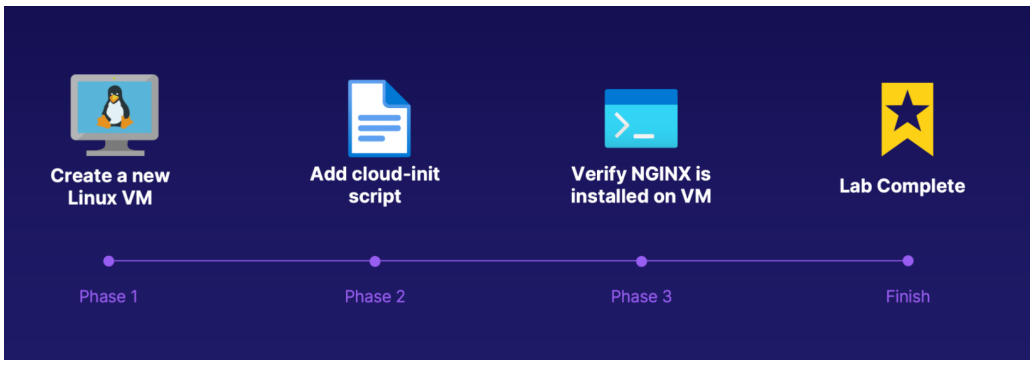
Install NGINX on a Linux VM in Deployment with Cloud Init

Introduction

Your manager asks if you can install NGINX on all new Linux VMs with as little manual intervention as possible. Instead of installing NGINX on each VM manually, you can use cloud-init to install NGINX during the deployment of a Linux VM.



Create a New Linux VM

1. Navigate to Virtual machines.
2. Click Add > Virtual machine.
3. Create a VM with the following settings:

- Resource group: Select the provided one in the dropdown
- Image: Ubuntu Server 18.04 LTS Gen1
- Virtual machine name: LinuxVM1-NGINX
- Region: Use the same region as your lab provided resource group
- Size: Standard_B2ms
    - Click Select size.
    - Select B2ms.
    - Click Select.
- Authentication type: Password

Create a username and a password you'll easily remember (you'll need it later).

- Public inbound ports: Allow selected ports
- Select inbound ports: SSH (22)

4. Click the Advanced tab toward the top of the screen.

5. In the Custom data box, enter the following cloud-init script:

```
#cloud-config
packages_upgrade: true
packages:
  - nginx
```

6. Click Review + create.
7. Click Create. It will take a few minutes to complete.

Deploy VM and Verify NGINX Is Installed

1. Once the VM is deployed, click Go to resource.
2. Click Connect > SSH.
3. Where it says, "Run the example command below to connect to your VM," copy the last part of the command (e.g., chad@40.11.141.12).
4. Click the Cloud Shell icon (>_) in the upper right.
5. Select Bash.
6. Click Show advanced settings.
7. In the Azure portal, click All resources to see which region your resources are located in.
8. In the Cloud Shell section, make sure Cloud Shell region is set to the same region as your lab provided resource group.
9. For Storage account, select Create new and provide a unique name..
10. For File share, select Create new and give it a name of "fileshare".
11. Click Create storage.
12. Log in to the VM via SSH using the command you copied a minute ago:
    ssh <USERNAME@IP_ADDRESS>
13. Enter yes at the prompt.
14. Enter the password you created in the VM creation process.
15. Verify you're connected to the VM: hostname
    The output should be LinuxVM1-NGINX.
16. Check the installed version of NGINX: nginx -v
17. Make sure it's active and running:
    sudo systemctl status nginx
    You should see it has an active (running) status.

Conclusion

Congratulations on successfully completing this hands-on lab!