MICROSOFT AZURE

NAME : K ASWATHI

DEPARTMENT: BTECH COMPUTER SCIENCE AND BUSINESS SYSTEMS

GITHUB LINK: https://github.com/Shakthii-S/Microsoft-Azure.git

REQUESTING A CLOUD SHELL SUCCEEDED.

CONNECTING TERMINAL...

Welcome to Azure Cloud Shell

- az vm create --resource-group "learn-3ae47ec3-0cc8-46f5-ae5c-dbb634c473d3" --name my-vm --public-ip-sku Standard --image Ubuntu2204 --admin-username azureuser --generate-ssh-keys

- az vm extension set --resource-group "learn-3ae47ec3-0cc8-46f5-ae5c-dbb634c473d3" --vm-name my-vm --name customScript --publisher Microsoft.Azure.Extensions --version 2.1 --settings '{"fileUris":["https://raw.githubusercontent.com/MicrosoftDocs/mslearn-welcome-to-azure/master/configure-nginx.sh"]}' --protected-settings '{"commandToExecute": "./configure-nginx.sh"}'

- sudo apt-get update
- ssh azureuser@ 98.70.112.166
- echo "sudo apt-get update -y
- sudo apt-get install nginx -y

- sudo systemctl start nginx
- sudo systemctl enable nginx" > setup_nginx.sh
- chmod +x setup_nginx.sh
- ./setup_nginx.sh

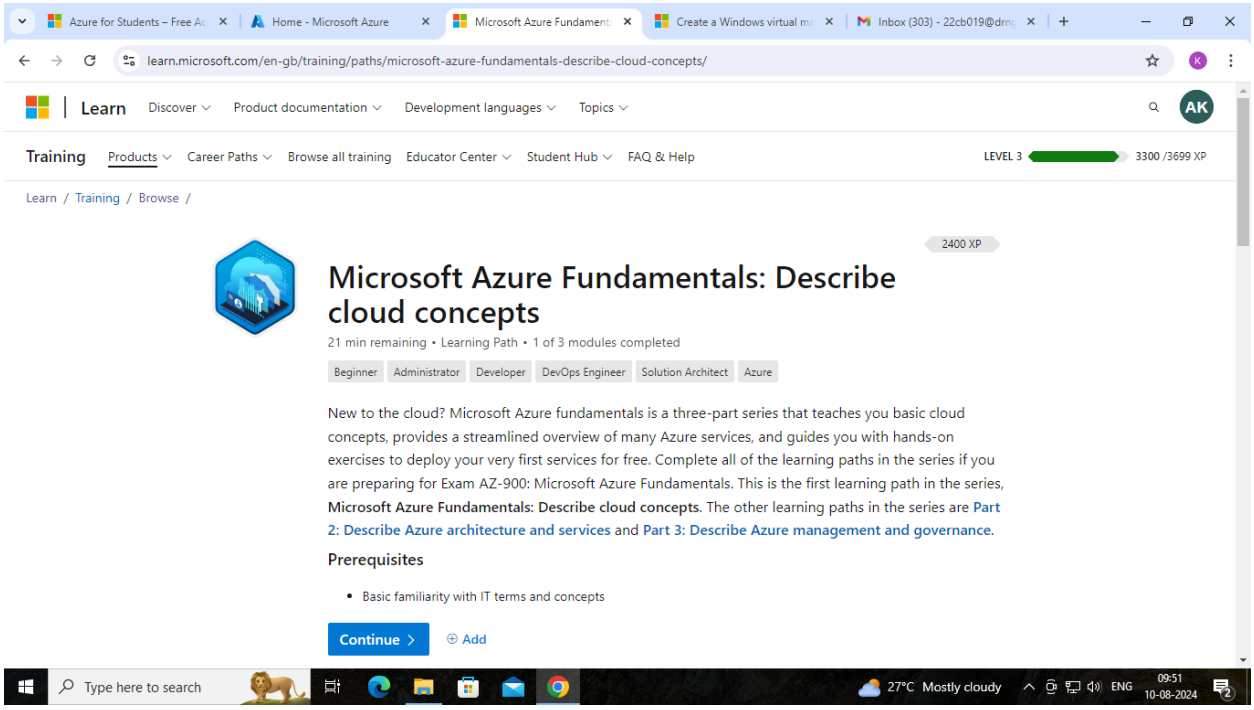
- echo "<html><body><h2>Welcome to Azure! My name is $(hostname).</h2></body></html>" | sudo tee -a /var/www/html/index.html

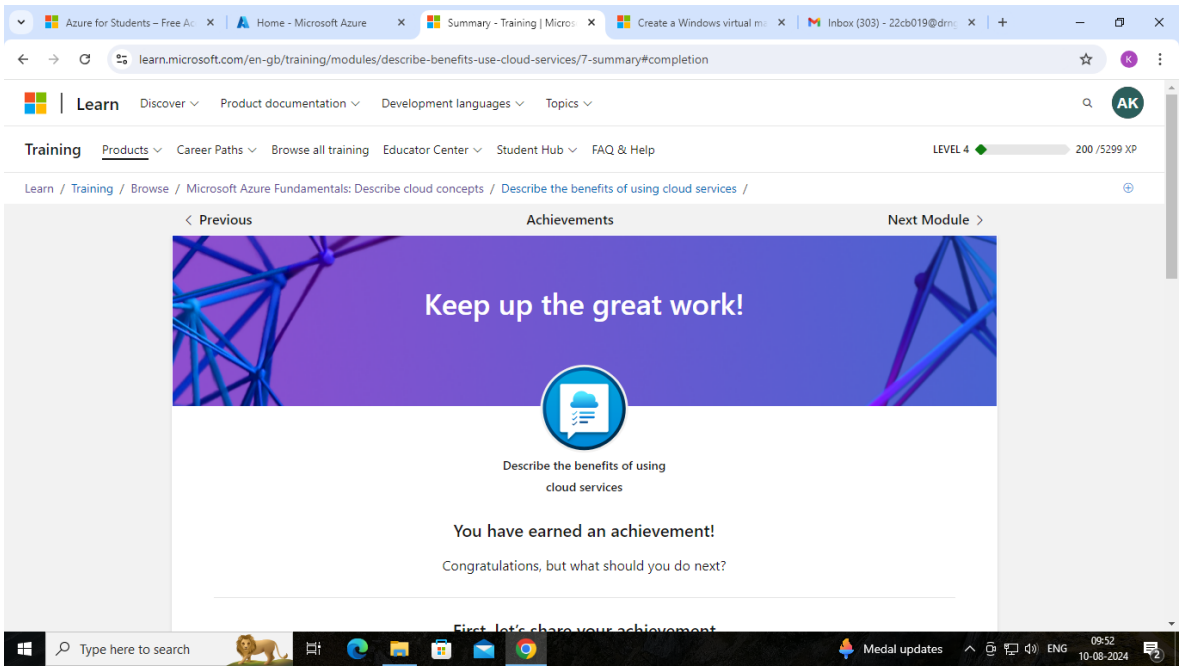
- sudo systemctl status nginx

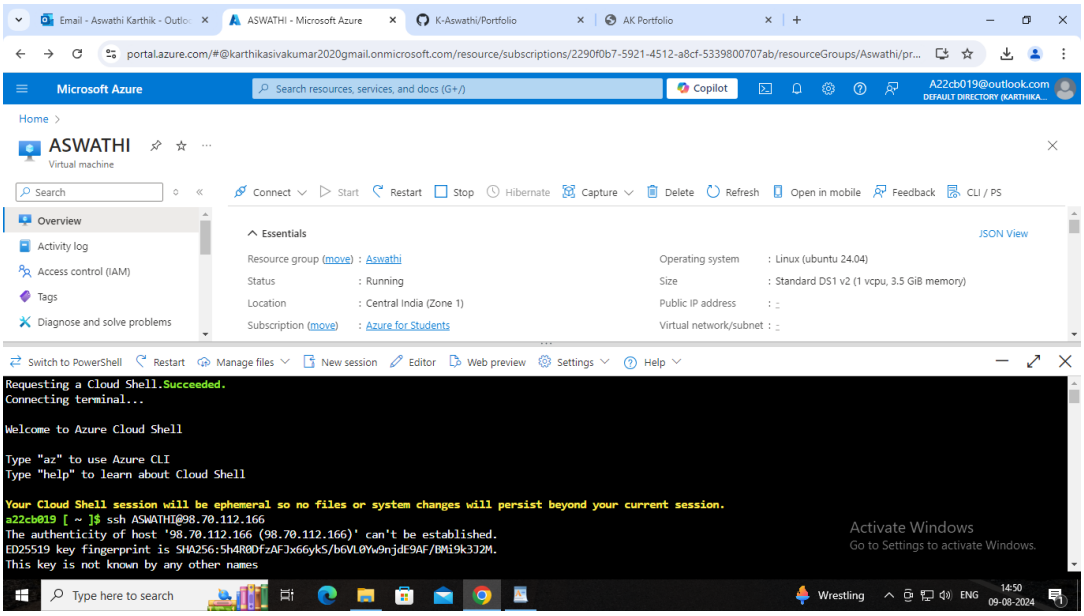
- az vm open-port --resource-group " learn-3ae47ec3-0cc8-46f5-ae5c-dbb634c473d3 " --name my-vm --port 80

- az vm list-ip-addresses --resource-group " learn-3ae47ec3-0cc8-46f5-ae5c-dbb634c473d3 " --name my-vm --output table
- ssh azureuser@ 98.70.112.166
- sudo apt-get update
- git clone https://github.com/Shakthii-S/Microsoft-Azure.git
- sudo cp -r html/* /var/www/html/
- sudo chown -R www-data:www-data /var/www/html
- sudo chmod -R 755 /var/www/html
- sudo systemctl restart nginx

