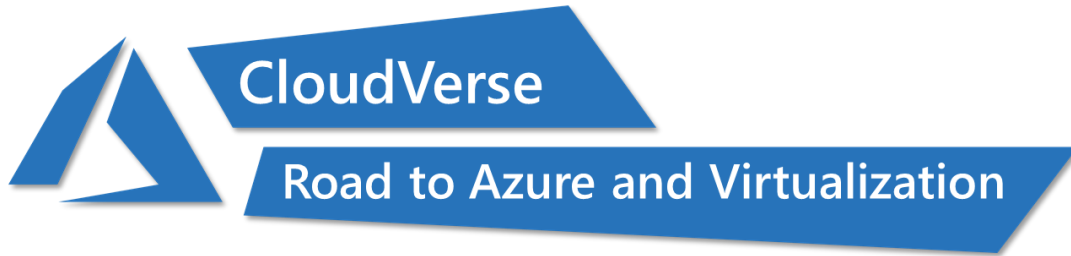


Microsoft
Learn

STUDENT AMBASSADOR





Getting Started with Virtual Machines

Event Speaker: Md. Asifuzzaman





Md. Asifuzzaman
Beta Student Ambassador
Bangladesh University of Professionals

Speaker Introduction

Interests

- Computer Networking
- Network Security
- Cloud Computing
- Internet of Things
- IT Infrastructure
- Operations Management
- Organizational Leadership

Social

- www.facebook.com/asif.z11
- www.linkedin.com/in/asif-z11
- Md.Asifuzzaman@studentambassadors.com



Topics to be discussed

- Virtual machine and its benefits
- VM creation using Azure Portal
- Remote access to virtual machines
- Hosting web server on a virtual machine

Recommended Microsoft Learn Paths

- Introduction to Azure virtual machines
 - <https://docs.microsoft.com/en-us/learn/modules/intro-to-azure-virtual-machines>
- Create a Windows virtual machine in Azure
 - <https://docs.microsoft.com/en-us/learn/modules/create-windows-virtual-machine-in-azure>



Virtual machine and its benefits

Azure VMs are one of several types of on-demand, scalable computing resources that Azure offers.

With VMs, you have total control over the configuration and can install anything you need to perform the work. You don't need to purchase physical hardware when you need to scale or extend your datacenter.

Finally, Azure provides additional services to monitor, secure, and manage updates and patches to the OS.

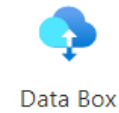
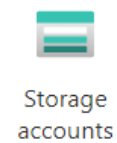
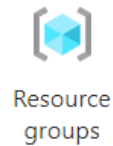
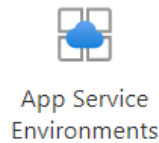
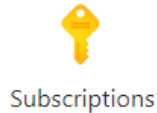
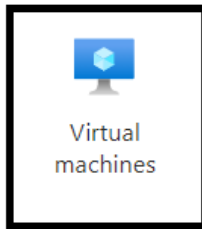


VM creation using Azure Portal





1. Sign into the Azure portal using your Azure for students account
2. Select Virtual machines in the top-left corner of the portal page

Azure services



Recent resources

Name	Type
 Ready1	Virtual machine
 Ready1_group	Resource group
 torrentFlix	Resource group
 Visual Studio Enterprise Subscription	Subscription
 NetworkWatcherRG	Resource group

VM creation using Azure Portal



3. Click on +Add
4. Select +Virtual machine

[Home](#) >

Virtual machines

Student Ambassadors

+ Add ▾ ⌚ Reservations ▾ ≡ Edit columns ↻ Refresh ↔ Try preview | 🏷 Assign tags ▶ Start ↺ Restart ☐ Stop

+ Virtual machine

+ Start with a preset configuration in the browser! This experience is faster and has improved sorting and filtering capabilities. Please note that the new experience is in preview.

Subscriptions: Visual Studio Enterprise Subscription

Filter by name...

All resource groups ▾

All types ▾

All locations

1 items

☐ Name ↑↓

Type ↑↓

Status

Resource group ↑↓

Location ↑↓

☐  Ready1

Virtual machine

Stopped (deallocated)

Ready1_group

Central India

VM creation using Azure Portal



5. Configure according to need

[Home](#) > [Virtual machines](#) >

Create a virtual machine ...

