

Allocate Static IPs to all VM's Creating a Network Security Group Creating Public IP Associating/ De-associating Public IP with virtual machine Creation of Network Interface

When you create a virtual machine (VM), it's automatically assigned a private IP address from a range that you specify. This IP address is based on the subnet in which the VM is deployed, and the VM keeps this address until the VM is deleted. Azure dynamically assigns the next available private IP address from the subnet you create a VM in. If you want to assign a specific IP address in this subnet for your VM, use a static IP address.

Prerequisites

- An Azure account with an active subscription. You can create an account for free.

Create a VM

Use the following steps to create a VM, and its virtual network and subnet:

1. Sign in to the Azure portal.
2. In the portal, search for and select **Virtual machines**.
3. Select **Create > Azure virtual machine**.
4. On the **Basics** tab of the **Create a virtual machine** screen, enter or select the following values:
 - **Subscription**: Keep the default or select a different subscription.
 - **Resource group**: Select **Create new**, and then name the group *myResourceGroup*.
 - **Virtual machine name**: Enter *myVM*.
 - **Region**: Select **(US) East US**.
 - **Availability options**: Select **No infrastructure redundancy required**.
 - **Image**: Select **Windows Server 2019 Datacenter - x64 Gen2**.
 - **Size**: Accept the default, or drop down and select a size.
 - **Username, Password, and Confirm password**: Enter an admin username and password for the VM.
 - **Public inbound ports**: Select **Allow selected ports**.
 - **Select inbound ports**: Select **RDP (3389)**.

Microsoft Azure

Search resources, services, and docs (G+)

user@contoso.com
CONTOSO (CONTOSO.ONMICRO...)

Home > Virtual machines >

Create a virtual machine

Basics

Disks

Networking

Management

Monitoring

Advanced

Tags

Review + create

Create a virtual machine that runs Linux or Windows. Select an image from Azure marketplace or use your own customized image. Complete the Basics tab then Review + create to provision a virtual machine with default parameters or review each tab for full customization. [Learn more](#)

Project details

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

Subscription *

Contoso Subscription

Resource group *

(New) myResourceGroup

Create new

Instance details

Virtual machine name *

myVM

Region *

(US) East US

Availability options

No infrastructure redundancy required

Security type

Standard

Image *

Windows Server 2019 Datacenter - x64 Gen2

See all images | Configure VM generation

VM architecture

Arm64

☒ x64

Arm64 is not supported with the selected image.

Run with Azure Spot discount

☐

Size *

Standard_DS1_v2 - 1 vcpu, 3.5 GiB memory (\$19.95/month)

See all sizes

Administrator account

Username *

Azureuser

Password *

Confirm password *

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.

Review + create

< Previous

Next : Disks >

Give feedback

5. Select the **Networking** tab at the top of the page.

6. On the **Networking** page, enter or select the following values:

- **Virtual network:** Accept the default network name.
- **Subnet:** Select **default** if not already selected.

- **Public IP:** Accept the default public IP configuration.
- **Public inbound ports:** Select **Allow selected ports**.
- **Select inbound ports:** Select **RDP (3389)**.

7. Select **Review + create**. Review the settings, and then select **Create**.

Change private IP address to static

In this procedure, you change the private IP address from **dynamic** to **static** for the VM you created previously:

1. In the portal, search for and select **Virtual machines**.
2. In **Virtual machines**, select **myVM** from the list.
3. On the **myVM** page, under **Settings**, select **Networking**.
4. In **Networking**, select the name of the network interface next to **Network interface**. In this example, the name of the NIC is **myvm472**.

myVM | Networking ...

Virtual machine

Search (Ctrl+/) << Attach network interface Detach network interface

Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems

Settings

Networking

Connect
Windows Admin Center (preview)
Disks
Size
Security
Advisor recommendations
Extensions

myvm472

IP configuration ⓘ
ipconfig1 (Primary)

Network Interface: myvm472 Effective security rules Troubleshoot VM connection issues Topology

Virtual network/subnet: myResourceGroup-vnet/default NIC Public IP: 20.62.69.9 NIC Private IP: 10.1.0.4
Accelerated networking: Enabled

Inbound port rules Outbound port rules Application security groups Load balancing

Network security group myVM-nsg (attached to network interface: myvm472)
Impacts 0 subnets, 1 network interfaces

| Priority | Name | Port | Protocol | Source |
|----------|------------------------------|------|----------|-----------------|
| 300 | ⚠ RDP | 3389 | TCP | Any |
| 65000 | AllowVnetInBound | Any | Any | VirtualNetwork |
| 65001 | AllowAzureLoadBalancerInB... | Any | Any | AzureLoadBalanc |
| 65500 | DenyAllInBound | Any | Any | Any |

5. On the **Network interface** page, under **Settings**, select **IP configurations**.

6. In **IP configurations**, select **ipconfig1** in the list.

Home > Virtual machines > myVM | Networking > myvm472

myvm472 | IP configurations

Network interface

Search << + Add Save X Discard Refresh

- Overview
- Activity log
- Access control (IAM)
- Tags
- Settings
 - IP configurations**
 - DNS servers
 - Network security group
 - Properties
 - Locks
- Monitoring

IP forwarding settings

IP forwarding **Disabled** Enabled

Virtual network myResourceGroup-vnet

Gateway Load balancer ① None

IP configurations

Subnet * default (10.1.0.0/24)

Search IP configurations

| Name | IP Version | Type | Private IP address | Public IP address |
|-----------|------------|---------|--------------------|--------------------------|
| ipconfig1 | IPv4 | Primary | 10.1.0.4 (Dynamic) | 20.62.69.9 (myVM-ip) *** |

Under **Assignment**, select **Static**. Change the private **IP address** if you want a different one, and then select **Save**.

Home > Virtual machines > myVM | Networking > myvm472 | IP configurations >

ipconfig1

myvm472

Save X Discard

Public IP address settings

Public IP address

Disassociate **Associate**

Public IP address *

myVM-ip (20.62.69.9) ✓

[Create new](#)

Private IP address settings

Virtual network/subnet

myResourceGroup-vnet/default

Assignment

Dynamic **Static**

IP address *

10.1.0.4

Clean up resources

When you're finished, delete the resource group and all of the resources it contains:

1. In the portal, search for and select **myResourceGroup**.
2. From the **myResourceGroup** screen, select **Delete resource group**.
3. Enter *myResourceGroup* for **Enter resource group name to confirm deletion**, and then select **Delete**.