MICROSOFT AZURE

NAME : ARUNIKA G

DEPARTMENT: B.TECH ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

GITHUB: https://github.com/Arunikagirimurugan/ARUNIKA-MICROSOFT-AZURE.git

REQUESTING A CLOUD SHELL SUCCEEDED.

CONNECTING TERMINAL...

Welcome to Azure Cloud Shell

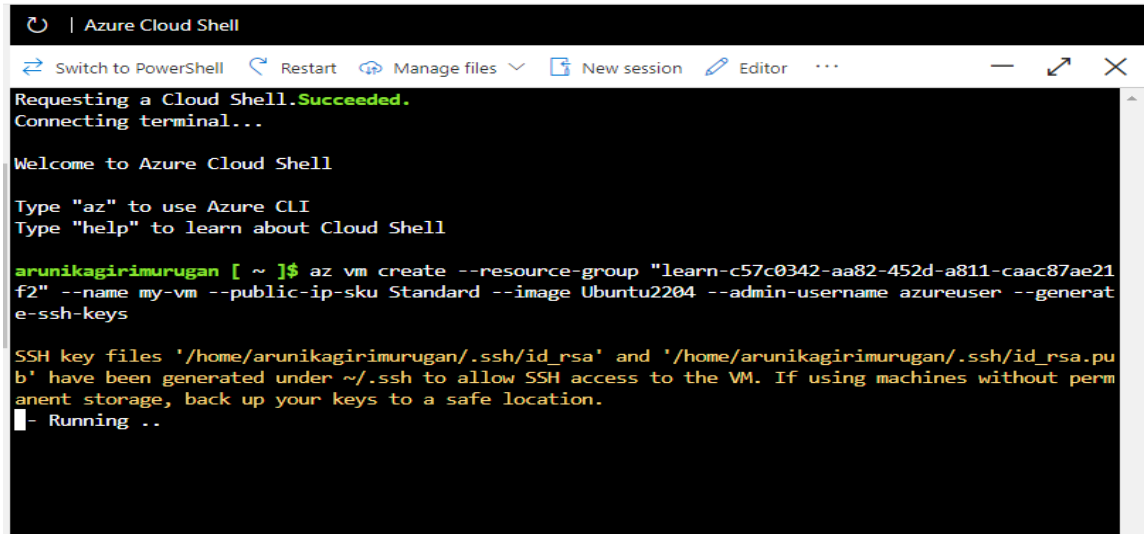
- az vm create --resource-group "learn-1dd151f8-37c6-44cc-a975-8f08e65c30c2" --name my-vm --public-ip-sku Standard --image Ubuntu2204 --admin-username azureuser --generate-ssh-keys

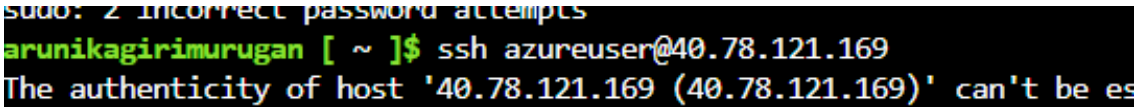
- az vm extension set --resource-group "learn-1dd151f8-37c6-44cc-a975-8f08e65c30c2" --vm-name my-vm --name customScript --publisher Microsoft.Azure.Extensions --version 2.1 --settings '{"fileUris":["https://raw.githubusercontent.com/MicrosoftDocs/mslearn-welcome-to-azure/master/configure-nginx.sh"]}' --protected-settings '{"commandToExecute": "./configure-nginx.sh"}'

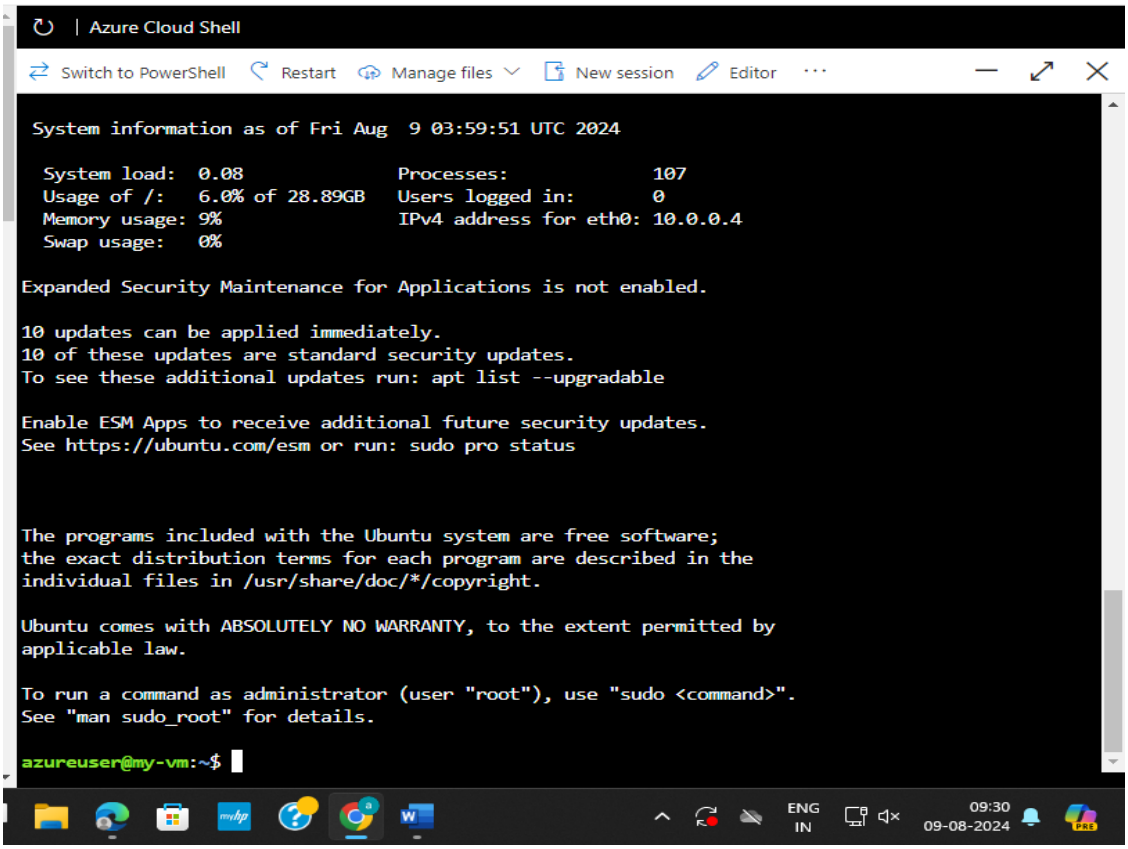
- sudo apt-get update
- ssh azureuser@ 13.93.201.132
- echo "sudo apt-get update -y
- sudo apt-get install nginx -y

- 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-c57c0342-aa82-452d-a811-caac87ae21f2" --name my-vm --port 80
- az vm list-ip-addresses --resource-group " learn-c57c0342-aa82-452d-a811-caac87ae21f2" --name my-vm --output table
- ssh azureuser@ 13.93.201.132
- sudo apt-get update
- git clone https://github.com/Arunikagirimurugan/eventmanagement.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

WORKING:


Azure Cloud Shell
Switch to PowerShell
Restart
Manage files
New session
Editor
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
arunikagirimurugan [~]$ az vm create --resource-group "learn-c57c0342-aa82-452d-a811-caac87ae21f2" --name my-vm --public-ip-sku Standard --image Ubuntu2204 --admin-username azureuser --generate-ssh-keys
SSH key files '/home/arunikagirimurugan/.ssh/id_rsa' and '/home/arunikagirimurugan/.ssh/id_rsa.pub' have been generated under ~/.ssh to allow SSH access to the VM. If using machines without permanent storage, back up your keys to a safe location.
- Running ..


arunikagirimurugan [~]$ ssh azureuser@40.78.121.169
The authenticity of host '40.78.121.169 (40.78.121.169)' can't be es


Azure Cloud Shell
Switch to PowerShell
Restart
Manage files
New session
Editor
System information as of Fri Aug 9 03:59:51 UTC 2024
System load: 0.08
Usage of /: 6.0% of 28.89GB
Memory usage: 9%
Swap usage: 0%
Processes: 107
Users logged in: 0
IPv4 address for eth0: 10.0.0.4
Expanded Security Maintenance for Applications is not enabled.
10 updates can be applied immediately.
10 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable
Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status
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@my-vm:~$
ENG
IN
09:30
09-08-2024

Azure Cloud Shell

Switch to PowerShell | Restart | Manage files | New session | Editor | ...

```
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@my-vm:~$ 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
Hit:1 http://azure.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://azure.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://azure.archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:4 http://azure.archive.ubuntu.com/ubuntu jammy-security InRelease
Reading package lists... Done
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
nginx is already the newest version (1.18.0-6ubuntu14.4).
0 upgraded, 0 newly installed, 0 to remove and 10 not upgraded.
Synchronizing state of nginx.service with SysV service script with /lib/systemd/systemd-sysv-inst
all.
Executing: /lib/systemd/systemd-sysv-install enable nginx
azureuser@my-vm:~$
```

