



DEMO: Deploying and Connecting to a Windows Virtual Machine via the Azure

Author: Saurav Raghuvanshi

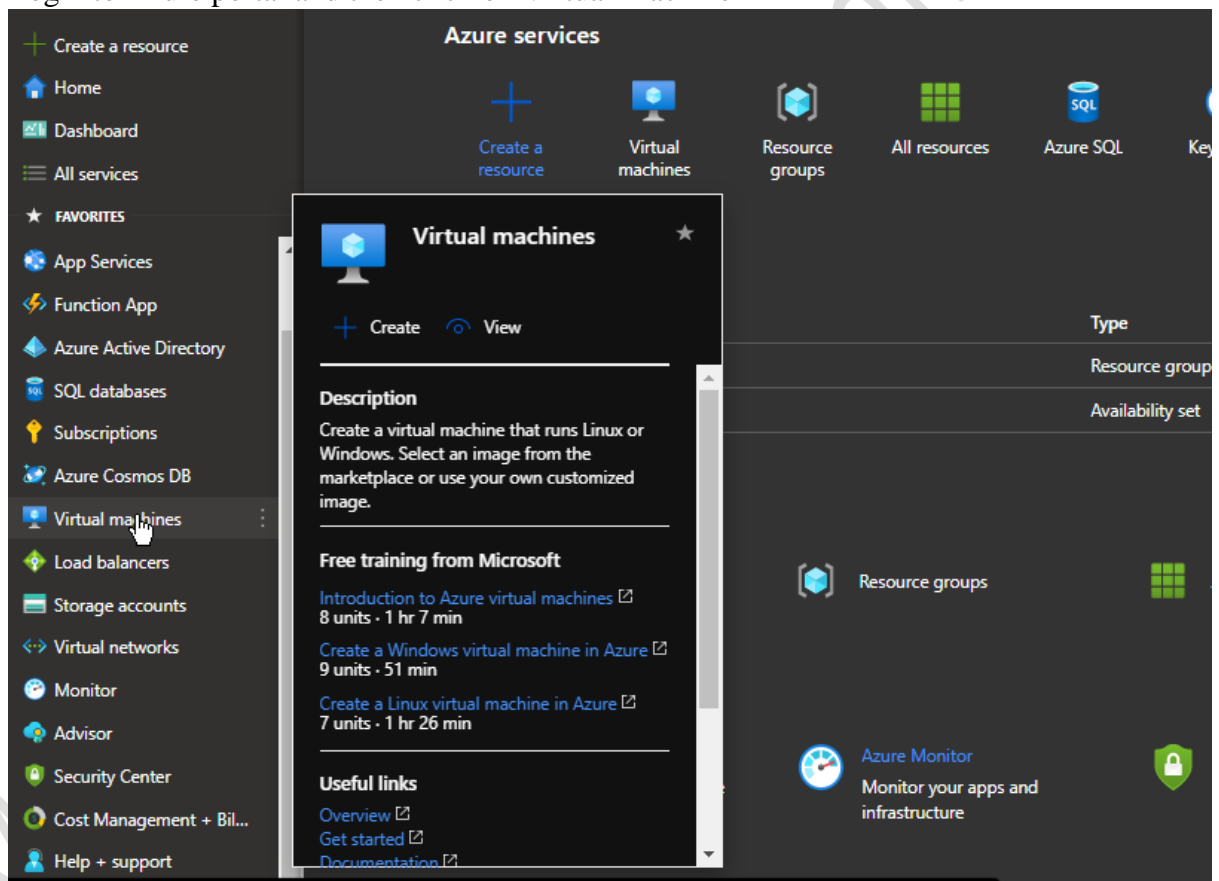
Aim: Deploying and Connecting to a Windows Virtual Machine via the Azure

Some Useful Link:

- Azure free Tier account creation: <https://azure.microsoft.com/en-us/free/>
- Azure Portal: <https://portal.azure.com/#home>
- Service Categories: <https://azure.microsoft.com/services/>
- Designing a Solution: <https://docs.microsoft.com/azure/architecture/>

