

## **EXP -5**

**DATE : 09-02-2023**

### **DEMONSTRATE INFRASTRUCTURE AS A SERVICE(IAAS) BY CREATING A VIRTUAL MACHINE USING A PUBLIC CLOUD SERVICE (AZURE)**

#### **AIM:**

To demonstrate infrastructure as a service (IaaS) by creating a virtual machine using a public cloud service (azure)

#### **PROCEDURE:**

1. Create an account in microsoft azure.
2. Goto resource group and create a resource group.
3. Give necessary things for resource group
4. Create a virtual network for to create a virtual machine .
5. Now create a virtual machine with ur ip address an  
username and password for your virtual machine.
6. Your virtual machine is deployed.
7. Now connect the virtual machine and download the rdp file to  
open your windows virtual machine.
8. Created a new windows virtual machine.

# IMPLEMENTATION:

## STEP1:CREATE AN ACCOUNT IN MICROSOFT AZURE.

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

Home > Resource groups >

Resource groups  
Default Directory

+ Create Manage view ...

Filter for any field...

Name ↑

- DefaultResourceGroup-CAU
- NetworkWatcherRG

Create a resource group ...

Validation passed.

Basics Tags Review + create

Basics

Subscription Azure for Students

Resource group Record

Region East US

Tags

None

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Create < Previous Next > Download a template for automation

## STEP2: GOTO RESOURCE GROUP AND CREATE A RESOURCE GROUP.

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

Home > Resource groups >

Resource groups  
Default Directory

+ Create Manage view ...

Filter for any field...

Name ↑

- DefaultResourceGroup-CAU
- NetworkWatcherRG

Create a resource group ...

Basics Tags Review + create

Resource group - A container that holds related resources for an Azure solution. The resource group can include all the resources for the solution, or only those resources that you want to manage as a group. You decide how you want to allocate resources to resource groups based on what makes the most sense for your organization. [Learn more](#)

