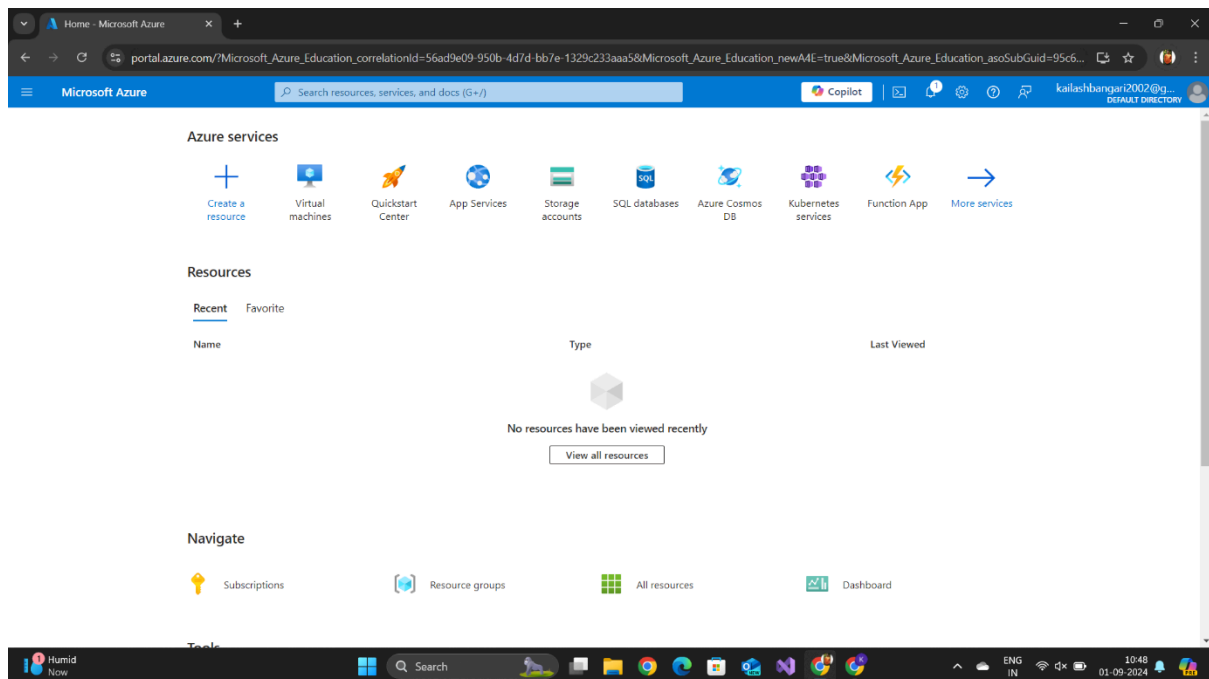
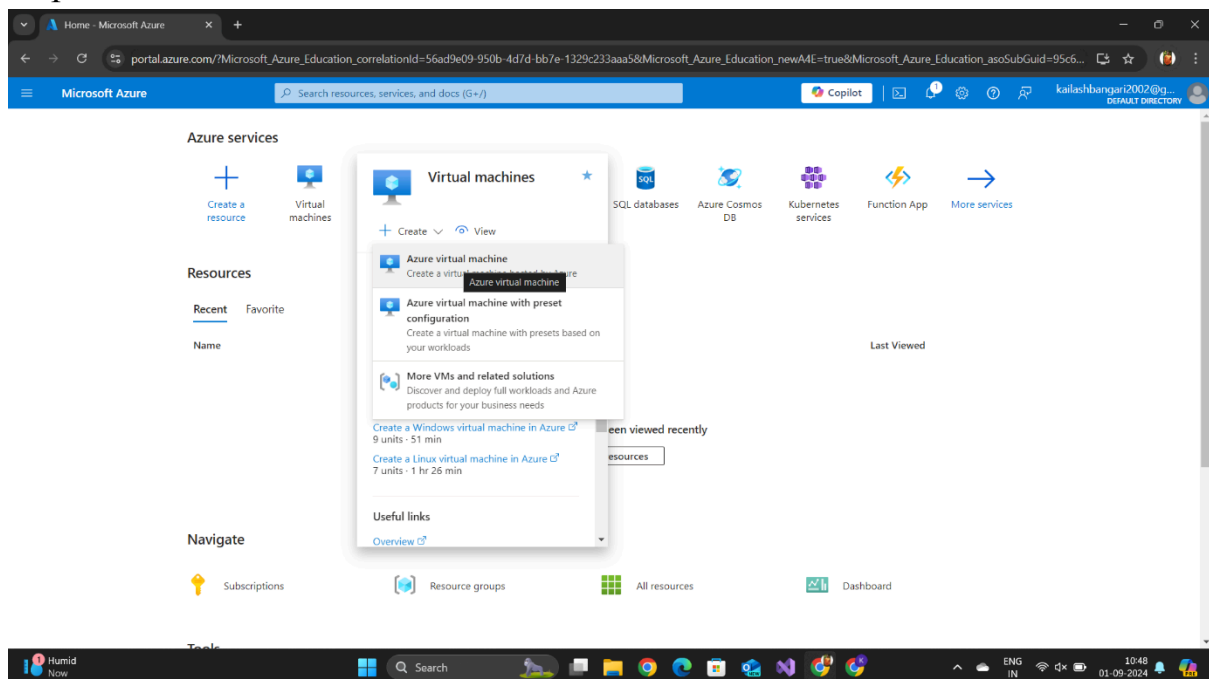