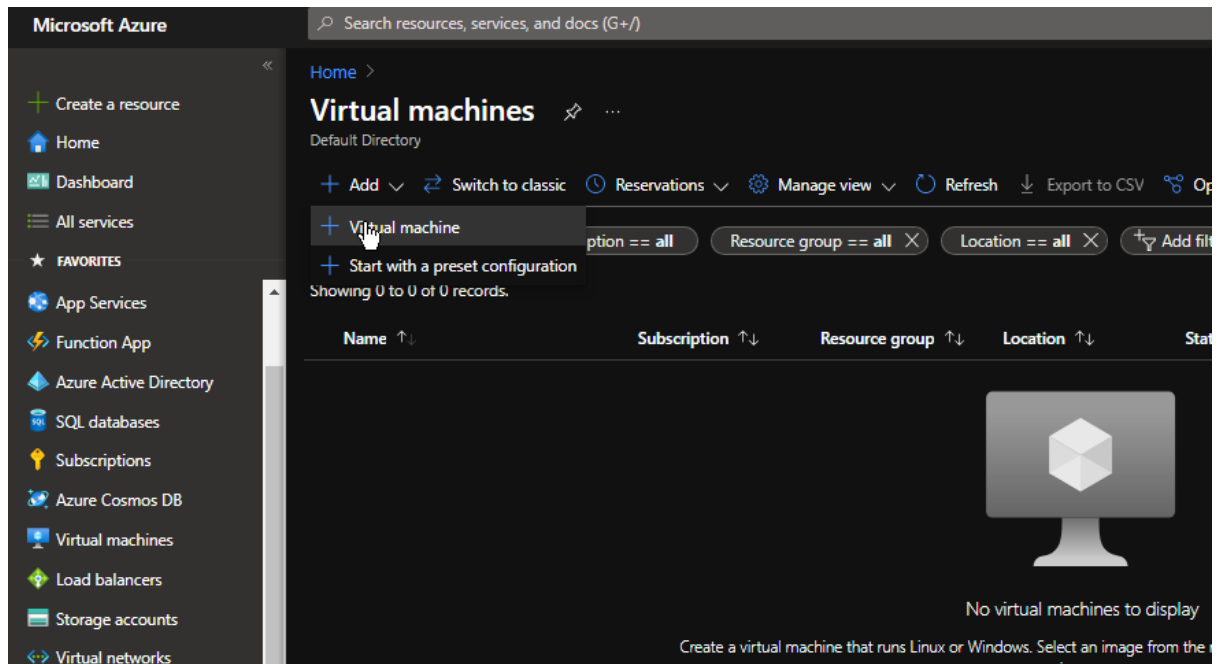
Instructions:

1. Login to Azure portal and then click on Virtual Machine

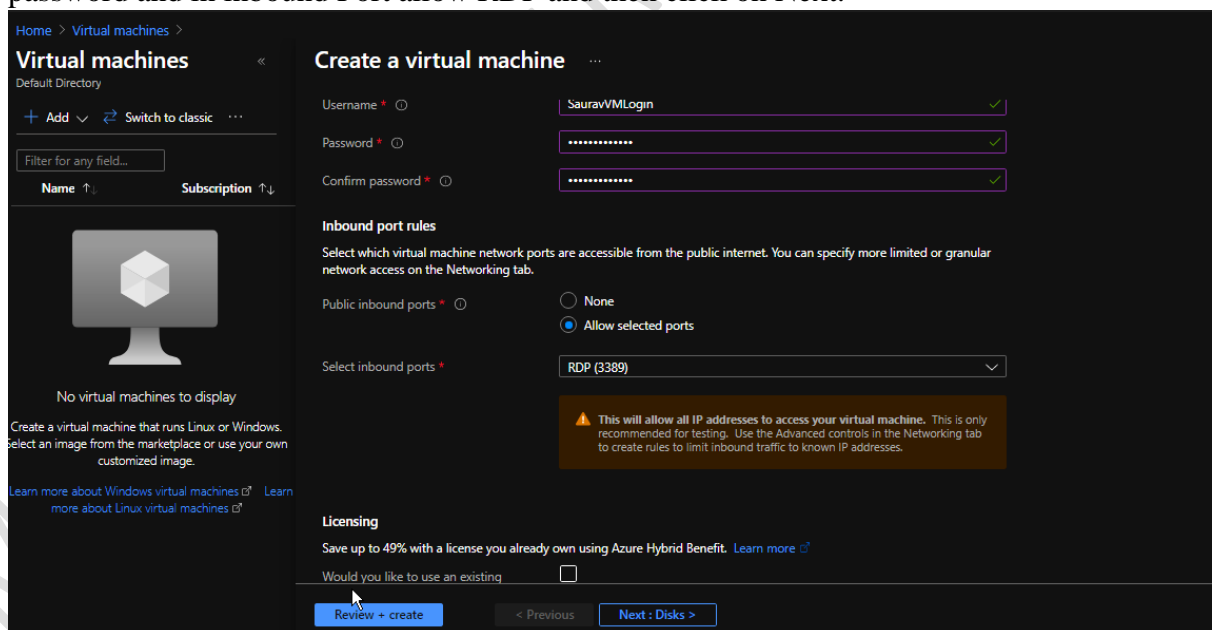


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2. Click on Add and then click on Virtual Machine



3. Select the resource group that we created in our last lab then give your VM a name, select image type i.e Windows Server 2019 datacenter, then select the availability option and the region where you want to create VM, give your vm username and password and in inbound Port allow RDP and then click on Next.



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- Let everything on default i.e the OS disk type, Encryption etc and then click on Next.

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Create a virtual machine

Basics **Disks** Networking Management Advanced Tags Review + create

Azure VMs have one operating system disk and a temporary disk for short-term storage. You can attach additional data disks. The size of the VM determines the type of storage you can use and the number of data disks allowed. [Learn more](#)

Disk options

OS disk type * ⓘ Premium SSD (locally-redundant storage) ▼

Encryption type * (Default) Encryption at-rest with a platform-managed key ▼

Enable Ultra Disk compatibility ⓘ ☐ Ultra disk is not supported with Availability Sets or VMSS.

Data disks

You can add and configure additional data disks for your virtual machine or attach existing disks. This VM also comes with a temporary disk.

LUN	Name	Size (GiB)	Disk type	Host caching
Create and attach a new disk Attach an existing disk				

▼ Advanced

- In this networking page, Azure will create Virtual Network, Subnet, Public IP address for our VM. We can set Network Security Group and Inbound port for your VM. So

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everything is default here. Just click on Next

Home >

Create a virtual machine

Virtual network * ⓘ (new) VM-Availability-vnet [Create new](#)

Subnet * ⓘ (new) default (10.0.0.0/24) [Create new](#)

Public IP ⓘ (new) SauravVM-ip [Create new](#)

NIC network security group ⓘ ☐ None ☒ Basic ☐ Advanced

Public inbound ports * ⓘ ☐ None ☒ Allow selected ports

Select inbound ports * RDP (3389)

⚠ 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.

Accelerated networking ⓘ ☐ The selected VM size does not support accelerated networking.

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6. In this page you can able to configure monitoring and management configuration of your VM. Everything will be default here and then click on next.

Home >

Create a virtual machine

Basics Disks Networking Management Advanced Tags Review + create

Configure monitoring and management options for your VM.

Azure Security Center
Azure Security Center provides unified security management and advanced threat protection across hybrid cloud workloads.
[Learn more](#)

✔ Your subscription is protected by Azure Security Center basic plan.

Monitoring

Boot diagnostics ⓘ ☒ Enable with managed storage account (recommended) ☐ Enable with custom storage account ☐ Disable

Enable OS guest diagnostics ⓘ ☐

Identity

System assigned managed identity ⓘ ☐

Azure AD

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- Here you can able to add additional configuration, agents, scripts or applications via virtual machine extensions or cloud-init. We here didn't need any feature so we keep it default so go on next

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Create a virtual machine

Azure Dedicated Hosts allow you to provision and manage a physical server within our data centers that are dedicated to your Azure subscription. A dedicated host gives you assurance that only VMs from your subscription are on the host, flexibility to choose VMs from your subscription that will be provisioned on the host, and the control of platform maintenance at the level of the host. [Learn more](#)

Host group

i Dedicated hosts cannot be used with availability sets.