ENG IN 09:35 09-08-2024

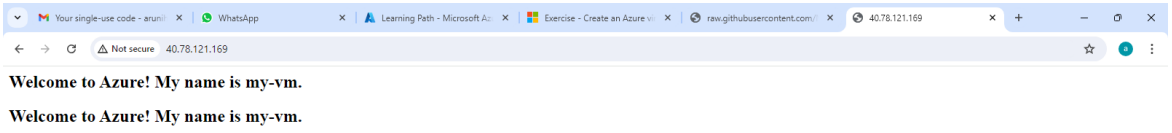
```
Executing: /lib/systemd/systemd-sysv-install enable nginx
azureuser@my-vm:~$ echo "<html><body><h2>Welcome to Azure! My name is $(hostname).</h2></body></h
tml>" | sudo tee -a /var/www/html/index.html
<html><body><h2>Welcome to Azure! My name is my-vm.</h2></body></html>
azureuser@my-vm:~$
```

```
<html><body><h2>Welcome to Azure! My name is my-vm.</h2></body></html>
azureuser@my-vm:~$ sudo systemctl status nginx
● nginx.service - A high performance web server and a reverse proxy server
     Loaded: loaded (/lib/systemd/system/nginx.service; enabled; vendor preset: enabled)
     Active: active (running) since Fri 2024-08-09 03:52:54 UTC; 15min ago
       Docs: man:nginx(8)
   Main PID: 2390 (nginx)
      Tasks: 2 (limit: 4011)
     Memory: 4.6M
        CPU: 30ms
     CGroup: /system.slice/nginx.service
             ├─2390 "nginx: master process /usr/sbin/nginx -g daemon on; master_process on;"
             └─2393 "nginx: worker process" "" "" "" "" "" "" "" "" "" "" "" "" "" "" "" "" "" "

Aug 09 03:52:54 my-vm systemd[1]: Starting A high performance web server and a reverse proxy ser
Aug 09 03:52:54 my-vm systemd[1]: Started A high performance web server and a reverse proxy serv
lines 1-14/14 (END)
```

```
Aug 09 03:52:54 my-vm systemd[1]: Started A high performance web server an

azureuser@my-vm:~$ exit
logout
Connection to 40.78.121.169 closed.
arunikagirimurugan [ ~ ]$
```

```
}
arunikagirimurugan [ ~ ]$ az vm list-ip-addresses --resource-group "learn-c57c0342-aa82-452d-a811
-caac87ae21f2" --name my-vm --output table
VirtualMachine    PublicIPAddresses    PrivateIPAddresses
----------------  -------------------  --------------------
my-vm             40.78.121.169        10.0.0.4
arunikagirimurugan [ ~ ]$
```

```
my-vm                40.78.121.169          10.0.0.4
arunikagirimurugan [ ~ ]$ ssh azureuser@40.78.121.169
Welcome to Ubuntu 22.04.4 LTS (GNU/Linux 6.5.0-1025-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

 System information as of Fri Aug  9 04:31:49 UTC 2024

  System load:  0.04               Processes:             117
  Usage of /:   7.8% of 28.89GB    Users logged in:       0
  Memory usage: 16%                IPv4 address for eth0: 10.0.0.4
  Swap usage:   0%


Expanded Security Maintenance for Applications is not enabled.

10 updates can be applied immediately.
10 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

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


Last login: Fri Aug  9 03:59:54 2024 from 4.188.105.206
azureuser@my-vm:~$
```



Welcome to Azure! My name is my-vm.

Welcome to Azure! My name is my-vm.

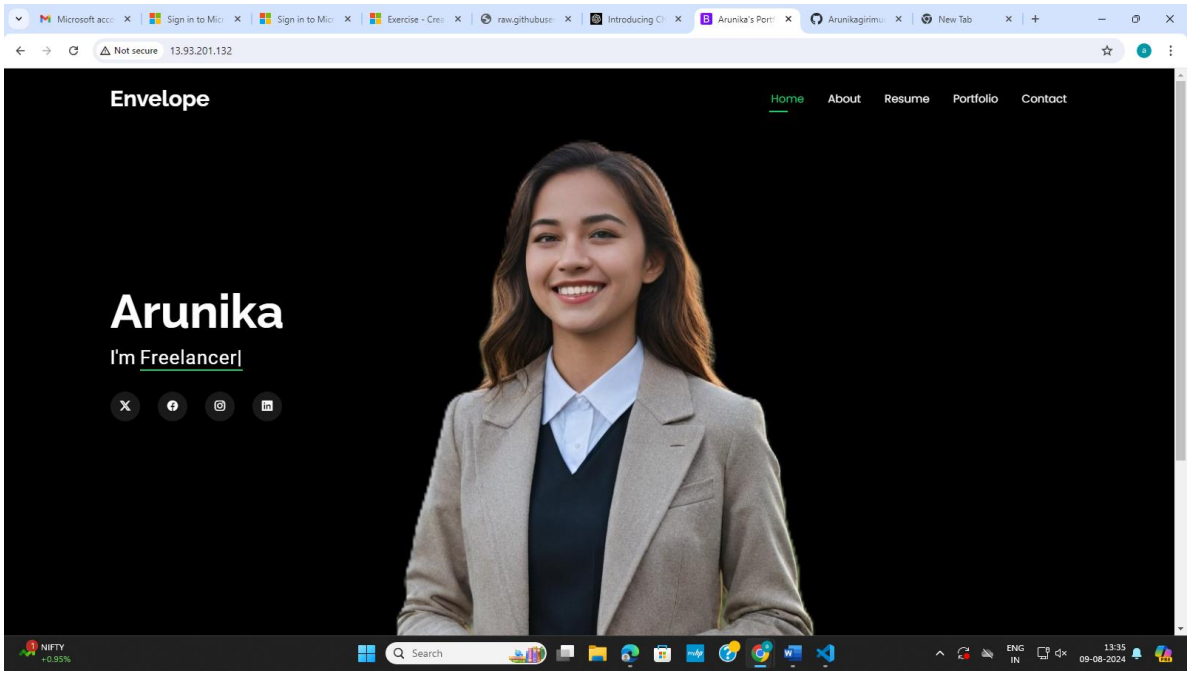
```
my-vm            13.93.201.132       10.0.0.4
arunikagirimurugan [ ~ ]$ ssh azureuser@13.93.201.132
Welcome to Ubuntu 22.04.4 LTS (GNU/Linux 6.5.0-1025-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

 System information as of Fri Aug  9 07:50:58 UTC 2024

  System load:  0.0               Processes:             107
```

```
Last login: Fri Aug  9 07:46:18 2024 from 4.186.11.194
azureuser@my-vm:~$ sudo apt-get update
sudo apt-get install git -y
Hit:1 http://azure.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://azure.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://azure.archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:4 http://azure.archive.ubuntu.com/ubuntu jammy-security InRelease
Reading package lists... Done
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
git is already the newest version (1:2.34.1-1ubuntu1.11).
git set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 13 not upgraded.
```

```
azureuser@my-vm:~$ git clone https://github.com/Arunikagirimurugan/eventmanagement.git
Cloning into 'eventmanagement'...
remote: Enumerating objects: 138, done.
remote: Counting objects: 100% (138/138), done.
remote: Compressing objects: 100% (98/98), done.
remote: Total 138 (delta 36), reused 138 (delta 36), pack-reused 0
Receiving objects: 100% (138/138), 2.50 MiB | 14.16 MiB/s, done.
Resolving deltas: 100% (36/36), done.
```

```
azureuser@my-vm:~$ sudo cp -r eventmanagement/* /var/www/html/
azureuser@my-vm:~$ sudo chown -R www-data:www-data /var/www/html
sudo chmod -R 755 /var/www/html
azureuser@my-vm:~$ sudo systemctl restart nginx
azureuser@my-vm:~$
```

OUTPUT:


Envelope
Home
About
Resume
Portfolio
Contact
Arunika
I'm Freelancer|
Not secure
13.93.201.132
Search

2. DESCRIBE AZURE STORAGE SERVICES

WORK WITH BLOB STORAGE

In this section, you'll create a Blob container and upload a picture.

1. Under **Data storage**, select **Containers**.
2. Select **+ Container** and complete the information.
3. Select Create.

Note

Step 4 will need an image. If you want to upload an image you already have on your computer, continue to Step 4. Otherwise, open a new browser window and search Bing for an image of a flower. Save the image to your computer.

4. Back in the Azure portal, select the container you created, then select Upload.
5. Browse for the image file you want to upload. Select it and then select upload.

Note

You can upload as many blobs as you like in this way. New blobs will be listed within the container.

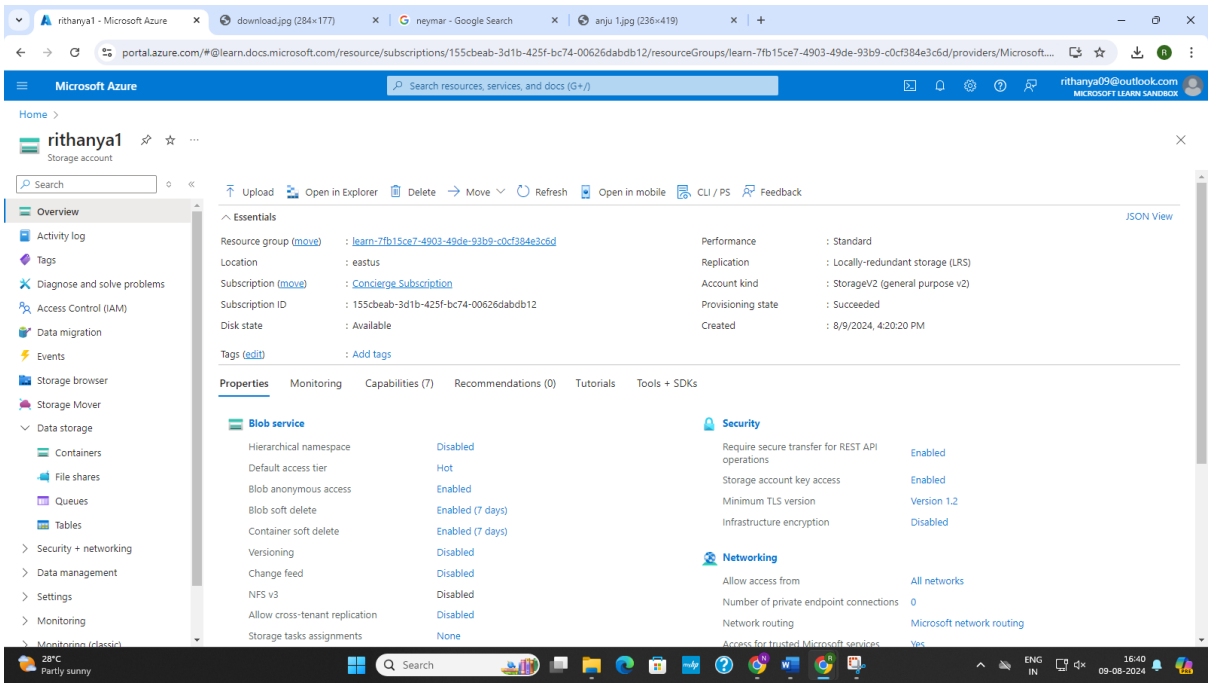
6. Select the Blob (file) you just uploaded. You should be on the properties tab.
7. Copy the URL from the URL field and paste it into a new tab.

