

Quickstart: Create a Windows virtual machine in the Azure portal

Azure virtual machines (VMs) can be created through the Azure portal. This method provides a browser-based user interface to create VMs and their associated resources. This quickstart shows you how to use the Azure portal to deploy a virtual machine (VM) in Azure that runs Windows Server 2019. To see your VM in action, you then RDP to the VM and install the IIS web server.

If you don't have an Azure subscription, create a [free account](#) before you begin.

Sign in to Azure

Sign in to the Azure portal at <https://portal.azure.com>.

Create virtual machine

1. Type **virtual machines** in the search.
2. Under **Services**, select **Virtual machines**.
3. In the **Virtual machines** page, select **Add**.
4. In the **Basics** tab, under **Project details**, make sure the correct subscription is selected and then choose to **Create new** resource group. Type *myResourceGroup* for the name.

Project details

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

Subscription * ⓘ

Pay-As-You-Go

Resource group * ⓘ

(New) myResourceGroup

Create new

5. Under **Instance details**, type *myVM* for the **Virtual machine name** and choose *East US* for your **Region**, and then choose *Windows Server 2019 Datacenter* for the **Image**. Leave the other defaults.

Instance details

Virtual machine name * ⓘ

myVM

Region * ⓘ

(US) East US

Availability options ⓘ

No infrastructure redundancy required

Image * ⓘ

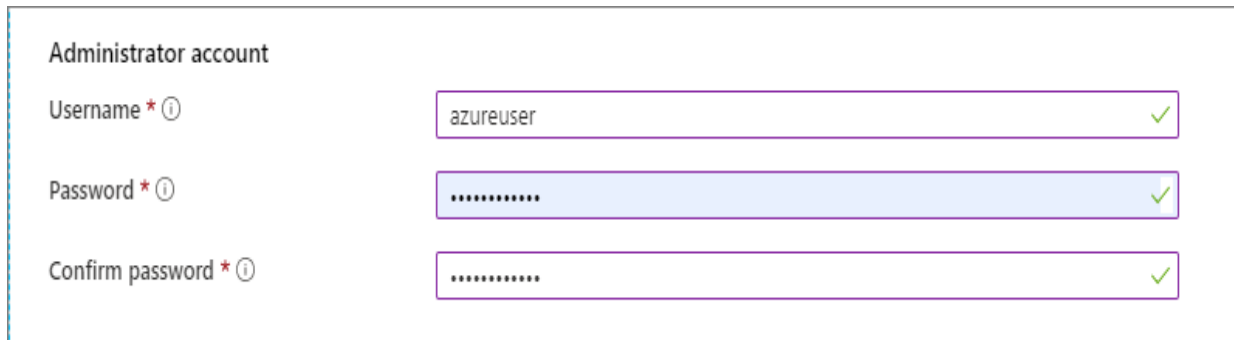
Windows Server 2019 Datacenter

Browse all public and private images

Size * ⓘ

Standard DS1 v2
1 vcpu, 3.5 GiB memory
Change size

- Under **Administrator account**, provide a username, such as *azureuser* and a password. The password must be at least 12 characters long and meet the [defined complexity requirements](#).



