

Create Application Gateway

Go to **Application Gateway** in Azure Portal → Click **Create**

Basics Tab:

Name: app-gateway

Region: Same as Hub

Tier: **Standard v2** (for path-based routing/SSL)

SKU Size: Choose based on load

Frontend IP Configuration:

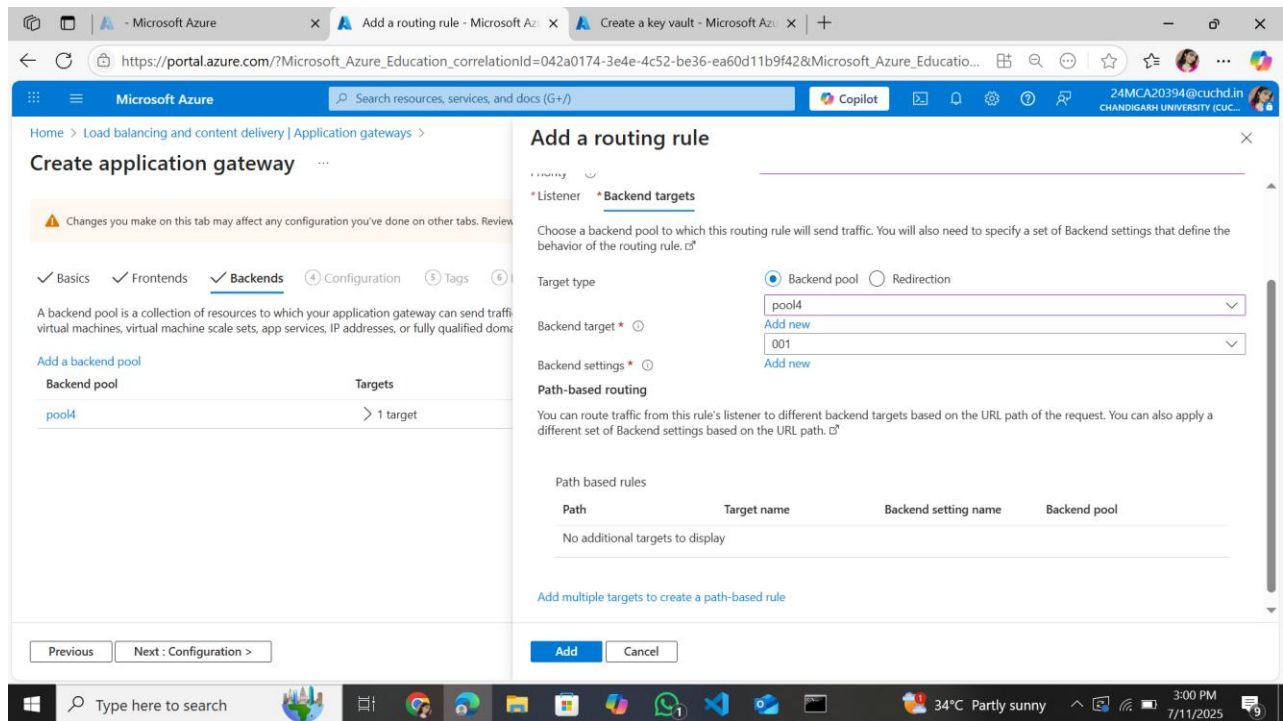
Public IP (create new or use existing)

Optional: Add **Private IP** for internal traffic

Backend Pools:

Add backend VMs/Web Apps in WebSubnet

Use their **IP addresses** or **FQDN**



Routing Rules:

