




Building A Web Server on Azure VM: A step-By Step

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Introduction of Azure VM:

Azure Virtual Machine (VMs) provide on-demand, scalable computing resources. In this guide , we will explore how to set up a Web Server on Azure VM step-by-Step.



Let's begin

Quickstart: Create a Windows virtual machine in the Azure portal

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Applies to:  Windows VMs

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 2022 Datacenter. 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.

Create virtual machine

1. Enter *virtual machines* in the search.
2. Under **Services**, select **Virtual machines**.
3. In the **Virtual machines** page, select **Create** and then **Azure virtual machine**. The **Create a virtual machine** page opens.
4. Under **Instance details**, enter *myVM* for the **Virtual machine name** and choose *Windows Server 2022 Datacenter: Azure Edition - x64 Gen 2* for the **Image**. Leave the other defaults.

Instance details

Virtual machine name * ⓘ

myVM ✓

Region * ⓘ

(US) West US 3 ▼


Availability options ⓘ

No infrastructure redundancy required ▼

Security type ⓘ

Trusted launch virtual machines ▼
[Configure security features](#)

Image * ⓘ


 Windows Server 2022 Datacenter: Azure Edition - x64 Gen2 ▼


[See all images](#) | [Configure VM generation](#)

VM architecture ⓘ

☐ Arm64

☒ x64

 Arm64 is not supported with the selected image.



ⓘ Note

Some users will now see the option to create VMs in multiple zones. To learn more about this new capability, see [Create virtual machines in an availability zone](#).

Availability zone * ⓘ

Zones 1



You can now select multiple zones. Selecting multiple zones will create one VM per zone.

5. 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 * ⓘ

azureuser



Password * ⓘ

.....



Confirm password * ⓘ

.....



6. 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 *

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.

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

Licensing
Save up to 49% with a license you already own using Azure Hybrid Benefit. [Learn more](#) ⓘ
Would you like to use an existing Windows Server license? * ⓘ ☐
[Review Azure hybrid benefit compliance](#)

Review + create

< Previous

Next : Disks >

8. After validation runs, select the **Create** button at the bottom of the page.

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

Create a virtual machine ...

✓ Validation passed

Basics

Subscription

Resource group

Virtual machine name

Region

Availability options

Security type

Enable secure boot

Enable vTPM

Integrity monitoring

Image

VM architecture

Size

Username

myAzureSubscription

myresourcegroup

myVM

West US 3

No infrastructure redundancy required

Trusted launch virtual machines

Yes

Yes

No

Windows Server 2022 Datacenter: Azure Edition - Gen2

x64

Standard B2ms (2 vcpus, 8 GiB memory)

azureuser

Create

< Previous

Next >

[Download a template for automation](#)

9. After deployment is complete, select **Go to resource**.

^ Next steps

[Setup auto-shutdown](#) Recommended

[Monitor VM health, performance and network dependencies](#) Recommended

[Run a script inside the virtual machine](#) Recommended

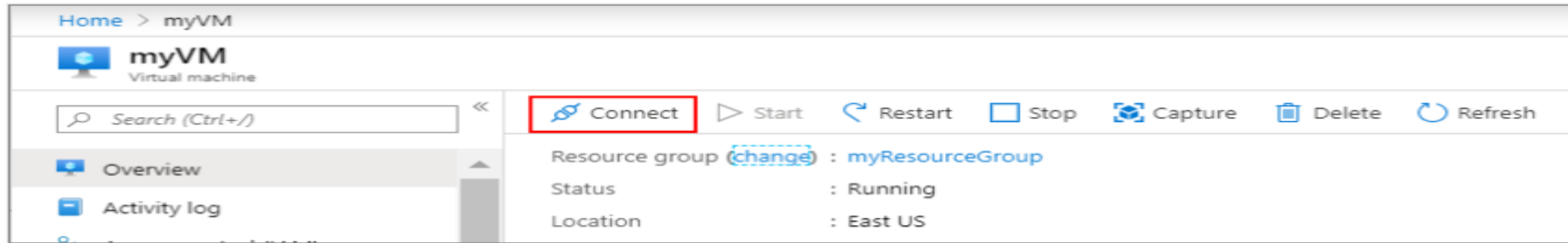
Go to resource

Create another VM

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. On the overview page for your virtual machine, select the **Connect > RDP**.



2. In the **Connect with RDP** tab, 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 the 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.

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:

PowerShell

 Copy

```
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, hover over the IP address to show **Copy to clipboard**. Copy the IP address and paste it into a browser tab. The default IIS welcome page will open, and should look like this:



Clean up resources

Delete resources

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

1. On the Overview page for the VM, select the **Resource group** link.
2. At the top of the page for the resource group, select **Delete resource group**.
3. A page will open warning you that you are about to delete resources. Type the name of the resource group and select **Delete** to finish deleting the resources and the resource group.

Auto-shutdown

If the VM is still needed, Azure provides an Auto-shutdown feature for virtual machines to help manage costs and ensure you are not billed for unused resources.

1. On the **Operations** section for the VM, select the **Auto-shutdown** option.
2. A page will open where you can configure the auto-shutdown time. Select the **On** option to enable and then set a time that works for you.
3. Once you have set the time, select **Save** at the top to enable your Auto-shutdown configuration.

Note

Remember to configure the time zone correctly to match your requirements, as (UTC) Coordinated Universal Time is the default setting in the Time zone dropdown.

Thanks!

