

Create a Windows virtual machine in an availability zone with the Azure portal

This article steps through using the Azure portal to create a virtual machine in an Azure availability zone. An [availability zone](#) is a physically separate zone in an Azure region. Use availability zones to protect your apps and data from an unlikely failure or loss of an entire datacentre.

To use an availability zone, create your virtual machine in a [supported Azure region](#).

Sign in to Azure

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

Create virtual machine

1. Click **Create a resource** in the upper left-hand corner of the Azure portal.
2. Select **Compute**, and then select **Windows Server 2016 Datacentre**.
3. Enter the virtual machine information. The user name and password entered here is used to sign in to the virtual machine. The password must be at least 12 characters long and meet the [defined complexity requirements](#). Choose a Location that supports availability zones. When complete, click **OK**.

Microsoft Azure New > Compute > Create virtual machine > Basics

portal.azure.com/#create/Microsoft.WindowsServer2016Datacenter-ARM

user@domain.com
AZURE AD (OFFICE 365 SUBS...)

Create virtual machine Basics

- 1 Basics
Configure basic settings
- 2 Size
Choose virtual machine size
- 3 Settings
Configure optional features
- 4 Summary
Windows Server 2016 Datacenter...

* Name: myVM ✓

VM disk type: SSD

* User name: azureuser ✓

* Password: [REDACTED] ✓

* Confirm password: [REDACTED] ✓

Subscription: Windows Azure MSDN - Visual Studio Ultin

* Resource group: ☒ Create new ☐ Use existing
myResourceGroup ✓

Location: East US 2

Save money
Save up to 40% with a license you already own.

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

OK

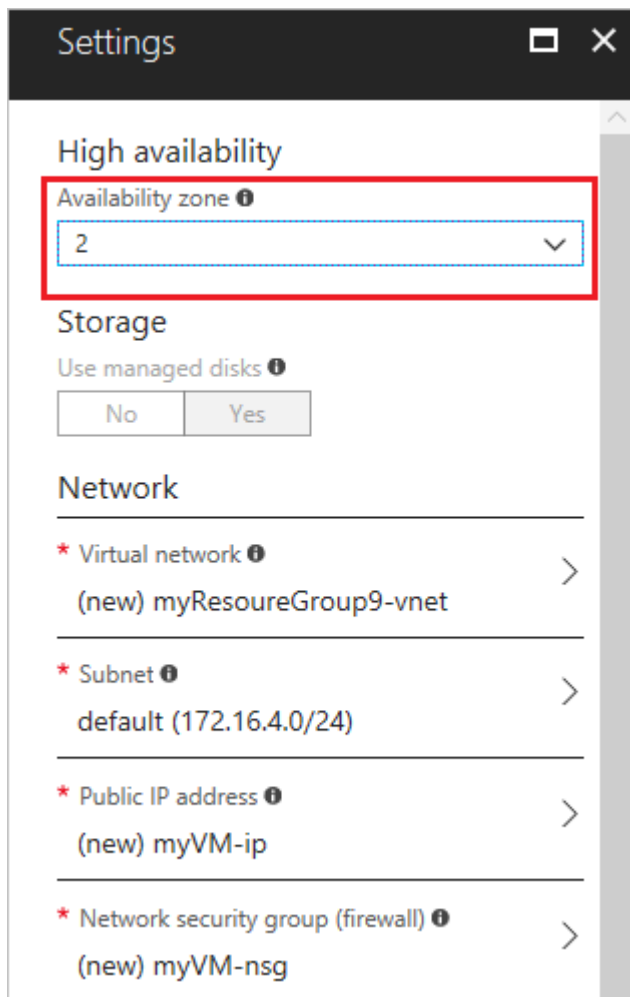
4. Choose a size for the VM. Select a recommended size, or filter based on features. Confirm the size is available in the zone you want to use.

Choose a size
Browse the available sizes and their features

Search: DS
Compute type: General purpose
Supported disk type: SSD
Minimum vCPUs: 1

RECOMM...	SKU	TYPE	VCPUS	GB RAM	DATA DI...	MAX IOPS	LOCAL SS...	RDMA S...	PREMIU...	GRAPHICS	ZONES	USD/MO...
★	DS1_v2	Standard	1	3.5	4	3200	7 GB		✓		1,2,3	\$91.51
	DS2_v2	Standard	2	7	8	6400	14 GB		✓		1,2,3	\$183.02
	DS3_v2	Standard	4	14	16	12800	28 GB		✓		1,2,3	\$365.30
	DS4_v2	Standard	8	28	32	25600	56 GB		✓		1,2,3	\$731.35
	DS5_v2	Standard	16	56	64	51200	112 GB		✓		1,2,3	\$1,392.77
	DS2_v2	Promo	2	7	8	8000	14 GB		✓		1,2,3	\$156.98
	DS3_v2	Promo	4	14	16	16000	28 GB		✓		1,2,3	\$313.97
	DS4_v2	Promo	8	28	32	32000	56 GB		✓		1,2,3	\$628.68
	DS5_v2	Promo	16	56	64	64000	112 GB		✓		1,2,3	\$1,257.36
	DS1	Standard	1	3.5	4	3200	7 GB		✓		2,3	\$96.72
	DS2	Standard	2	7	8	6400	14 GB		✓		2,3	\$193.44
	DS3	Standard	4	14	16	12800	28 GB		✓		2,3	\$386.88
	DS4	Standard	8	28	32	25600	56 GB		✓		2,3	\$773.76

5. Under **Settings** > **High availability**, select one of the numbered zones from the **Availability zone** dropdown, keep the remaining defaults, and click **OK**.



