

## # Generate a VM using Azure CLI

The screenshot shows the Visual Studio Code interface with the following components:

- Explorer Sidebar:** Displays the file structure. The 'VM.sh' file is selected under the 'AZURE' folder.
- Terminal Window:** Shows the execution of the 'VM.sh' script. The output includes:
 

```

      1 #!/bin/bash
      2 # Usage: bash VM.sh RGName AdminName
      3
      4 # Create a resource group
      5 az group create --name ${1}RG --location eastus
      6
      7 # Create a Windows VM
      8 az vm create \
      9   --resource-group ${1}RG \
      10  --name myWindowsVM \
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```

**Resource groups**

Default Directory (fathozsahin@zotmail.onmicrosoft.com)

+ Create Manage view ...

Filter for any field...

- Name ↑
- emine-dev ...
- emine\_prod ...
- NetworkWatcherRG ...
- VM\_test2RG ...

### VM\_test2RG

Resource group

Overview Activity log Access control (IAM) Tags Resource visualizer Events

#### Settings

- Deployments
- Security
- Policies
- Properties
- Locks

#### Cost Management

- Cost analysis
- Cost alerts (preview)
- Budgets
- Advisor recommendations

#### Monitoring

- Insights (preview)
- Alerts
- Metrics
- Diagnostic settings

Search resources, services, and docs (G+Y)

+ Create Delete resource group Refresh Export to CSV Open query Assign tags Move Delete Export template

#### Essentials

Subscription (move): Azure subscription\_1 Deployments: 2 Succeeded

Subscription ID : e6f20371-3f03-4eee-96be-4e87f021adaa Location : East US

Tags (edit) : Click here to add tags

#### Resources Recommendations

Filter for any field... Type equals all Location equals all Add filter

Showing 1 to 11 of 11 records. Show hidden types No grouping

Name ↑	Type ↑	Location ↑
myUbuntuVM	Virtual machine	East US
myUbuntuVM_disk1_b3b14801c49043788867c8b88557e1b1	Disk	East US
myUbuntuVMMNSG	Network security group	East US
myUbuntuVMPublicIP	Public IP address	East US
myUbuntuVMMVMNic	Network interface	East US
myWindowsVM	Virtual machine	East US
myWindowsVM_OsDisk_1_7e435ee5bcff4fb6b7393143683d8d46	Disk	East US
myWindowsVMSNG	Network security group	East US
myWindowsVMPublicIP	Public IP address	East US
myWindowsVMMVMNic	Network interface	East US
myWindowsVMVNET	Virtual network	East US

## #Using ARM template

← → Azure\_Virtual\_Machines

arm\_for\_vm.json README.md ×

① README.md > #

You, 1 second ago | 1 author (You)

1 #

2

3 I generated a key in Azure portal for WindowsVMs

4

5 I used Microsoft Remote Control App to connect Windows VM. I also tried to use ssh key to connect Windows VM.

6

PROBLEMS ① OUTPUT DEBUG CONSOLE TERMINAL GITLENS

zsh + -

● Emine Azure\_Virtual\_Machines \$ az deployment group create --resource-group emine-dev --template-file arm\_for\_vm.json

{

"id": "/subscriptions/e6f20371-3f03-4eee-968e-4e87f021adaa/resourceGroups/emine-dev/providers/Microsoft.Resources/deployments/arm\_for\_vm",