Step 1: Login to Azure Account



Step 2: Click on Virtual Machine and then Azure virtual machine



Step 3: Fill on the Required Details

Create a virtual machine - Mic...

portal.azure.com/?Microsoft_Azure_Education_correlationId=56ad9e09-950b-4d7d-bb7e-1329c233aaa5&Microsoft_Azure_Education_newA4E=true&Microsoft_Azure_Education_asoSubGuid=95c6...

Microsoft Azure

Search resources, services, and docs (5+)

Copilot

kailashbangari2002@q...
DEFAULT DIRECTORY

Home >

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

This subscription may not be eligible to deploy VMs of certain sizes in certain regions.

Project details

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

Subscription *

Azure for Students

Resource group *

(New) Training

Create new

Instance details

Virtual machine name *

ubuntu-server-azure

Region *

(Asia Pacific) Central India

Availability options

Availability zone

Zone options

Self-selected zone

Choose up to 3 availability zones, one VM per zone

Azure-selected zone (Preview)

< Previous

Next >

Review + create

Give feedback

VCF - VIL
Game score

Search

ENG
IN

01-09-2024

Create a virtual machine - Mic...

portal.azure.com/?Microsoft_Azure_Education_correlationId=56ad9e09-950b-4d7d-bb7e-1329c233aaa5&Microsoft_Azure_Education_newA4E=true&Microsoft_Azure_Education_asoSubGuid=95c6...

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Home >

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

per zone. [Learn more](#)

Security type

Trusted launch virtual machines

Configure security features

Image *

Ubuntu Server 24.04 LTS - x64 Gen2

See all images | Configure VM generation

VM architecture

Arm64

x64

Run with Azure Spot discount

Size *

Standard_B1s - 1 vcpu, 1 GiB memory (₹680.20/month) (free services eligible)

See all sizes

Enable Hibernation

Hibernate does not currently support Trusted launch and Confidential virtual machines for Linux images. [Learn more](#)

Administrator account

Authentication type

SSH public key

< Previous

Next >

Review + create

Give feedback

WHU - MCI
Game score

Search

ENG
IN

01-09-2024

Create a virtual machine - Mic...

portal.azure.com/?Microsoft_Azure_Education_correlationId=56ad9e09-950b-4d7d-bb7e-1329c233aaa5&Microsoft_Azure_Education_newA4E=true&Microsoft_Azure_Education_asoSubGuid=95c6...

Microsoft AzureSearch resources, services, and docs (5+ /)Copilotkailashbangari2002@q...DEFAULT DIRECTORY

Home >Create a virtual machine...