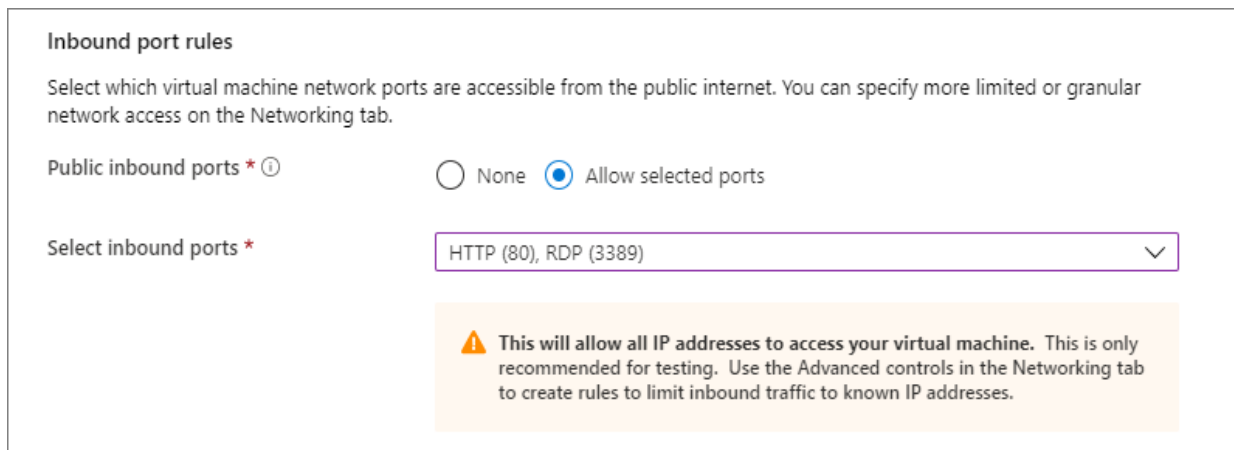
Administrator account

Username * ⓘ ✓

Password * ⓘ ✓

Confirm password * ⓘ ✓

- Under **Inbound port rules**, choose **Allow selected ports** and then select **RDP (3389)** and **HTTP (80)** from the drop-down.



Inbound port rules

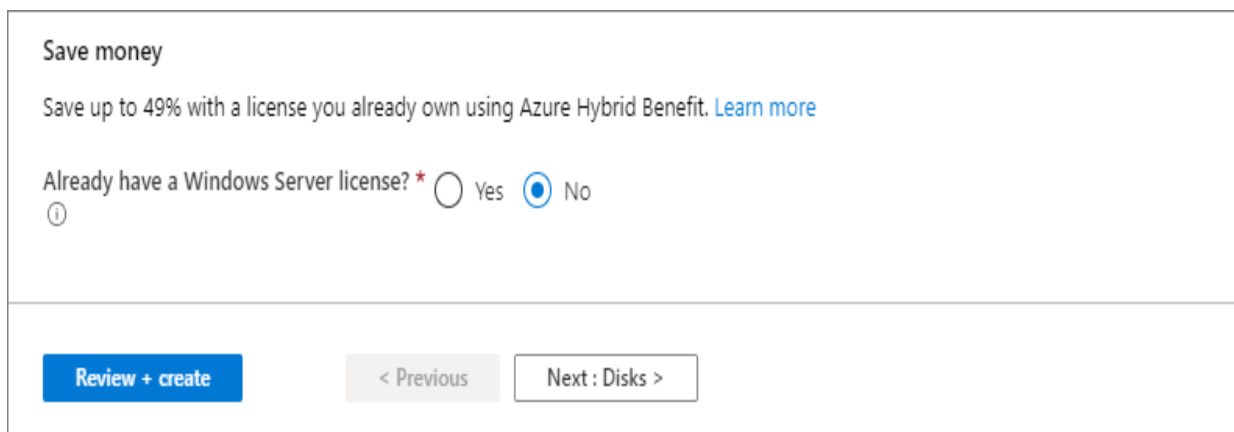
Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

Public inbound ports * ⓘ ☐ None ☒ Allow selected ports

Select inbound ports * ✓

⚠ 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.

- Leave the remaining defaults and then select the **Review + create** button at the bottom of the page.



Save money

Save up to 49% with a license you already own using Azure Hybrid Benefit. [Learn more](#)

Already have a Windows Server license? * ⓘ ☐ Yes ☒ No

Review + create < Previous Next : Disks >

- Click Next. In the screen as shown below, select **Create and attach a new disk**

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 ▼

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

Enable Ultra Disk compatibility ⓘ ☐ Yes ☒ No

Ultra Disk compatibility is not available for this VM size and location.

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		

10. In the next screen, as shown below, click on the Change Size link.

Create a new disk

Create a new disk to store applications and data on your VM. Disk pricing varies based on factors including disk size, storage type, and number of transactions. [Learn more about Azure Managed Disks](#)

Name * myVm_DataDisk_0

Source type * ⓘ None (empty disk) ▼

Size * ⓘ

1024 GiB
Premium SSD
[Change size](#)

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

11. Choose the highlighted option for size, as shown below.

Select a disk size

Browse available disk sizes and their features.