Create **HTTP Listener**

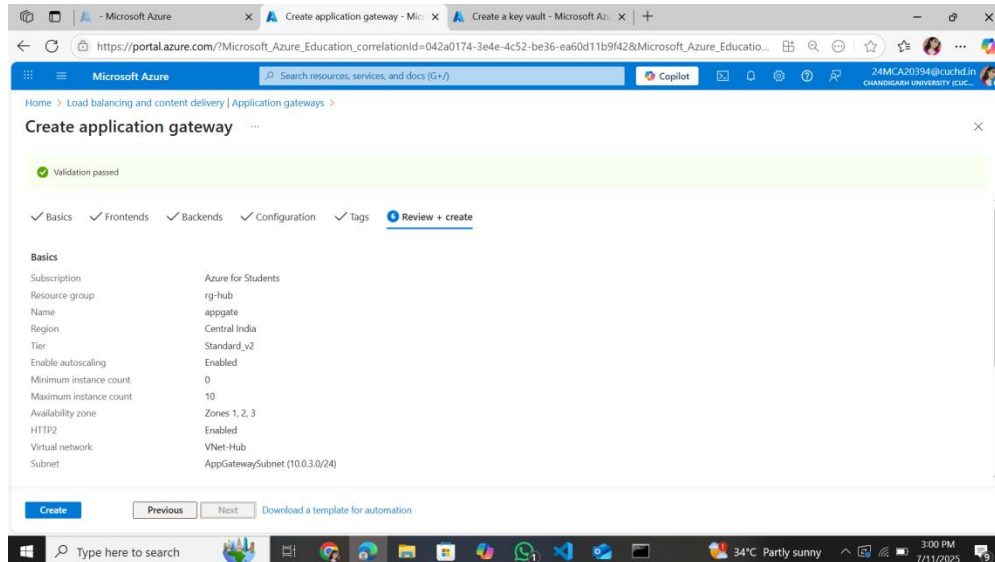
Add **Rules** to forward based on path (e.g., /api, /web)

Health Probes: Configure for your backend services (HTTP/S)

Enable SSL Offloading (Optional):

Upload certificate if HTTPS listener is used

Review + Create the Application Gateway



THEN AFTER

Step-by-Step: Create Site-to-Site VPN Connection in Azure

Go to the Virtual Network Gateway

1. In the Azure portal, search for "**Virtual network gateway**"
2. Select your gateway: vnet-gateway-hub

Create VPN Connection

In the left menu, click **Connections** > **+ Add**

Fill in the fields:

Name: conn-hub-to-onprem

Connection type: Site-to-site (IPsec)

Virtual network gateway: Auto-selected (vnet-gateway-hub)

Local network gateway: Choose lng-onprem (created earlier)

Shared key (PSK): Enter a strong password (same on both ends)

IKE Protocol: IKEv2 (recommended)

Click **OK / Create**

The screenshot shows the 'Create connection' page in the Microsoft Azure portal. The page is titled 'Create connection' and has tabs for 'Basics', 'Settings', 'Tags', and 'Review + create'. The 'Basics' tab is selected. The page contains the following fields and options:

- Project details:**
 - Subscription:** Azure for Students
 - Resource group:** rg-hub
- Instance details:**
 - Connection type:** Site-to-site (IPsec)
 - Name:** hubtoonprem
 - Region:** Central India

At the bottom of the page, there are buttons for 'Review + create', 'Previous', 'Next: Settings >', and 'Download a template for automation'. A 'Give feedback' link is also present.

Microsoft Azure portal interface showing the "Create connection" wizard for a Virtual network gateway. The wizard is in the "Settings" tab.

Virtual network gateway
To use a virtual network with a connection, it must be associated to a virtual network gateway.

Virtual network gateway *

Local network gateway *

Authentication Method ☒ Shared Key(PSK) ☐ Key Vault Certificate (Preview)

Shared Key(PSK) *

IKE Protocol ☐ IKEv1 ☒ IKEv2

Use Azure Private IP Address ☐

Enable BGP ☐

IPsec / IKE policy

Use policy based traffic selector

[Review + create](#) [Previous](#) [Next: Tags >](#) [Download a template for automation](#) [Give feedback](#)

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Enable BGP ☐

IPsec / IKE policy

Use policy based traffic selector

[Review + create](#) [Previous](#) [Next: Tags >](#) [Download a template for automation](#) [Give feedback](#)

Microsoft Azure portal interface showing the "Create connection" page for a Virtual network gateway. The page is divided into tabs: Basics, Settings, Tags, and Review + create. The Settings tab is active, showing configuration options for the connection.