INTODUCTION TO MICROSOFT AZURE






Email - Aswathi Karthik - Outlo
ASWATHI - Microsoft Azure
K-Aswathi/Portfolio
AK Portfolio
portal.azure.com/#@karthikasivakumar2020gmail.onmicrosoft.com/resource/subscriptions/2290f0b7-5921-4512-a8cf-5339800707ab/resourceGroups/Aswathi/pr...
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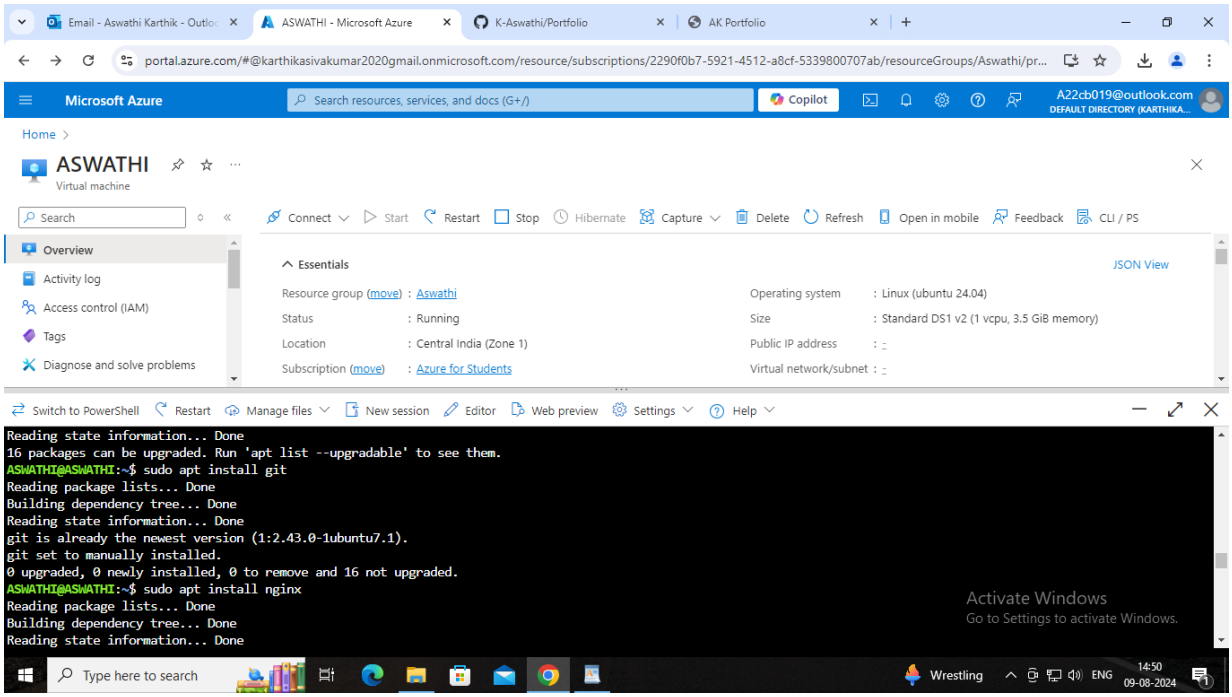
Copilot
A22cb019@outlook.com
DEFAULT DIRECTORY (KARTHIKA...
Home
ASWATHI
Virtual machine
Search
Connect
Start
Restart
Stop
Hibernate
Capture
Delete
Refresh
Open in mobile
Feedback
CLI / PS
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Essentials
JSON View
Resource group (move) : Aswathi
Status : Running
Location : Central India (Zone 1)
Subscription (move) : Azure for Students
Operating system : Linux (ubuntu 24.04)
Size : Standard DS1 v2 (1 vcpu, 3.5 GiB memory)
Public IP address : -
Virtual network/subnet : -
Switch to PowerShell
Restart
Manage files
New session
Editor
Web preview
Settings
Help
Requesting a Cloud Shell.Succeeded.
Connecting terminal...
Welcome to Azure Cloud Shell
Type "az" to use Azure CLI
Type "help" to learn about Cloud Shell
Your Cloud Shell session will be ephemeral so no files or system changes will persist beyond your current session.
a22cb019 [~]$ ssh ASWATHI@98.70.112.166
The authenticity of host '98.70.112.166 (98.70.112.166)' can't be established.
ED25519 key fingerprint is SHA256:5h4R0DfzAFJx66ykS/b6VL0Yw9njdE9AF/BMi9k3J2M.
This key is not known by any other names
Activate Windows
Go to Settings to activate Windows.
Type here to search
Wrestling
ENG
14:50
09-08-2024