Settings

High availability

Availability zone ⓘ

2

Storage

Use managed disks ⓘ

No Yes

Network

* Virtual network ⓘ

(new) myResourceGroup9-vnet

* Subnet ⓘ

default (172.16.4.0/24)

* Public IP address ⓘ

(new) myVM-ip

* Network security group (firewall) ⓘ

(new) myVM-nsg

6. On the summary page, click **Create** to start the virtual machine deployment.
7. The VM will be pinned to the Azure portal dashboard. Once the deployment has completed, the VM summary automatically opens.

Confirm zone for managed disk and IP address

When the VM is deployed in an availability zone, a managed disk for the VM is created in the same availability zone. By default, a public IP address is also created in that zone.

You can confirm the zone settings for these resources in the portal.

1. Click **Resource groups** and then the name of the resource group for the VM, such as *myResourceGroup*.

2. Click the name of the Disk resource. The **Overview** page includes details about the location and availability zone of the resource.

Home > myResourceGroup9 > myVM_OsDisk_1_9b339ea95c8a485183a6afc1324c8e7e

myVM_OsDisk_1_9b339ea95c8a485183a6afc1324c8e7e

Disk

Search (Ctrl+ /)

Overview

Activity log

Access control (IAM)

Tags

SETTINGS

Locks

Automation script

SUPPORT + TROUBLESHOOTING

New support request

Save Discard Create snapshot Create VM Export Move Delete

NAME

myVM_OsDisk_1_9b339ea95c8a485183a6afc1324c8e7e

DISK STATE

Attached

* Account type ⓘ

Premium (SSD)

* Size (GiB) ⓘ

128

Disks can be resized or account type changed only when they are unattached or the owner VM is deallocated.

ESTIMATED PERFORMANCE ⓘ

IOPS limit 500

Throughput limit (MB/s) 100

OWNER VM

myVM

OPERATING SYSTEM

Windows

SOURCE IMAGE

MicrosoftWindowsServer / WindowsServer / 2016-Datacenter / 2016.127.20171217

TIME CREATED

3/13/2018 2:26:24 PM

RESOURCE GROUP

MYRESOURCEGROUP9

LOCATION

East US 2

AVAILABILITY ZONE

2

3. Click the name of the Public IP address resource. The **Overview** page includes details about the location and availability zone of the resource.

Home > myResourceGroup9 > myVM-ip

myVM-ip

Public IP address

Search (Ctrl+ /)

Overview

Activity log

Access control (IAM)

Tags

SETTINGS

Associate Dissociate Move Delete

Essentials

Resource group (change)

myResourceGroup9

Location

East US 2 (Zone 2)

Subscription name (change)

Internal

Subscription ID

XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXX

SKU

Basic

IP address

40.70.67.133

DNS name

-

Associated to

myvm712

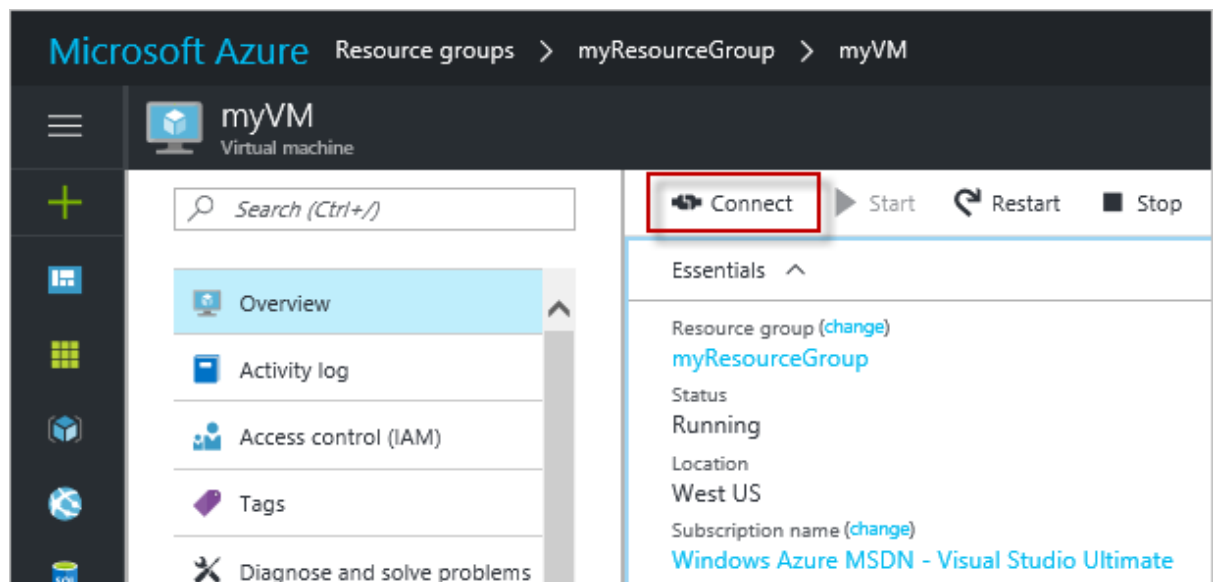
Virtual machine

myVM

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 virtual machine properties page.



2. In the **Connect to virtual machine** page, keep the default options to connect by DNS name 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.