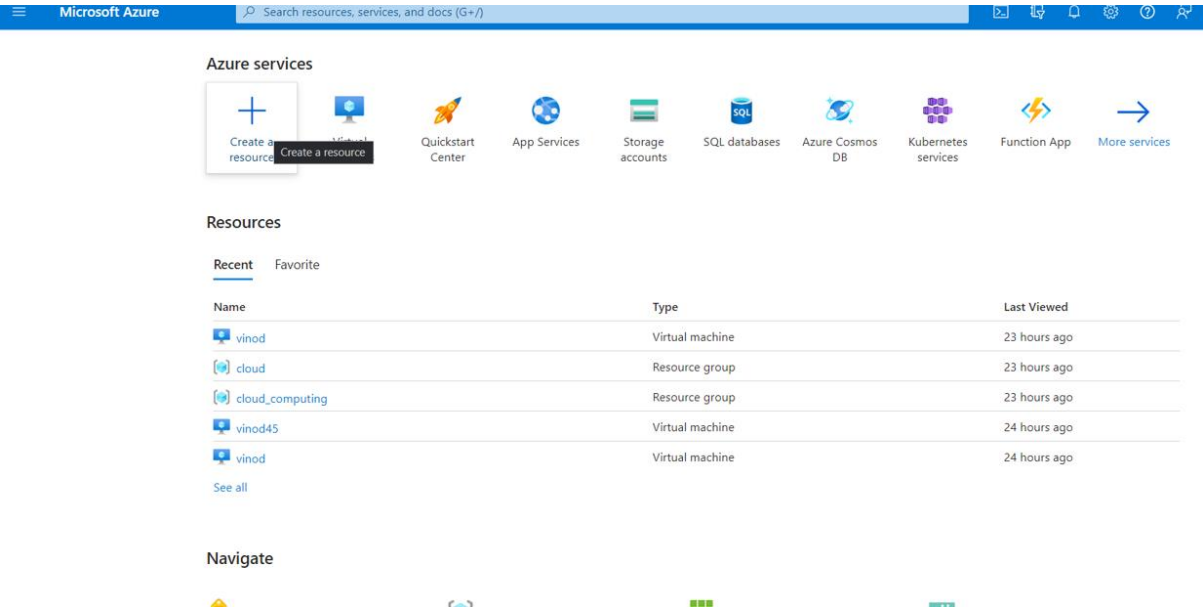


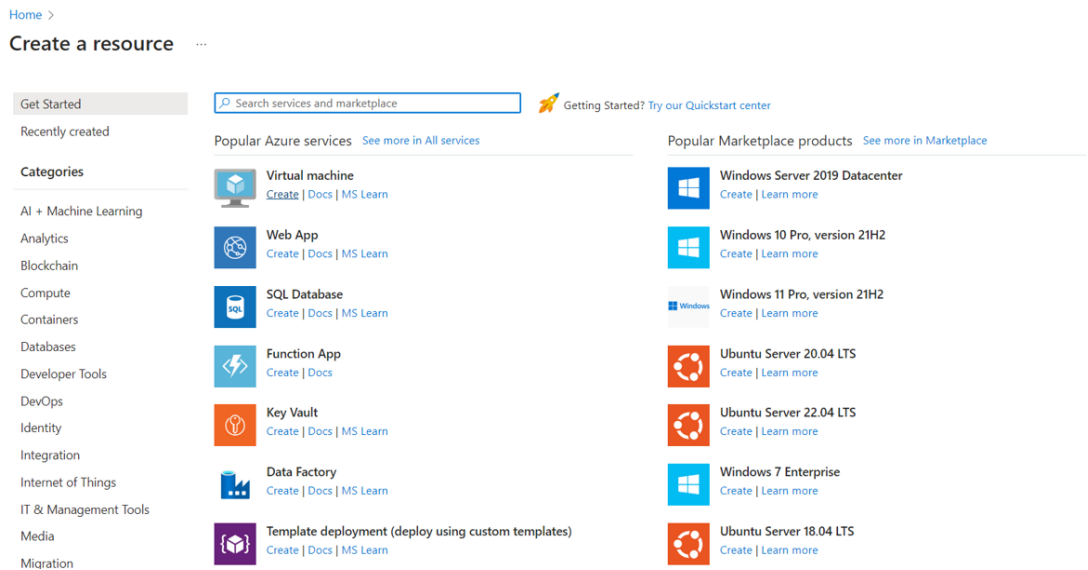
CLOUD COMPUTING

EXPERIMENT 14

STEP-1



STEP 2



STEP-3

[Home](#) > [Create a resource](#) >

Create a virtual machine ...