Project details

Subscription \* Azure for Students

Resource group \* Record

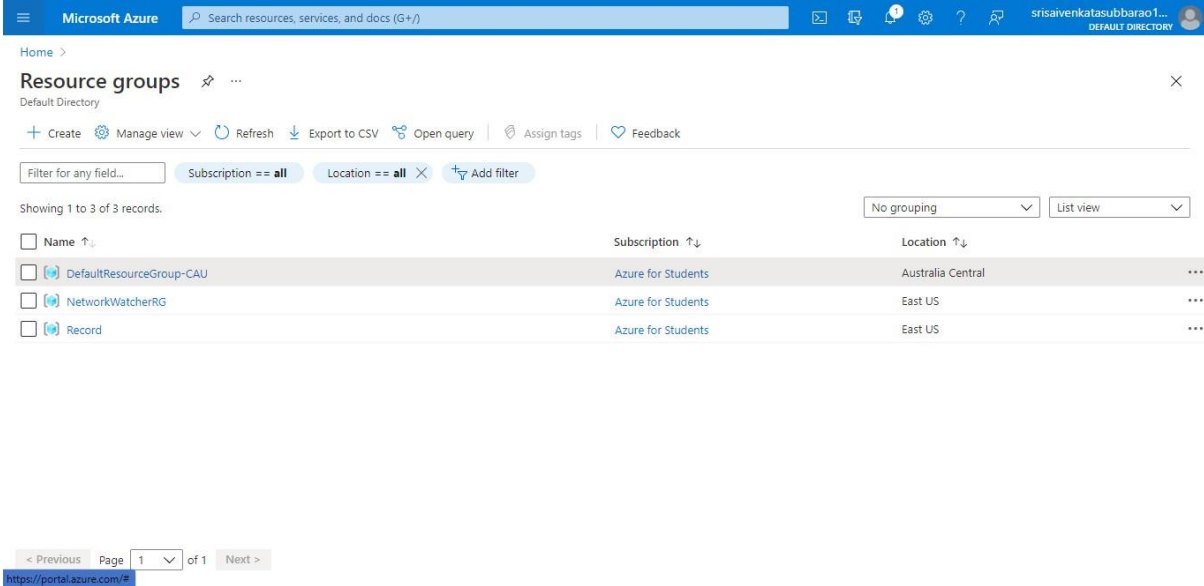
Resource details

Region \* (US) East US

Page 1 of 1

Review + create < Previous Next: Tags >

## STEP4: CREATE A VIRTUAL NETWORK FOR TO CREATE A VIRTUAL MACHINE .



The screenshot shows the Microsoft Azure portal interface. At the top, there's a navigation bar with the Microsoft Azure logo and a search bar. Below the navigation bar, the 'Resource groups' section is displayed. It includes a 'Filter for any field...' input, a 'Subscription == all' filter, and a 'Location == all' filter. A table lists three resource groups: 'DefaultResourceGroup-CAU', 'NetworkWatcherRG', and 'Record'. Each row shows the resource group name, the subscription 'Azure for Students', and the location 'Australia Central', 'East US', and 'East US' respectively. The table also has columns for 'Name', 'Subscription', and 'Location'. At the bottom, there's a pagination bar showing 'Page 1 of 1' and a URL 'https://portal.azure.com/#'.

Name	Subscription	Location
DefaultResourceGroup-CAU	Azure for Students	Australia Central
NetworkWatcherRG	Azure for Students	East US
Record	Azure for Students	East US

## STEP5: NOW CREATE A VIRTUAL MACHINE WITH UR IP ADDRESS AN USERNAME AND PASSWORD FOR YOUR VIRTUAL MACINE.

## STEP6: AND YOUR VIRTUAL MACHINE IS DEPLOYED.

RDP SSH Bastion

### Connect with RDP

^ Suggested method for connecting

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

- Checking network security group for inbound access from your client's IP address. [Learn more](#)
- The VM's network interface has a Public IP address. [Learn more](#)
- The VM is running.

To connect to your virtual machine via RDP, select an IP address, optionally change the port number, and download the RDP file.

IP address \*

Public IP address (20.38.5.71)

Port number \*

3389

Download RDP File

Can't connect?

Test your connection

Troubleshoot RDP connectivity issues

Home > MYVM Virtual machine

Search

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

Overview

- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems

Settings

- Networking
- Connect
- Windows Admin Center
- Disks
- Size
- Microsoft Defender for Cloud
- Advisor recommendations
- Extensions + applications
- Continuous delivery
- Availability + scaling
- Configuration
- Identity

Properties Monitoring Capabilities (8) Recommendations Tutorials

**Virtual machine**

Computer name	MYVM
Health state	-
Operating system	Windows (Windows Server 2019 Datacenter)
Publisher	MicrosoftWindowsServer
Offer	WindowsServer
Plan	2019-datacenter-gensecond
VM generation	V2
VM architecture	x64
Agent status	Ready
Agent version	2.7.41491.1071
Host group	None
Host	-
Proximity placement group	-
Colocation status	N/A
Capacity reservation group	-

**Availability + scaling**

Availability zone	-
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**Networking**

Public IP address	20.38.5.71
Public IP address (IPv6)	-
Private IP address	10.0.0.4
Private IP address (IPv6)	-
Virtual network/subnet	nr1-vnet/default
DNS name	Configure