Email - Aswathi Karthik - Outlo
ASWATHI - Microsoft Azure
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portal.azure.com/#@karthikasivakumar2020gmail.onmicrosoft.com/resource/subscriptions/2290f0b7-5921-4512-a8cf-5339800707ab/resourceGroups/Aswathi/pr...
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Virtual network/subnet : -
Switch to PowerShell
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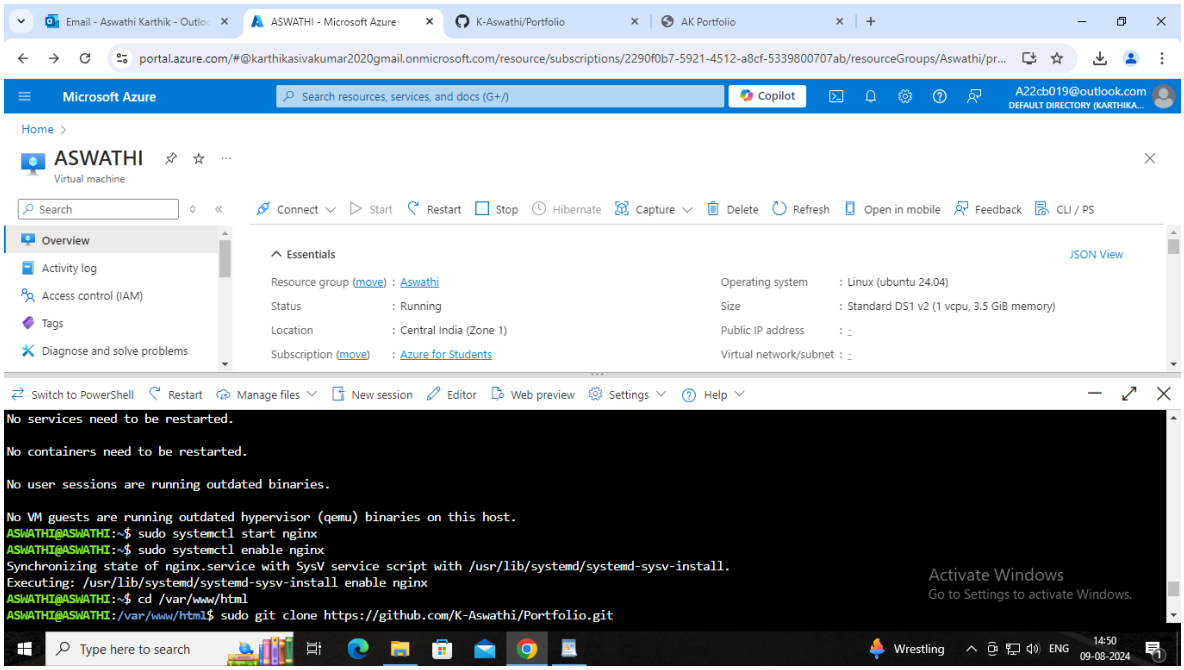
New session
Editor
Web preview
Settings
Help
Reading state information... Done
16 packages can be upgraded. Run 'apt list --upgradable' to see them.
ASWATHI@ASWATHI:~$ sudo apt install git
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
git is already the newest version (1:2.43.0-1ubuntu7.1).
git set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 16 not upgraded.
ASWATHI@ASWATHI:~$ sudo apt install nginx
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Activate Windows
Go to Settings to activate Windows.
Type here to search
Wrestling
ENG
14:50
09-08-2024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K-Aswathi/Portfolio
AK Portfolio
portal.azure.com/#@karthikasivakumar2020gmail.onmicrosoft.com/resource/subscriptions/2290f0b7-5921-4512-a8cf-5339800707ab/resourceGroups/Aswathi/pr...
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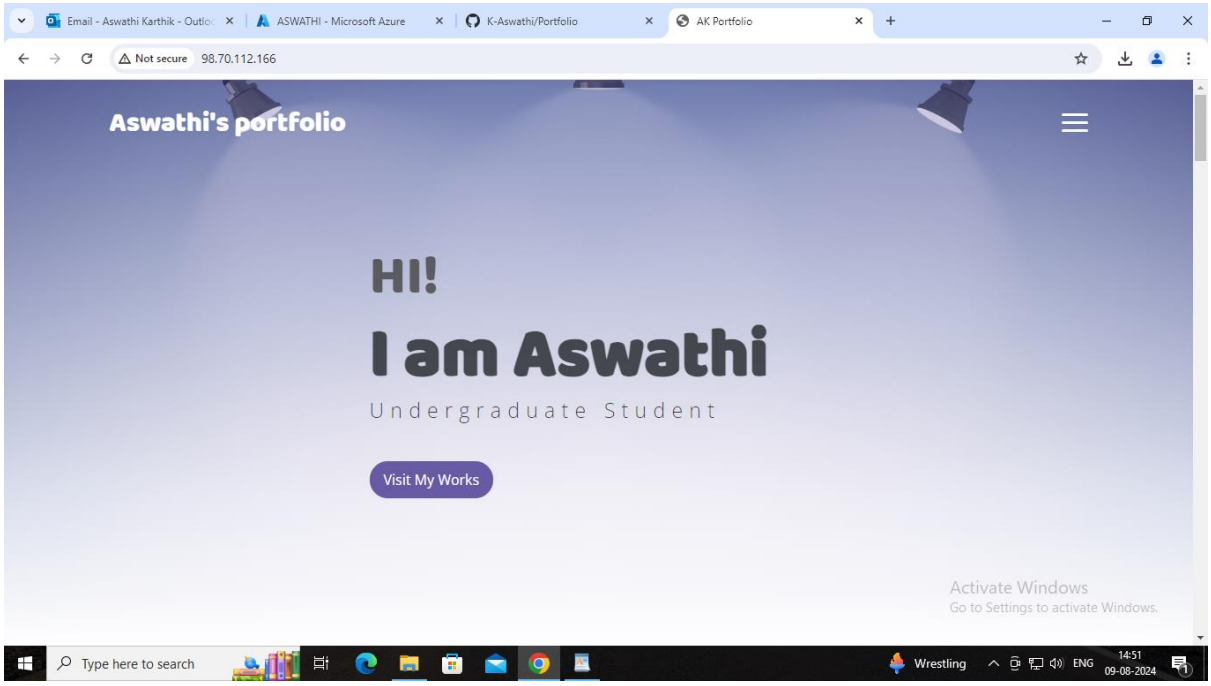
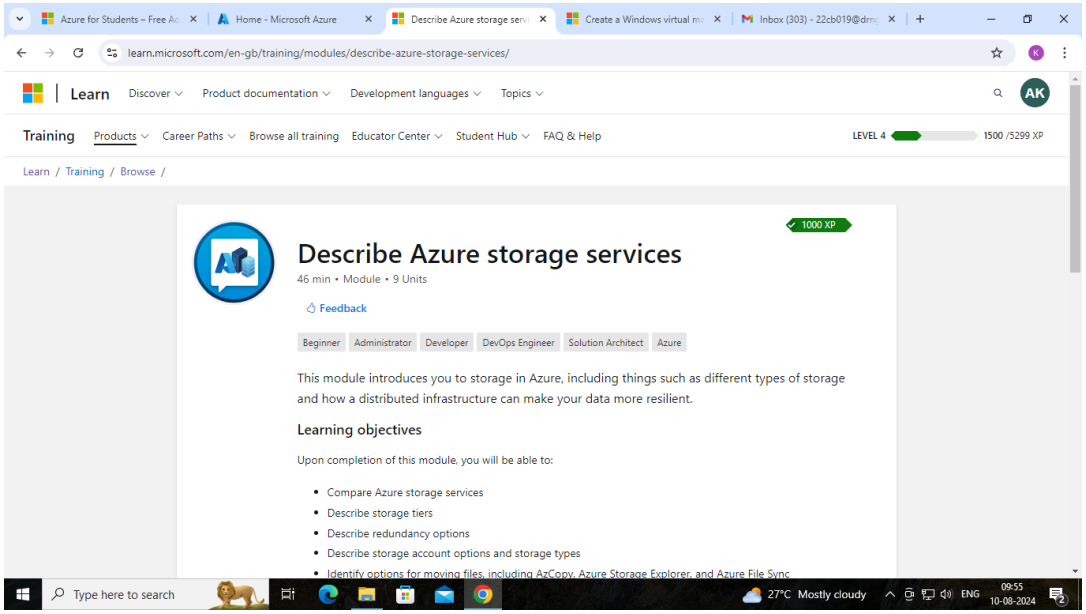
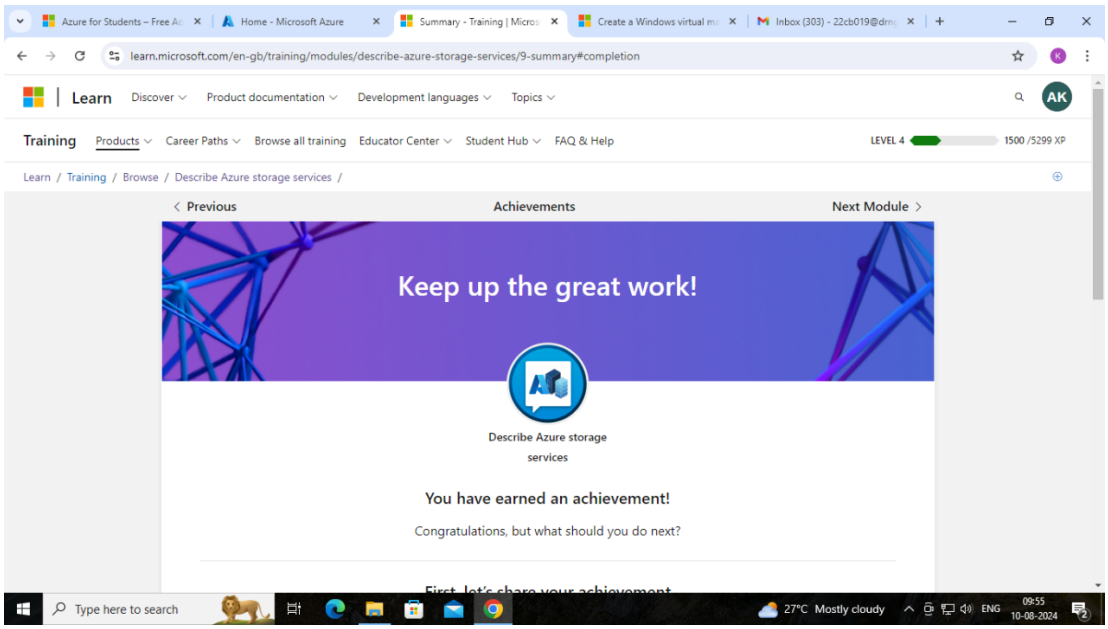
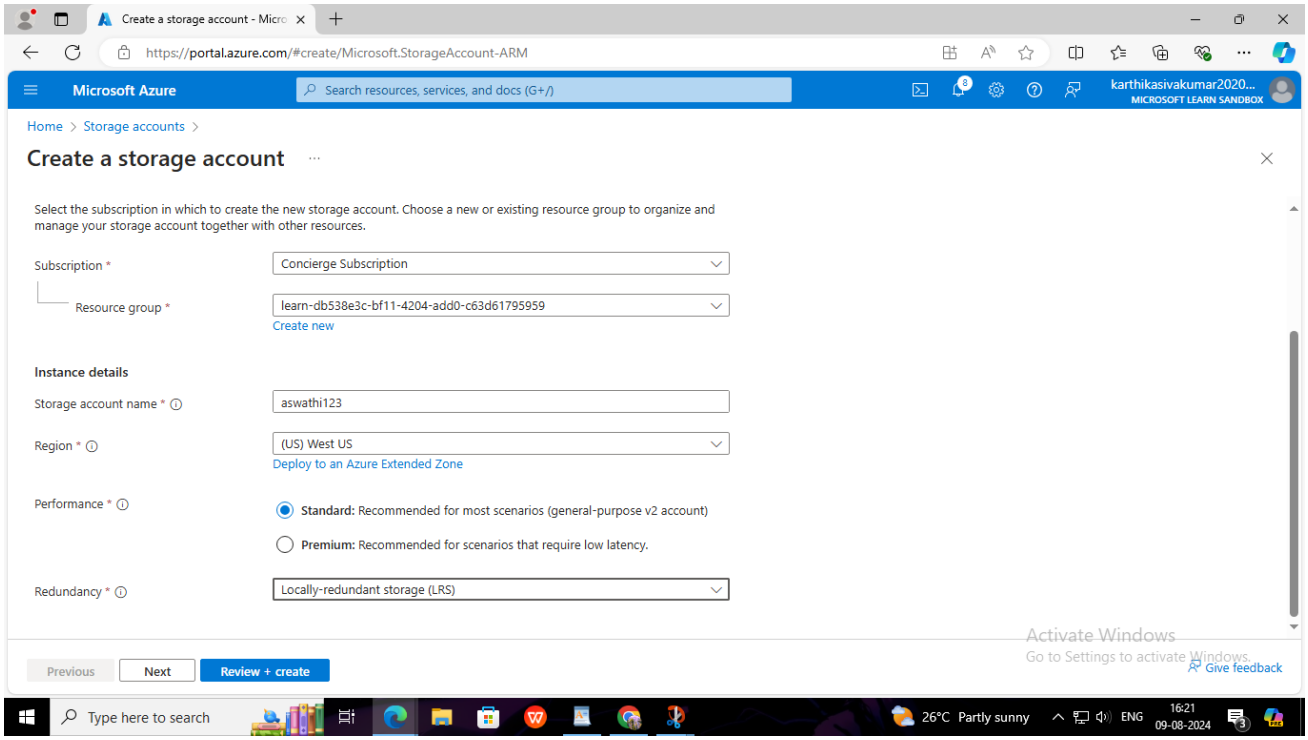
Size : Standard DS1 v2 (1 vcpu, 3.5 GiB memory)
Public IP address : -
Virtual network/subnet : -
Switch to PowerShell
Restart
Manage files
New session
Editor
Web preview
Settings
Help
No services need to be restarted.
No containers need to be restarted.
No user sessions are running outdated binaries.
No VM guests are running outdated hypervisor (qemu) binaries on this host.
ASWATHI@ASWATHI:~$ sudo systemctl start nginx
ASWATHI@ASWATHI:~$ sudo systemctl enable nginx
Synchronizing state of nginx.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable nginx
ASWATHI@ASWATHI:~$ cd /var/www/html
ASWATHI@ASWATHI:/var/www/html$ sudo git clone https://github.com/K-Aswathi/Portfolio.git
Activate Windows
Go to Settings to activate Windows.
Type here to search
Wrestling
ENG
14:50
09-08-2024