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

BasicsDisksNetworkingManagementMonitoringAdvancedTagsReview + create

Azure VMs have one operating system disk and a temporary disk for short-term storage. You can attach additional data disks. The size of the VM determines the type of storage you can use and the number of data disks allowed. [Learn more](#)

VM disk encryption

Azure disk storage encryption automatically encrypts your data stored on Azure managed disks (OS and data disks) at rest by default when persisting it to the cloud.

Encryption at host ☐

Encryption at host is not registered for the selected subscription. [Learn more about enabling this feature](#)

OS disk

OS disk size

OS disk type

Delete with VM ☒

Key management

Enable Ultra Disk compatibility ☐

< PreviousNext : Networking >Review + create

28°C Haze

Search

ENG IN10:5301-09-2024

Create a virtual machine - Mic

portal.azure.com/?Microsoft_Azure_Education_correlationId=56ad9e09-950b-4d7d-bb7e-1329c233aaa58&Microsoft_Azure_Education_newA4E=true&Microsoft_Azure_Education_asoSubGuid=95c6...

Microsoft Azure

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Home >

Create a virtual machine

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

Network interface

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

Virtual network *

(new) ubuntu-server-azure-vnet

Create new

Subnet *

(new) default (10.0.0.0/24)

Public IP *

(new) ubuntu-server-azure-ip

Create new

NIC network security group *

NoneBasicAdvanced

Public inbound ports *

NoneAllow selected ports

Select inbound ports *

HTTP (80), HTTPS (443), SSH (22)

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.

< Previous

Next: Management >

Review + create

Give feedback

Create a virtual machine - Mic

portal.azure.com/?Microsoft_Azure_Education_correlationId=56ad9e09-950b-4d7d-bb7e-1329c233aaa58&Microsoft_Azure_Education_newA4E=true&Microsoft_Azure_Education_asoSubGuid=95c6...

Microsoft Azure

Search resources, services, and docs (5+)

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DEFAULT DIRECTORY

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Create a virtual machine

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

BasicsDisksNetworkingManagementMonitoringAdvancedTagsReview + create

Configure management options for your VM.

Microsoft Defender for Cloud

Microsoft Defender for Cloud provides unified security management and advanced threat protection across hybrid cloud workloads. [Learn more](#)

Enable basic plan for free

☒

This will apply to every VM in the selected subscription

Identity

Enable system assigned managed identity

☐

Microsoft Entra ID

Login with Microsoft Entra ID

☐

RBAC role assignment of Virtual Machine Administrator Login or Virtual Machine User Login is required when using Microsoft Entra ID login. [Learn more](#)

Microsoft Entra ID login now uses SSH certificate-based authentication. You will need to use an SSH client that supports OpenSSH certificates. You can use Azure CLI or Cloud Shell from the Azure Portal. [Learn more](#)

< Previous

Next: Monitoring >

Review + create

Give feedback

Step 4: Click on Review+Create.

The screenshot shows the 'Create a virtual machine' wizard in the Microsoft Azure portal, specifically the 'Review + create' step. The browser address bar shows the URL: `portal.azure.com/?Microsoft_Azure_Education_correlationId=56ad9e09-950b-4d7d-bb7e-1329c233aaa5&Microsoft_Azure_Education_newA4E=true&Microsoft_Azure_Education_asoSubGuid=95c6...`. The page title is 'Create a virtual machine'. 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 'Monitoring' tab is selected. The page content includes sections for 'Alerts', 'Diagnostics', and 'Health'. Under 'Alerts', there is a checkbox for 'Enable recommended alert rules'. Under 'Diagnostics', there are three options: 'Enable with managed storage account (recommended)' (selected), 'Enable with custom storage account', and 'Disable'. Under 'Health', there is a checkbox for 'Enable application health monitoring'. At the bottom, there are navigation buttons: '< Previous', 'Next: Advanced >', and 'Review + create'. A 'Give feedback' link is also present.

Step 5: Click on Create.