Storage type ⓘ

Premium SSD

Size	Disk tier	Max IOPS	Max throughput
4 GiB	P1	120	25
8 GiB	P2	120	25
16 GiB	P3	120	25
32 GiB	P4	120	25
64 GiB	P6	240	50
128 GiB	P10	500	100
256 GiB	P15	1100	125
512 GiB	P20	2300	150
1024 GiB	P30	5000	200
2048 GiB	P40	7500	250

OK

12. Click Ok. Then in the screen below also, click Ok

Dashboard > Virtual machines > Create a virtual machine > Create a new disk

Create a new disk

Create a new disk to store applications and data on your VM. Disk pricing varies based on factors including disk size, storage type, and number of transactions. [Learn more about Azure Managed Disks](#)

Name *

myVm_DataDisk_0

Source type * ⓘ

None (empty disk)

Size * ⓘ

4 GiB

Premium SSD

[Change size](#)

Encryption type *

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

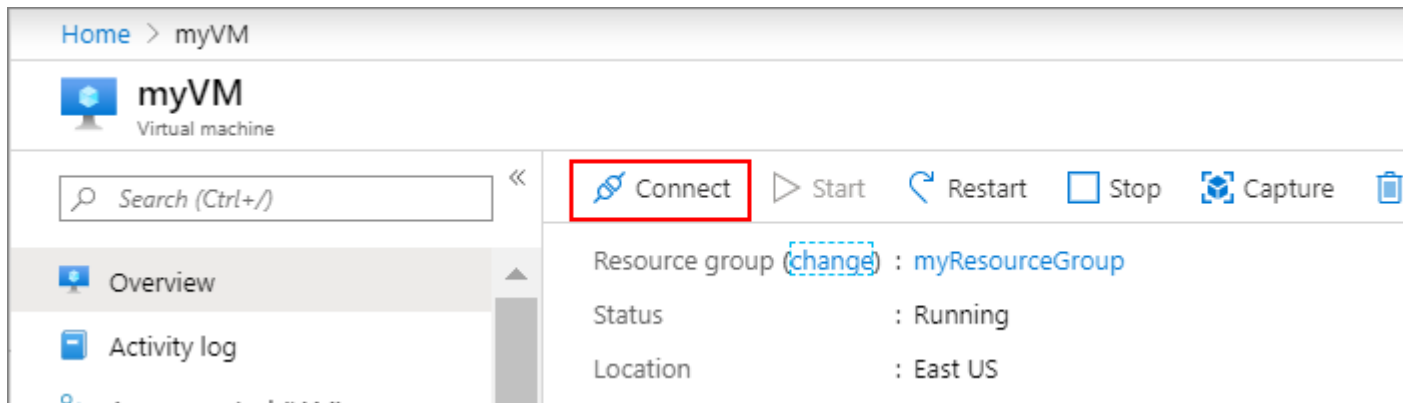
OK

13. Optionally add Tags, if required. Then click on Review & Create. Then Click on Create. This completes the creation of the Virtual machine.

Connect to virtual machine

Create a remote desktop connection to the virtual machine. These directions tell you how to connect to your VM from a Windows computer. On a Mac, you need an RDP client such as this [Remote Desktop Client](#) from the Mac App Store.

1. Click the **Connect** button on the overview page for your virtual machine.



2. In the **Connect to virtual machine** page, keep the default options to connect by IP address, over port 3389, and click **Download RDP file**.
3. Open the downloaded RDP file and click **Connect** when prompted.
4. In the **Windows Security** window, select **More choices** and then **Use a different account**. Type the username as **localhost\username**, enter password you created for the virtual machine, and then click **OK**.
5. You may receive a certificate warning during the sign-in process. Click **Yes** or **Continue** to create the connection.