Virtual network gateway
To use a virtual network with a connection, it must be associated to a virtual network gateway.

Virtual network gateway *

Local network gateway *

Authentication Method ☒ Shared Key(PSK) ☐ Key Vault Certificate (Preview)

Shared Key(PSK) *

IKE Protocol ☐ IKEv1 ☒ IKEv2

Use Azure Private IP Address ☐

Enable BGP ☐

IPsec / IKE policy ☒ Default ☐ Custom

Use policy based traffic selector ☐ Enable ☒ Disable

Buttons: Review + create, Previous, Next: Tags >, Download a template for automation, Give feedback

Save your password?
Your password will autofill the next time and will be saved to your Microsoft account

Username:

Password:

Buttons: Save, Not now

Microsoft Azure portal interface showing the "Create connection" page for a Virtual network gateway. The page is divided into tabs: Basics, Settings, Tags, and Review + create. The Review + create tab is active, showing a summary of the configuration.

Validation passed

Basics

Subscription	Azure for Students
Resource Group	onpremrng
Region	Central India
Connection type	Site-to-site (IPsec)
Connection name	cn1

Settings

Virtual network gateway	Onpremgateway
Local network gateway	onPremLNG
IKE Protocol	IKEv2
IPsec / IKE policy	Default
Use policy based traffic selector	Disable

Buttons: Create, Previous, Next, Download a template for automation, Give feedback

Create a Virtual Machine in Azure

The screenshot shows the 'Create a virtual machine' wizard in the Microsoft Azure portal, specifically the 'Basics' tab. The page is titled 'Create a virtual machine' and includes a breadcrumb trail: 'Home > Compute infrastructure > Virtual machines >'. Below the title, there are three help links: '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 'Basics' tab is selected, and the page content includes a description of creating a VM, project details (Subscription, Resource group), and instance details (Virtual machine name, Region). The 'Estimated monthly costs' panel on the right shows a total cost of \$62.34.

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 *

[< Previous](#) [Next > Disks](#) [Review + create](#) [Give feedback](#)

Estimated monthly costs

Costs indicated here are estimates only. Pricing may vary depending on your Microsoft agreement, date of purchase, subscription type, usage costs, licensing and currency exchange rates. Total costs may include other resource costs, licensing and subscription implications. This feature may have limited or restricted functionality, but is made available on a preview basis for evaluation and feedback.

[Give feedback about your estimate experience](#)

Basics	\$42.63
Virtual machine	\$42.63
Image Windows Server 2019 Datacenter	\$6.72
Size	\$35.92
Estimated monthly cost	\$62.34

The screenshot shows the 'Create a virtual machine' wizard in the Microsoft Azure portal, specifically the 'Disks' tab. The page is titled 'Create a virtual machine' and includes a breadcrumb trail: 'Home > Compute infrastructure > Virtual machines >'. Below the title, there are three help links: '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 'Disks' tab is selected, and the page content includes a description of creating a VM, project details (Subscription, Resource group), and instance details (Virtual machine name, Region). The 'Estimated monthly costs' panel on the right shows a total cost of \$163.52.

Disks Basics 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 *

[< Previous](#) [Next > Disks](#) [Review + create](#) [Give feedback](#)

Estimated monthly costs

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[Give feedback about your estimate experience](#)

Basics	\$143.81
Virtual machine	\$143.81
Image Windows Server 2019 Datacenter	\$67.16
Size	\$76.65
Estimated monthly cost	\$163.52

Microsoft Azure portal interface for creating a virtual machine. The page title is "Create a virtual machine". The breadcrumb navigation shows "Home > Compute infrastructure | Virtual machines >".

Help buttons: "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".

Configuration options:

- Image: Windows Server 2019 Datacenter - x64 Gen2
- VM architecture: x64 (selected), Arm64 (not supported with the selected image)
- Run with Azure Spot discount: ☐
- Size: Standard_D2s_v3 - 2 vcpus, 8 GiB memory (\$143.81/month)
- Enable Hibernation: ☐ (Hibernation 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: new-user2
 - Password: [masked]

Buttons: "< Previous", "Next: Disks >", "Review + create", "Give feedback".