The screenshot shows the 'Create a virtual machine' wizard in the Microsoft Azure portal, specifically the 'Review + create' step. The browser address bar shows the URL: `portal.azure.com/?Microsoft_Azure_Education_correlationId=56ad9e09-950b-4d7d-bb7e-1329c233aaa5&Microsoft_Azure_Education_newA4E=true&Microsoft_Azure_Education_asoSubGuid=95c6...`. The page title is 'Create a virtual machine'. 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 'Review + create' tab is selected. The page content includes a 'Validation passed' message. Below this, 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 'Review + create' tab is selected. The page content includes sections for 'Price' and 'TERMS'. Under 'Price', it shows '1 X Standard B1s' and 'Subscription credits apply'. The price is listed as '0.9318 INR/hr'. Under 'TERMS', there is a text block explaining the legal terms and privacy statement. At the bottom, there are input fields for 'Name' (kailash bangari) and 'Preferred e-mail address' (kailashbangari2002@gmail.com). Navigation buttons at the bottom include '< Previous', 'Next >', and 'Create'. A 'Download a template for automation' link and a 'Give feedback' link are also present.

After Deployment the resources will be created accordingly

Home > CreateVm-canonical.ubuntu-24_04-lts-server-20240901105202 | Overview

Search

Overview

Inputs

Outputs

Template

✓ Your deployment is complete

Deployment name: CreateVm-canonical.ubuntu-24_04-lts-server-2... Start time: 01/09/2024, 10:56:13
Subscription: Azure for Students Correlation ID: 7fcee96a-7326-45fc-aa1b-5367f1ec094

Resource group: Training

Deployment details

Resource	Type	Status	Operation details
✓ ubuntu-server-azure	Microsoft.Compute/virtualMachines	OK	Operation details
✓ ubuntu-server-azure-761_z1	Microsoft.Network/networkInterfaces	Created	Operation details
✓ ubuntu-server-azure-ip	Microsoft.Network/publicIPAddresses	OK	Operation details
✓ ubuntu-server-azure-vnet	Microsoft.Network/virtualNetworks	OK	Operation details
✓ ubuntu-server-azure-nsg	Microsoft.Network/networkSecurityGroups	OK	Operation details

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](#)

Cost Management

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[Set up cost alerts >](#)

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Secure your apps and infrastructure

[Go to Microsoft Defender for Cloud >](#)

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Azure experts are service provider partners who can help manage your assets on Azure and be your first line of support.

[Find an Azure expert >](#)

Step 6 : To Connect the server instance click on connect

Home > CreateVm-canonical.ubuntu-24_04-lts-server-20240901105202 | Overview

Search

Connect

Start

Restart

Stop

Hibernate

Capture

Delete

Refresh

Open in mobile

Feedback

CLI / PS

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Connect

Networking

Settings

Availability + scale

Security

Backup + disaster recovery

Operations

Monitoring

Automation

Help

Essentials

Resource group (move): [Training](#)

Status: Running

Location: Central India (Zone 1)

Subscription (move): [Azure for Students](#)

Subscription ID: 95c6cce0-5092-4a13-baa7-b8bd74024d1f

Availability zone: 1

Tags (edit): [Add tags](#)

Operating system: Linux (ubuntu 24.04)

Size: Standard B1s (1 vcpu, 1 GiB memory)

Public IP address: [4.240.115.7](#)

Virtual network/subnet: [ubuntu-server-azure-vnet/default](#)

DNS name: [Not configured](#)

Health state: -

Time created: 01/09/2024, 05:26 UTC

Properties

Monitoring

Capabilities (7)

Recommendations

Tutorials

Virtual machine

Computer name: ubuntu-server-azure

Operating system: Linux (ubuntu 24.04)

VM generation: V2

VM architecture: x64

Agent status: Ready

Agent version: 2.11.1.12

Networking

Public IP address: 4.240.115.7 (Network interface ubuntu-server-azure761_z1)

Public IP address (IPv6): -

Private IP address: 10.0.0.4

Private IP address (IPv6): -

Virtual network/subnet: [ubuntu-server-azure-vnet/default](#)

DNS name: [Configure](#)

