Create virtual machine scale set

Create a Virtual Machine Scale Set (VMSS) ...

Basics   Spot   Disks   Networking   Management   Health   Advanced   Tags   Review + create

At no added cost, a VMSS offers automatic scaling and performance optimization, infrastructure flexibility, and options to mix VM sizes, zones, and fault domains—all with simple, centralized group VM management. Already have VMs? Just create a new flexible VMSS, and attach existing VMs to your new scale set to get enhanced availability, resiliency, and capacity and cost optimization. Learn more about VMSS ↗

Project details

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

Subscription *   Manohar Subscription

    Resource group *   Demo-RG
                                        Create new

Scale set details

Virtual machine scale set name *   app-set

Region *   (Asia Pacific) Central India

Availability zone ⓘ   None

Orchestration

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Create a Virtual Machine Scale Set (VMSS) ...

A scale set has a "scale set model" that defines the attributes of virtual machine instances (size, number of data disks, etc). As the number of instances in the scale set changes, new instances are added based on the scale set model.
Learn more about the scale set model ↗

Orchestration mode * ⓘ
- ⦿ **Flexible: achieve** high availability at scale with identical or multiple virtual machine types
- ◯ **Uniform:** optimized for large scale stateless workloads

Security type ⓘ
Trusted launch virtual machines	⌄

Configure security features

Scaling

Scaling mode ⓘ
- ⦿ **Manually update** the capacity: Maintain a fixed amount of instances.
- ◯ **Autoscaling:** Scaling based on a CPU metric, on any schedule.
- ◯ **No scaling profile:** manual attach virtual machines after deployment

🧭 Improve your availability by selecting multiple zones

Instance count * ⓘ
2	✓

Configure scaling options

Instance details

Image * ⓘ
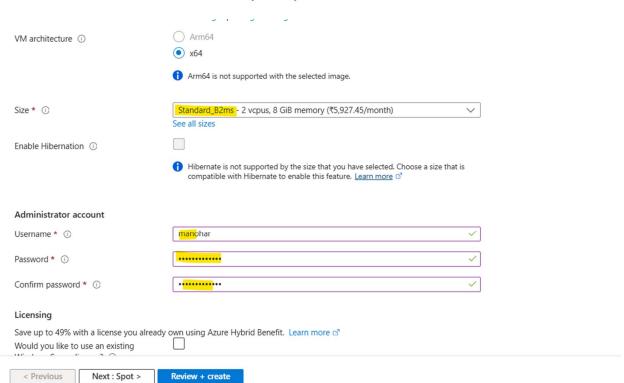| ⊞ Windows Server 2022 Datacenter - x64 Gen2	⌄

See all images | Configure VM generation

☰ **Microsoft Azure** 🔍 Search resources, services, and docs (G+/)

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Create a Virtual Machine Scale Set (VMSS) ...

VM architecture ⓘ
- ○ Arm64
- ● x64

ⓘ Arm64 is not supported with the selected image.

Size * ⓘ
Standard_B2ms - 2 vcpus, 8 GiB memory (₹5,927.45/month) ⌄

See all sizes

Enable Hibernation ⓘ
☐

ⓘ Hibernate is not supported by the size that you have selected. Choose a size that is compatible with Hibernate to enable this feature. Learn more ⧉

Administrator account

Username * ⓘ
manohar ✓

Password * ⓘ
•••••••••••• ✓

Confirm password * ⓘ
••••••••••• ✓

Licensing

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Would you like to use an existing
Windows Server license? ⓘ
☐

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Create a Virtual Machine Scale Set (VMSS) ...

Virtual network * ⓘ

(New) Demo-RG-vnet (recommended)	⌄

Create virtual network

Network interface

A network interface enables an Azure virtual machine to communicate with internet, Azure, and on-premises resources. A VM can have one or more network interfaces.

➕ Create new nic   🗑 Delete

	NAME	CREATE PUBLI...	SUBNET	NETWORK SECURI...	ACCELERATED N...	
☐	Demo-RG-vnet-nic01	Yes	default (10.0.0.0/20)	Basic	Off	✏

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
  Supports all TCP/UDP network traffic, port-forwarding, and outbound flows.
- ◯ Application gateway
  Web traffic load balancer for HTTP/HTTPS with URL-based routing, SSL termination, session persistence, and web application firewall.

