

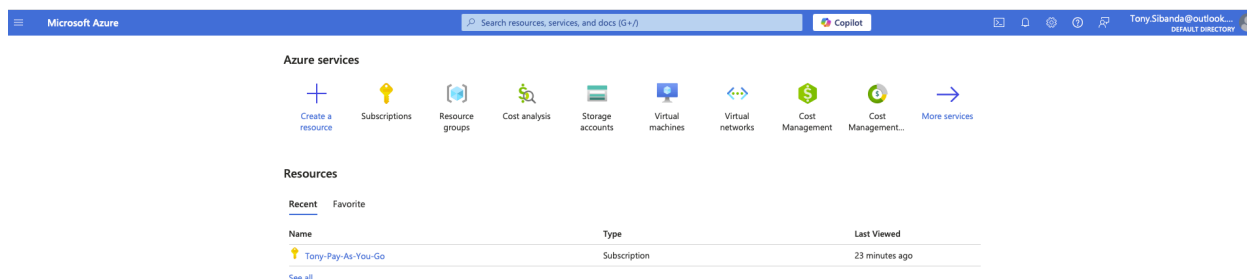
# Creating Windows and Linux Virtual Machines on Microsoft Azure

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- A Windows 11 VM
  - An Ubuntu Linux VM
- 

## Open the Azure Portal

1. Go to <https://portal.azure.com>
2. From the dashboard, click Virtual Machines or Create a resource



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## Create a Resource Group

1. Click Resource groups in the left menu
2. Click + Create
3. Name the group **RG-Network-Activities** (any name that you want)
4. Set Region to **(US) East US 2**
5. Click Review + create, then click Create

Microsoft Azure

Search resources, services, and documentation

[Home](#) > [Resource groups](#) >

## Create a resource group

Basics

Tags

Review + create

**Resource group** - A container that holds related resources for an Azure solution. The resource group can include all the resources for the solution, or only those resources that you want to manage as a group. You decide how you want to allocate resources to resource groups based on what makes the most sense for your organization. [Learn more](#)

Subscription \*

Tony-Pay-As-You-Go

Resource group name \*

RG-Network-Activities

Region \*

(US) East US 2

Previous

Next

Review + create

# Create a Windows Virtual Machine

1. Go to Virtual Machines
2. Click + Create → Azure virtual machine
3. Select the Resource Group **RG-Network-Activities**

Microsoft Azure

Search resources, services, and documentation

[Home](#) > [Compute infrastructure](#)

## Compute infrastructure | Virtual machines

Search

Virtual machines

Get started

Overview

All resources

Infrastructure

**Virtual machines**

Virtual Machine Scale Set (VMSS)

Compute Fleet

> Disks + images

> Capacity + placement

> Related services

> Help

+ Create

Switch to classic

Reservations

Manage view

Refresh

**Azure virtual machine**  
Create a virtual machine hosted by Azure

**Azure virtual machine with preset configuration**  
Create a virtual machine with presets based on your workloads

**More VMs and related solutions**  
Discover and deploy full workloads and Azure products for your business needs

features may be missing. Click here to learn more.

Type equals all

Resource

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# Configure the Windows VM

## Basic Tab Setup:

- VM Name: **windows-vm (any name that you want).**
- Region: East US 2 (same region as the Resource Group for purposes of this exercise)
- Availability Zone: Zone 1
- Image: Windows 11 Pro, version 24H2 - x64 Gen2
- Size: Standard\_D2s\_v3
- Security Type: Trusted launch virtual machines
- Username: labuser
- Password: Your secure password
- Public inbound ports: Allow RDP (3389)
- Be sure to click the confirm that you have eligible Windows 10/11 license with multi-tenant hosting rights at the bottom of the screen
- Disk, Networking, Management, Monitoring, Advanced & Tags (for purposes of this exercise we'll skip these steps, we don't need to change or add anything here)
- Click Review & Create and start the deployment process
- After clicking review and create and after the Validation Test has passed

Create a virtual machine ...