"location": null,

"name": "arm\_for\_vm",

"properties": {

"correlationId": "7c6e03f9-b9df-43d0-9c23-ed347637d2b9",

"debugSetting": null,

"dependencies": [

{

"dependsOn": [

{

"id": "/subscriptions/e6f20371-3f03-4eee-968e-4e87f021adaa/resourceGroups/emine-dev/providers/Microsoft.Network/networkSecurityGroups/EmineUbuntuVM-nsg",

"resourceGroup": "emine-dev",

"resourceName": "EmineUbuntuVM-nsg",

"resourceType": "Microsoft.Network/networkSecurityGroups"

}

],

"id": "/subscriptions/e6f20371-3f03-4eee-968e-4e87f021adaa/resourceGroups/emine-dev/providers/Microsoft.Network/virtualNetworks/EmineUbuntuVM-VirtualNetwork",

"resourceGroup": "emine-dev",

"resourceName": "EmineUbuntuVM-VirtualNetwork",

"resourceType": "Microsoft.Network/virtualNetworks"

},

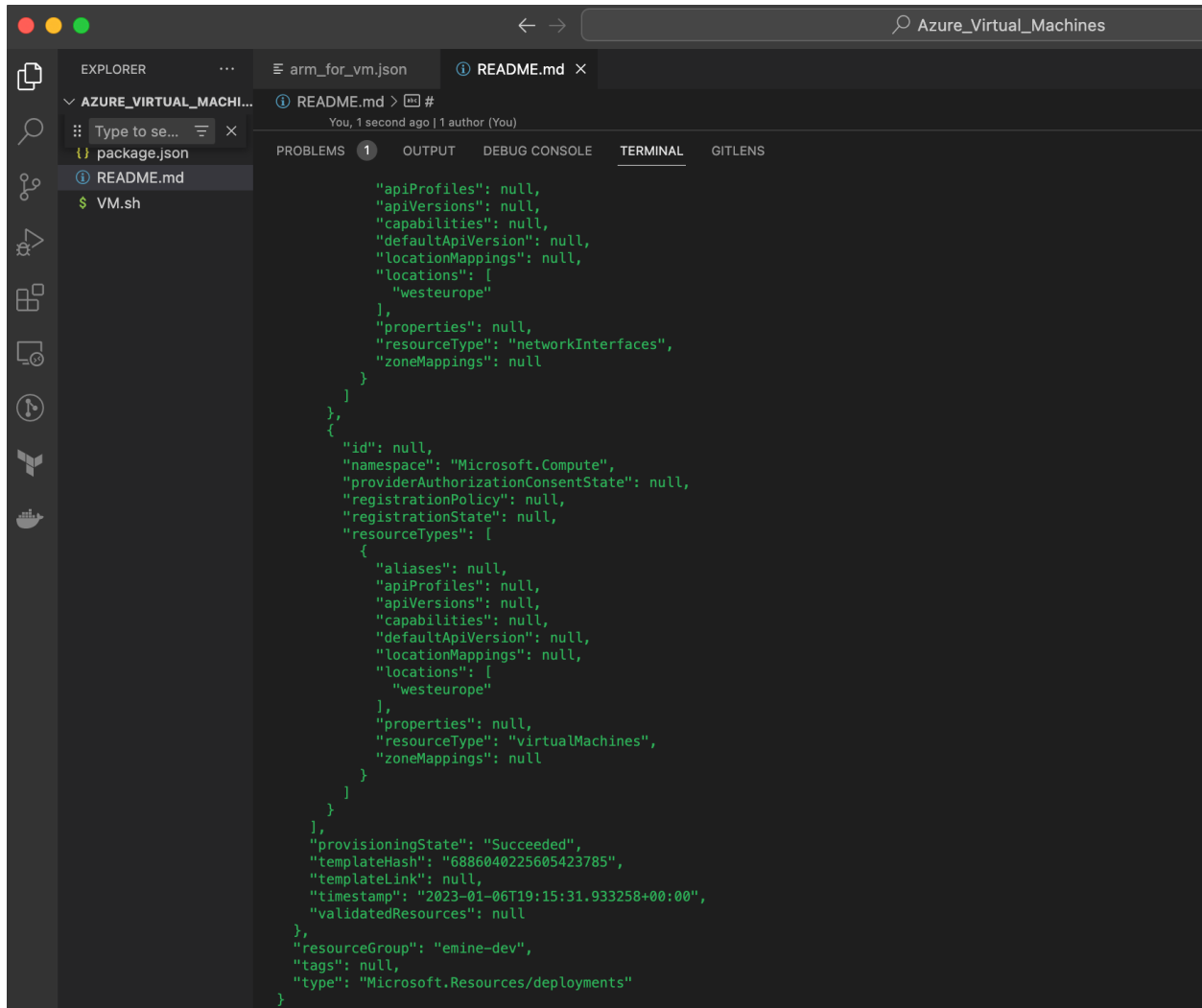
]

}

}

0 ① 1 Git Graph You, 8 minutes ago Ln 7, Col 6 Spaces: 4 UTF-8 LF Markdown Go Live 1 Spell Prettier

.....



Microsoft Azure Upgrade Search resources, services, and docs (G+/f)

Home > Resource groups >

### Resource groups

Default Directory

+ Create Manage view ...

Filter for any field...

Name ↑↓

- emine-dev
- emine\_prod
- MyVMTestRG2
- NetworkWatcherRG

**emine-dev** Resource group

Search

+ Create Manage view ... Delete resource group Refresh Export to CSV Open query Assign tags Move

Overview

- Activity log
- Access control (IAM)
- Tags
- Resource visualizer
- Events

Settings

- Deployments
- Security
- Policies
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- Locks

Cost Management

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Monitoring

- Insights (preview)
- Alerts
- Metrics
- Diagnostic settings
- Logs
- Advisor recommendations
- Workbooks

Automation

#### Essentials

Subscription (move) : [Azure subscription 1](#) Deployments : [1 Succeeded](#)

Subscription ID : e6f20371-3f03-4eee-968e-4e87f021adaa Location : West Europe

Tags (edit) : [Click here to add tags](#)

#### Resources Recommendations

Filter for any field... Type equals all Location equals all Add filter

Showing 1 to 14 of 14 records. Show hidden types

Name ↑↓	Type ↑↓
EmineUbuntuVM	Virtual machine
EmineUbuntuVM-NetworkInterface	Network Interface
EmineUbuntuVM-nsg	Network security group
EmineUbuntuVM-OSDisk	Disk
EmineUbuntuVM-PublicIP	Public IP address
EmineUbuntuVM-VirtualNetwork	Virtual network
emineubuntumstorage	Storage account
eminewinvm	Virtual machine
eminewinvm-NetworkInterface	Network Interface
eminewinvm-nsg	Network security group
eminewinvm-PublicIP	Public IP address
eminewinvm-VirtualNetwork	Virtual network
eminewinvmOSDisk	Disk
eminewinvmstorage	Storage account

#Using Portal

Home > Virtual machines >

## Create a virtual machine

⚠ Changing Basic options may reset selections you have made. Review all options prior to creating the virtual machine.

Resource group \* ⓘ VM\_testRG  
[Create new](#)