»

Basics Disks Networking Management 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](#)

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 * ⓘ

Availability options ⓘ

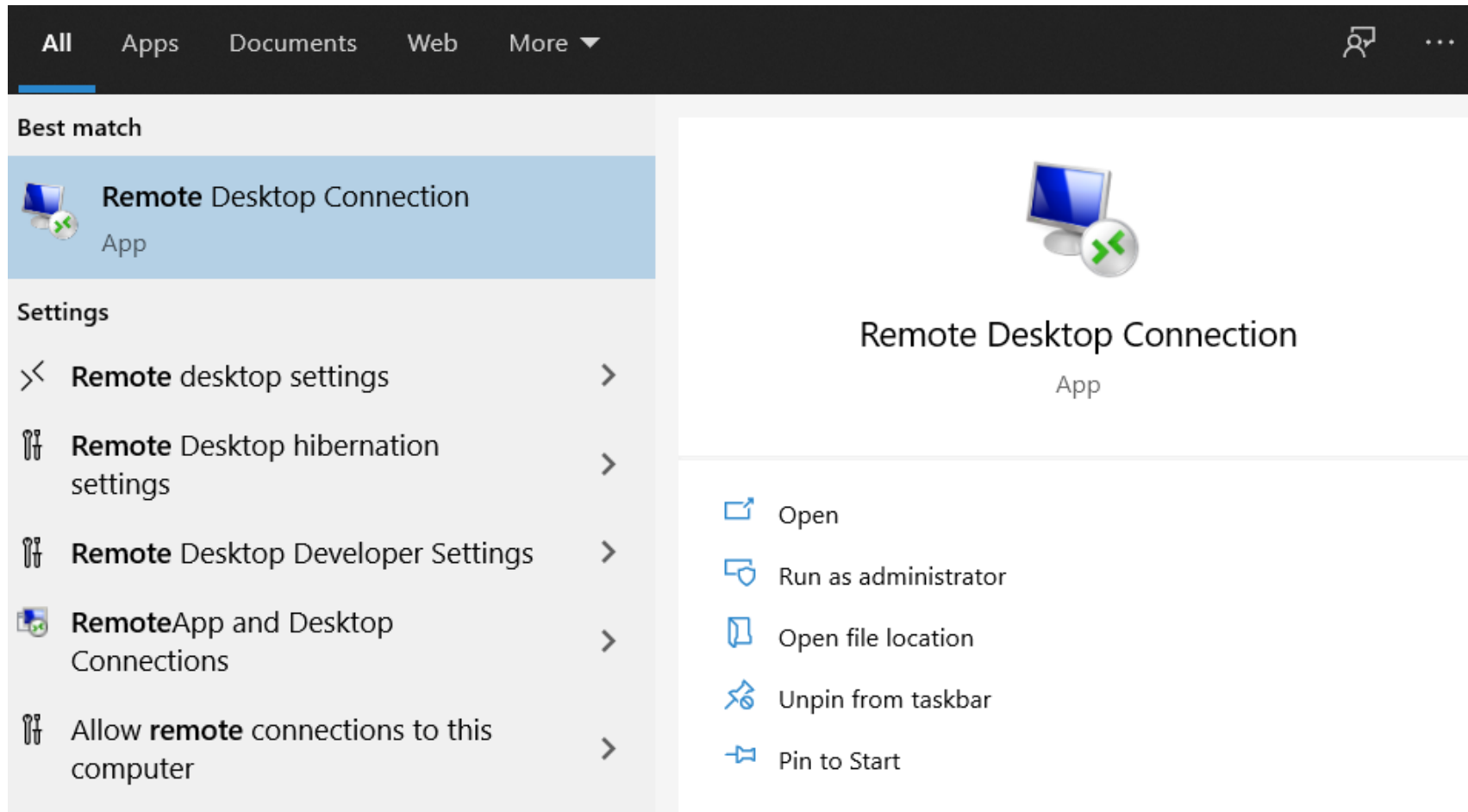
Image * ⓘ

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

Remote access to virtual machines



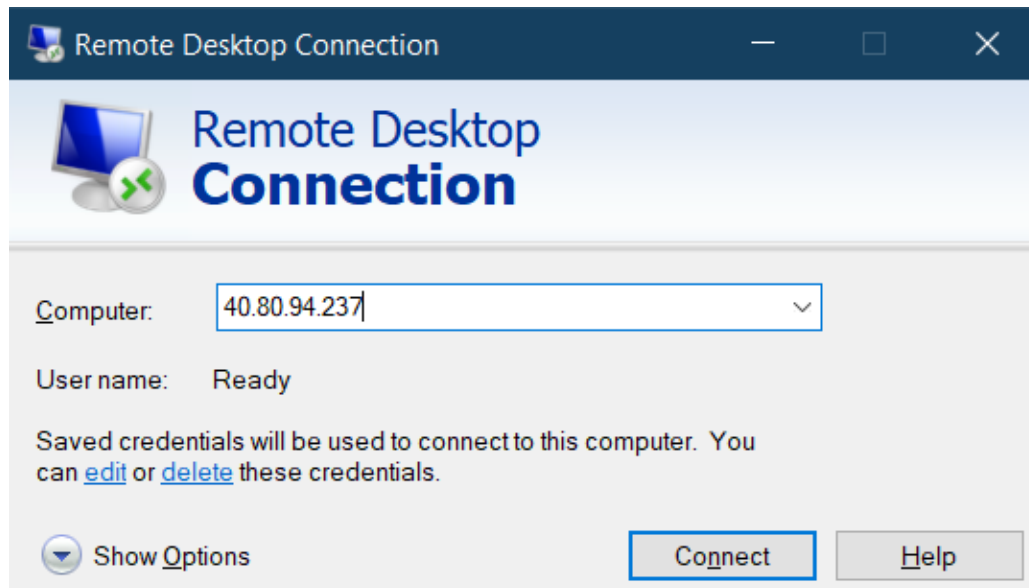
1. Search for "Remote Desktop Connection"



Remote access to virtual machines



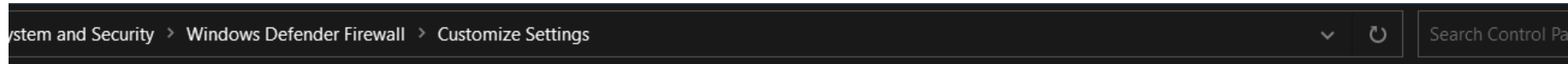
2. Insert IP Address of VM
3. Provide Username and Password for your VM
4. Ignore any warnings



Hosting web server on a virtual machine



- Disable Windows Firewall



Customize settings for each type of network

You can modify the firewall settings for each type of network that you use.

Private network settings



☐ Turn on Windows Defender Firewall

☐ Block all incoming connections, including those in the list of allowed apps

☒ Notify me when Windows Defender Firewall blocks a new app



☒ Turn off Windows Defender Firewall (not recommended)

Public network settings



☐ Turn on Windows Defender Firewall

☐ Block all incoming connections, including those in the list of allowed apps

☒ Notify me when Windows Defender Firewall blocks a new app



☒ Turn off Windows Defender Firewall (not recommended)

Hosting web server on a virtual machine



- Open destination port from “Networking” settings of your VM

The screenshot shows the Azure portal interface for a virtual machine named 'Ready1'. The left sidebar shows the 'Virtual machines' section with a list of VMs. The main area displays the 'Networking' settings for 'Ready1', showing the 'ready1991' network interface and its IP