lcastro",
  "location": "eastus",
  "managedBy": null,
  "name": "lcastro",
  "properties": {
    "provisioningState": "Succeeded"
  },
  "tags": null,
  "type": "Microsoft.Resources/resourceGroups"
}
SJCMAC17JJHD4:Downloads lcastro$
```

```
# az group show --name username
```

Step 4 - Create Virtual Machine

```
az vm create --resource-group <username> \  
  --name <username+VM1> \  
  --image UbuntuLTS \  
  --generate-ssh-keys \  
  --output json \  
  --verbose
```

```
SJCMAC17JJHD4:Downloads lcastro$ az vm create --resource-group lcastro \  
> --name lcastroVM1 \  
> --image UbuntuLTS \  
> --generate-ssh-keys \  
> --output json \  
> --verbose  
Failed to retrieve image alias doc 'https://raw.githubusercontent.com/Azure/azure-rest-api-specs/master/arm-compute/quickstart-templates/aliases.json'. Error: 'ConnectionError'. Use local copy instead.  
SSH key files '/Users/lcastro/.ssh/id_rsa' and '/Users/lcastro/.ssh/id_rsa.pub' have been generated under ~/.ssh to allow SSH access to the VM. If using machines without permanent storage, back up your keys to a safe location.  
{  
  "fqdns": "",  
  "id": "/subscriptions/6bcf9eb8-9994-44d8-bd69-4bad91926bb5/resourceGroups/lcastro/providers/Microsoft.Compute/virtualMachines/lcastroVM1",  
  "location": "eastus",  
  "macAddress": "00-0D-3A-13-C7-4A",  
  "powerState": "VM running",  
  "privateIpAddress": "10.0.0.4",  
  "publicIpAddress": "52.170.86.57",  
  "resourceGroup": "lcastro",  
  "zones": ""  
}  
command ran in 82.153 seconds.  
SJCMAC17JJHD4:Downloads lcastro$
```

After creation validate the JSON Output

```
{
  "fqdns": "",
  "id": "/subscriptions/6bcf9eb8-9994-44d8-bd69-4bad91926bb5/resourceGroups/lcastro/providers/Microsoft.Compute/virtualMachines/lcastroVM1",
  "location": "eastus",
  "macAddress": "00-0D-3A-13-C7-4A",
  "powerState": "VM running",
  "privateIpAddress": "10.0.0.4",
  "publicIpAddress": "52.170.86.57",
  "resourceGroup": "lcastro",
  "zones": ""
}
```

Step 5 - Connect to VM

ssh <PUBLIC_IP_ADDRESS>

ssh 52.170.86.57

```
SJCMAC17JJHD4:Downloads lcastro$ ssh 52.170.86.57
The authenticity of host '52.170.86.57 (52.170.86.57)' can't be established.
ECDSA key fingerprint is SHA256:yqnQkoUbBL4PQHmgr400ZgAC00ejCeMymTiAIevF/kU.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '52.170.86.57' (ECDSA) to the list of known hosts.
Welcome to Ubuntu 18.04.4 LTS (GNU/Linux 5.0.0-1032-azure x86_64)

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

System information as of Mon Mar 30 18:53:44 UTC 2020

System load: 0.0          Processes:           107
Usage of /:  4.0% of 28.90GB    Users logged in:    0
Memory usage: 9%            IP address for eth0: 10.0.0.4
Swap usage:  0%

Step 5 - Connect to VM
ssh <PUBLIC_IP_ADDRESS>
0 packages can be updated.
0 updates are security updates.

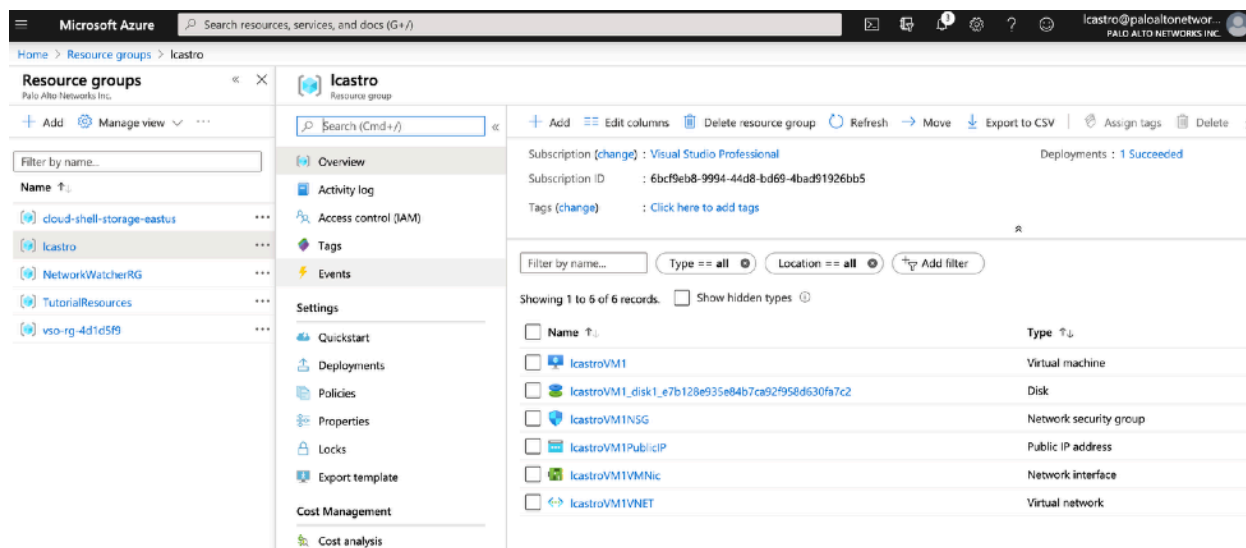
The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law. Use the following command to list all possible CLI options for network co

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

lcastro@lcastroVM1:~$
```

Step 6 - Confirm Resources inside the Azure Web Portal



The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes the 'Microsoft Azure' logo and a search bar. The left sidebar displays a list of resource groups under 'Resource groups', with 'Icastro' selected. The main pane shows the 'Icastro' resource group details. The 'Overview' tab is active, showing a list of resources within the group. The resources listed are:

Name	Type
IcastroVM1	Virtual machine
IcastroVM1_disk1_e7b128e935e84b7ca92f958d630f7c2	Disk
IcastroVM1NSG	Network security group
IcastroVM1PublicIP	Public IP address
IcastroVM1VMNic	Network interface
IcastroVM1VNET	Virtual network

Step 7 - Cleanup

Delete assets inside the Resource Group created

```
# az group wait --name <username> --deleted
```

Validate inside the Azure Web Console the assets has been deleted.