

Problem statement

Create a Virtual Machine with the following configurations,

Region: (US) East US

Availability options: No infrastructure redundancy required

Security type: Standard

Image: Ubuntu Server 20.04 LTS - Gen2

Size: Standard_B2ms

Authentication type: SSH public key

SSH public key source: Generate new key pair

OS disk type: Standard HDD

Inbound rule: Allow HTTP and 8080 Port

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Networking Connect Disks Size Microsoft Defender for Cloud Advisor recommendations Extensions + applications Continuous delivery Availability + scaling

Network interface: newvm144 Effective security rules Troubleshoot VM connection issues Topology

Virtual network/subnet: new-vm-vnet/default NIC Public IP: 20.121.211.34 NIC Private IP: 10.0.0.5 Accelerated networking: Disabled

Inbound port rules Outbound port rules Application security groups Load balancing

Network security group newvm-nsg (attached to network interface: newvm144) Impacts 0 subnets, 1 network interfaces Add inbound port rule

Priority	Name	Port	Protocol	Source	Destination	Action
300	SSH	22	TCP	Any	Any	Allow
320	HTTP	80	TCP	Any	Any	Allow
330	AllowAnyCustom8080Inbound	8080	Any	Any	Any	Allow
65000	AllowVnetInbound	Any	Any	VirtualNetwork	VirtualNetwork	Allow
65001	AllowAzureLoadBalancerInbound	Any	Any	AzureLoadBalancer	Any	Allow
65500	DenyAllInbound	Any	Any	Any	Any	Deny

Need help? Understand Azure load balancing

Install Jenkins on VM

Run Jenkins on 8080 Port

Ensure that you can able to access the default Jenkins landing page from the local machine web browser.

```
appadmin@newvm:~$ history
1  ls
2  sudo apt-get update
3  sudo apt-get install default-jdk
4  wget -q -O - https://pkg.jenkins.io/debian-stable/jenkins.io.key | sudo apt-key add -
5  sudo sh -c 'echo deb http://pkg.jenkins.io/debian-stable binary/ > /etc/apt/sources.list.d/jenkins.list'
6  sudo apt-get update
7  sudo apt-get install jenkins
8  sudo systemctl start jenkins
9  sudo apt-key adv --keyserver keyserver.ubuntu.com --recv-keys 5BA31D57EF5975CA
10 sudo apt-get update
11 sudo apt-get install jenkins
12 sudo systemctl start jenkins
13 sudo systemctl status jenkins
14 history
appadmin@newvm:~$
```

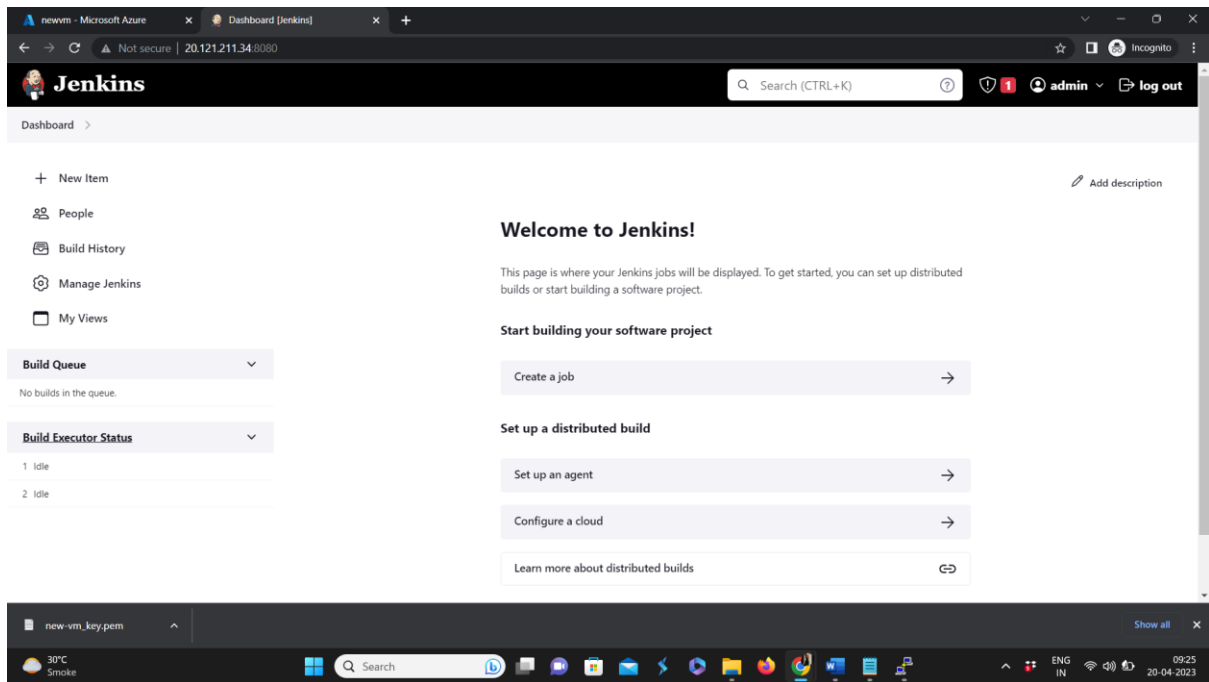
Problem statement contd.