You can connect according to your requirement

The image shows a screenshot of the Microsoft Azure portal interface for connecting to a virtual machine named 'ubuntu-server-azure'. The portal displays various connection methods under the 'Connect' tab, including Bastion, Networking, Settings, Availability + scale, Security, Backup + disaster recovery, Operations, Monitoring, Automation, and Help. The 'Connect' section is expanded, showing 'Connecting using Public IP address | 4.240.115.7'. Below this, there are two main options: 'SSH using Azure CLI' and 'Native SSH'. The 'SSH using Azure CLI' option is selected, showing details like 'Admin username: azureuser', 'Port (change): 22', and 'Just-in-time policy: Unsupported by plan'. The 'Native SSH' option is also visible, noting that no additional software is needed. A 'Select' button is present for each option. Below the connection options, there is a 'More ways to connect (3)' link.

The terminal window shows the following system information as of Sun Sep 1 05:31:07 UTC 2024:

```
System load: 0.0      Processes:    110
Usage of /:  5.0% of 28.02GB   Users logged in: 0
Memory usage: 30%      IPv4 address for eth0: 10.0.0.4
Swap usage:  0%

Expanded Security Maintenance for Applications is not enabled.
0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

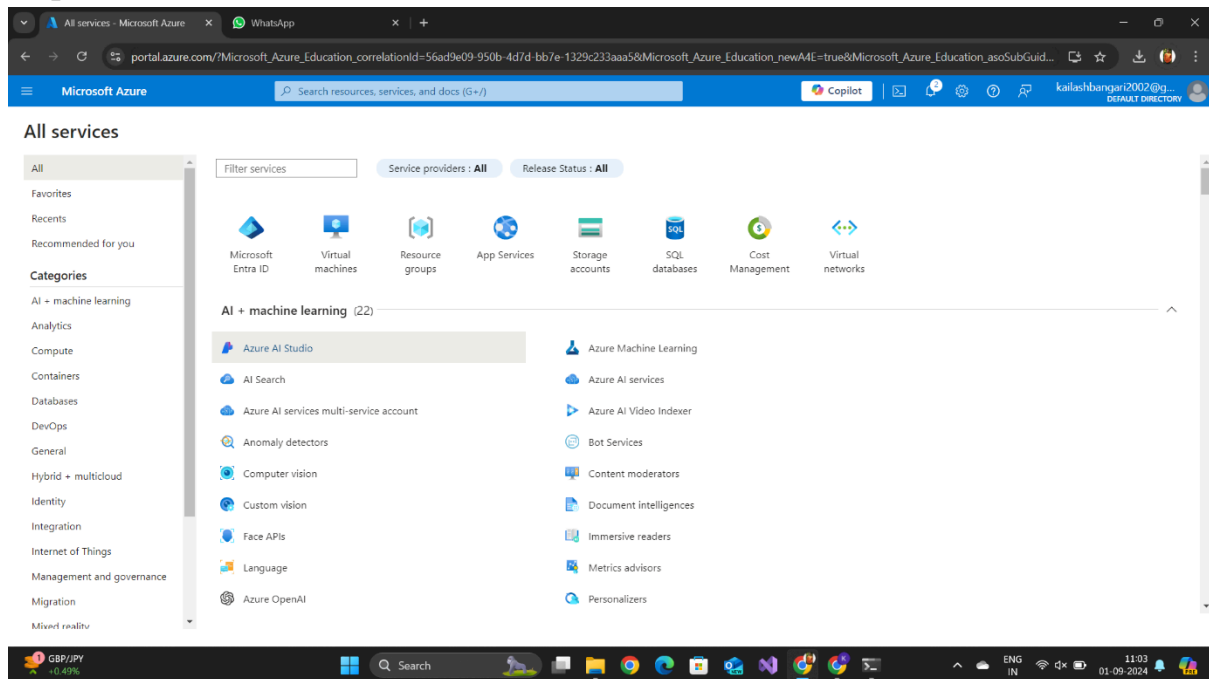
The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

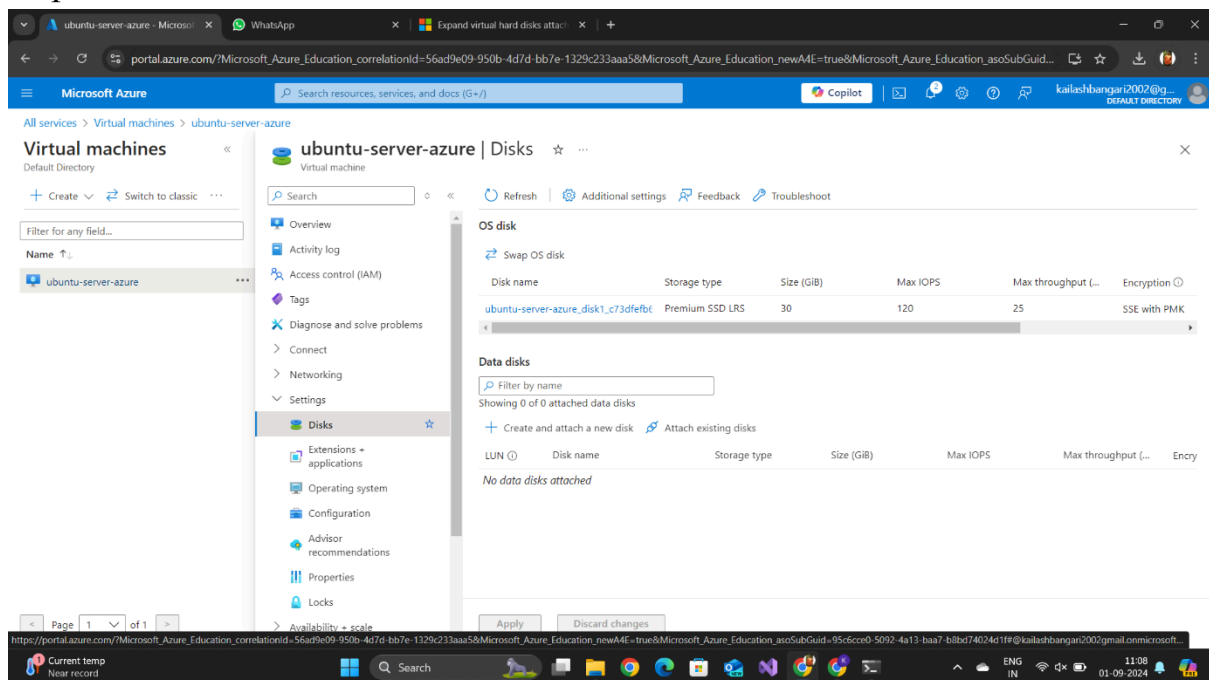
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azureuser@ubuntu-server-azure:~$
```