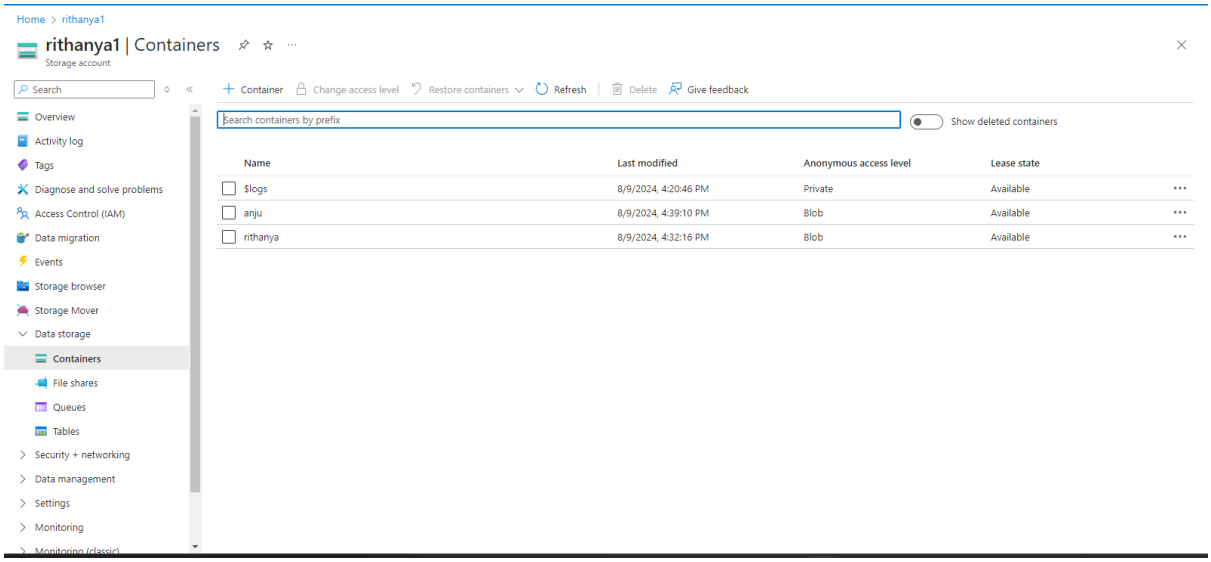
- **Change the access level of your blob**

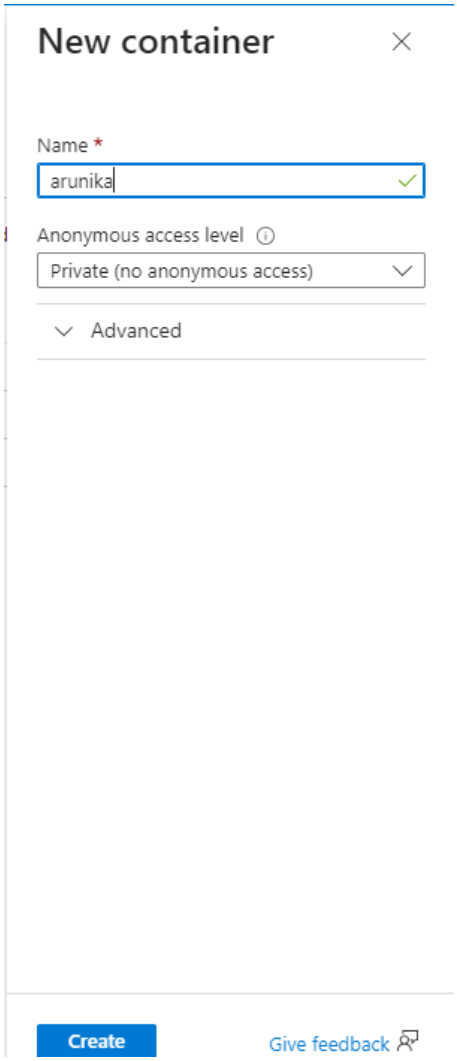
1. Go back to the Azure portal.
2. Select Change access level.

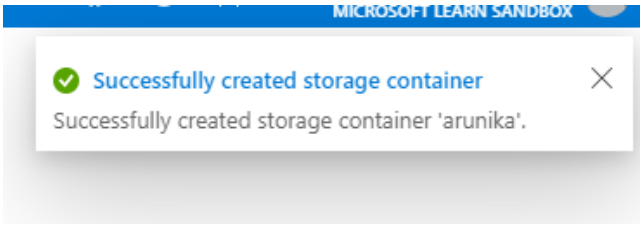
3. Set the Anonymous access level to Blob (anonymous read access for blobs only).
4. Select OK.
5. Refresh the tab where you attempted to access the file earlier.

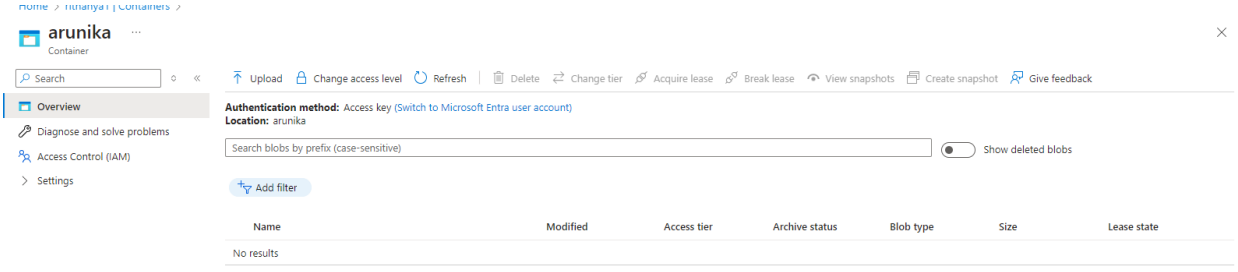
WORKING:






New container
Name *
arunika
Anonymous access level
Private (no anonymous access)
Advanced
Create
Give feedback


MICROSOFT LEARN SANDBOX
Successfully created storage container
Successfully created storage container 'arunika'.


arunika
Container
Search
Overview
Diagnose and solve problems
Access Control (IAM)
Settings
Upload
Change access level
Refresh
Delete
Change tier
Acquire lease
Break lease
View snapshots
Create snapshot
Give feedback
Authentication method: Access key (Switch to Microsoft Entra user account)
Location: arunika
Search blobs by prefix (case-sensitive)
Show deleted blobs
Add filter
Name
Modified
Access tier
Archive status
Blob type
Size
Lease state
No results

Upload blob

1 file(s) selected: arun.jpg

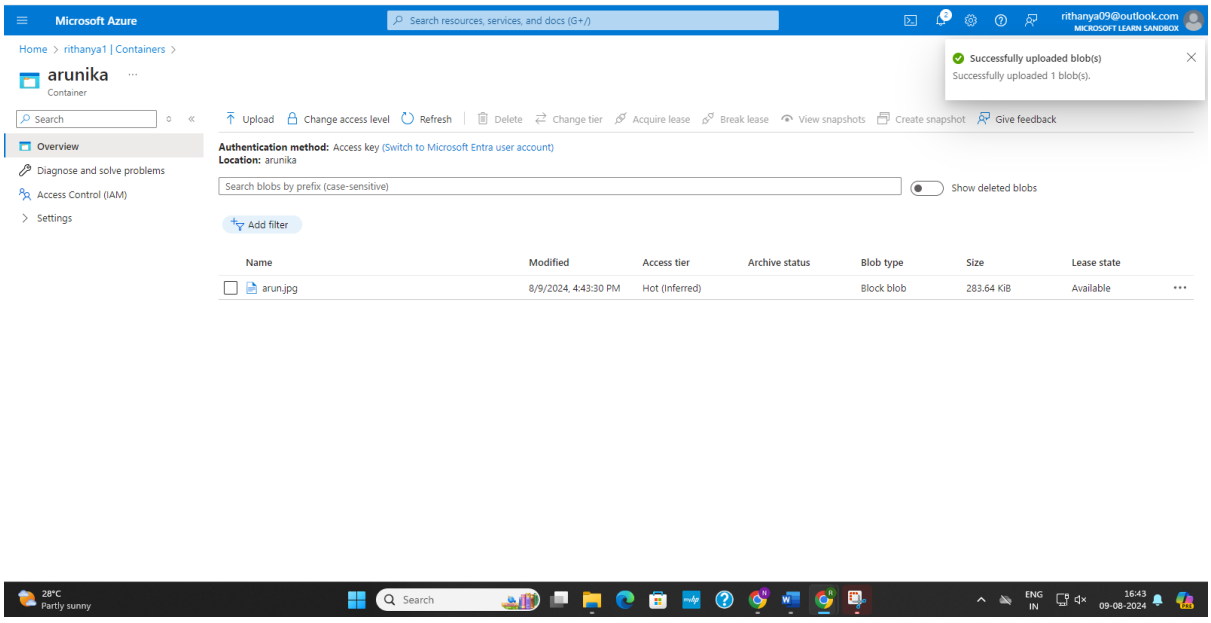
Drag and drop files here or Browse for files