Proximity placement group

Proximity placement groups allow you to group Azure resources physically closer together in the same region. [Learn more](#)

Proximity placement group

VM generation

Generation 2 VMs support features such as UEFI-based boot architecture, increased memory and OS disk size limits, Intel® Software Guard Extensions (SGX), and virtual persistent memory (vPMEM). [Click here to learn more about Gen2 virtual machine capabilities.](#)

VM generation ☐ Gen 1 ☒ Gen 2

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8. We are not going to tag anything so just click review and create


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Create a virtual machine ...

Basics Disks Networking Management Advanced Tags Review + create

Tags are name/value pairs that enable you to categorize resources and view consolidated billing by applying the same tag to multiple resources and resource groups. [Learn more about tags](#) 

Note that if you create tags and then change resource settings on other tabs, your tags will be automatically updated.

Name ⓘ	Value ⓘ	Resource
<input type="text"/>	:	<input type="text"/> 12 selected 

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- Click on create to create the VM

Home > **Create a virtual machine** ...

✓ Validation passed

Management

Azure Security Center	Basic (free)
Boot diagnostics	On
Enable OS guest diagnostics	Off
System assigned managed identity	Off
Login with Azure AD	Off
Auto-shutdown	Off
Backup	Disabled
Site Recovery	Disabled
Enable hotpatch (Preview)	Off
Patch orchestration options	OS-orchestrated patching: patches will be installed by OS

Advanced

Extensions	None
Cloud init	No
User data	No
Proximity placement group	None

[Create](#) [< Previous](#) [Next >](#) [Download a template for automation](#)

- After 5 min we have our virtual machine up and running

Microsoft Azure

portal.azure.com/#@413c9482-cdc7-4bb9-b2ad-c2e03af125f9/resource/subscriptions/e1448126-0466-485f-81ca-7289521ec372/r...

VM-Availability

Resource group

Search (Ctrl+F)

+ Add Edit columns Delete resource group Refresh Export to CSV Open query Assign tags Move ...

Essentials

Subscription (change): Azure for Students Deployments: 2 Succeeded

Subscription ID: e1448126-0466-485f-81ca-7289521ec372 Location: Central India

Tags (change): Click here to add tags

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

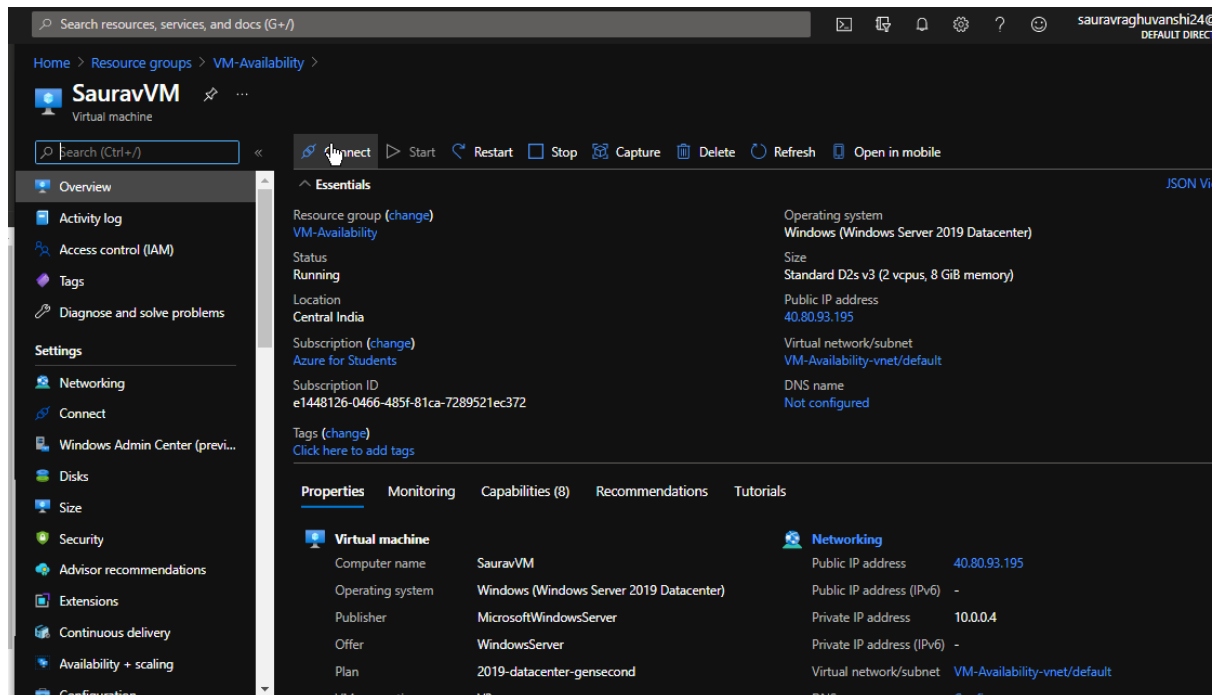
Showing 1 to 8 of 8 records. Show hidden types No grouping List view