configuration. The 'Inbound port rules' tab is selected, showing a table of rules. The 'Add inbound security rule' dialog is open, showing the configuration for a new rule. The 'Destination port ranges' field is highlighted with a red error message: 'The port must be a number between 0 and 65535'.

Virtual machines
Student Ambassadors

Home > Virtual machines > Ready1

Try the new virtual machine resource browser! This experience is faster and has improved sorting and filtering capabilities. Please note that the new experience will not show classic virtual machines and does not include support for some columns such as maintenance status.

Filter by name...

☐ Name ↑↓

☐ Ready1

Ready1 | Networking
Virtual machine

Search (Ctrl+/)

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

Settings

- Networking
- Connect
- Windows Admin Center (previ...
- Disks
- Size
- Security
- Advisor recommendations
- Extensions
- Continuous delivery
- Availability + scaling
- Configuration

Attach network interface Detach network interface

ready1991

IP configuration ⓘ
ipconfig1 (Primary)

Network Interface: ready1991 Effective security

Virtual network/subnet: Ready1_group-vnet/default

Inbound port rules Outbound port rules Applied

Network security group Ready1-nsg (attached to nsg) Impacts 0 subnets, 1 network interfaces

Priority	Name
310	Port_8888
330	Port_8080
340	Port_8096
65000	AllowVnetInBound
65001	AllowAzureLoadBalancerInBou...
65500	DenyAllInBound

Add inbound security rule
Ready1-nsg

Source ⓘ
Any

Source port ranges * ⓘ
*

Destination ⓘ
Any

Service ⓘ
Custom

Destination port ranges * ⓘ
Type Your Required Port Here

✖ The port must be a number between 0 and 65535.