[Basics](#) [Disks](#) [Networking](#) [Management](#) [Monitoring](#) [Advanced](#) [Tags](#) [Review + create](#)

Create a virtual machine that runs Linux or Windows. Select an image from Azure marketplace or use your own customized image. Complete the Basics tab then Review + create to provision a virtual machine with default parameters or review each tab for full customization. [Learn more](#) ⓘ

i This subscription may not be eligible to deploy VMs of certain sizes in certain regions.

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * ⓘ
Resource group * ⓘ
[Create new](#)

Instance details

Virtual machine name * ⓘ
Region * ⓘ

A resource group is a container that holds related resources for an Azure solution.

Name *

Give

STEP-4

Region * ⓘ
Availability options ⓘ
Security type ⓘ
Image * ⓘ
[See all images](#) | [Configure VM generation](#)
VM architecture ⓘ ☐ Arm64 ☒ x64
Run with Azure Spot discount ⓘ ☐
Size * ⓘ
[See all sizes](#)

Administrator account

☒ SSH public key

STEP-5

Region * ⓘ
Availability options ⓘ
Security type ⓘ
Image * ⓘ
VM architecture ⓘ
Run with Azure Spot discount ⓘ
Size * ⓘ
Administrator account

Recommended ⓘ

- (US) East US
- (US) East US 2
- (US) West US 3
- (Asia Pacific) Australia East
- (Europe) North Europe
- (Europe) UK South
- (Europe) West Europe
- (Africa) South Africa North
- (Asia Pacific) Central India
- (Asia Pacific) East Asia

STEP-6

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.

STEP-6

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 >

Give feedback

STEP-7

Create a virtual machine ...

✓ Validation passed

Basics

Disks

Networking

Management

Monitoring

Advanced

Tags

Review + create

ⓘ Cost given below is an estimate and not the final price. Please use [Pricing calculator](#) for all your pricing needs.

Price

1 X Standard E2s v3

by Microsoft

[Terms of use](#) | [Privacy policy](#)

Subscription credits apply ⓘ

9.8953 INR/hr

[Pricing for other VM sizes](#)

TERMS

By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the [Azure Marketplace Terms](#) for additional details.

Name

PATHI VINOD

Create

< Previous

Next >

[Download a template for automation](#)

STEP-8

Search

Delete Cancel Redeploy Download Refresh

Your deployment is complete

Deployment name: CreateVm-canonical.0001-com-ubuntu-server-f... Start time: 5/11/2023, 8:34:43 AM
 Subscription: Azure for Students Correlation ID: d9ab0a2f-e95e-47da-be3c-21ed4e346807
 Resource group: cloud2.0

Deployment details

Resource	Type	Status	Operation details
vinodchoudary	Microsoft.Compute/virtualMachines	OK	Operation details
vinodchoudary173	Microsoft.Network/networkInterfaces	Created	Operation details
vinodchoudary-ip	Microsoft.Network/publicIPAddresses	OK	Operation details
vinodchoudary-vnet	Microsoft.Network/virtualNetworks	OK	Operation details
vinodchoudary-nsg	Microsoft.Network/networkSecurityGroups	OK	Operation details

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](#)

Cost Management
 Get notified to stay within your budget and prevent unexpected charges on your bill.
[Set up cost alerts >](#)

Microsoft Defender for Cloud
 Secure your apps and infrastructure
[Go to Microsoft Defender for Cloud >](#)

Free Microsoft tutorials
[Start learning today >](#)

Work with an expert
 Azure experts are service provider partners who can help manage your assets on Azure and be your first line of support.