Execute the following job in Jenkins running on the created Virtual Machine:

Login to Jenkins with username as admin and fetch password from the path:

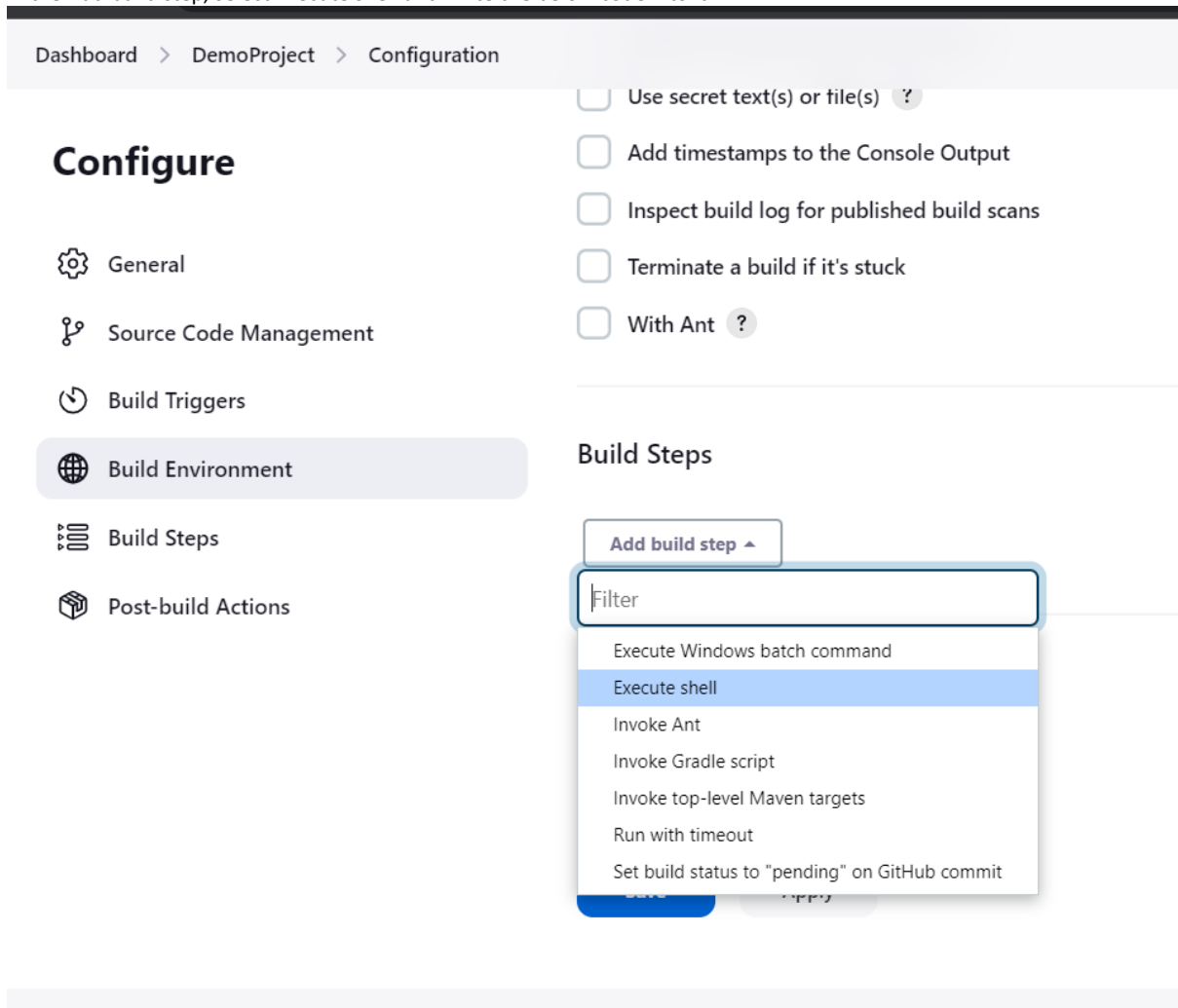
```
sudo cat /var/lib/jenkins/secrets/initialAdminPassword
```

Install suggested plugins and Continue as admin user.



Create a job named DemoProject in Jenkins.

In the Add build step, select Execute shell and write the below code into it.



```
#!/bin/sh
echo "The Demo Project was successfully run on Jenkins Environment!"
exit 0
```

Apply the changes and build your job. Once done, check your result in the console output of your build.

Dashboard > DemoProject > #1 > Console Output

Status


Changes

Console Output

View as plain text

Edit Build Information

Delete build '#1'

 Console Output

Started by user [admin](#)
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/DemoProject
[DemoProject] \$ /bin/sh /tmp/jenkins1362262841636734425.sh
The Demo Project was successfully run on Jenkins Environment!
Finished: SUCCESS

Notes

Use the credentials given in the hands-on to log in to the Azure Portal.

Create a new resource group and use the same resource group for all resources.

The Username/Password/Services Name can be as per your choice.

Connect to the VM from the local machine through the SSH connection.

After completing the hands-on, delete all the resources created.