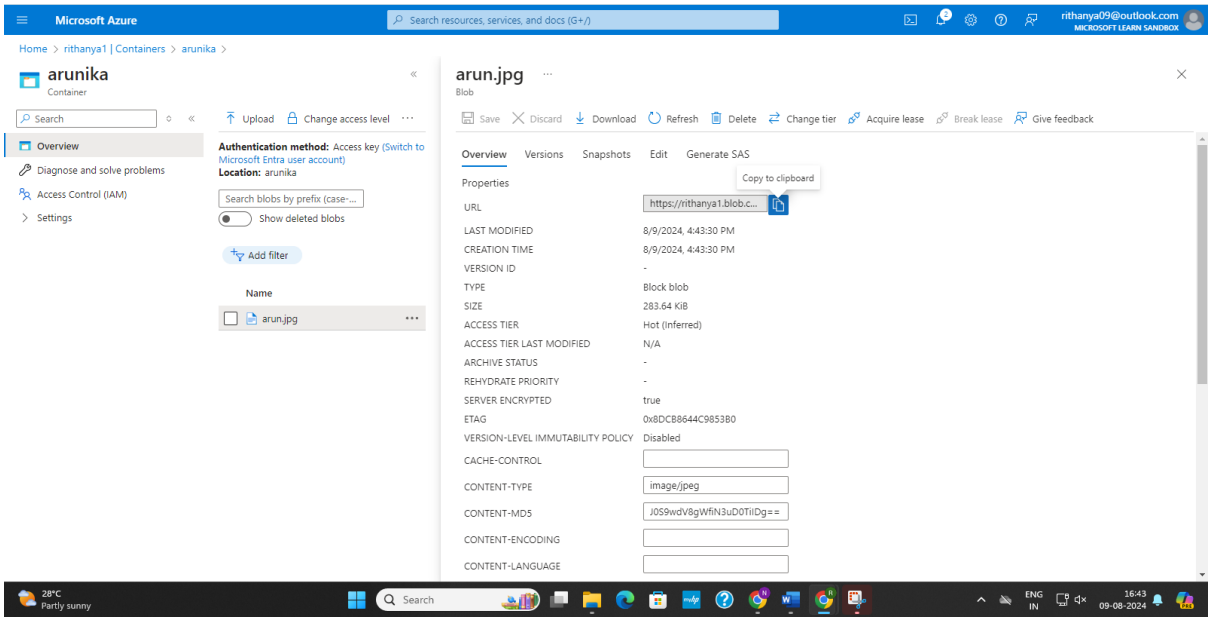
Overwrite if files already exist

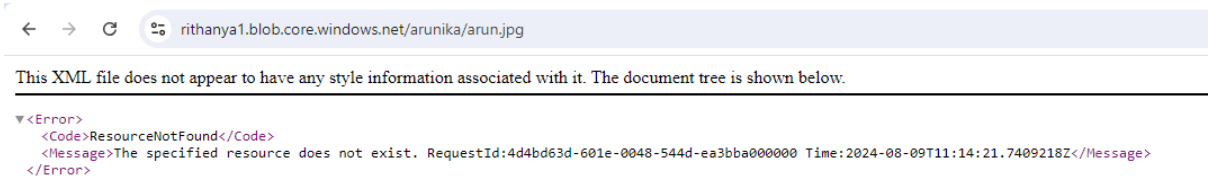
Advanced

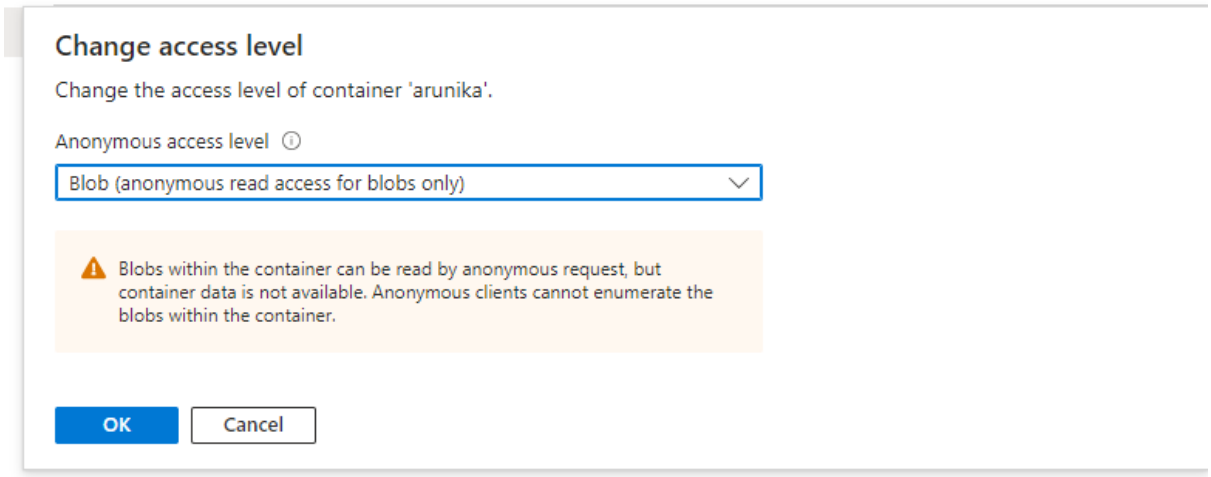
Upload

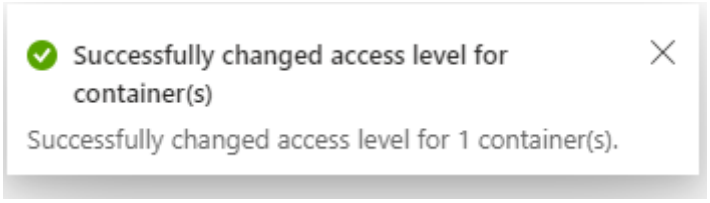
Give feedback



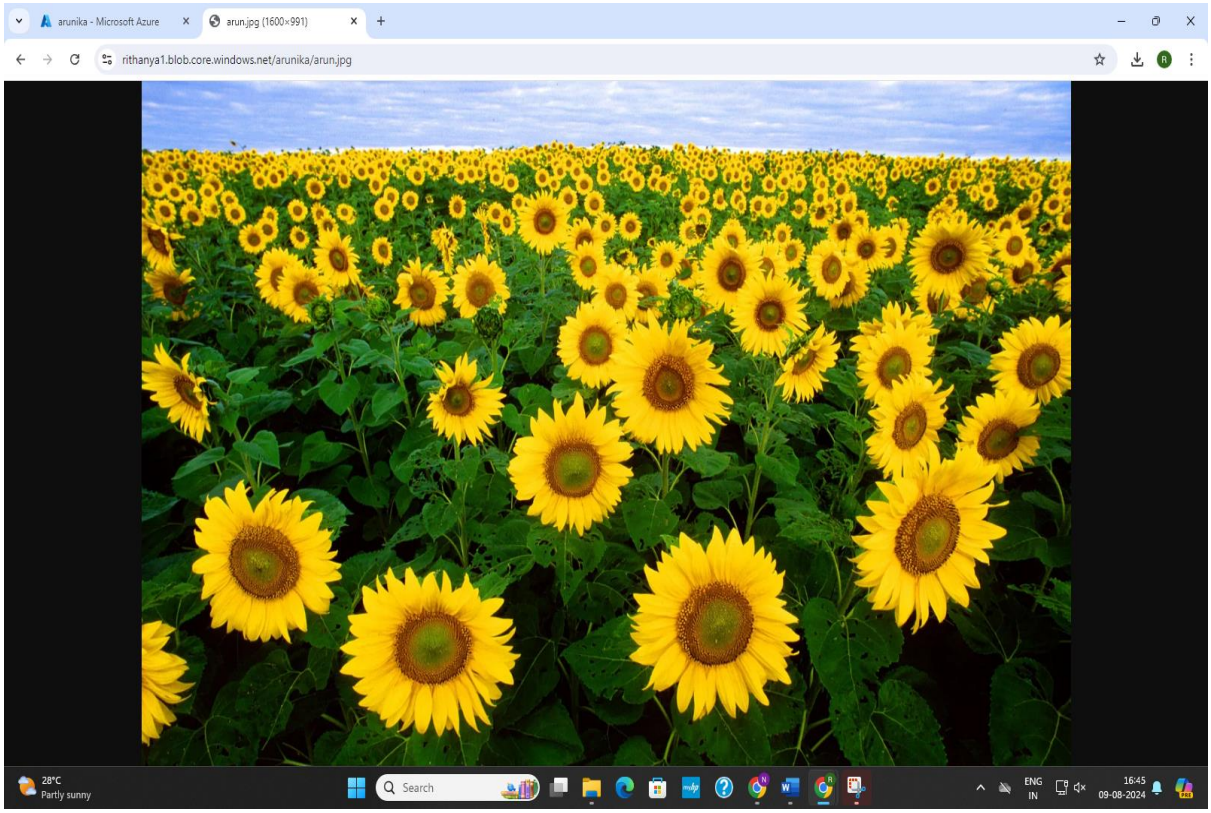

Microsoft Azure
Search resources, services, and docs (G+/)
rithanya09@outlook.com
MICROSOFT LEARN SANDBOX
Home > rithanya1 | Containers > arunika >
arunika
Container
Search
Overview
Diagnose and solve problems
Access Control (IAM)
Settings
Upload
Change access level
Authentication method: Access key (Switch to Microsoft Entra user account)
Location: arunika
Search blobs by prefix (case-...
Show deleted blobs
Add filter
Name
arun.jpg
arun.jpg
Blob
Save
Discard
Download
Refresh
Delete
Change tier
Acquire lease
Break lease
Give feedback
Overview
Versions
Snapshots
Edit
Generate SAS
Properties
Copy to clipboard
URL
https://rithanya1.blob.c...
LAST MODIFIED 8/9/2024, 4:43:30 PM
CREATION TIME 8/9/2024, 4:43:30 PM
VERSION ID -
TYPE Block blob
SIZE 283.64 KiB
ACCESS TIER Hot (Inferred)
ACCESS TIER LAST MODIFIED N/A
ARCHIVE STATUS -
REHYDRATE PRIORITY -
SERVER ENCRYPTED true
ETAG 0x8DCB8644C9853B0
VERSION-LEVEL IMMUTABILITY POLICY Disabled
CACHE-CONTROL
CONTENT-TYPE image/jpeg
CONTENT-MD5 J0S9wdV8gWfiN3uD0TiiDg==
CONTENT-ENCODING
CONTENT-LANGUAGE
28°C
Partly sunny
Search
ENG
IN
16:43
09-08-2024


rithanya1.blob.core.windows.net/arunika/arun.jpg
This XML file does not appear to have any style information associated with it. The document tree is shown below.
<Error>
<Code>ResourceNotFound</Code>
<Message>The specified resource does not exist. RequestId:4d4bd63d-601e-0048-544d-ea3bba000000 Time:2024-08-09T11:14:21.7409218Z</Message>
</Error>


Change access level
Change the access level of container 'arunika'.
Anonymous access level