[Help me create a low cost VM](#) [Help me create a VM optimized for high availability](#) [Help me choose the right VM size for my workload](#)

**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 \*

Resource group \*   
[Create new](#)

**Instance details**

Virtual machine name \*

Region \*

Availability options

Zone options ☒ Self-selected zone  
Choose up to 3 availability zones, one VM per zone  
☐ Azure-selected zone (Preview)  
Let Azure assign the best zone for your needs

Availability zone \*   
☒ You can now select multiple zones. Selecting multiple zones will create one VM per zone. [Learn more](#)

Security type   
[Configure security features](#)

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

VM architecture ☐ Arm64  
☒ x64  
Arm64 is not supported with the selected image.

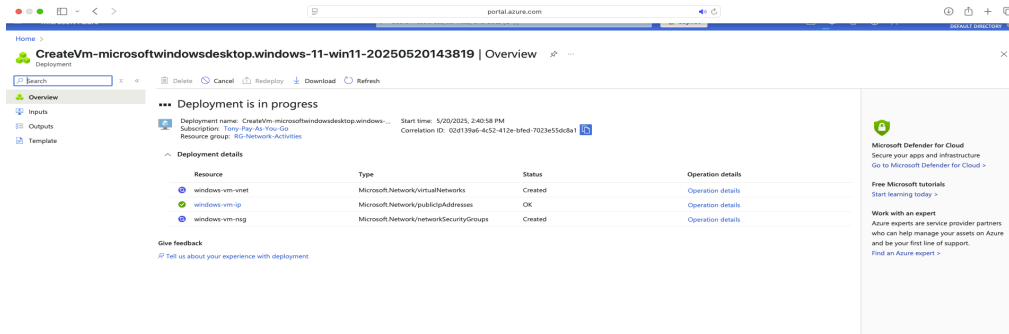
Run with Azure Spot discount ☐

Size \*   
[See all sizes](#)

Enable Hibernation ☐  
Hibernate is not supported by the size that you have selected. Choose a size that is compatible with Hibernation to enable this feature. [Learn more](#)

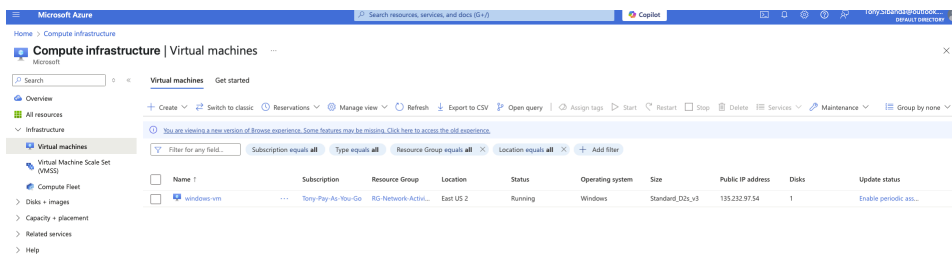
**Administrator account**

Username \*



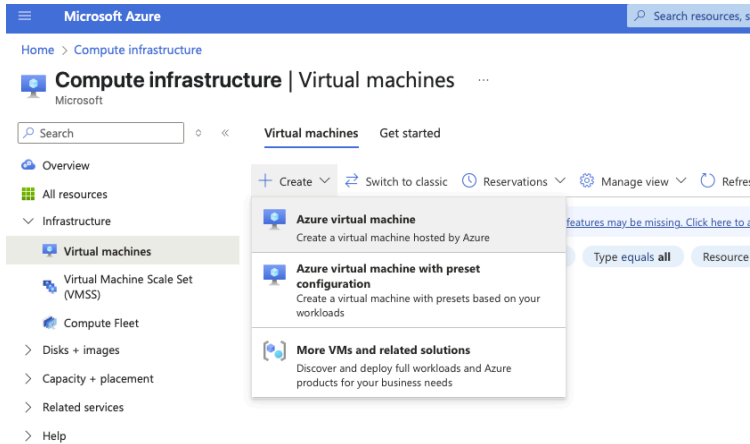
## Deployment Configuration Completion

- It is good practice to go back to the Virtual Machines and double check the VM is running



## Create a Linux Virtual Machine

- Go to Virtual Machines
- Click + Create → Azure virtual machine
- Select the Resource Group **RG-Network-Activities**