----- Optional Steps for Experimentation for this audience-----

Install web server

To see your VM in action, install the IIS web server. Open a PowerShell prompt on the VM and run the following command:

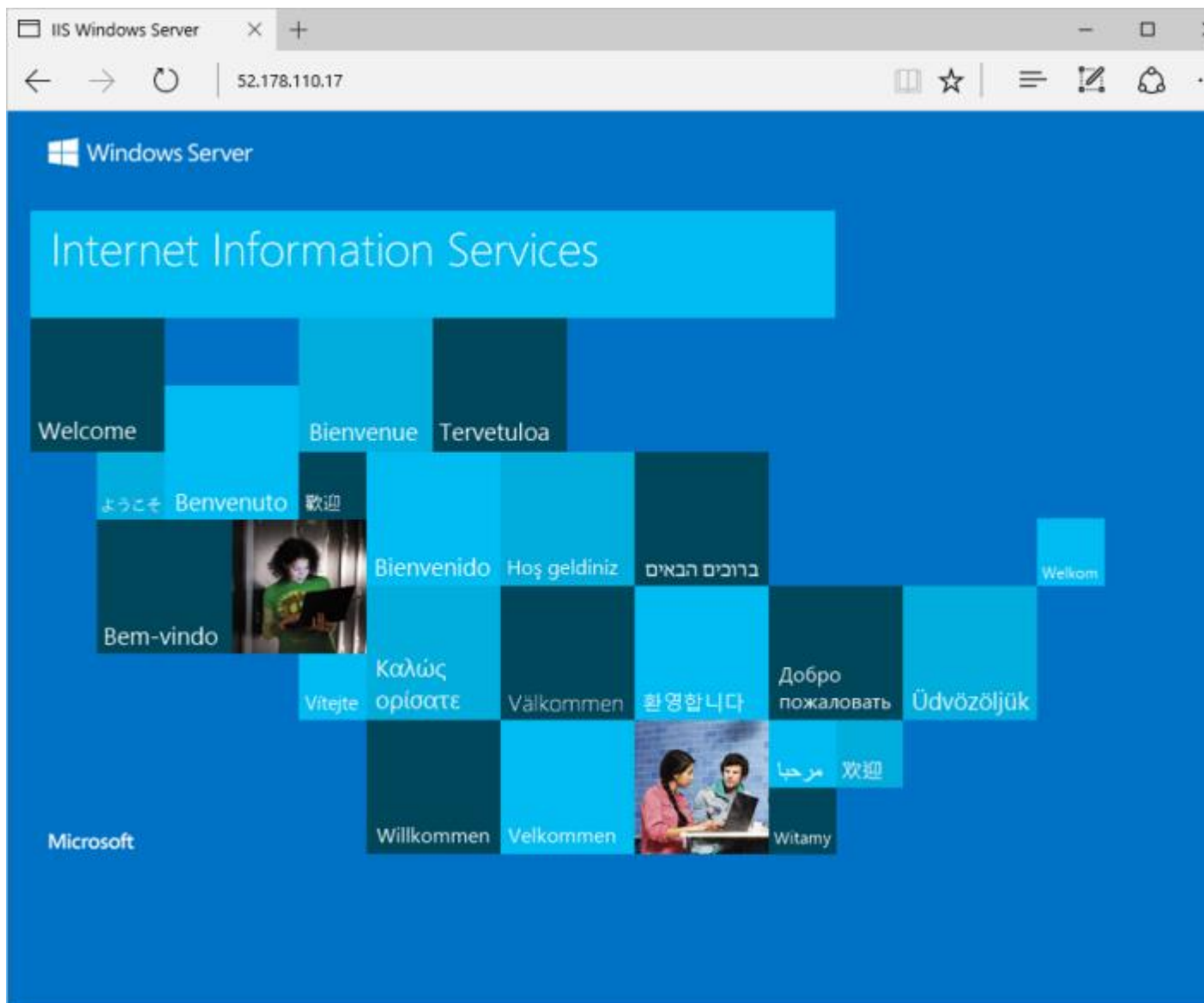
```
PowerShellCopy
```

```
Install-WindowsFeature -name Web-Server -IncludeManagementTools
```

When done, close the RDP connection to the VM.

View the IIS welcome page

In the portal, select the VM and in the overview of the VM, use the **Click to copy** button to the right of the IP address to copy it and paste it into a browser tab. The default IIS welcome page will open, and should look like this:



Clean up resources

When no longer needed, you can delete the resource group, virtual machine, and all related resources.

Select the resource group for the virtual machine, then select **Delete**. Confirm the name of the resource group to finish deleting the resources.