Blob (anonymous read access for blobs only)
Blobs within the container can be read by anonymous request, but container data is not available. Anonymous clients cannot enumerate the blobs within the container.
OK
Cancel


Successfully changed access level for container(s)
Successfully changed access level for 1 container(s).

OUTPUT:


arunika - Microsoft Azure
arun.jpg (1600×991)
rithanya1.blob.core.windows.net/arunika/arun.jpg
28°C
Partly sunny
Search
ENG
IN
16:45
09-08-2024

3. ESTIMATE WORKLOAD COSTS BY USING THE PRICING CALCULATOR

- Explore the Pricing calculator

  1. Go to the Pricing calculator.

  2. Notice the following tabs:

     - Products This is where you choose the Azure services that you want to include in your estimate. You'll likely spend most of your time here.

     - Example scenarios Here you'll find several *reference architectures*, or common cloud-based solutions that you can use as a starting point.

     - Saved estimates Here you'll find your previously saved estimates.

  3. Estimate your solution

- Here you add each Azure service that you need to the calculator. Then you configure each service to fit your needs.
- Tip
- Make sure you have a clean calculator with nothing listed in the estimate. You can reset the estimate by selecting the trash can icon next to each item.
- Add services to the estimate

  1. On the Products tab, select the service from each of these categories:

  2. Scroll to the bottom of the page. Each service is listed with its default configuration.

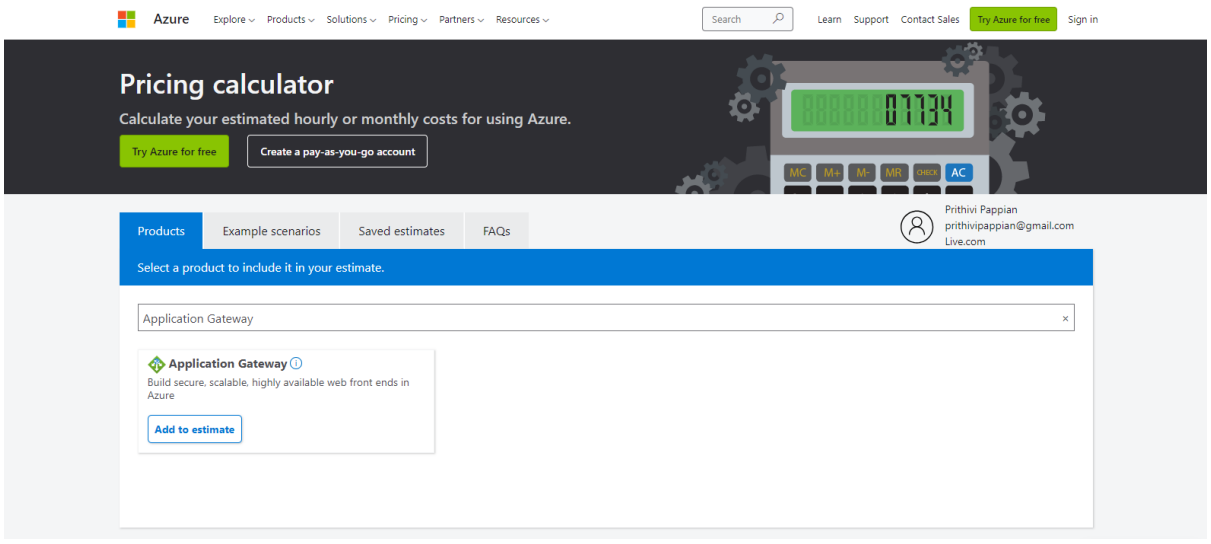
- Configure services to match your requirements:

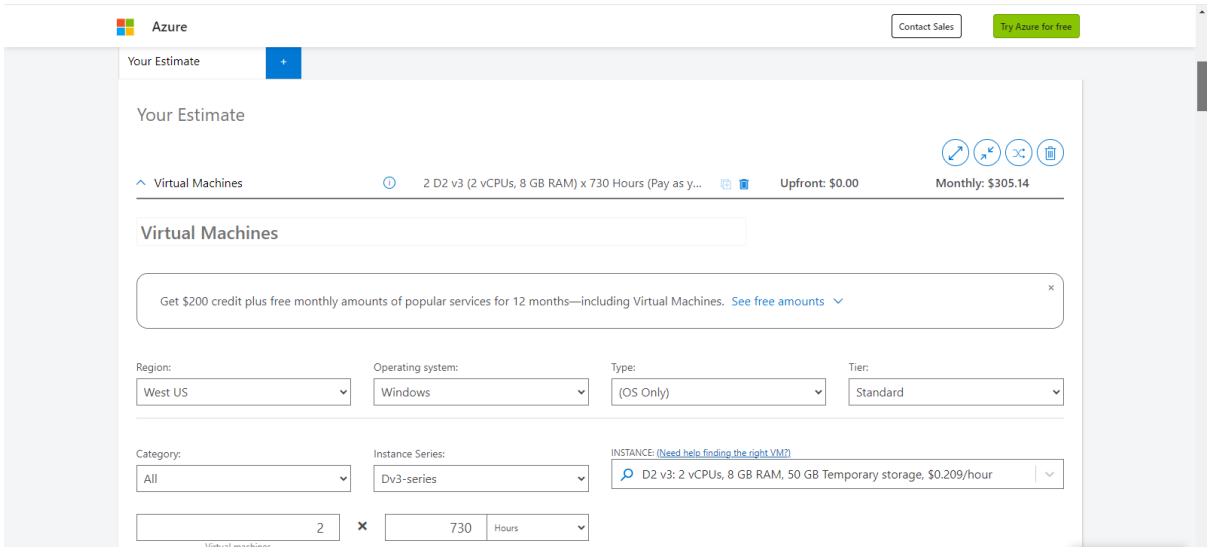
  1. Under Virtual Machines, set values.

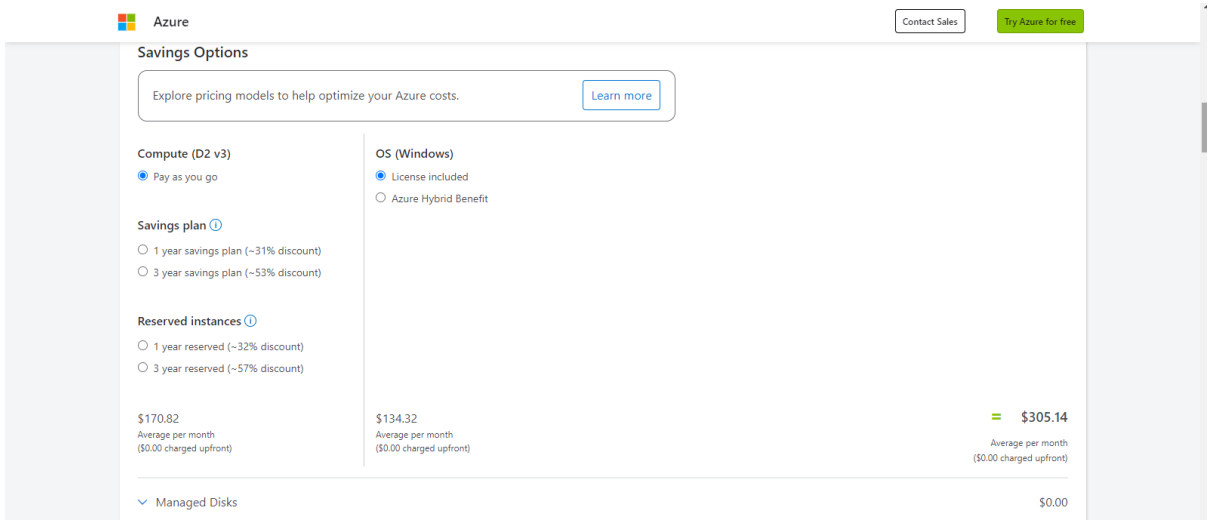
2. Under Azure SQL Database, set values.
3. Under Application Gateway, set values.