Name	Type	Location
AvailSet	Availability set	Central India
MyAvailSet	Availability set	West US
SauravVM	Virtual machine	Central India
SauravVM-ip	Public IP address	Central India
SauravVM-nsg	Network security group	Central India
sauravvm331	Network interface	Central India
SauravVM_OsDisk_1_da68fd3bc0104ee88ea2fd42d00a2123	Disk	Central India
VM-Availability-vnet	Virtual network	Central India

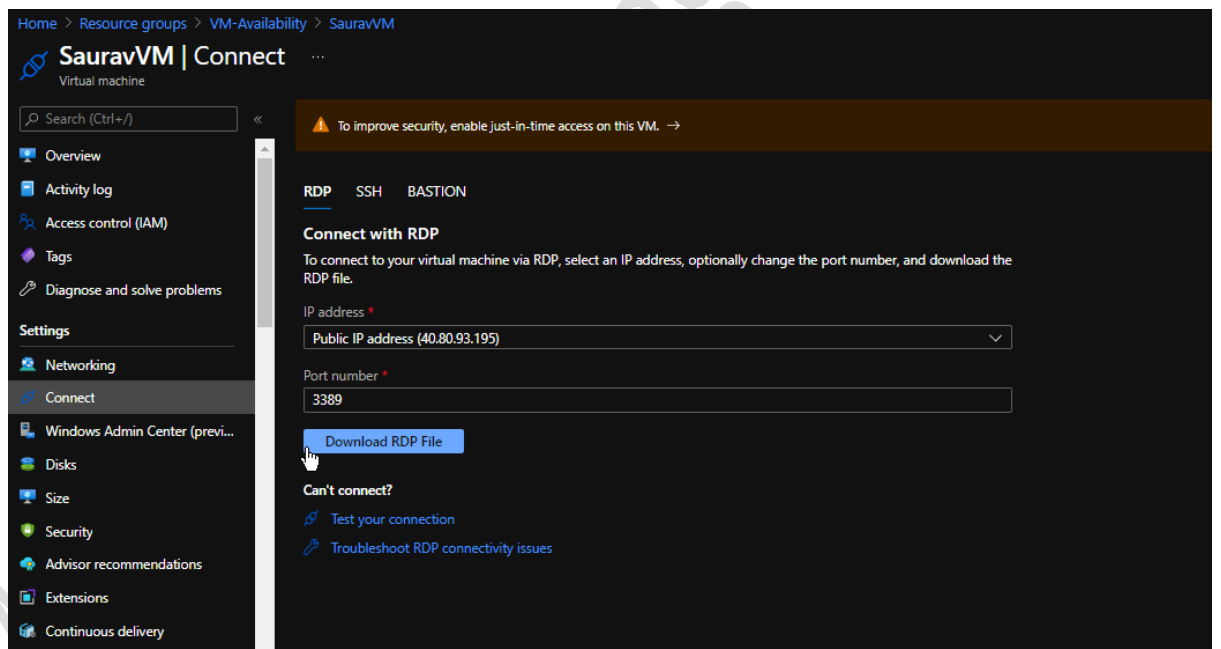
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11. Goto VM and then click on connect to RDP into the VM