Estimated monthly costs (Basics):

Category	Cost
Virtual machine	\$143.81
Image	\$67.16
Windows Server 2019 Datacenter	\$76.65
Estimated monthly cost	\$163.52

Microsoft Azure portal interface for creating a virtual machine. The page title is "Create a virtual machine". The breadcrumb navigation shows "Home > Compute infrastructure | Virtual machines >".

Help buttons: "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".

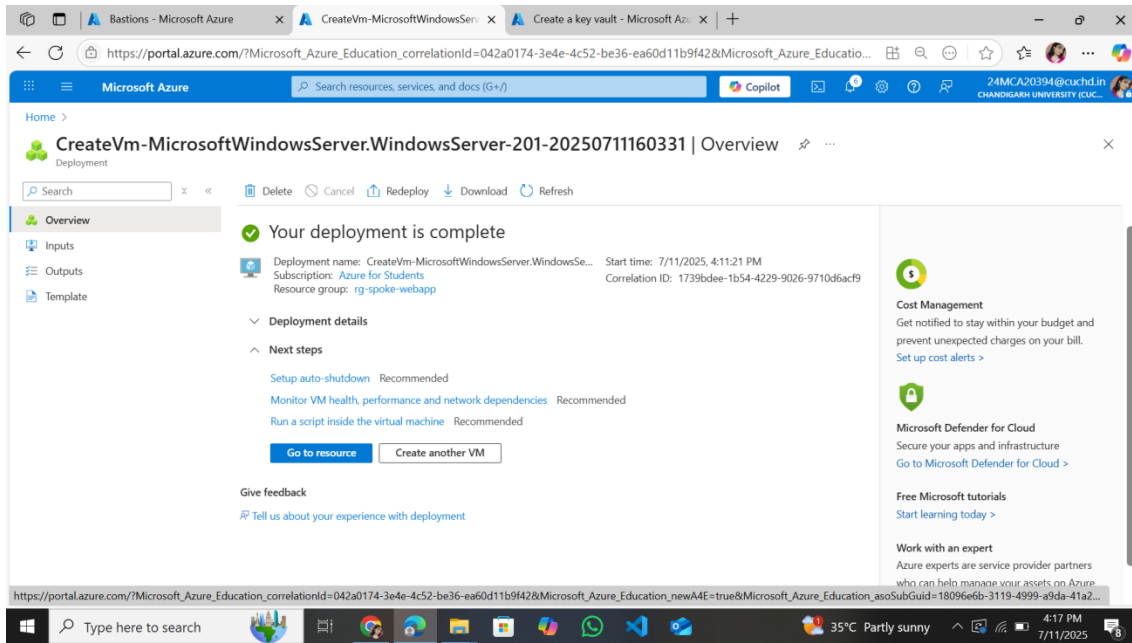
Configuration options:

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- VM architecture: x64 (selected), Arm64 (not supported with the selected image)
- Run with Azure Spot discount: ☐
- Size: Standard_D2s_v3 - 2 vcpus, 8 GiB memory (\$143.81/month)
- Enable Hibernation: ☐ (Hibernation 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: vm2
 - Password: [masked]

Buttons: "< Previous", "Next: Disks >", "Review + create", "Give feedback".

Estimated monthly costs (Basics):