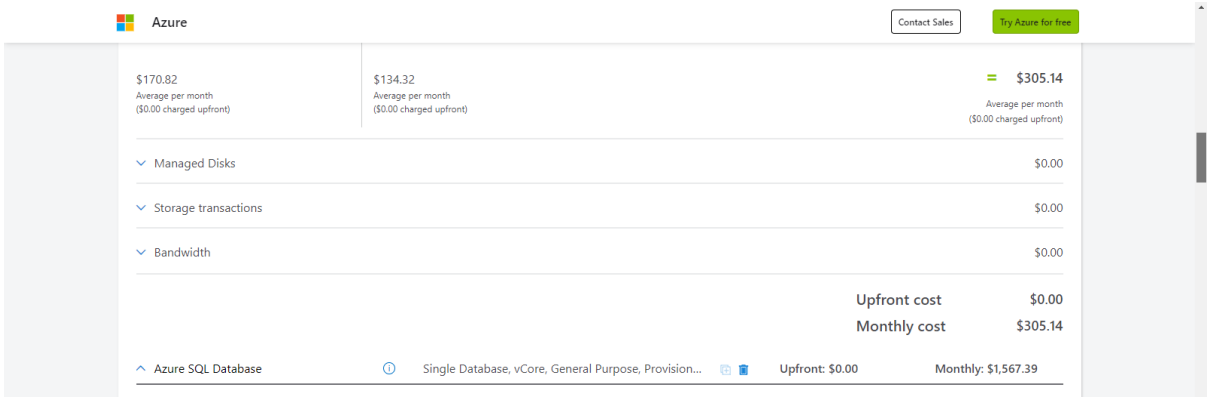
- Review, share, and save your estimate
- At the bottom of the page, you see the total estimated cost of running the solution. You can change the currency type if you want.
- At this point, you have a few options:
  - Select Export to save your estimate as an Excel document.
  - Select Save or Save as to save your estimate to the Saved Estimates tab for later.
  - Select Share to generate a URL so you can share the estimate with your team.

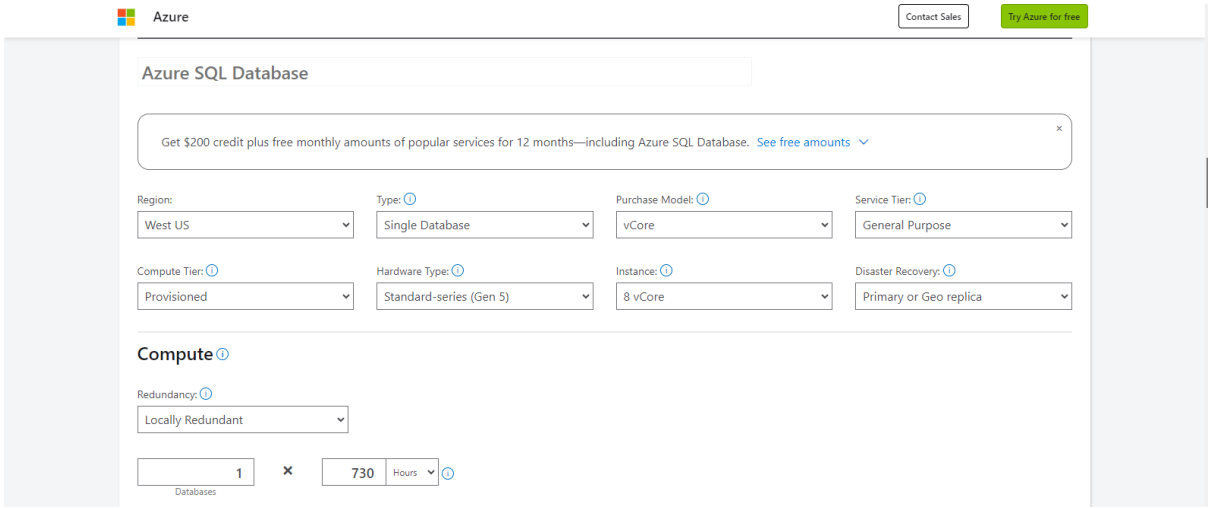
WORKING :

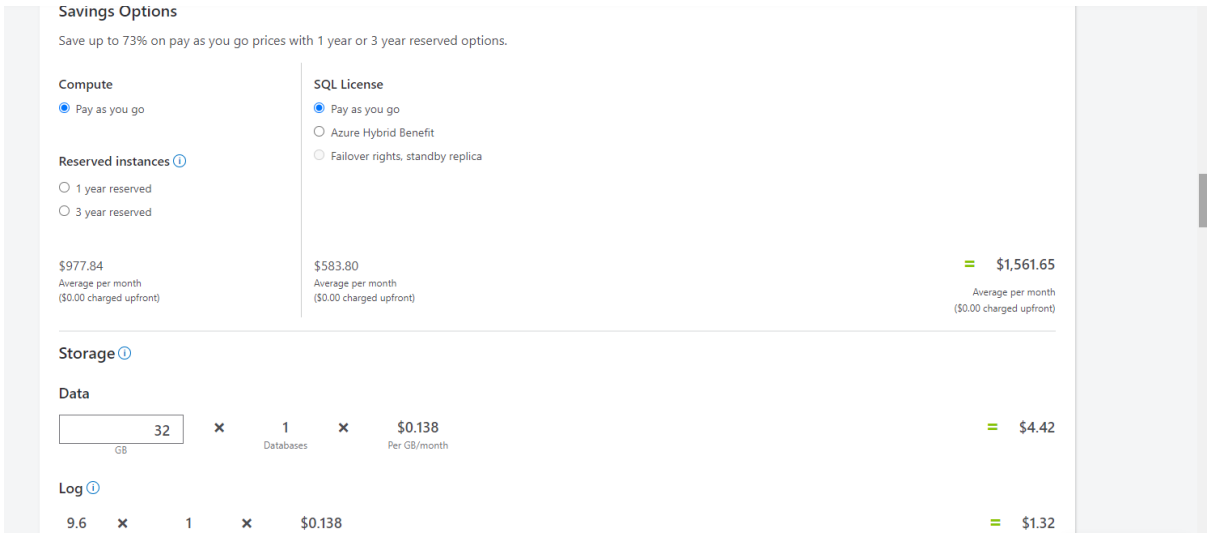


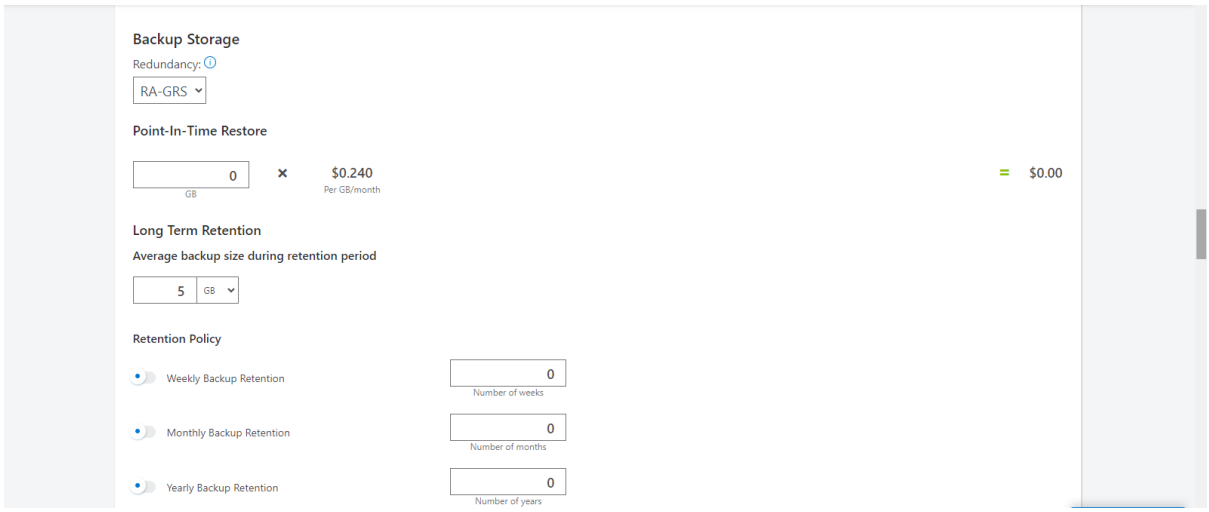

Azure
Contact Sales
Try Azure for free
Your Estimate
+
Your Estimate
Virtual Machines
2 D2 v3 (2 vCPUs, 8 GB RAM) x 730 Hours (Pay as y...
Upfront: $0.00
Monthly: $305.14
Virtual Machines
Get $200 credit plus free monthly amounts of popular services for 12 months—including Virtual Machines. See free amounts
Region:
West US
Operating system:
Windows
Type:
(OS Only)
Tier:
Standard
Category:
All
Instance Series:
Dv3-series
INSTANCE: (Need help finding the right VM?)
D2 v3: 2 vCPUs, 8 GB RAM, 50 GB Temporary storage, $0.209/hour
2
730
Hours