Protocol
☒ Any
☐ TCP
☐ UDP
☐ ICMP

Action
☒ Allow

Add Cancel

Hosting web server on a virtual machine



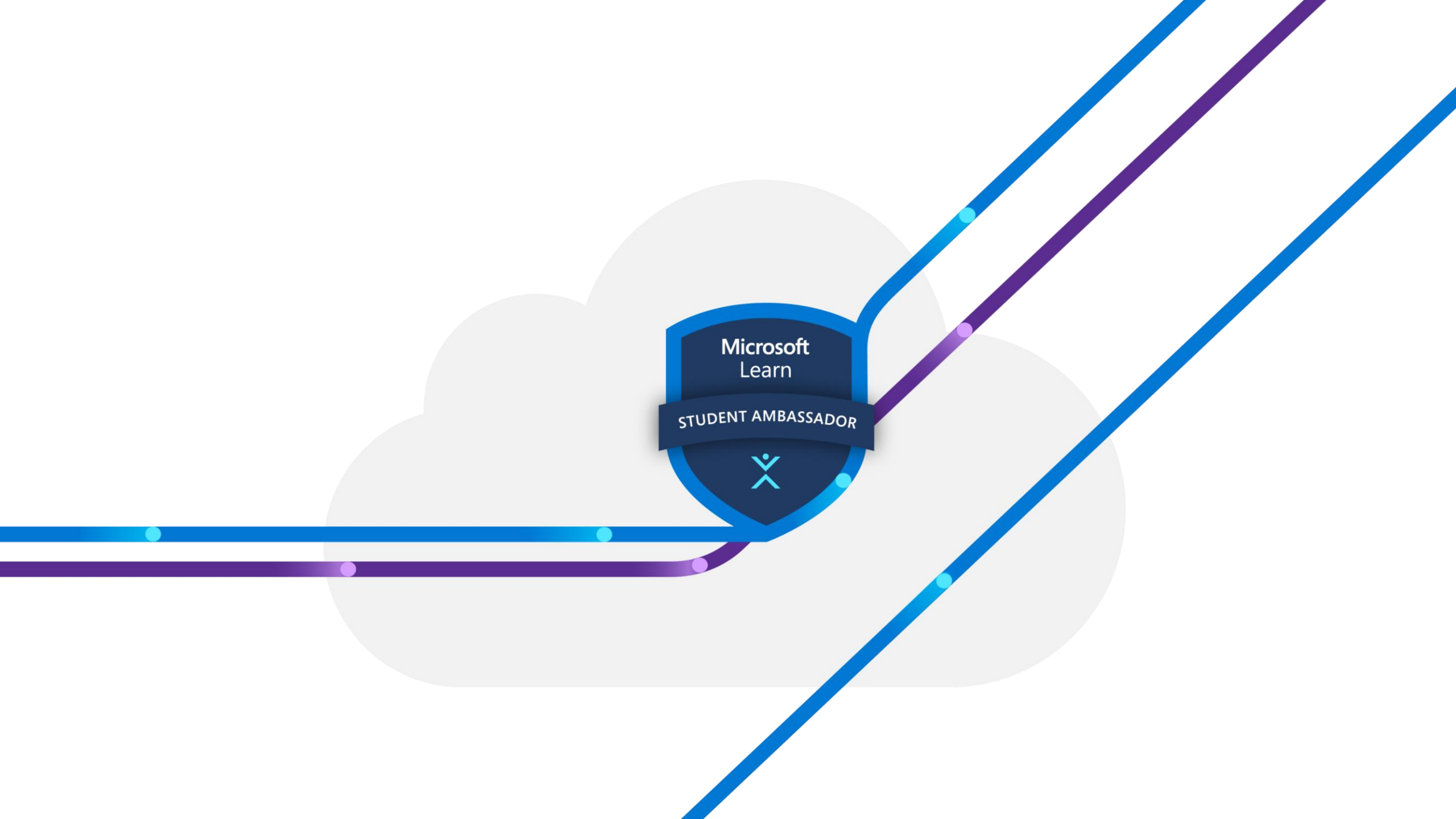
- Select and open preferred application
- Configure network configuration
- Test for usage
- Troubleshoot (if required)

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Thank you all : 'D





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