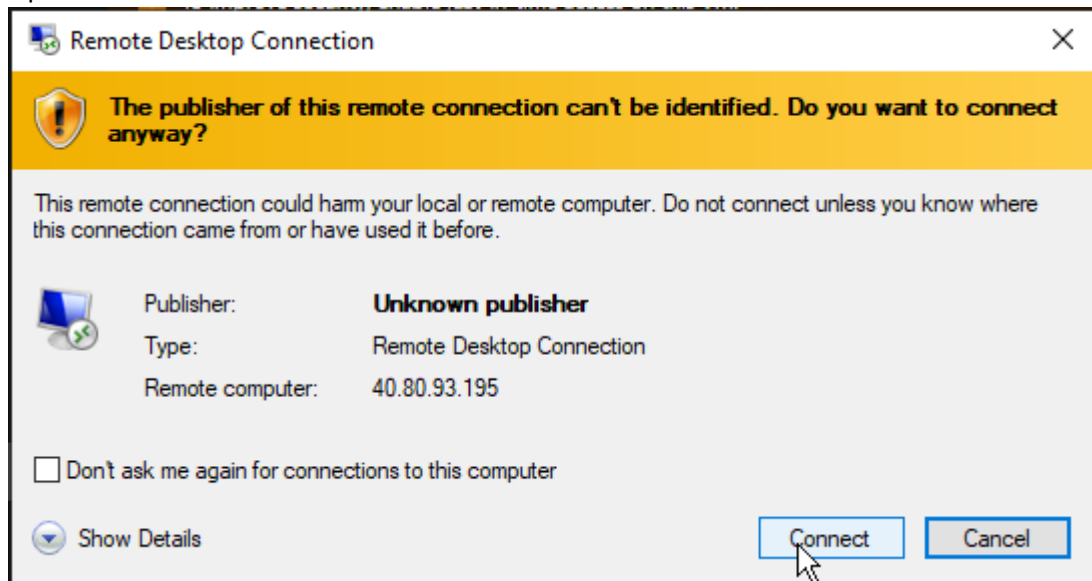


12. Download the RDP File

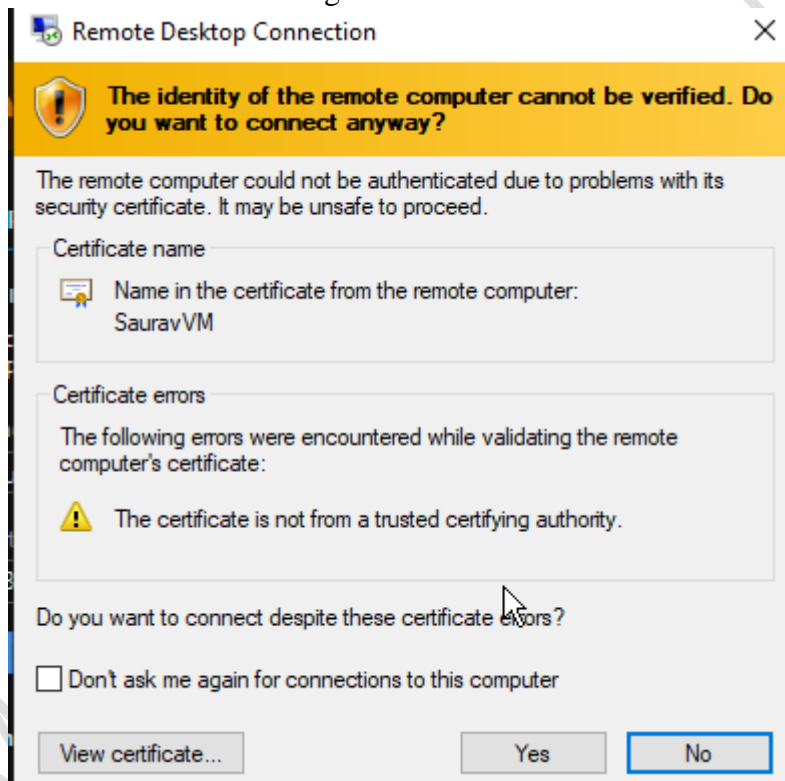


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13. Open the RDP file and then click on connect