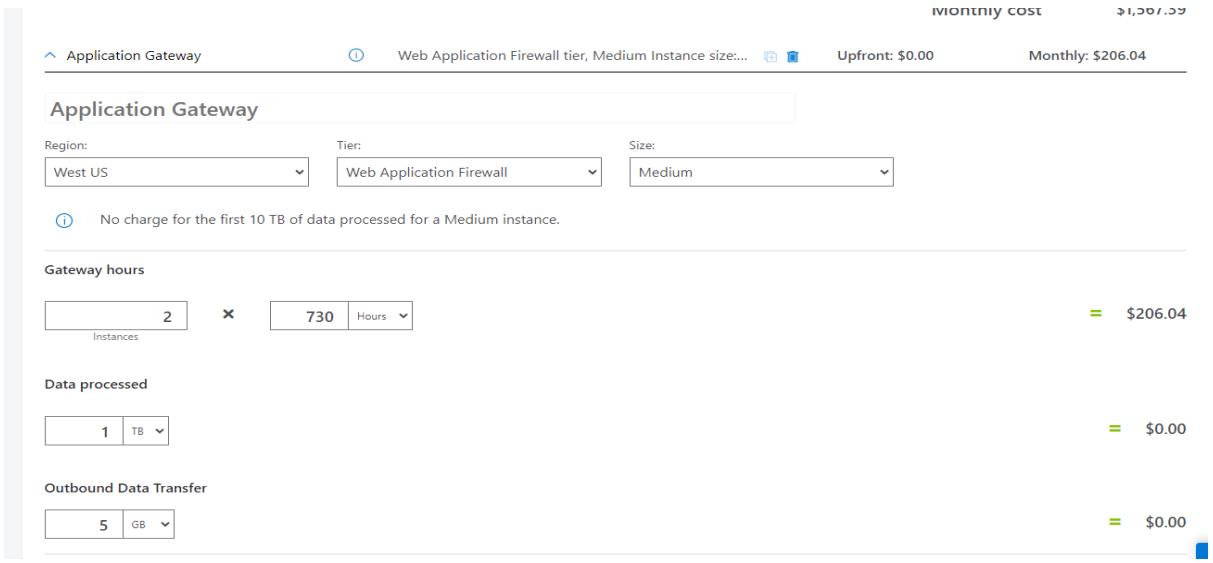

Azure
Contact Sales
Try Azure for free
Savings Options
Explore pricing models to help optimize your Azure costs.
Learn more
Compute (D2 v3)
Pay as you go
Savings plan
1 year savings plan (~31% discount)
3 year savings plan (~53% discount)
Reserved instances
1 year reserved (~32% discount)
3 year reserved (~57% discount)
OS (Windows)
License included
Azure Hybrid Benefit
$170.82
Average per month
($0.00 charged upfront)
$134.32
Average per month
($0.00 charged upfront)
= $305.14
Average per month
($0.00 charged upfront)
Managed Disks
$0.00

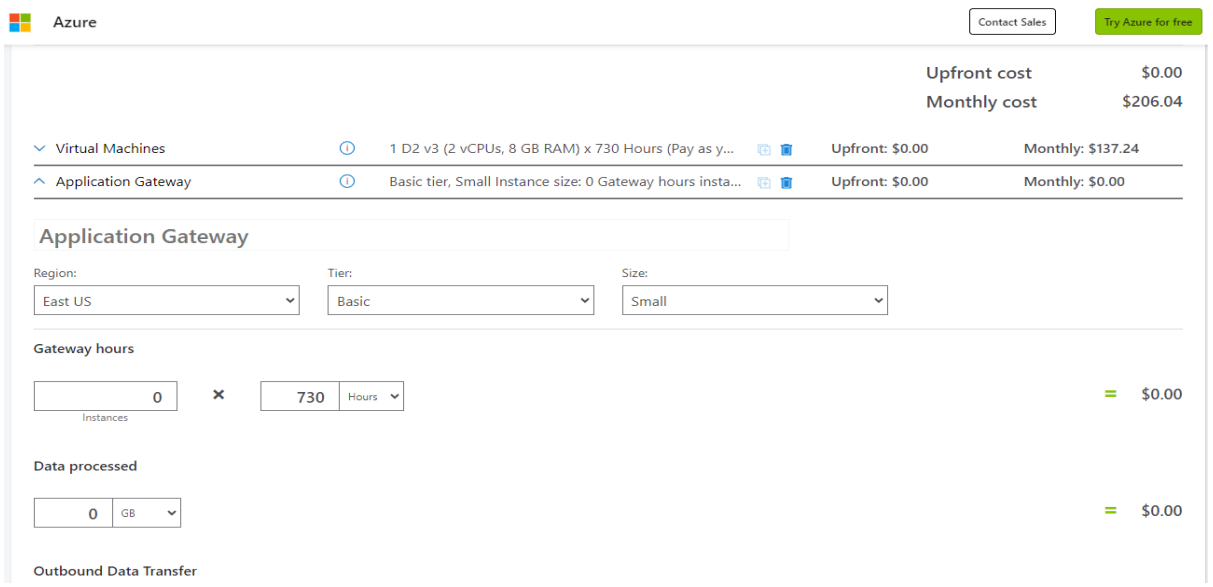

Azure
Contact Sales
Try Azure for free
$170.82
Average per month
($0.00 charged upfront)
$134.32
Average per month
($0.00 charged upfront)
= $305.14
Average per month
($0.00 charged upfront)
Managed Disks
$0.00
Storage transactions
$0.00
Bandwidth
$0.00
Upfront cost
$0.00
Monthly cost
$305.14
Azure SQL Database
Single Database, vCore, General Purpose, Provision...
Upfront: $0.00
Monthly: $1,567.39

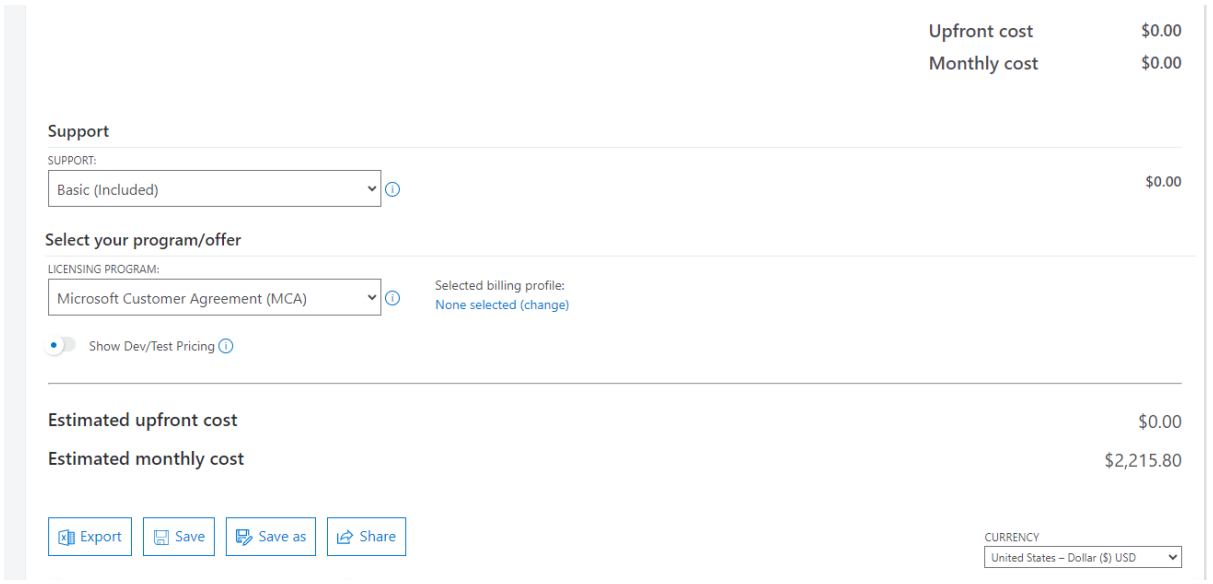

Azure
Contact Sales
Try Azure for free
Azure SQL Database
Get $200 credit plus free monthly amounts of popular services for 12 months—including Azure SQL Database. See free amounts
Region: West US
Type: Single Database
Purchase Model: vCore
Service Tier: General Purpose
Compute Tier: Provisioned
Hardware Type: Standard-series (Gen 5)
Instance: 8 vCore
Disaster Recovery: Primary or Geo replica
Compute
Redundancy: Locally Redundant
1 Databases × 730 Hours


Savings Options
Save up to 73% on pay as you go prices with 1 year or 3 year reserved options.
Compute
Pay as you go
Reserved instances
1 year reserved
3 year reserved
$977.84
Average per month
($0.00 charged upfront)
SQL License
Pay as you go
Azure Hybrid Benefit
Failover rights, standby replica
$583.80
Average per month
($0.00 charged upfront)
= $1,561.65
Average per month
($0.00 charged upfront)
Storage
Data
32 GB × 1 Databases × $0.138 Per GB/month = $4.42
Log
9.6 × 1 × $0.138 = $1.32