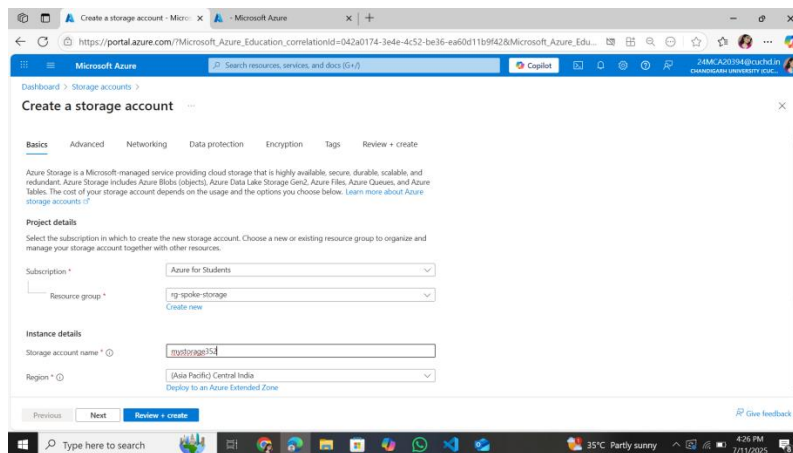
Category	Cost
Virtual machine	\$143.81
Image	\$67.16
Windows Server 2019 Datacenter	\$76.65
Estimated monthly cost	\$163.52



Create Storage Account with No Public Access

Go to Storage Accounts

1. In Azure Portal, search for **“Storage accounts”**
2. Click + **Create**



Basics Tab

Field

Subscription

Resource Group

Storage account name

Region

Performance

Redundancy

Value

Azure for Students

rg-spoke-storage

storagespokedata (must be globally unique)

Central India

Standard

LRS (Locally-redundant storage)

Create a storage account - Micro x - Microsoft Azure x +

https://portal.azure.com/?Microsoft_Azure_Education_correlationId=042a0174-3e4e-4c52-be36-ea60d11b9f42&Microsoft_Azure_Edu...

Microsoft Azure Search resources, services, and docs (G+/) Copilot 24MCA20394@cuchd.in CHANDIGARH UNIVERSITY (CUC...

Dashboard > Storage accounts >

Create a storage account

manage your storage account, together with other resources.

Subscription * Azure for Students

Resource group * rg-spoke-storage [Create new](#)

Instance details

Storage account name *

Region * [Deploy to an Azure Extended Zone](#)

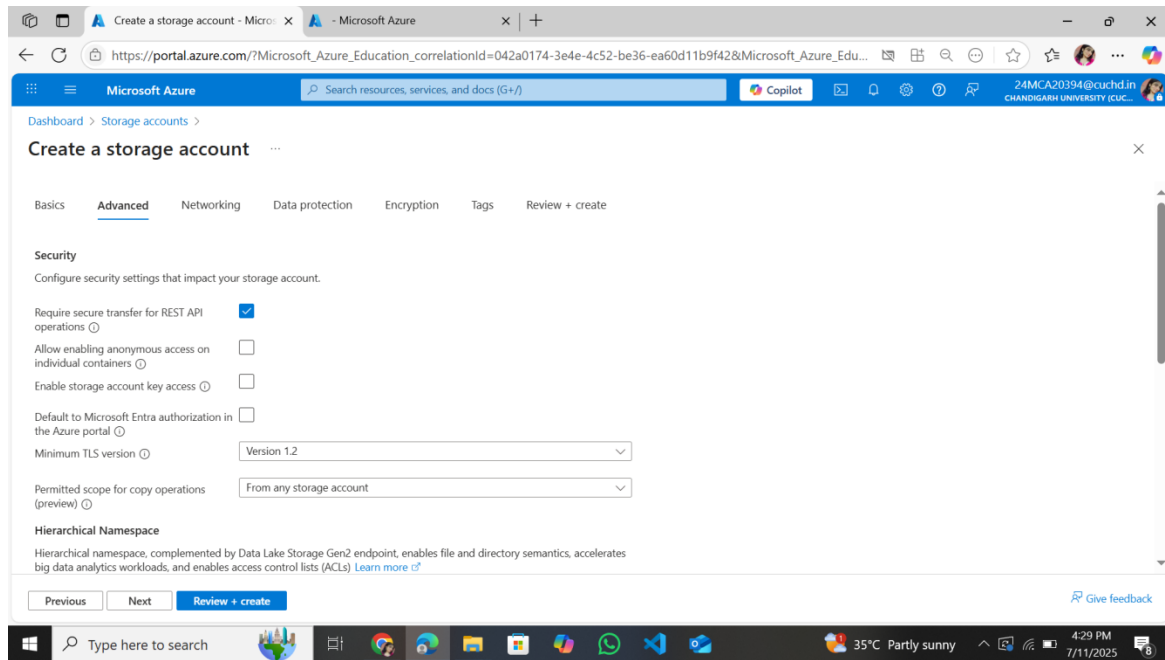
Primary service

Performance * ☒ Standard: Recommended for most scenarios (general-purpose v2 account)
☐ Premium: Recommended for scenarios that require low latency.