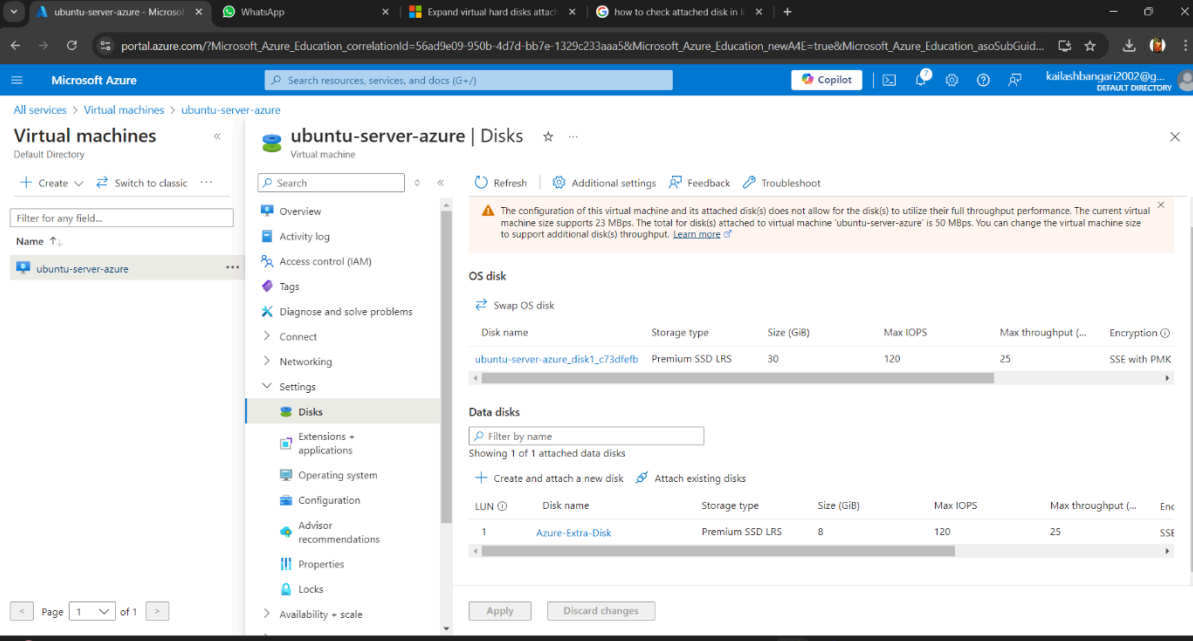
Step 7 : For Creation of Disk Resource



Step 8 : Click on Create and attach a new disk



Step 9 : Fill the Details Accordingly



The screenshot shows the Azure portal interface for a virtual machine named 'ubuntu-server-azure'. The 'Disks' page is active, displaying the OS disk and one data disk. A warning message at the top states: 'The configuration of this virtual machine and its attached disk(s) does not allow for the disk(s) to utilize their full throughput performance. The current virtual machine size supports 23 MBps. The total for disk(s) attached to virtual machine 'ubuntu-server-azure' is 50 MBps. You can change the virtual machine size to support additional disk(s) throughput. [Learn more](#)'.

OS disk

Disk name	Storage type	Size (GiB)	Max IOPS	Max throughput (...)	Encryption
ubuntu-server-azure_disk1_c73dfe6b	Premium SSD LRS	30	120	25	SSE with PMK

Data disks

Filter by name

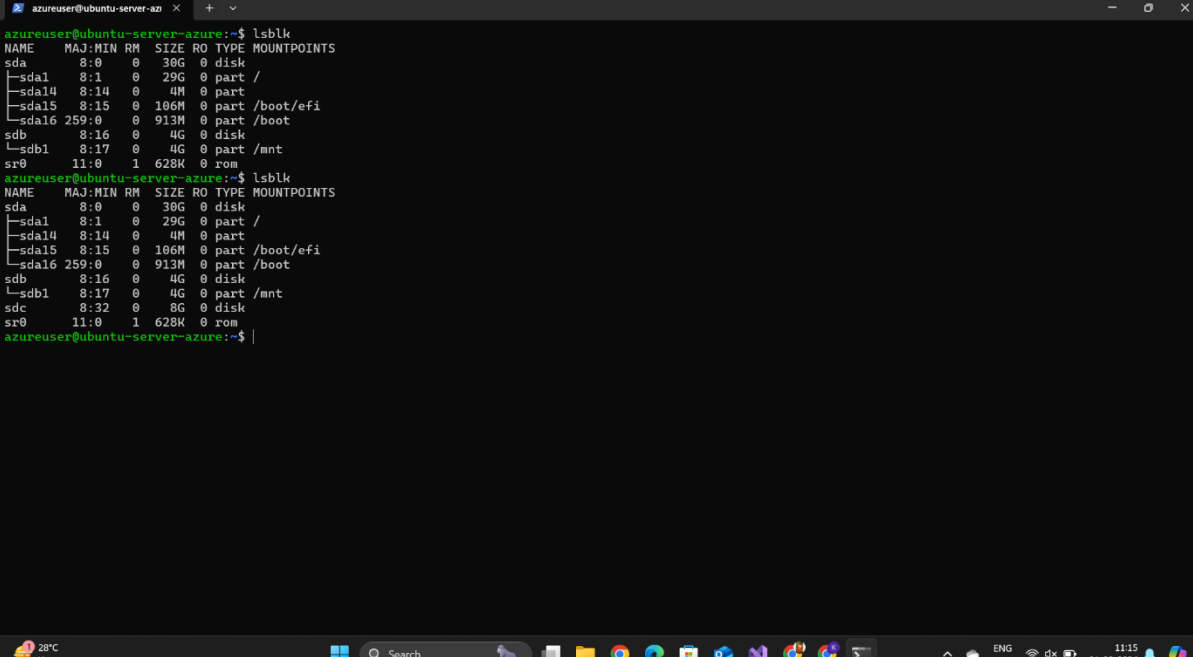
Showing 1 of 1 attached data disks

[Create and attach a new disk](#) [Attach existing disks](#)