## Basic Tab Setup:

- VM Name: **linux-vm**
- Image: Ubuntu Server 22.04 or 24.04 LTS
- Authentication Type: Password
- Username: labuser
- Password: Your secure password
- Public inbound ports: Allow SSH (22)
- Keep the other settings consistent with the Windows VM

[Help me create a low cost VM](#)
[Help me create a VM optimized for high availability](#)
[Help me choose the right VM size for my workload](#)

[Basics](#)
[Disks](#)
[Networking](#)
[Management](#)
[Monitoring](#)
[Advanced](#)
[Tags](#)
[Review + create](#)

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# Configure Networking

- Virtual Network: We'll use the windows-vm network that we just created
- Public IP: Automatically assigned
- NIC Security Group: Basic
- Public inbound ports:
  - Windows VM: RDP (3389)
  - Linux VM: SSH (22)
- Leave Accelerated Networking enabled

The screenshot shows the 'Create a virtual machine' page in the Microsoft Azure portal, specifically the 'Networking' tab. The page is titled 'Create a virtual machine' and has a search bar at the top right. Below the title, there are three tabs: 'Help me create a low cost VM', 'Help me create a VM optimized for high availability', and 'Help me choose the right VM size for my workload'. The 'Networking' tab is selected, and the sub-tabs are 'Basics', 'Disks', 'Networking', 'Management', 'Monitoring', 'Advanced', 'Tags', and 'Review + create'. The 'Networking' sub-tab is active, and the page content is as follows:

Define network connectivity for your virtual machine by configuring network interface card (NIC) settings. You can control ports, inbound and outbound connectivity with security group rules, or place behind an existing load balancing solution. [Learn more](#)

**Network interface**

When creating a virtual machine, a network interface will be created for you.

Virtual network \*  [Create new](#)

Subnet \*  [Manage subnet configuration](#)

Public IP \*  [Create new](#)

NIC network security group \* ☐ None ☒ Basic ☐ Advanced

Public inbound ports \* ☐ None ☒ Allow selected ports

Select inbound ports \*

**Load balancing**

You can place this virtual machine in the backend pool of an existing Azure load balancing solution. [Learn more](#)

Load balancing options \* ☒ None ☐ Azure load balancer ☐ Application gateway

Supports all TCP/UDP network traffic, port-forwarding, and outbound flows.

Web traffic load balancer for HTTP/HTTPS with URL-based routing, SSL termination, session persistence, and web application firewall.

[< Previous](#) [Next: Management >](#) [Review + create](#)

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## Why We Skip the Remaining Tabs (Management, Monitoring, Advanced, Tags)

These tabs are optional and not necessary for basic setups or practice labs:

- Management: Enables auto-shutdown, backup, and diagnostics, useful later but not needed for testing.
- Monitoring: You can configure insights and metrics later if desired.
- Advanced: Not required unless you need VM extensions or custom scripts.
- Tags: Useful in enterprise environments for cost tracking, optional for personal use.

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## Review and Create

- Azure runs a validation check.
- If successful, click Create to begin deployment.

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Home >

### Create a virtual machine

Validation passed

Help me create a low cost VM Help me create a VM optimized for high availability Help me choose the right VM size for my workload

Basics Disks Networking Management Monitoring Advanced Tags **Review + create**

Price

1 X Standard D2s v3  
by Microsoft  
[Terms of use](#) | [Privacy policy](#)

Subscription credits apply ⓘ  
**0.0960 USD/hr**  
[Pricing for other VM sizes](#)

TERMS

By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the [Azure Marketplace Terms](#) for additional details.

Name

Preferred e-mail address

Preferred phone number

⚠ You have set SSH port(s) open to the internet. This is only recommended for testing. If you want to change this setting, go back to Basics tab.