Email - Aswathi Karthik - Outlo
ASWATHI - Microsoft Azure
K-Aswathi/Portfolio
AK Portfolio
Not secure
98.70.112.166
Aswathi's portfolio
HI!
I am Aswathi
Undergraduate Student
Visit My Works
Activate Windows
Go to Settings to activate Windows.
Type here to search
Wrestling
ENG
14:51
09-08-2024

AZURE STORAGE SERVICES:






Create a storage account - Micro
https://portal.azure.com/#create/Microsoft.StorageAccount-ARM
Microsoft Azure
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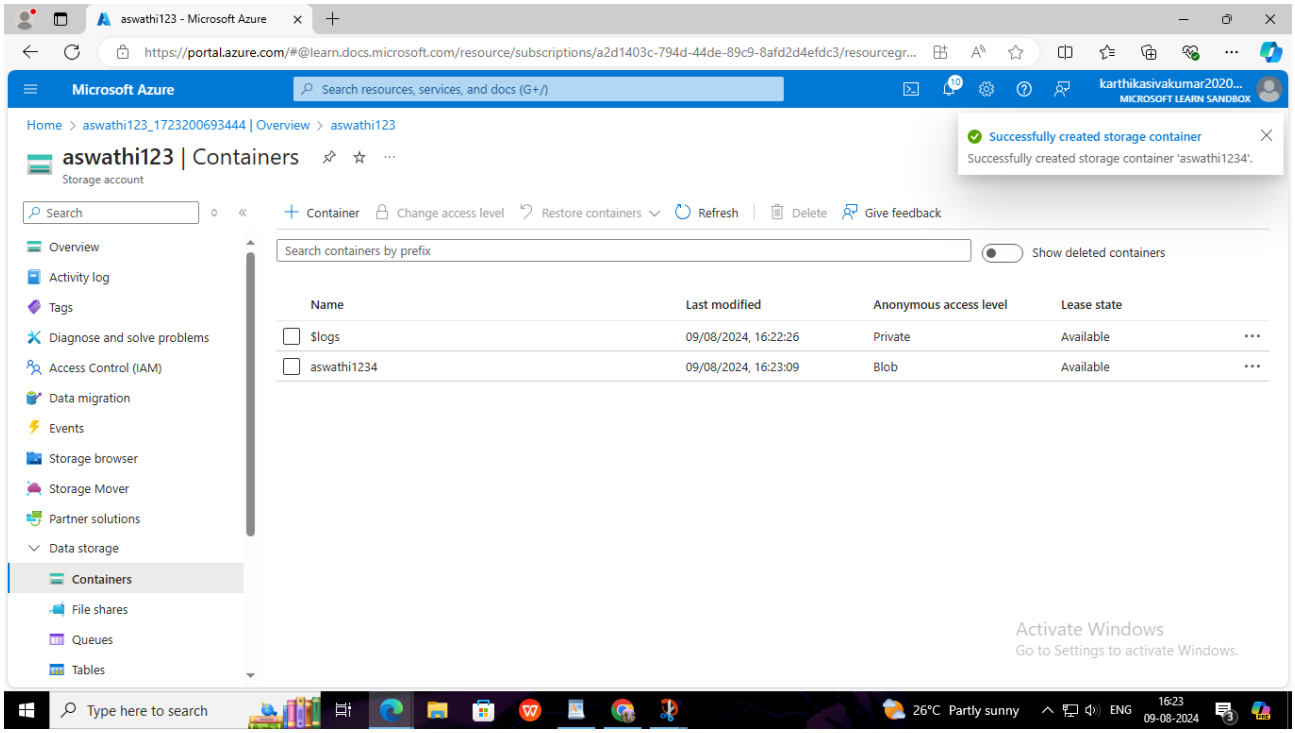
MICROSOFT LEARN SANDBOX
Home > Storage accounts >
Create a storage account
Select the subscription in which to create the new storage account. Choose a new or existing resource group to organize and manage your storage account together with other resources.
Subscription *
Concierge Subscription
Resource group *
learn-db538e3c-bf11-4204-add0-c63d61795959
Create new
Instance details
Storage account name *
aswathi123
Region *
(US) West US
Deploy to an Azure Extended Zone
Performance *
Standard: Recommended for most scenarios (general-purpose v2 account)
Premium: Recommended for scenarios that require low latency.
Redundancy *
Locally-redundant storage (LRS)
Previous
Next
Review + create
Give feedback
Activate Windows
Go to Settings to activate Windows.
Type here to search
26°C Partly sunny
ENG
16:21
09-08-2024


aswathi123 - Microsoft Azure
https://portal.azure.com/#@learn.docs.microsoft.com/resource/subscriptions/a2d1403c-794d-44de-89c9-8afd2d4efdc3/resourcegr...
Microsoft Azure
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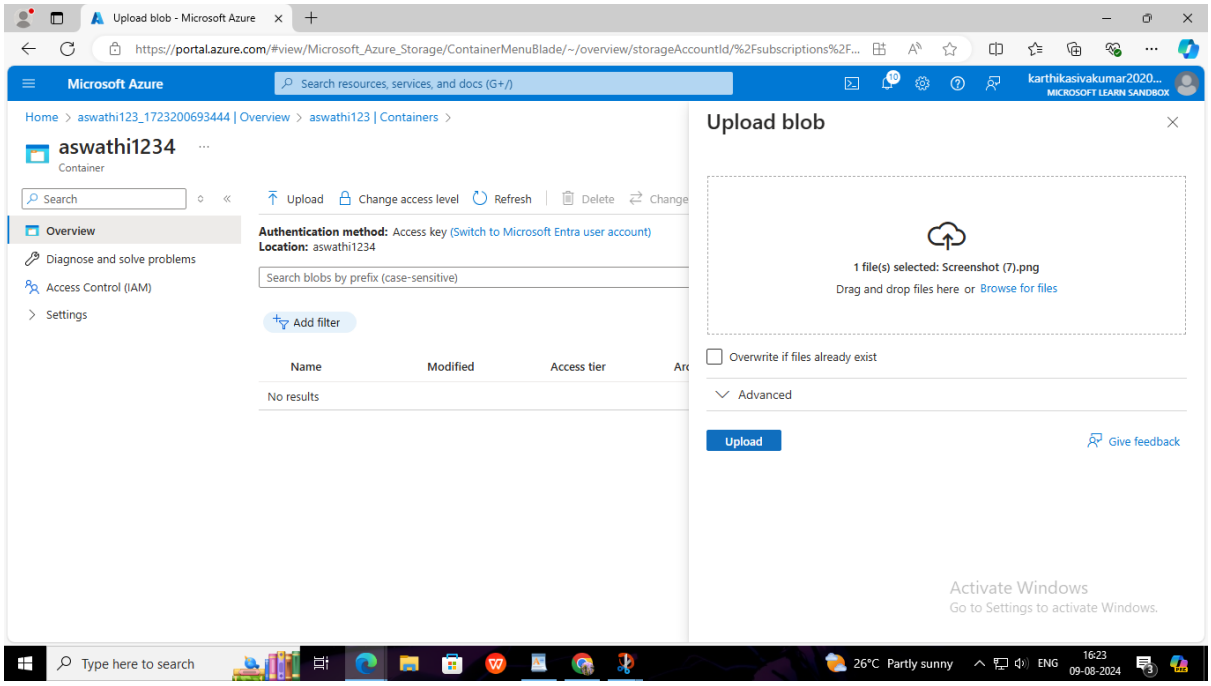
karthikasivakumar2020...
MICROSOFT LEARN SANDBOX
Home > aswathi123_1723200693444 | Overview > aswathi123
aswathi123 | Containers
Storage account
Successfully created storage container
Successfully created storage container 'aswathi1234'.
Search
Container
Change access level
Restore containers
Refresh
Delete
Give feedback
Overview
Activity log
Tags
Diagnose and solve problems
Access Control (IAM)
Data migration
Events
Storage browser
Storage Mover
Partner solutions
Data storage
Containers
File shares
Queues
Tables
Search containers by prefix
Show deleted containers
Name
Last modified
Anonymous access level
Lease state
$logs
09/08/2024, 16:22:26
Private
Available
aswathi1234
09/08/2024, 16:23:09
Blob
Available
Activate Windows
Go to Settings to activate Windows.
Type here to search
26°C Partly sunny
ENG
16:23
09-08-2024