Redundancy *

[Previous](#) [Next](#) [Review + create](#) [Give feedback](#)

Type here to search 35°C Partly sunny 4:29 PM 7/11/2025



Advanced Tab

Option

Public access

Secure transfer required

Access tier

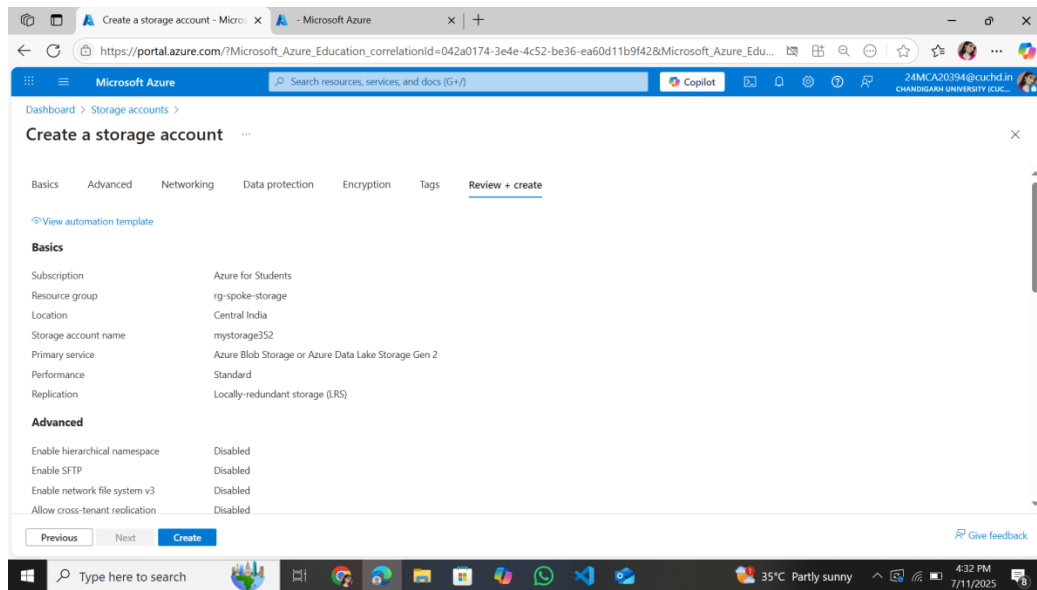
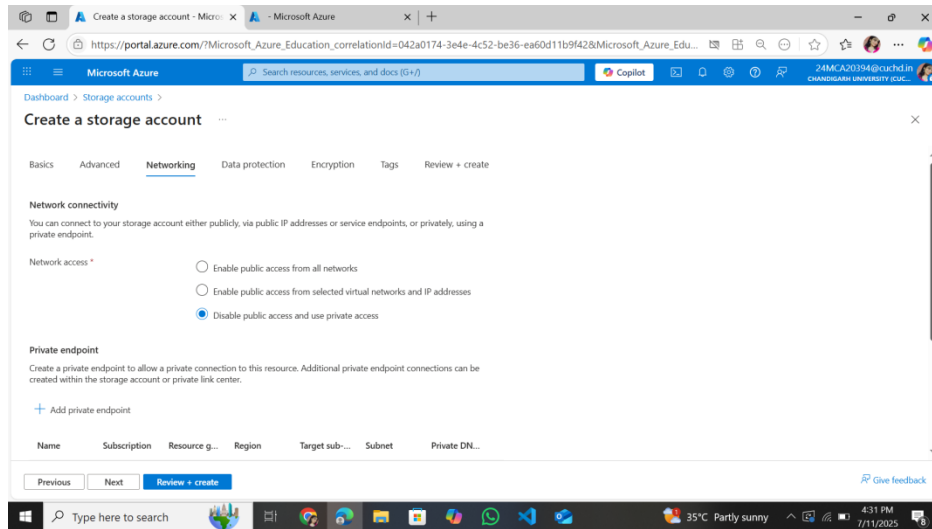
Click **Next: Networking**