### Instance details

Virtual machine name \* ⓘ myUbuntuVM ✓

Region \* ⓘ (US) East US ✓

Availability options ⓘ No infrastructure redundancy required ✓

Security type ⓘ Standard ✓

Image \* ⓘ  Ubuntu Server 20.04 LTS - x64 Gen2 (free services eligible) ✓  
[See all images](#) | [Configure VM generation](#)

VM architecture ⓘ ☐ Arm64 ☒ x64

Run with Azure Spot discount ⓘ ☐

**i** You are in the free trial period. Costs associated with this VM can be covered by any remaining credits on your subscription.  
[Learn more](#)

Size \* ⓘ Standard\_B1s - 1 vcpu, 1 GiB memory (US\$7.59/month) (free services eligible) ✓  
[See all sizes](#)

### Administrator account

Authentication type ⓘ ☐ SSH public key ☒ Password

Username \* ⓘ emine ✓

Password \* ⓘ  ✓

Confirm password \* ⓘ  ✓

### Inbound port rules

Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

Public inbound ports \* ⓘ ☐ None ☒ Allow selected ports

Select inbound ports \* ⓘ SSH (22) ✓

⚠ This will allow all IP addresses to access your virtual machine. This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.

[Review + create](#) [< Previous](#) [Next : Disks >](#)

Home > **CreateVm-canonical.0001-com-ubuntu-server-focal-2-20221226144655 | Overview** ⚙️ ...

Deployment

Search < Delete Cancel Redeploy Download Refresh

**Overview**

Inputs

Outputs

Template

**✓ Your deployment is complete**

Deployment name: CreateVm-canonical.0001-com-ubuntu-server... Start time: 12/26/2022, 2:50:54 PM  
 Subscription: [Azure subscription 1](#) Correlation ID: c865584f-2e39-4006-88ed-5d992db8738b ⓘ  
 Resource group: [VM\\_testRG](#)

**Deployment details**

Resource	Type	Status
✓ <a href="#">myUbuntuVM</a>	Microsoft.Compute/virtualMachines	OK
✓ <a href="#">myubuntum691</a>	Microsoft.Network/networkInterfaces	Created
✓ <a href="#">myUbuntuVM-nsg</a>	Microsoft.Network/networkSecurityGroups	OK
✓ <a href="#">VM_testRG-vnet</a>	Microsoft.Network/virtualNetworks	OK
✓ <a href="#">myUbuntuVM-ip</a>	Microsoft.Network/publicIpAddresses	OK

**Next steps**

[Setup auto-shutdown](#) Recommended

[Monitor VM health, performance and network dependencies](#) Recommended

[Run a script inside the virtual machine](#) Recommended

[Go to resource](#) [Create another VM](#)

Give feedback

[Tell us about your experience with deployment](#)

## # Connect to Ubuntu VM

```
Emine-MBP:~ emineozsahin$ ssh -i ~/.ssh/myUbuntuVMssh_key.pem emine@20.168.210.173
Welcome to Ubuntu 20.04.5 LTS (GNU/Linux 5.15.0-1029-azure x86_64)

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

System information as of Mon Dec 26 20:01:22 UTC 2022

System load:  0.08          Processes:            108
Usage of /:   5.1% of 28.89GB Users logged in:          0
Memory usage: 30%          IPv4 address for eth0: 10.0.0.5
Swap usage:   0%

0 updates can be applied immediately.

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.

emine@myUbuntuVMssh:~$
```

## # Connect to Windows VM