STEP-9

Search

Connect Start Restart Stop Capture Delete Refresh Open in mobile Feedback CLI / PS

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

Essentials

Resource group (move) : cloud2.0
 Status : Running cloud2.0
 Location : East US
 Subscription (move) : Azure for Students
 Subscription ID : 3b4fbb3b-ccc6-4257-8f12-75b8d7b2a1b9

Operating system : Linux (ubuntu 20.04)
 Size : Standard E2s v3 (2 vcpus, 16 GiB memory)
 Public IP address : 74.235.175.2
 Virtual network/subnet : vinodchoudary-vnet/default
 DNS name : Not configured
 Health state : -

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

Properties Monitoring Capabilities (7) Recommendations Tutorials

Virtual machine

Computer name	vinodchoudary
Operating system	Linux (ubuntu 20.04)
Publisher	canonical
Offer	0001-com-ubuntu-server-focal
Plan	20_04-lts-gen2
VM generation	V2

Networking

Public IP address	74.235.175.2 (Network interface vinodchoudary173)
Public IP address (IPv6)	-
Private IP address	10.2.0.4
Private IP address (IPv6)	-
Virtual network/subnet	vinodchoudary-vnet/default
DNS name	Configure

STEP-10

Microsoft Azure

Azure services

Create a resource Virtual machines Quickstart Center App Services Storage accounts SQL databases Azure Cosmos DB Kubernetes services Function App More services

Resources

Recent Favorite

Name	Type	Last Viewed
vinodchoudary	Virtual machine	a minute ago
cloud2.0	Resource group	9 minutes ago
vinod	Virtual machine	24 hours ago
cloud	Resource group	24 hours ago
cloud.com	Resource group	24 hours ago
vinod45	Virtual machine	a day ago
vinod	Virtual machine	a day ago

See all

Navigate

STEP-11

Search

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

Connect

Start

Restart

Stop

Capture

Delete

Refresh

Open in mobile

Feedback

CLI / PS

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

Properties Monitoring Capabilities (7) Recommendations Tutorials

Virtual machine

Computer name: vinodchoudary

Operating system: Linux (ubuntu 20.04)

Publisher: canonical

Offer: 0001-com-ubuntu-server-focal

Plan: 20_04-lts-gen2

VM generation: V2

VM architecture: x64

Agent status: Ready

Agent version: 2.9.0.4

Host group: None

Host: -

Proximity placement group: -

Colocation status: N/A

Capacity reservation group: -

Disk controller type: SCSI

Networking

Public IP address: 74.235.175.2 (Network interface vinodchoudary173)

Public IP address (IPv6): -

Private IP address: 10.2.0.4

Private IP address (IPv6): -

Virtual network/subnet: vinodchoudary-vnet/default

DNS name: [Configure](#)

Size

Size: Standard E2s v3

vCPUs: 2

RAM: 16 GiB

Disk

OS disk: vinodchoudary_disk1_9064116f9bfb4e44b1071d9abfdb6bfe

Encryption at host: Disabled

Access disk encryption: Not enabled

STEP-12

Search

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

Connect

Start

Restart

Stop

Capture

Delete

Refresh

Open in mobile

Feedback

CLI / PS

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

JSON View

Essentials

Resource group (move) : cloud2.0

Status : Running

Location : East US

Subscription (move) : [Azure for Students](#)

Subscription ID : 3b4fbb3b-ccc6-4257-8f12-75b8d7b2a1b9

Operating system : Linux (ubuntu 20.04)

Size : Standard E2s v3 (2 vcpus, 16 GiB memory)

Public IP address : [74.235.175.2](#)

Virtual network/subnet : [vinodchoudary-vnet/default](#)

DNS name : [Not configured](#)

Health state : -

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

Properties Monitoring Capabilities (7) Recommendations Tutorials

Virtual machine

Computer name: vinodchoudary

Operating system: Linux (ubuntu 20.04)

Publisher: canonical

Offer: 0001-com-ubuntu-server-focal

Plan: 20_04-lts-gen2

VM generation: V2

VM architecture: x64

Networking

Public IP address: 74.235.175.2 (Network interface vinodchoudary173)

Public IP address (IPv6): -

Private IP address: 10.2.0.4

Private IP address (IPv6): -

Virtual network/subnet: vinodchoudary-vnet/default

DNS name: [Configure](#)

STEP-13

Search

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

Connect

Start

Restart

Stop

Capture

Delete

Refresh

Open in mobile

Feedback

CLI / PS

To improve security, enable just-in-time access on this VM. →

RDP **SSH** Bastion

Connect via SSH with client

^ **Suggested method for connecting**

Azure has checked the status for the most common prerequisites when connecting using this method.

- ✓ An inbound network security group rule has been created and your client IP address can access port 22. [Learn more](#)
- ✓ The VM's network interface has a Public IP address. [Learn more](#)
- ✓ The VM is running.