Upload blob - Microsoft Azure
Microsoft Azure
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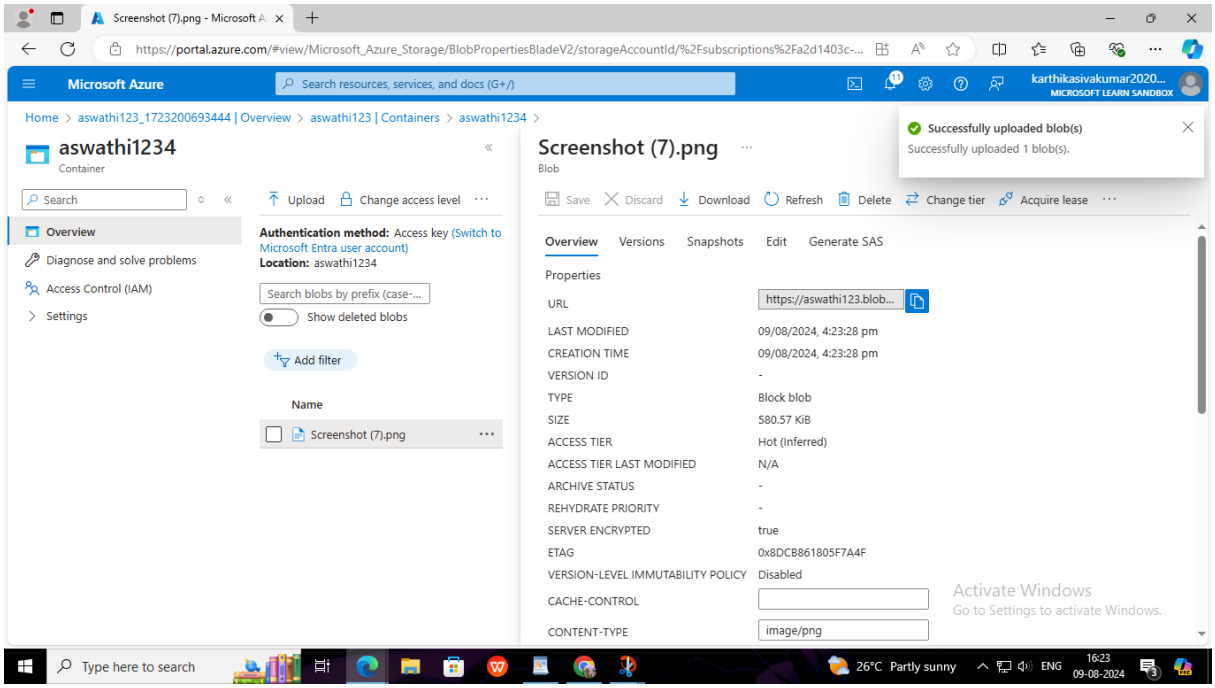
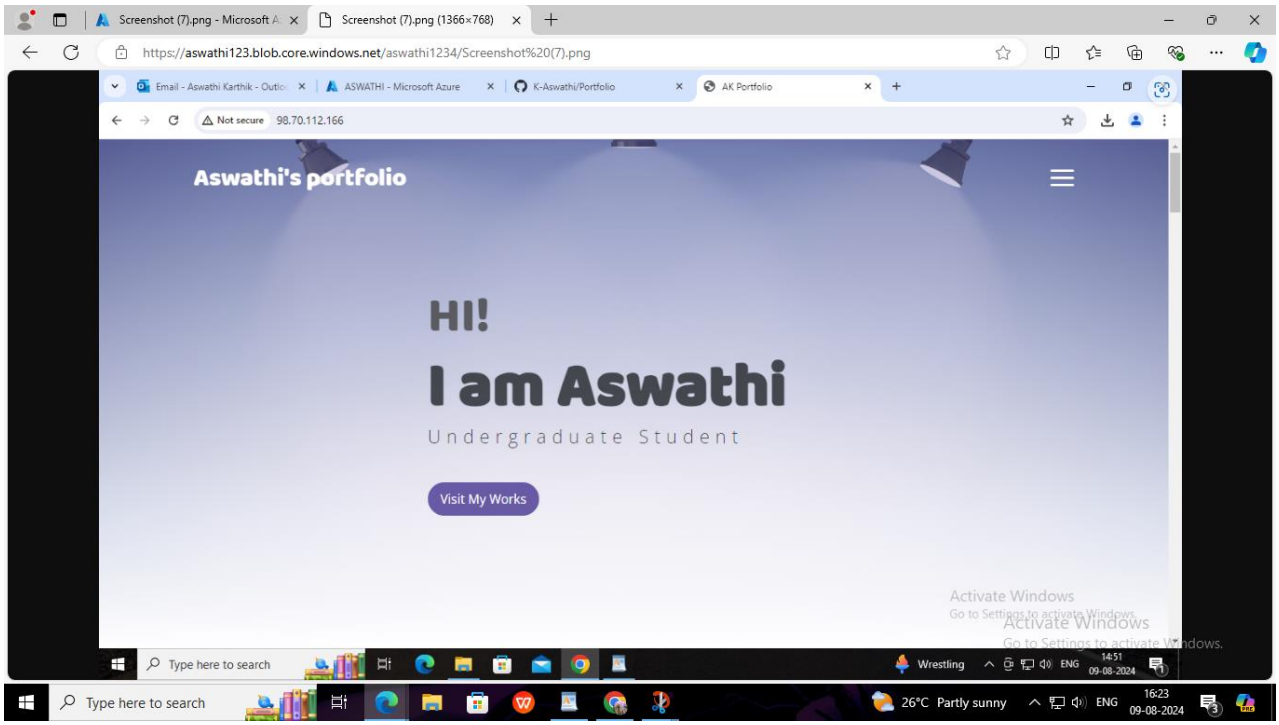
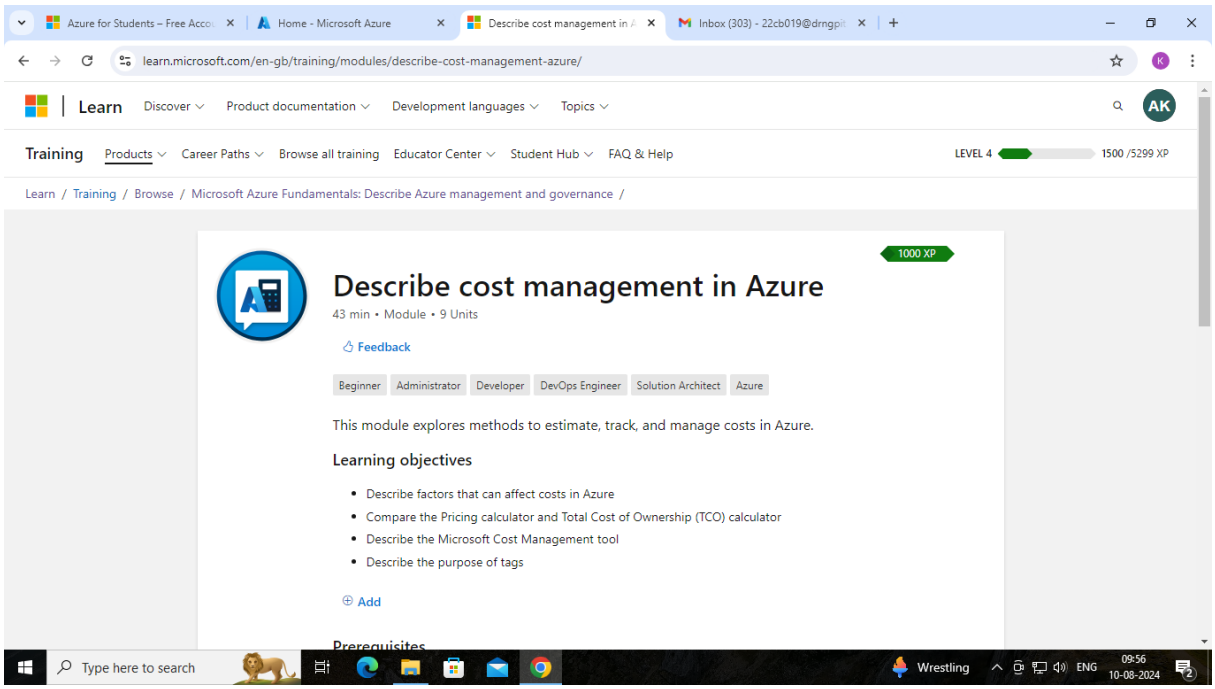
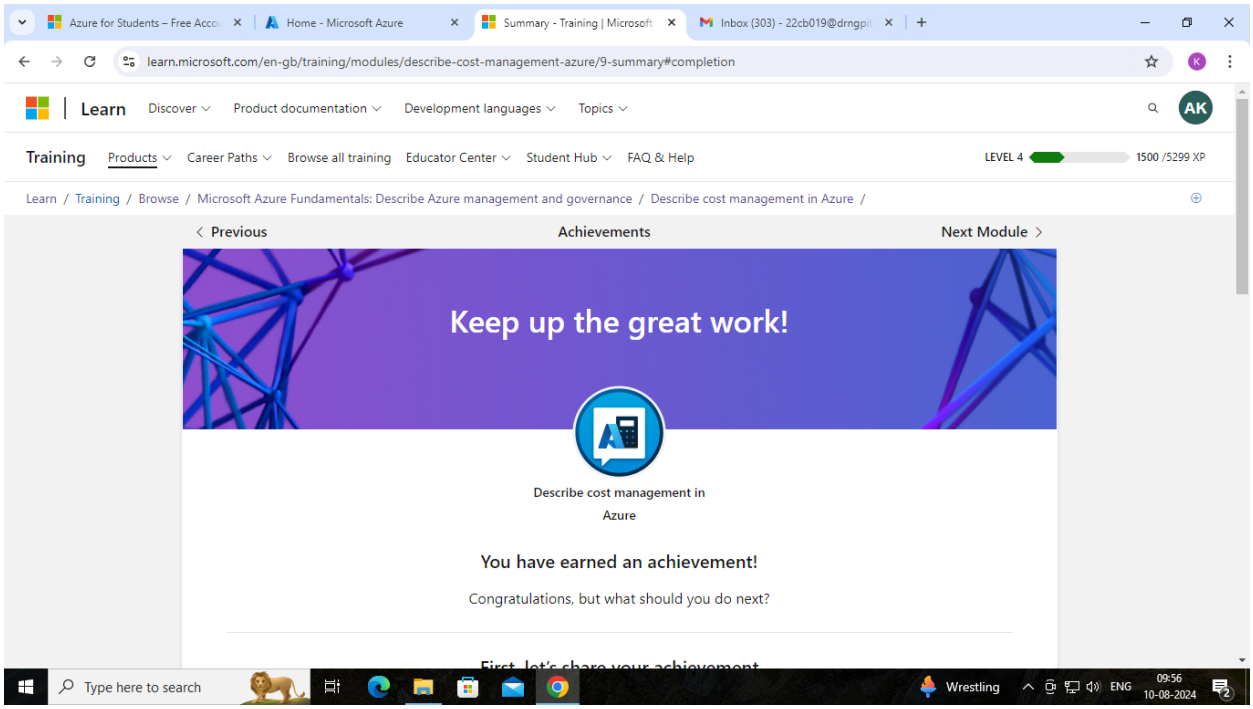
karthikasivakumar2020...
MICROSOFT LEARN SANDBOX
Home > aswathi123_1723200693444 | Overview > aswathi123 | Containers >
aswathi1234
Container
Search
Overview
Diagnose and solve problems
Access Control (IAM)
Settings
Upload
Change access level
Refresh
Delete
Authentication method: Access key (Switch to Microsoft Entra user account)
Location: aswathi1234
Search blobs by prefix (case-sensitive)
Add filter
Name
Modified
Access tier
No results
Upload blob
1 file(s) selected: Screenshot (7).png
Drag and drop files here or Browse for files
Overwrite if files already exist
Advanced
Upload
Give feedback
Activate Windows
Go to Settings to activate Windows.
Type here to search
26°C Partly sunny
ENG
16:23
09-08-2024