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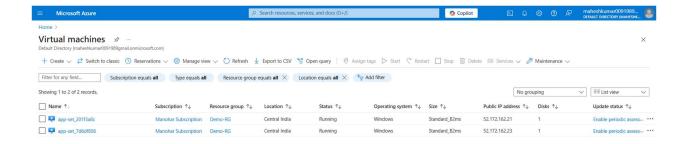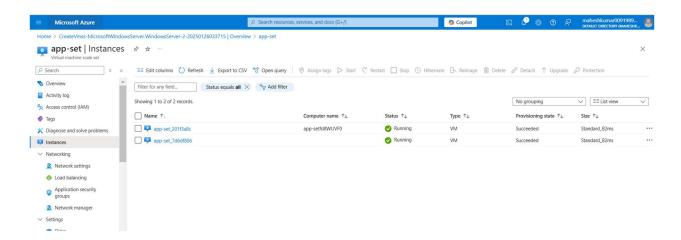
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Create a Virtual Machine Scale Set (VMSS) …

✅ Validation passed

Basics Spot Disks Networking Management Health Advanced Tags **Review + create**

Basics

Subscription	Manohar Subscription
Resource group	Demo-RG
Virtual machine scale set name	app-set
Region	Central India
Orchestration mode	Flexible
Availability zone	None
Image	Windows Server 2022 Datacenter - Gen2
Size	Standard B2ms (2 vcpus, 8 GiB memory)
Scaling mode	Manually update the capacity
Instance count	2
Security type	Trusted launch virtual machines
Enable secure boot	Yes
Enable vTPM	Yes
Integrity monitoring	No
Enable Hibernation	No

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CreateVmss-MicrosoftWindowsServer.WindowsServer-2-20250126033715 | Overview 📌 …
Deployment

🔍 Search

- Overview
- Inputs
- Outputs
- Template

🗑 Delete 🚫 Cancel Redeploy ⬇ Download 🔄 Refresh

✅ Your deployment is complete

Deployment name : CreateVmss-MicrosoftWindowsServer.WindowsServer-2-202501260...   Start time   : 1/26/2025, 3:40:43 AM
Subscription   : Manohar Subscription   Correlation ID : 712d98d0-a0b4-4259-92ee-941bb8a92a85
Resource group : Demo-RG

> Deployment details

∨ Next steps

Go to resource

Give feedback

📣 Tell us about your experience with deployment

💲 **Cost management**
Get notified to stay within your budget
and prevent unexpected charges on your
bill.
Set up cost alerts >