Basics

Subscription	Tony-Pay-As-You-Go
Resource group	RG-Network-Activities
Virtual machine name	linux-vm
Region	East US 2
Availability options	Availability zone
Zone options	Self-selected zone
Availability zone	1
Security type	Trusted launch virtual machines
Enable secure boot	Yes
Enable vTPM	Yes
Integrity monitoring	No
Image	Ubuntu Server 24.04 LTS - Gen2

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Next >

Create

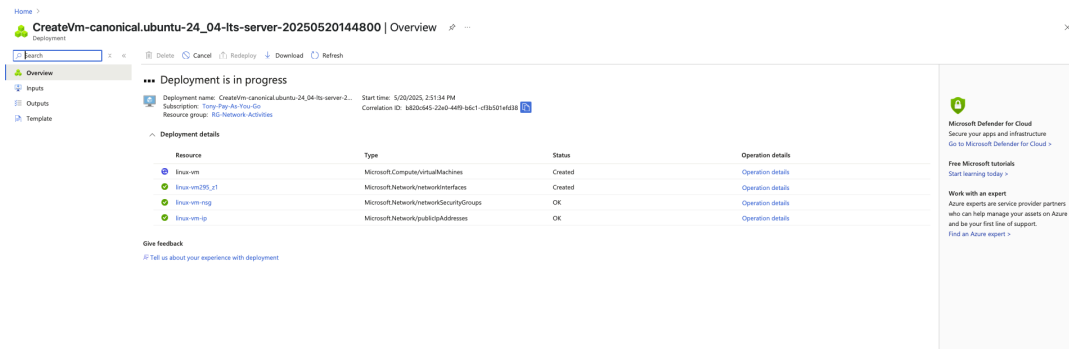
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## Deployment Progress

Azure will begin provisioning resources:

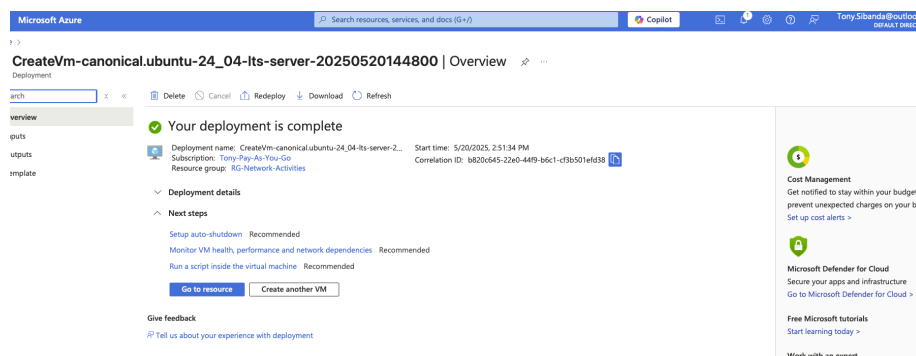
- Virtual Network
- Subnet
- NSG (Network Security Group)
- Public IP
- Disk and NIC





## Deployment Complete

After a few minutes, you'll see Deployment Succeeded.  
Click Go to resource to view your new virtual machine.



## Verify Virtual Machines



Go back to the Virtual Machines panel.  
Confirm both **windows-vm** and **linux-vm** show status as Running and have public IP addresses assigned.

Virtual machines
Get started

+ Create
Switch to classic
Reservations
Manage view
Refresh
Export to CSV
Open query
Assign tags
Start
Restart
Stop
Group by none

You are viewing a new version of Browse experience. Some features may be missing. Click here to access the old experience.

Filter for any field...
Subscription equals all
Type equals all
Resource Group equals all
Location equals all
Add filter

<input checked="" type="checkbox"/>	Name ↑		Subscription	Resource Group	Location	Status	Operating syst...	Size	Public IP addre...	Disks	Update status
<input type="checkbox"/>	 linux-vm	...	Tony-Pay-As-Yo...	RG-Network-Ac...	East US 2	Running	Linux	Standard_D2s_v3	172.203.80.113	1	<a href="#">Enable periodic...</a>
<input type="checkbox"/>	 windows-vm	...	Tony-Pay-As-Yo...	RG-Network-Ac...	East US 2	Running	Windows	Standard_D2s_v3	135.232.97.54	1	<a href="#">Enable periodic...</a>

## Best Practices

- Shutdown unused VMs to avoid charges
- Use NSG rules to secure access (don't allow all IPs in production)
- Consider Azure Bastion or VPN for secure remote access
- Use Tags when working with multiple environments or users