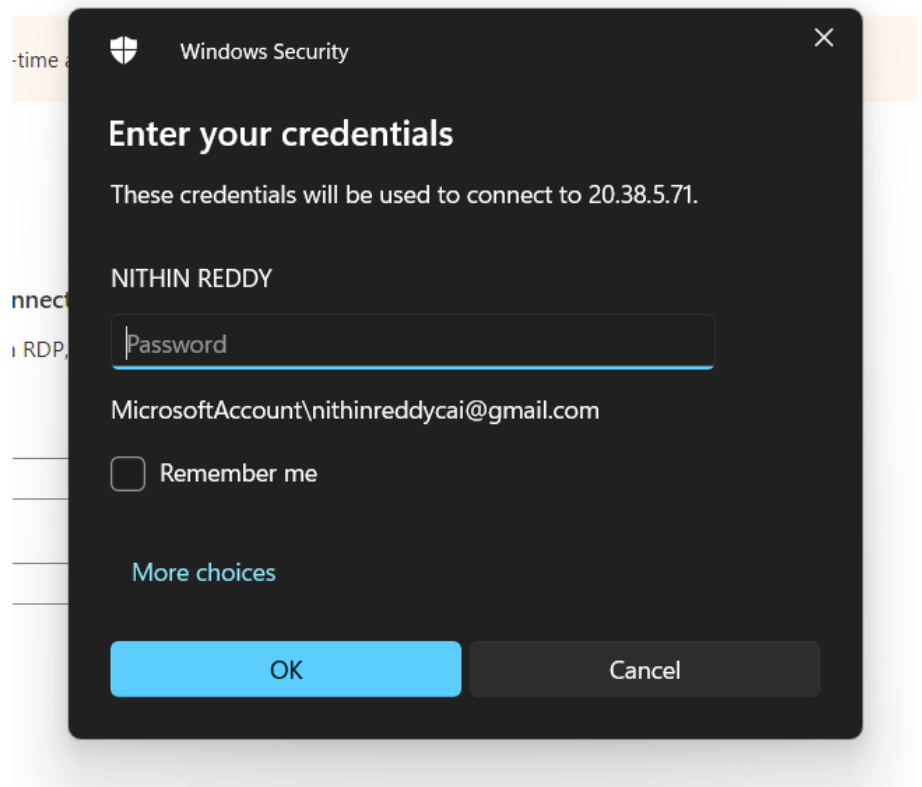
**Size**

Size	Standard D2s v3
vCPUs	2
RAM	8 GiB

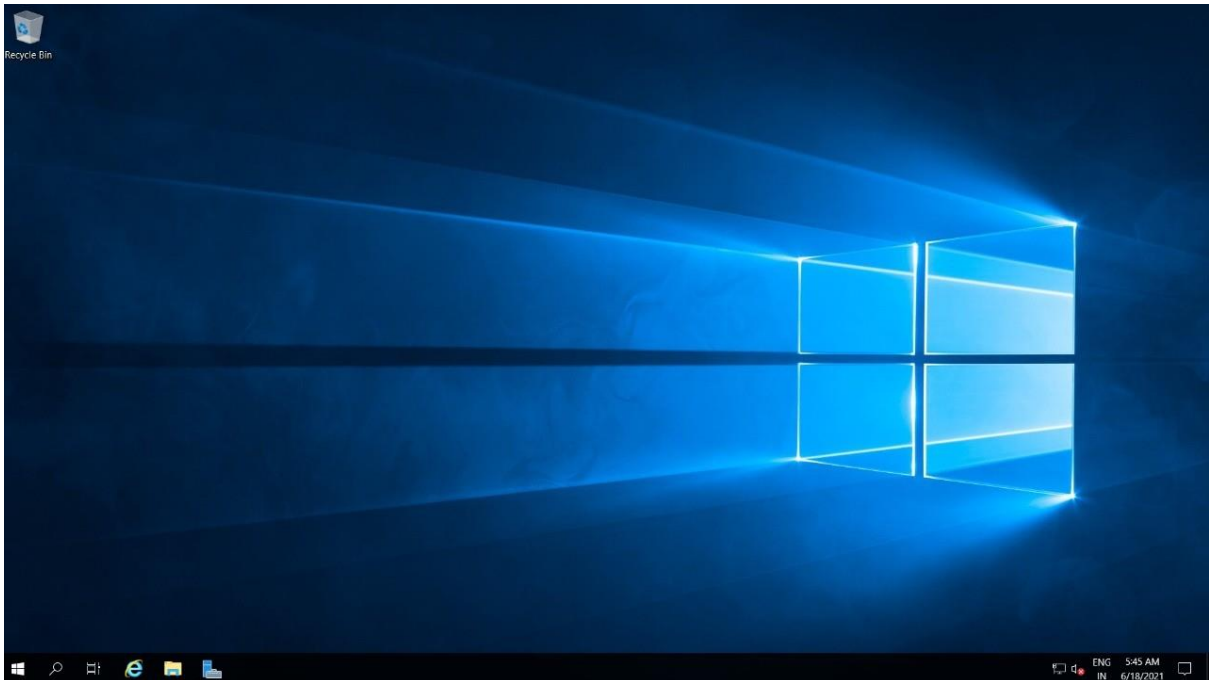
**Disk**

OS disk	MYVM_OsDisk_1_5a84ae30086948f199a2cde80e4ecc08
Encryption at host	Disabled
Azure disk encryption	Not enabled
Ephemeral OS disk	N/A
Data disks	0

**STEP7: NOW CONNECT THE VIRTUAL MACHINE AND DOWNLOAD THE RDP FILE TO OPEN YOUR WINDOWS VIRTUAL MACHINE.**



## **STEP8: CREATED A NEW WINDOWS VIRTUAL MACHINE.**



## **RESULT:**

Hence infrastructure as a service (IaaS) by creating a virtual machine using a public cloud service (azure) is Demonstrated.