Value

Disabled ✓

Enabled ✓

Hot (default)



Networking Tab

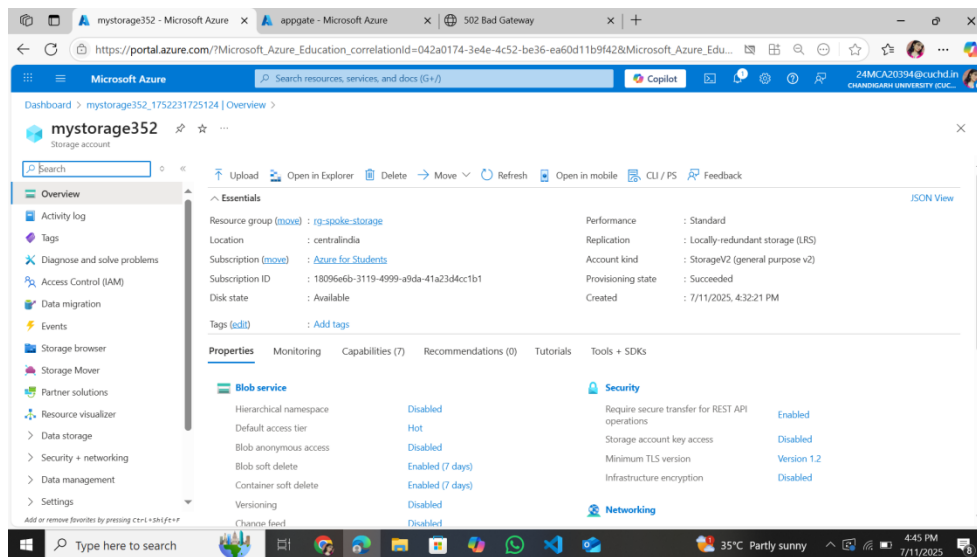
Field	Value
Connectivity method	Private endpoint only ✓
Routing preference	Microsoft network routing
TLS version	1.2 or above

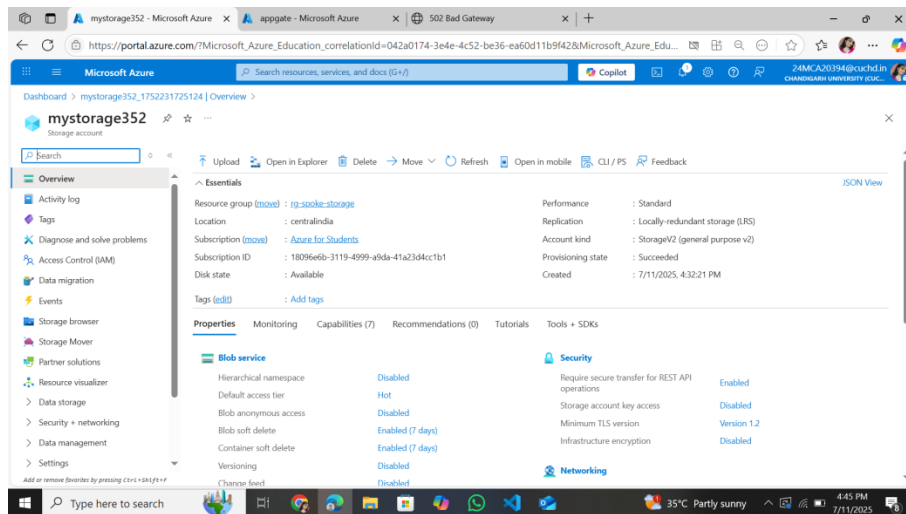
Review + Create

Click **Review + Create**

Azure will validate the settings

Click **Create**





FINAL RESULT