LUN	Disk name	Storage type	Size (GiB)	Max IOPS	Max throughput (...)	Enc
1	Azure-Extra-Disk	Premium SSD LRS	8	120	25	SSE

Page 1 of 1

After Creation you can see a disk attached to your server



```
azureuser@ubuntu-server-azure:~$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
sda         8:0    0   30G  0 disk 
├─sda1      8:1    0   29G  0 part /
├─sda14     8:14   0    4M  0 part 
├─sda15     8:15   0  106M  0 part /boot/efi
└─sda16    259:0   0   913M  0 part /boot
sdb         8:16   0    4G  0 disk 
└─sdb1      8:17   0    4G  0 part /mnt
sr0        11:0    1 6282K  0 rom

azureuser@ubuntu-server-azure:~$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
sda         8:0    0   30G  0 disk 
├─sda1      8:1    0   29G  0 part /
├─sda14     8:14   0    4M  0 part 
├─sda15     8:15   0  106M  0 part /boot/efi
└─sda16    259:0   0   913M  0 part /boot
sdb         8:16   0    4G  0 disk 
└─sdb1      8:17   0    4G  0 part /mnt
sdc         8:32   0    8G  0 disk 
sr0        11:0    1 6282K  0 rom

azureuser@ubuntu-server-azure:~$
```

Step 10 : Mount the disk for the usage

```
azureuser@ubuntu-server-az x + v
sda      8:0    0   38G  0 disk
├─sda1   8:1    0   29G  0 part /
├─sda14  8:14   0    4M  0 part
├─sda15  8:15   0   186M  0 part /boot/efi
├─sda16 259:0   0   913M  0 part /boot
├─sdb    8:16   0    4G  0 disk
├─sdb1   8:17   0    4G  0 part /mnt
├─sdc    8:32   0    8G  0 disk
└─sr0    11:0   1   628K  0 rom
azureuser@ubuntu-server-azure:~$ sudo mkdir /mnt/Training
azureuser@ubuntu-server-azure:~$ sudo mount /dev/sdc /mnt/Training
mount: /mnt/Training: wrong fs type, bad option, bad superblock on /dev/sdc, missing codepage or helper program, or other error.
dmesg(1) may have more information after failed mount system call.
azureuser@ubuntu-server-azure:~$ sudo mkfs -t ext4 /dev/sdc
mke2fs 1.47.0 (5-Feb-2023)
Discarding device blocks: done
Creating filesystem with 2097152 4k blocks and 524288 inodes
Filesystem UUID: ab1e8c-6683-4116-8d02-a25b220b7aa2
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632
Allocating group tables: done
Writing inode tables: done
Creating journal (16384 blocks): done
Writing superblocks and filesystem accounting information: done
azureuser@ubuntu-server-azure:~$ sudo mount /dev/sdc /mnt/Training
azureuser@ubuntu-server-azure:~$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
sda          8:0    0   38G  0 disk
├─sda1       8:1    0   29G  0 part /
├─sda14      8:14   0    4M  0 part
├─sda15      8:15   0   186M  0 part /boot/efi
├─sda16     259:0   0   913M  0 part /boot
├─sdb        8:16   0    4G  0 disk
├─sdb1       8:17   0    4G  0 part /mnt
├─sdc        8:32   0    8G  0 disk /mnt/Training
└─sr0        11:0   1   628K  0 rom
azureuser@ubuntu-server-azure:~$ pwd
/home/azureuser
azureuser@ubuntu-server-azure:~$
```