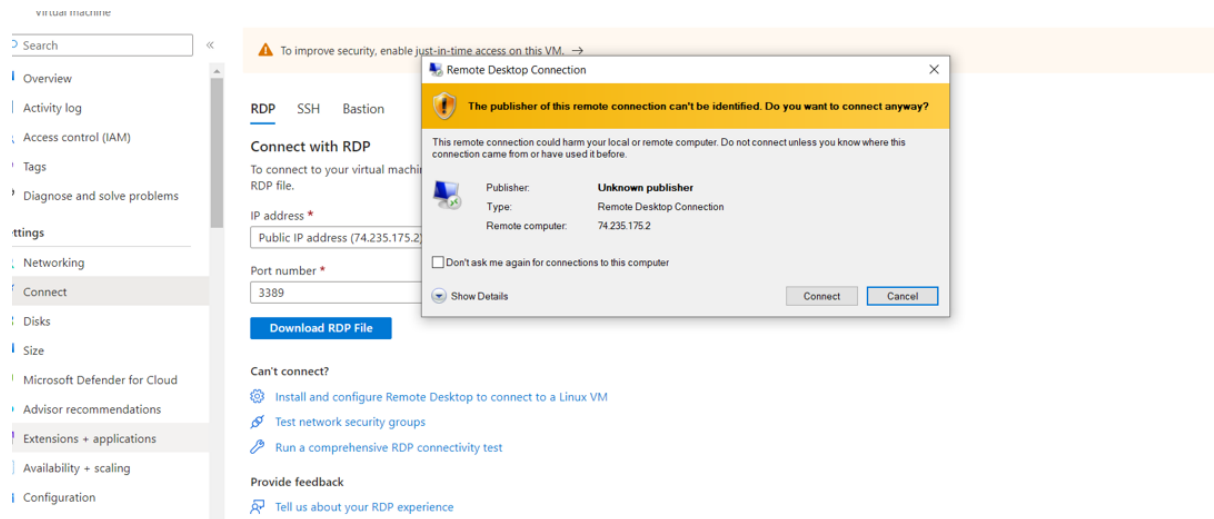
1. Open the client of your choice, for example [WSL on Windows](#), [Terminal on Mac](#) or [Shell on Linux](#).
2. Ensure you have read-only access to the private key. Chmod is only supported on Linux subsystems (e.g. WSL on Windows or Terminal on Mac).


```
chmod 400 <keyname>.pem
```
3. Provide a path to your SSH private key file. [Replace/reset your SSH private key.](#)

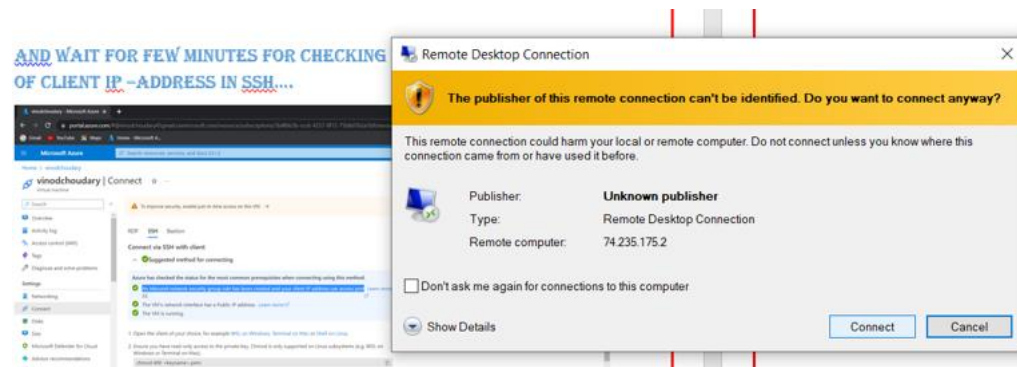
Private key path

```
~/ssh/<keyname>.pem
```
4. Run the example command below to connect to your VM.

STEP-14



STEP-15



STEP-16

Remote Desktop Connection



Remote Desktop can't connect to the remote computer for one of these reasons:

- 1) Remote access to the server is not enabled
- 2) The remote computer is turned off
- 3) The remote computer is not available on the network

Make sure the remote computer is turned on and connected to the network, and that remote access is enabled.

OK

Help