Screenshot (7).png - Microsoft A
Microsoft Azure
Search resources, services, and docs (G+/)
karthikasivakumar2020...
MICROSOFT LEARN SANDBOX
Home > aswathi123_1723200693444 | Overview > aswathi123 | Containers > aswathi1234 >
aswathi1234
Container
Search
Overview
Diagnose and solve problems
Access Control (IAM)
Settings
Upload
Change access level
Authentication method: Access key (Switch to Microsoft Entra user account)
Location: aswathi1234
Search blobs by prefix (case-...
Show deleted blobs
Add filter
Name
Screenshot (7).png
Screenshot (7).png
Blob
Save
Discard
Download
Refresh
Delete
Change tier
Acquire lease
Overview
Versions
Snapshots
Edit
Generate SAS
Properties
URL
https://aswathi123.blob...
LAST MODIFIED
09/08/2024, 4:23:28 pm
CREATION TIME
09/08/2024, 4:23:28 pm
VERSION ID
-
TYPE
Block blob
SIZE
580.57 KiB
ACCESS TIER
Hot (Inferred)
ACCESS TIER LAST MODIFIED
N/A
ARCHIVE STATUS
-
REHYDRATE PRIORITY
-
SERVER ENCRYPTED
true
ETAG
0x8DCB861805F7A4F
VERSION-LEVEL IMMUTABILITY POLICY
Disabled
CACHE-CONTROL
CONTENT-TYPE
image/png
Successfully uploaded blob(s)
Successfully uploaded 1 blob(s).
Activate Windows
Go to Settings to activate Windows.
Type here to search
26°C Partly sunny
ENG
16:23
09-08-2024



COST MANAGEMENT IN AZURE:




Azure for Students – Free Acco
Home - Microsoft Azure
Summary - Training | Microsoft
Inbox (303) - 22cb019@drngpi
learn.microsoft.com/en-gb/training/modules/describe-cost-management-azure/9-summary#completion
Learn
Discover
Product documentation
Development languages
Topics
AK
Training
Products
Career Paths
Browse all training
Educator Center
Student Hub
FAQ & Help
LEVEL 4
1500 /5299 XP
Learn / Training / Browse / Microsoft Azure Fundamentals: Describe Azure management and governance / Describe cost management in Azure /
Previous
Achievements
Next Module
Keep up the great work!
Describe cost management in Azure
You have earned an achievement!
Congratulations, but what should you do next?
Type here to search
Wrestling
ENG
09:56
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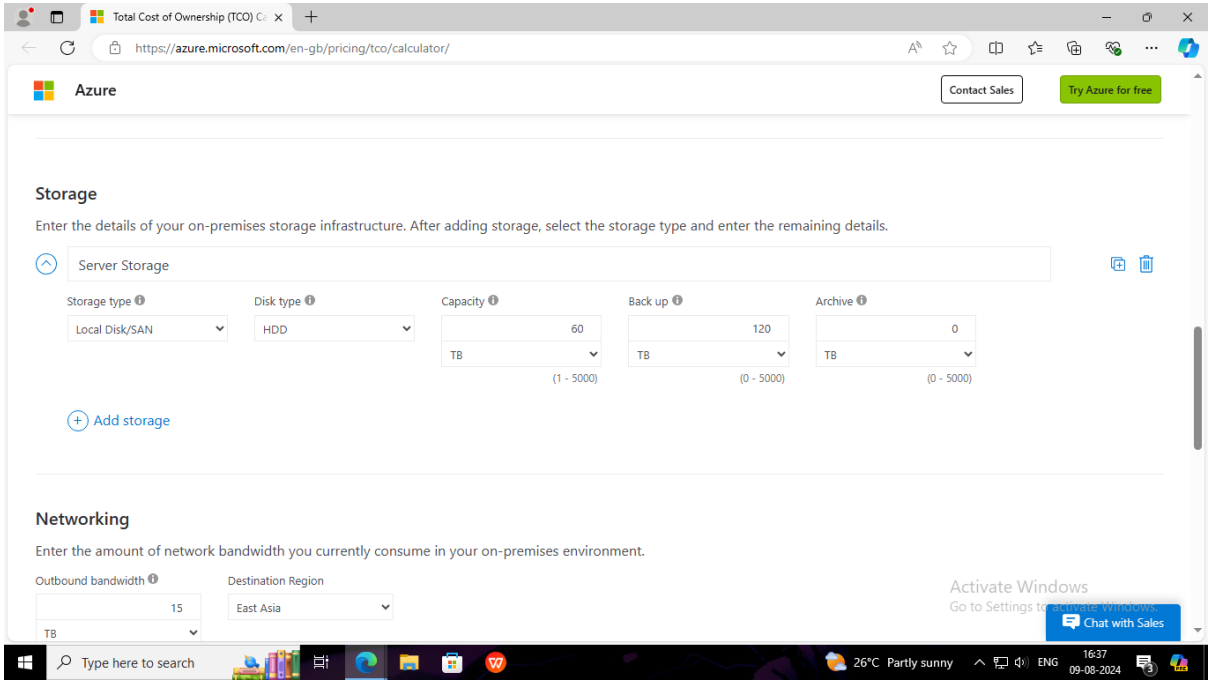
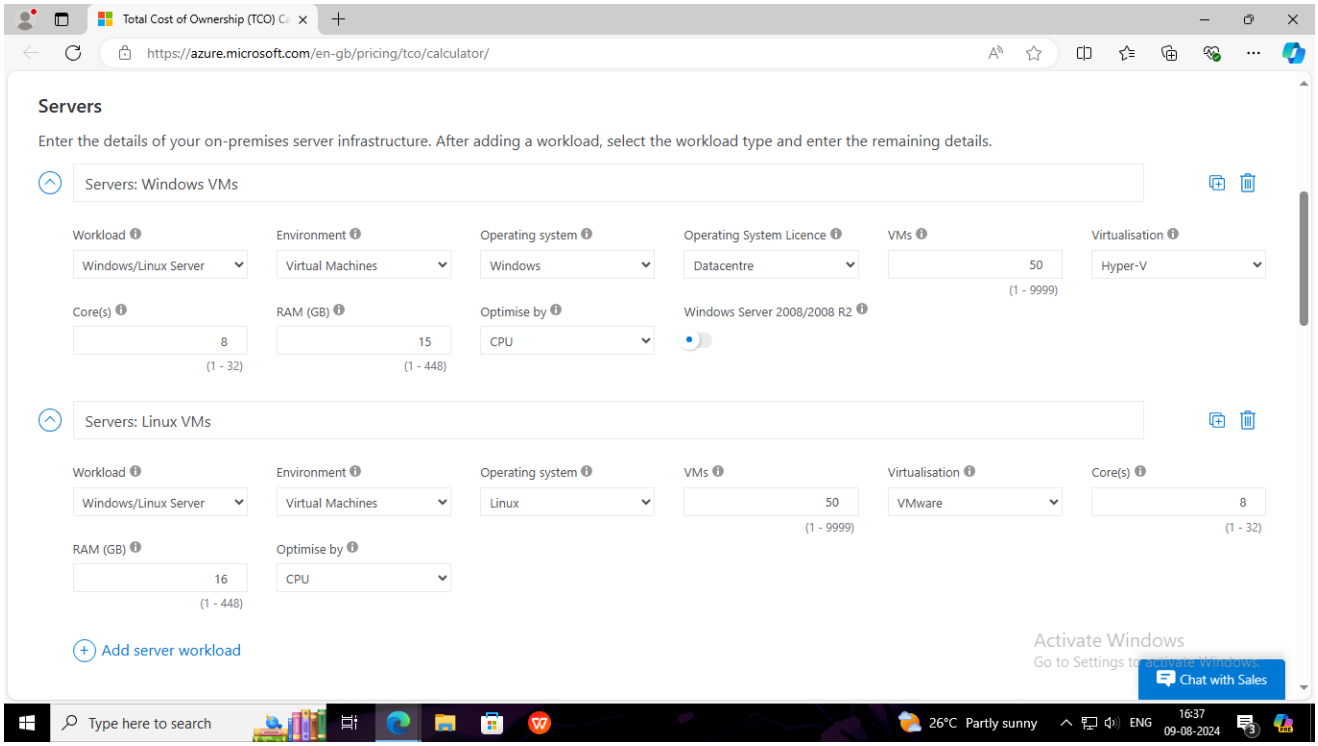
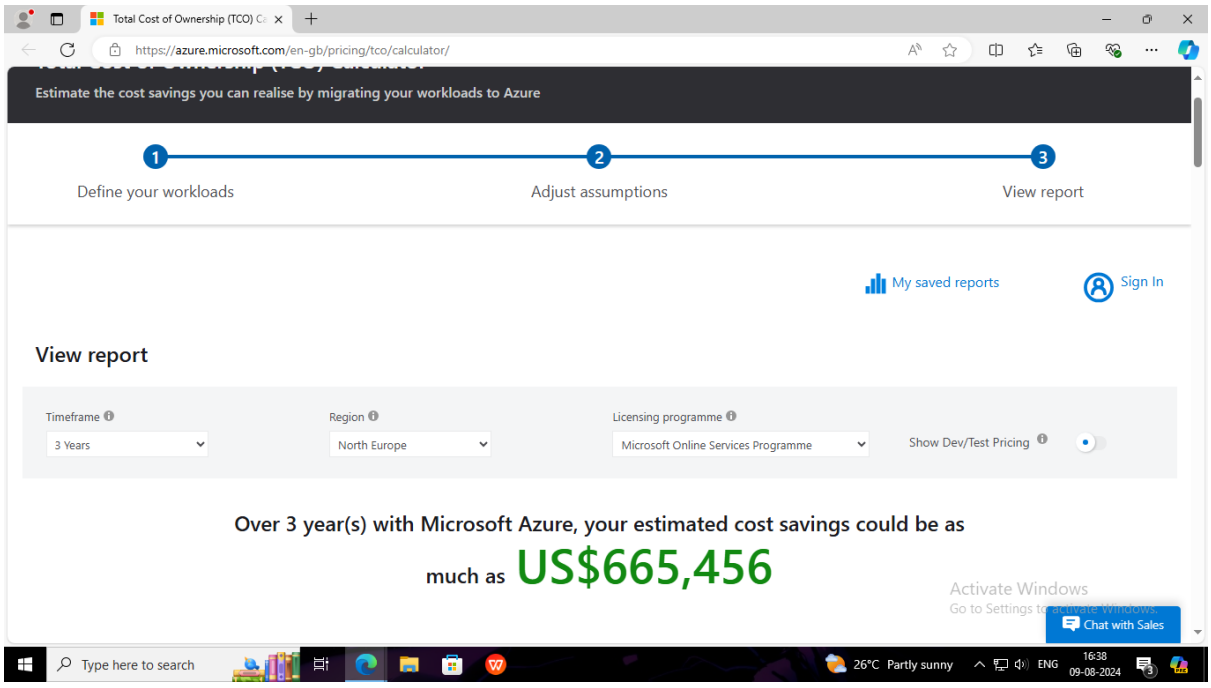
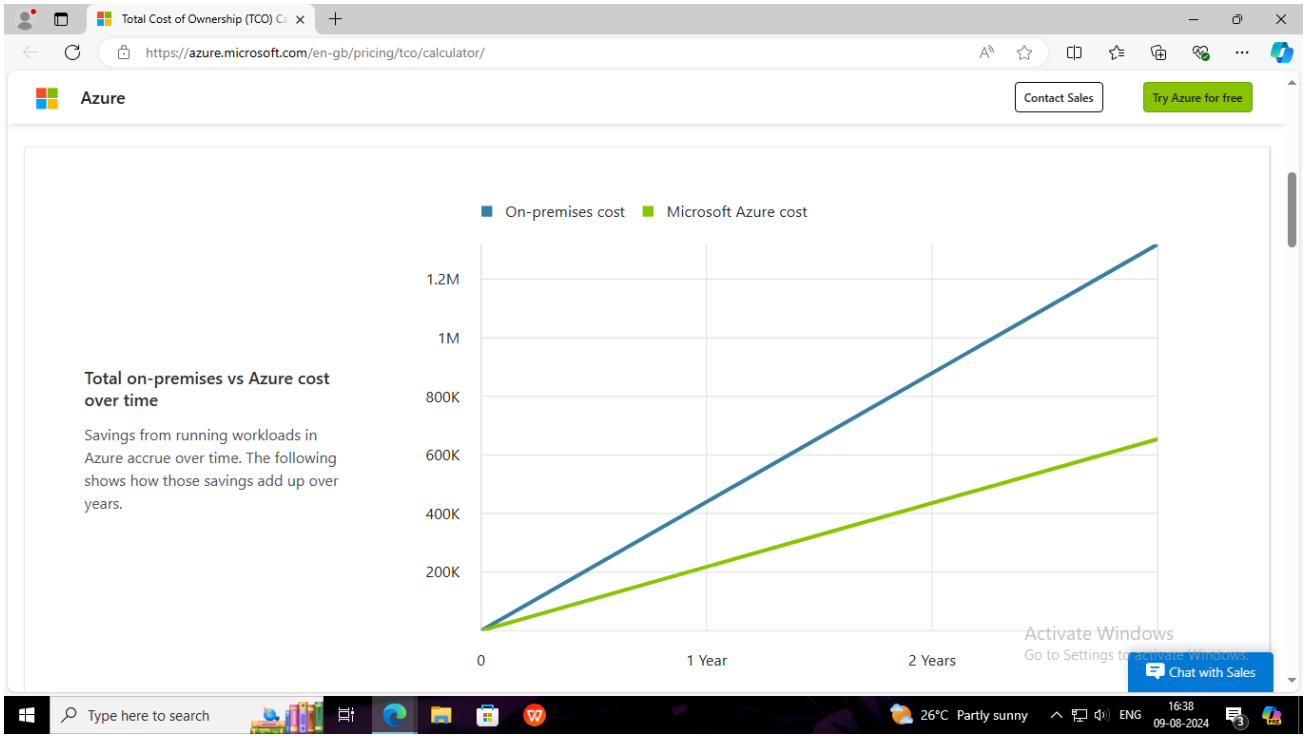
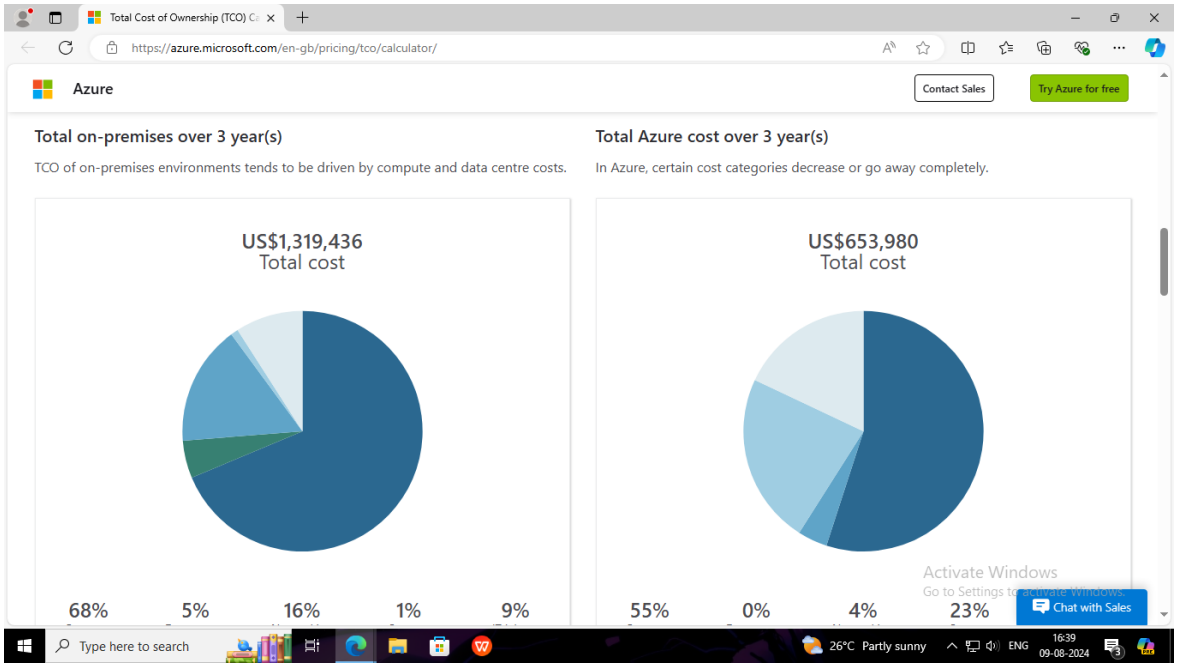

Total Cost of Ownership (TCO) Ca
https://azure.microsoft.com/en-gb/pricing/tco/calculator/
Azure
Contact Sales
Try Azure for free
Storage
Enter the details of your on-premises storage infrastructure. After adding storage, select the storage type and enter the remaining details.
Server Storage
Storage type
Local Disk/SAN
Disk type
HDD
Capacity
60
TB
(1 - 5000)
Back up
120
TB
(0 - 5000)
Archive
0
TB
(0 - 5000)
Add storage
Networking
Enter the amount of network bandwidth you currently consume in your on-premises environment.
Outbound bandwidth
15
TB
Destination Region
East Asia
Activate Windows
Go to Settings to activate Windows.
Chat with Sales
Type here to search
26°C Partly sunny
ENG
16:37
09-08-2024