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Work with an expert
Azure experts are service provider
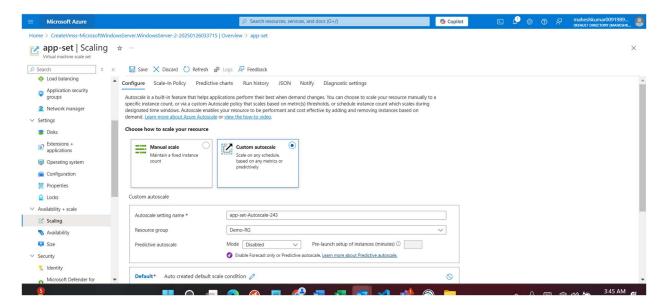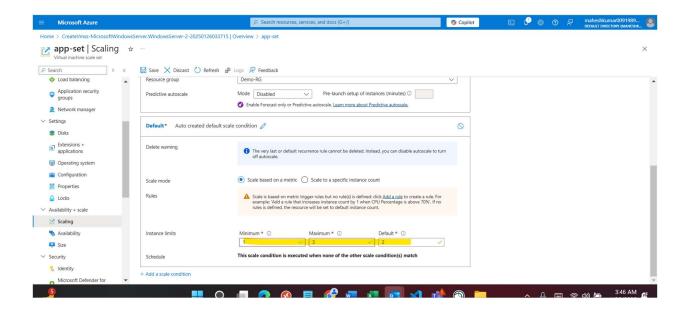partners who can help manage your
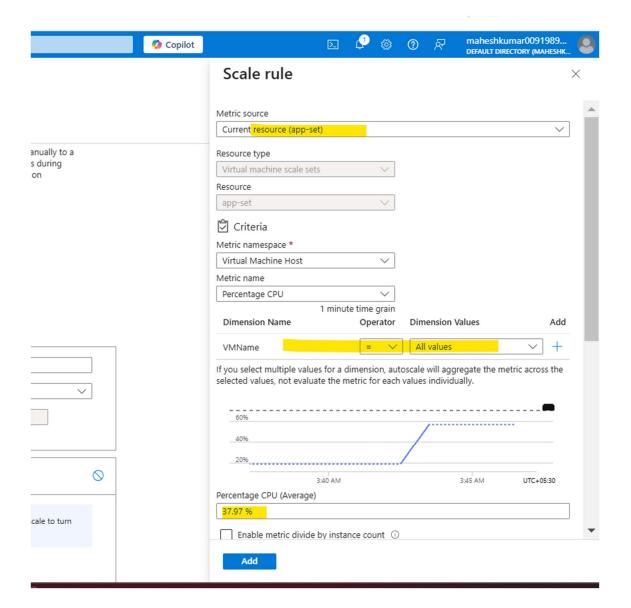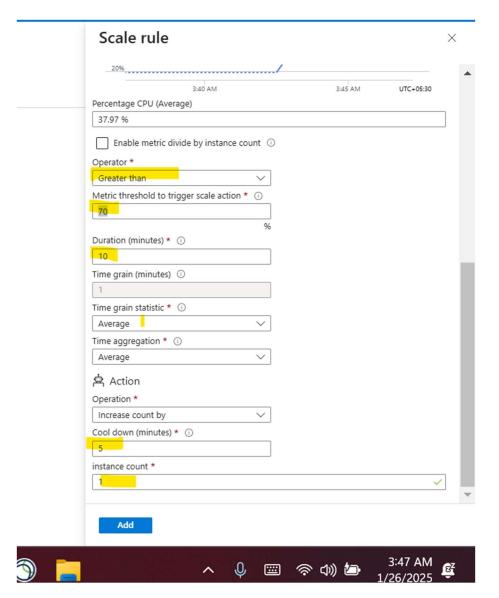assets on Azure and be your first line of
support

Create autoscaling rule based on metric

If cpu utilization is greater than 70% for the duration of 10 mins increase the count by 1

Scale rule

Metric source

Current resource (app-set)

Resource type

Virtual machine scale sets

Resource

app-set

☑ Criteria

Metric namespace *

Virtual Machine Host

Metric name

Percentage CPU

1 minute time grain

Dimension Name	Operator	Dimension Values	Add
VMName	=	All values	+

If you select multiple values for a dimension, autoscale will aggregate the metric across the selected values, not evaluate the metric for each values individually.

60%

40%

20%

3:40 AM   3:45 AM   UTC+05:30

Percentage CPU (Average)

37.97 %

☐ Enable metric divide by instance count ⓘ

Add

Scale rule

20%

3:40 AM   3:45 AM   UTC+05:30

Percentage CPU (Average)

37.97 %

☐ Enable metric divide by instance count ⓘ

Operator *

Greater than   ⌄

Metric threshold to trigger scale action * ⓘ

70
                                          %

Duration (minutes) * ⓘ

10

Time grain (minutes) ⓘ

1

Time grain statistic * ⓘ

Average   ⌄

Time aggregation * ⓘ

Average   ⌄

🖥 Action

Operation *

Increase count by   ⌄

Cool down (minutes) * ⓘ

5

instance count *

1   ✓

Add

3:47 AM
1/26/2025

If cpu utilization is less than 50% for the duration of 10 mins decrease the count by 1

Scale rule

3:40 AM   3:45 AM   UTC+05:30

Percentage CPU (Average)

28.19 %

☐ Enable metric divide by instance count ⓘ

Operator *

| Less than | ⌄ |

Metric threshold to trigger scale action * ⓘ

| 50 | ✓ |

%

Duration (minutes) * ⓘ

| 10 |

Time grain (minutes) ⓘ

| 1 |

Time grain statistic * ⓘ

| Average | ⌄ |

Time aggregation * ⓘ

| Average | ⌄ |

🖳 Action

Operation *

| Decrease count by | ⌄ |

Cool down (minutes) * ⓘ

| 5 |

instance count *

| 1 | ✓ |

Add

3:48 AM
1/26/2025

Our autoscaling group took affect and now the number of instance count is 1

This complete Virtual machine scale set assignment