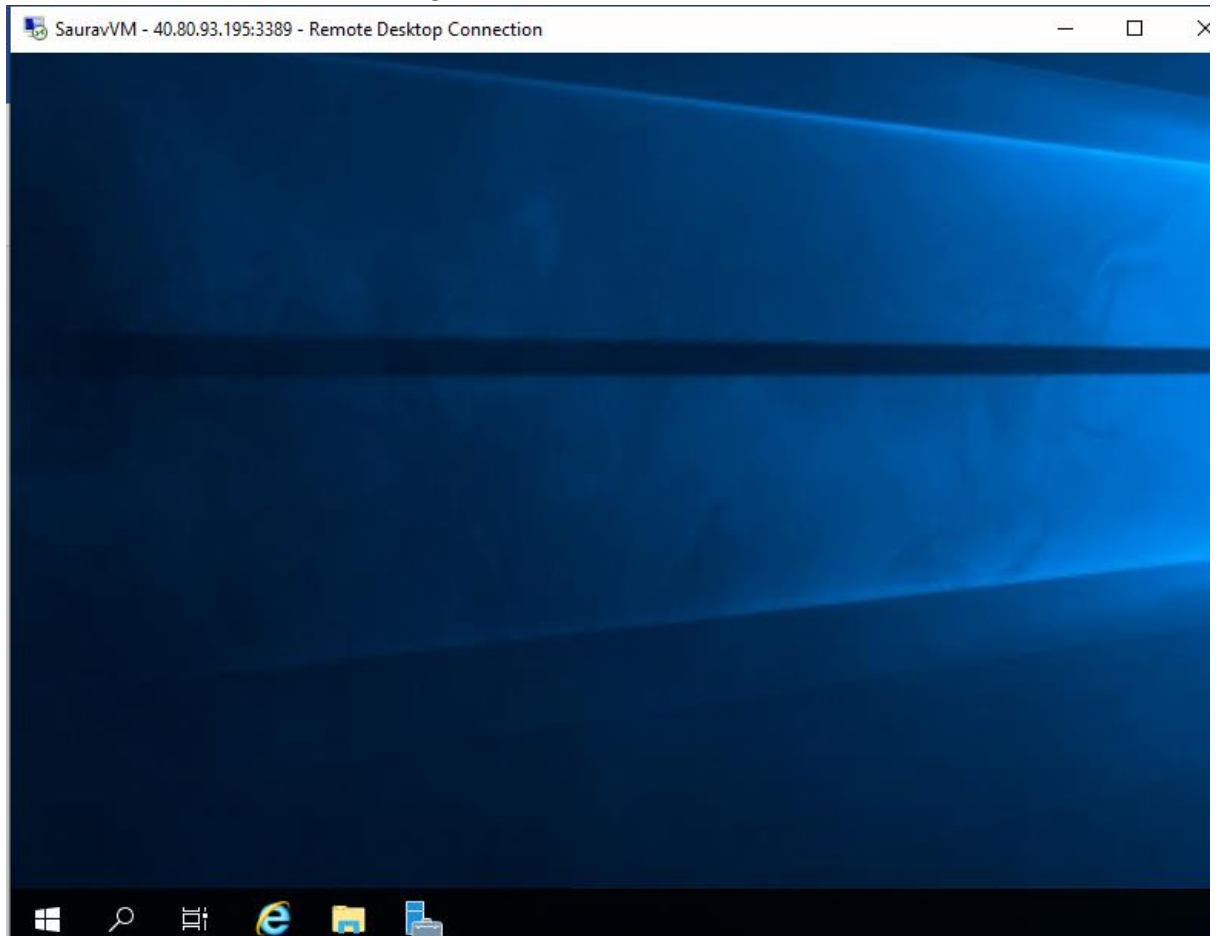


14. Enter the credential to login into VM and then click on Yes



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15. Now we have a Window VM running in Cloud



Congratulation, now we have our Window VM up and running in cloud 😊😊

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