

Full Stack Application Development with MS Azure Cloud

Module 6 – Application Deployment and Management with Azure

Lab Practical Manual

Topic: Virtual Machine – Solved Question

Hands-On 1: Create a Windows virtual machine in the Azure portal.

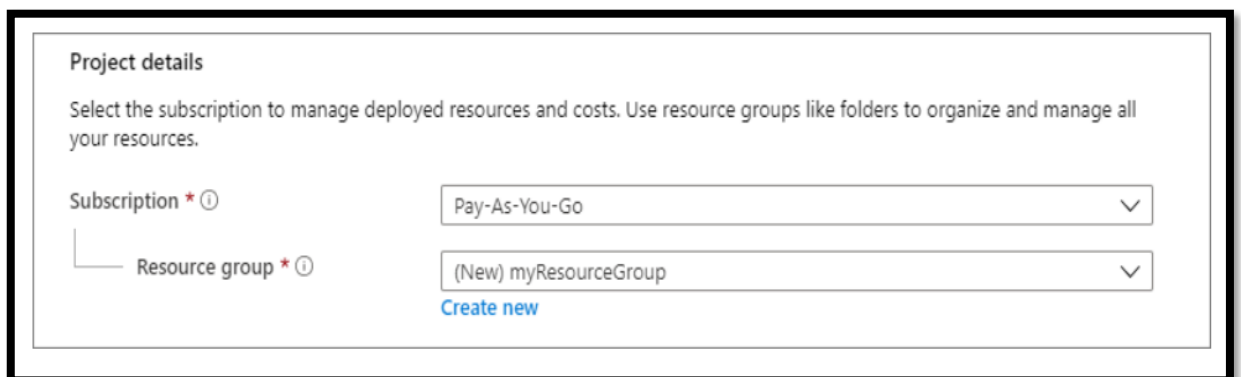
Azure virtual machines (VMs) can be created through the Azure portal. This method provides a browser-based user interface to create VMs and their associated resources. This quick start shows you how to use the Azure portal to deploy a virtual machine (VM) in Azure that runs Windows Server 2019.

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** then **Virtual machine**.
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**. Choose *Windows Server 2019 Datacenter* for the **Image** and *Standard_DS1_v2* for the **Size**. 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 - Gen1 ▼

See all images

Azure Spot instance ⓘ

☐

Size * ⓘ

Standard_DS1_v2 - 1 vcpu, 3.5 GiB memory ▼

See all sizes

- 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 * ⓘ

..... ✓

- 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 *

HTTP (80), 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.

- 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 >](#)

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

10. 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](#)

2.2.8 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** button then select **RDP**.

Home > myVM



myVM
Virtual machine

[Connect](#)
[Start](#)
[Restart](#)
[Stop](#)
[Capture](#)
[Delete](#)
[Refresh](#)

Overview

Activity log

Resource group [\(change\)](#) : myResourceGroup

Status : Running

Location : East US

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

2.2.9 Clean up resources

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

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