Total Cost of Ownership (TCO) C
https://azure.microsoft.com/en-gb/pricing/tco/calculator/
Servers
Enter the details of your on-premises server infrastructure. After adding a workload, select the workload type and enter the remaining details.
Servers: Windows VMs
Workload
Windows/Linux Server
Environment
Virtual Machines
Operating system
Windows
Operating System Licence
Datacentre
VMs
50
(1 - 9999)
Virtualisation
Hyper-V
Core(s)
8
(1 - 32)
RAM (GB)
15
(1 - 448)
Optimise by
CPU
Windows Server 2008/2008 R2
Servers: Linux VMs
Workload
Windows/Linux Server
Environment
Virtual Machines
Operating system
Linux
VMs
50
(1 - 9999)
Virtualisation
VMware
Core(s)
8
(1 - 32)
RAM (GB)
16
(1 - 448)
Optimise by
CPU
Add server workload
Activate Windows
Chat with Sales
Type here to search
26°C Partly sunny
ENG
16:37
09-08-2024


Total Cost of Ownership (TCO) C
https://azure.microsoft.com/en-gb/pricing/tco/calculator/
Estimate the cost savings you can realise by migrating your workloads to Azure
1
Define your workloads
2
Adjust assumptions
3
View report
My saved reports
Sign In
View report
Timeframe
3 Years
Region
North Europe
Licensing programme
Microsoft Online Services Programme
Show Dev/Test Pricing
Over 3 year(s) with Microsoft Azure, your estimated cost savings could be as
much as US$665,456
Activate Windows
Chat with Sales
Type here to search
26°C Partly sunny
ENG
16:38
09-08-2024


Total Cost of Ownership (TCO) C
https://azure.microsoft.com/en-gb/pricing/tco/calculator/
Azure
Contact Sales
Try Azure for free
On-premises cost
Microsoft Azure cost
Total on-premises vs Azure cost over time
Savings from running workloads in Azure accrue over time. The following shows how those savings add up over years.
1.2M
1M
800K
600K
400K
200K
0
1 Year
2 Years
Activate Windows
Go to Settings to activate Windows.
Chat with Sales
Type here to search
26°C Partly sunny
ENG
16:38
09-08-2024


Total Cost of Ownership (TCO) C
https://azure.microsoft.com/en-gb/pricing/tco/calculator/
Azure
Contact Sales
Try Azure for free
Total on-premises over 3 year(s)
TCO of on-premises environments tends to be driven by compute and data centre costs.
US$1,319,436
Total cost
68%
5%
16%
1%
9%
Total Azure cost over 3 year(s)
In Azure, certain cost categories decrease or go away completely.
US$653,980
Total cost
55%
0%
4%
23%
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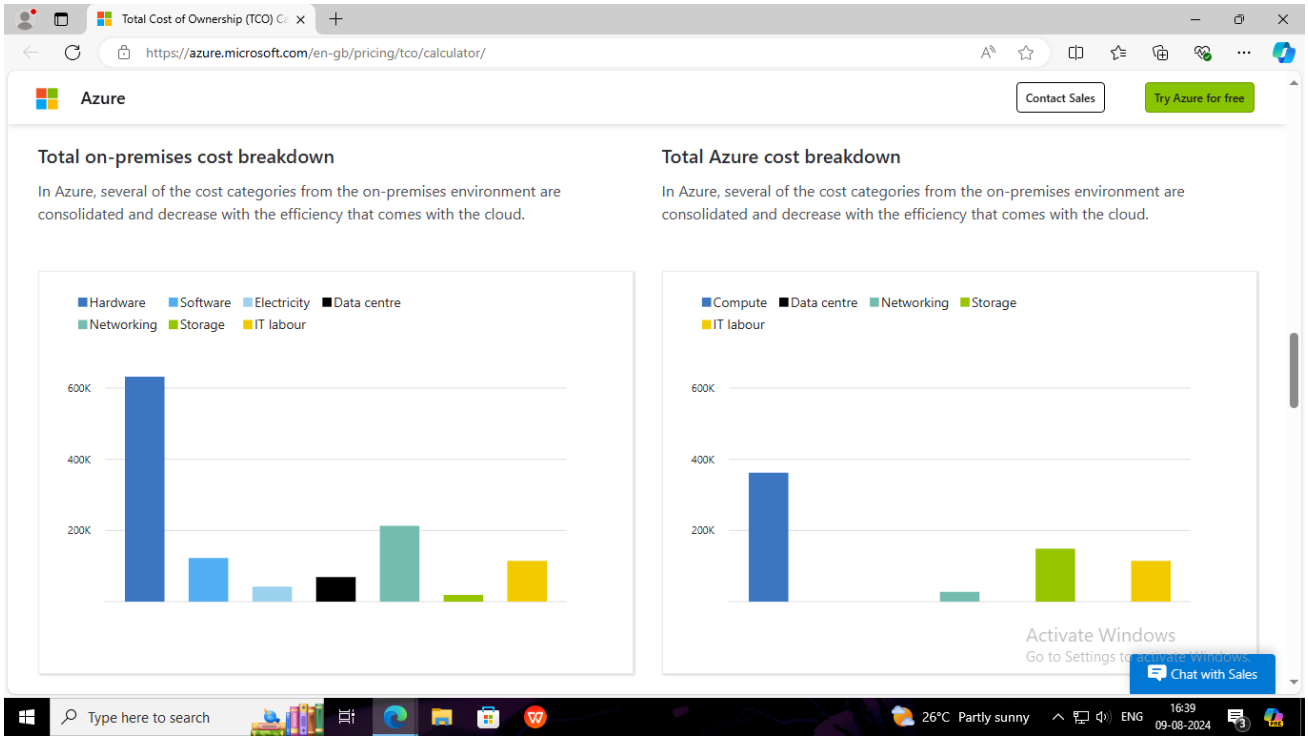
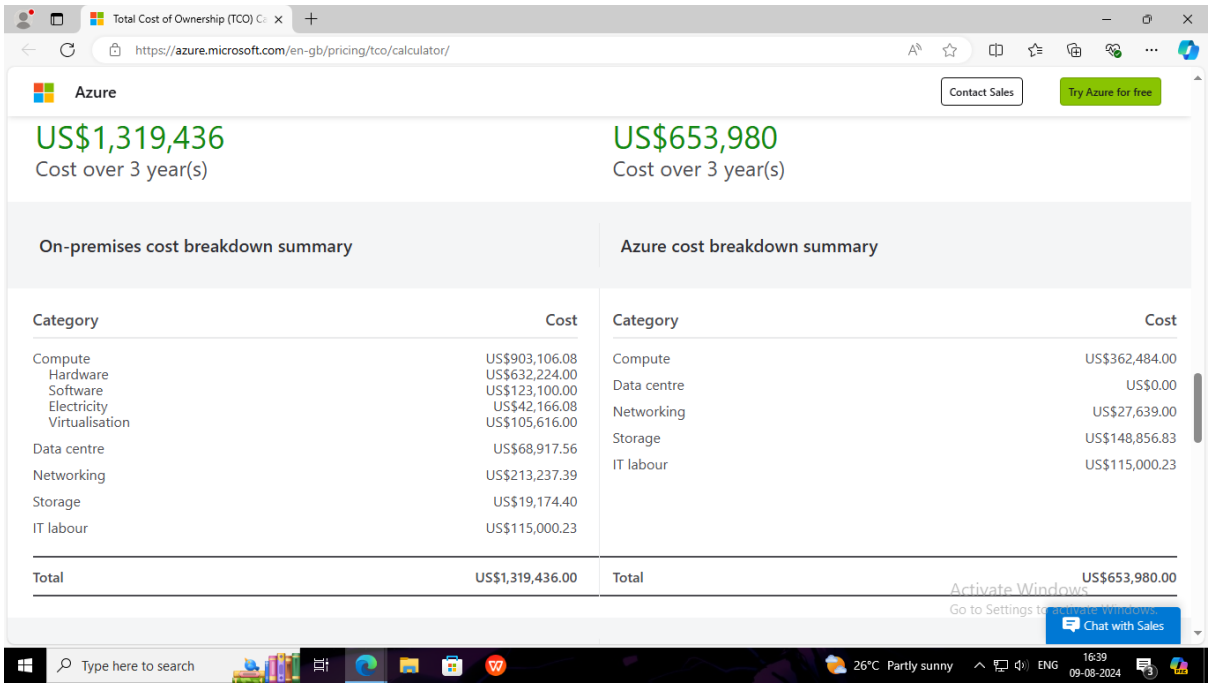
Chat with Sales
Type here to search
26°C Partly sunny
ENG
16:39
09-08-2024


Total Cost of Ownership (TCO) C
https://azure.microsoft.com/en-gb/pricing/tco/calculator/
Azure
Contact Sales
Try Azure for free
Total on-premises cost breakdown
In Azure, several of the cost categories from the on-premises environment are consolidated and decrease with the efficiency that comes with the cloud.
Total Azure cost breakdown
In Azure, several of the cost categories from the on-premises environment are consolidated and decrease with the efficiency that comes with the cloud.
Hardware
Software
Electricity
Data centre
Networking
Storage
IT labour
600K
400K
200K
Compute
Data centre
Networking
Storage
IT labour
600K
400K
200K
Activate Windows
Chat with Sales
Type here to search
26°C Partly sunny
ENG
16:39
09-08-2024


Total Cost of Ownership (TCO) C
https://azure.microsoft.com/en-gb/pricing/tco/calculator/
Azure
Contact Sales
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US$1,319,436
Cost over 3 year(s)
US$653,980
Cost over 3 year(s)
On-premises cost breakdown summary
Azure cost breakdown summary
Category
Cost
Compute US$903,106.08
Hardware US$632,224.00
Software US$123,100.00
Electricity US$42,166.08
Virtualisation US$105,616.00
Data centre US$68,917.56
Networking US$213,237.39
Storage US$19,174.40
IT labour US$115,000.23
Total US$1,319,436.00
Category
Cost
Compute US$362,484.00
Data centre US$0.00
Networking US$27,639.00
Storage US$148,856.83
IT labour US$115,000.23
Total US$653,980.00
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16:39
09-08-2024