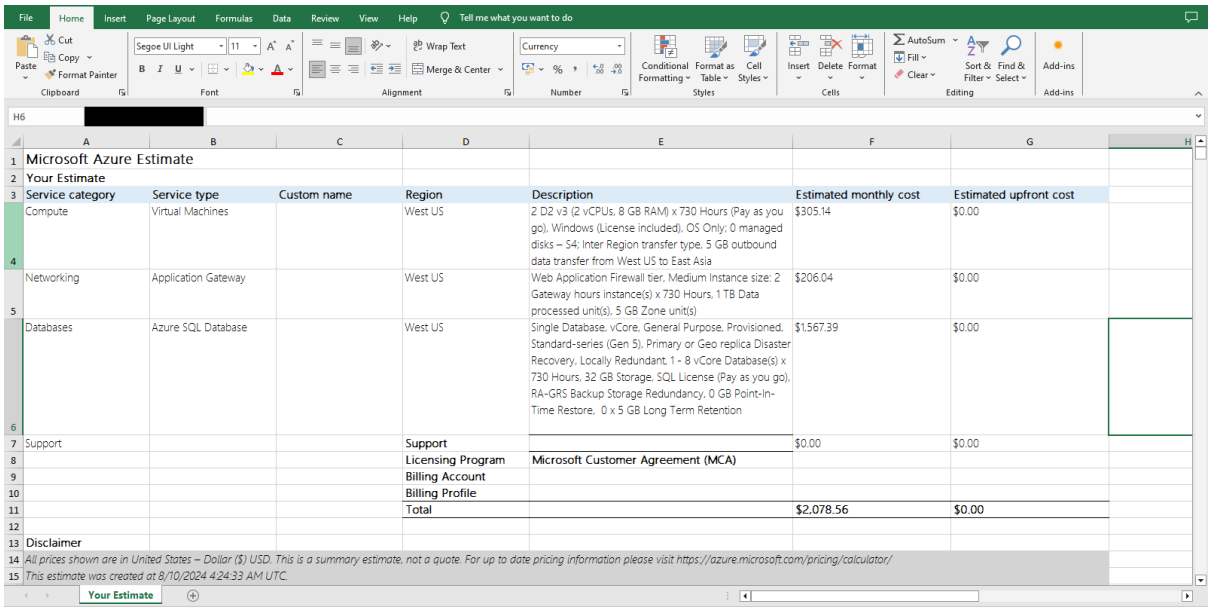

Backup Storage
Redundancy: RA-GRS
Point-In-Time Restore
0 GB × $0.240 Per GB/month = $0.00
Long Term Retention
Average backup size during retention period
5 GB
Retention Policy
Weekly Backup Retention
0 Number of weeks
Monthly Backup Retention
0 Number of months
Yearly Backup Retention
0 Number of years


Monthly cost $1,567.39
Application Gateway
Web Application Firewall tier, Medium Instance size:...
Upfront: $0.00
Monthly: $206.04
Application Gateway
Region:
West US
Tier:
Web Application Firewall
Size:
Medium
No charge for the first 10 TB of data processed for a Medium instance.
Gateway hours
2
Instances
730
Hours
= $206.04
Data processed
1
TB
= $0.00
Outbound Data Transfer
5
GB
= $0.00

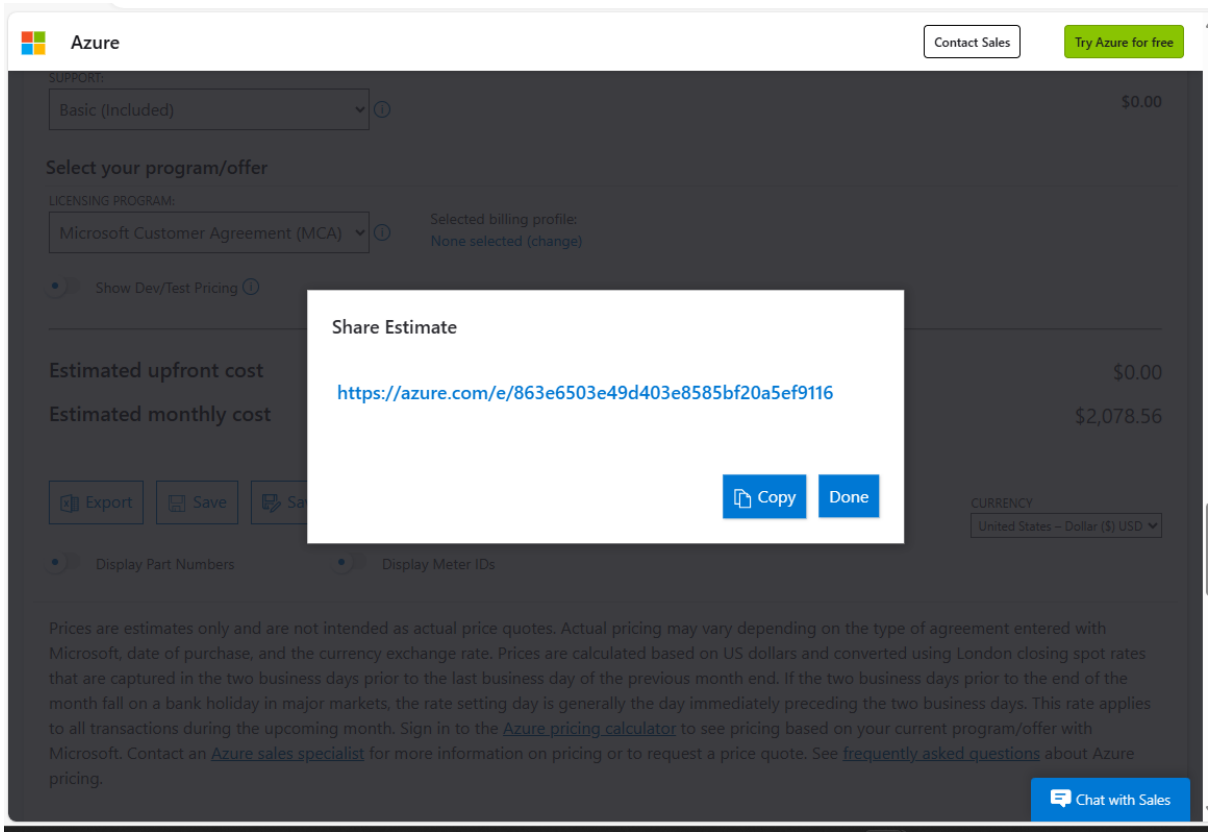

Azure
Contact Sales
Try Azure for free
Upfront cost $0.00
Monthly cost $206.04
Virtual Machines
1 D2 v3 (2 vCPUs, 8 GB RAM) x 730 Hours (Pay as y...
Upfront: $0.00
Monthly: $137.24
Application Gateway
Basic tier, Small Instance size: 0 Gateway hours insta...
Upfront: $0.00
Monthly: $0.00
Application Gateway
Region:
East US
Tier:
Basic
Size:
Small
Gateway hours
0
Instances
730
Hours
= $0.00
Data processed
0
GB
= $0.00
Outbound Data Transfer


Upfront cost $0.00
Monthly cost $0.00
Support
SUPPORT:
Basic (Included)
$0.00
Select your program/offer
LICENSING PROGRAM:
Microsoft Customer Agreement (MCA)
Selected billing profile:
None selected (change)
Show Dev/Test Pricing
Estimated upfront cost $0.00
Estimated monthly cost $2,215.80
Export
Save
Save as
Share
CURRENCY
United States – Dollar ($) USD

OUTPUT:



	A	B	C	D	E	F	G
1	Microsoft Azure Estimate						
2	Your Estimate						
3	Service category	Service type	Custom name	Region	Description	Estimated monthly cost	Estimated upfront cost
4	Compute	Virtual Machines		West US	2 D2 v3 (2 vCPUs, 8 GB RAM) x 730 Hours (Pay as you go), Windows (License included), OS Only; 0 managed disks – S4; Inter Region transfer type, 5 GB outbound data transfer from West US to East Asia	$305.14	$0.00
5	Networking	Application Gateway		West US	Web Application Firewall tier, Medium Instance size: 2 Gateway hours instance(s) x 730 Hours, 1 TB Data processed unit(s), 5 GB Zone unit(s)	$206.04	$0.00
6	Databases	Azure SQL Database		West US	Single Database, vCore, General Purpose, Provisioned, Standard-series (Gen 5), Primary or Geo replica Disaster Recovery, Locally Redundant, 1 - 8 vCore Database(s) x 730 Hours, 32 GB Storage, SQL License (Pay as you go), RA-GRS Backup Storage Redundancy, 0 GB Point-In-Time Restore, 0 x 5 GB Long Term Retention	$1,567.39	$0.00
7	Support			Support		$0.00	$0.00
8				Licensing Program	Microsoft Customer Agreement (MCA)		
9				Billing Account			
10				Billing Profile			
11				Total		$2,078.56	$0.00
12							
13	Disclaimer						
14	*All prices shown are in United States – Dollar ($) USD. This is a summary estimate, not a quote. For up to date pricing information please visit https://azure.microsoft.com/pricing/calculator/*						
15	*This estimate was created at 8/10/2024 4:24:33 AM UTC.*						



4. COMPARE WORKLOAD COSTS USING THE TCO CALCULATOR

- Define your workloads

Enter the specifications of your on-premises infrastructure into the TCO Calculator.

1. Go to the TCO Calculator.
2. Under **Define your workloads**, select **Add server workload** to create a row for your bank of Windows Server VMs.
3. Under **Servers**, set the value for each of these settings.
4. Select **Add server workload** to create a second row for your bank of Linux VMs. Then specify these settings.
5. Under **Storage**, select **Add storage**. Then specify these settings.
6. Under **Networking**, set **Outbound bandwidth** to **15 TB**.
7. Select **Next**.

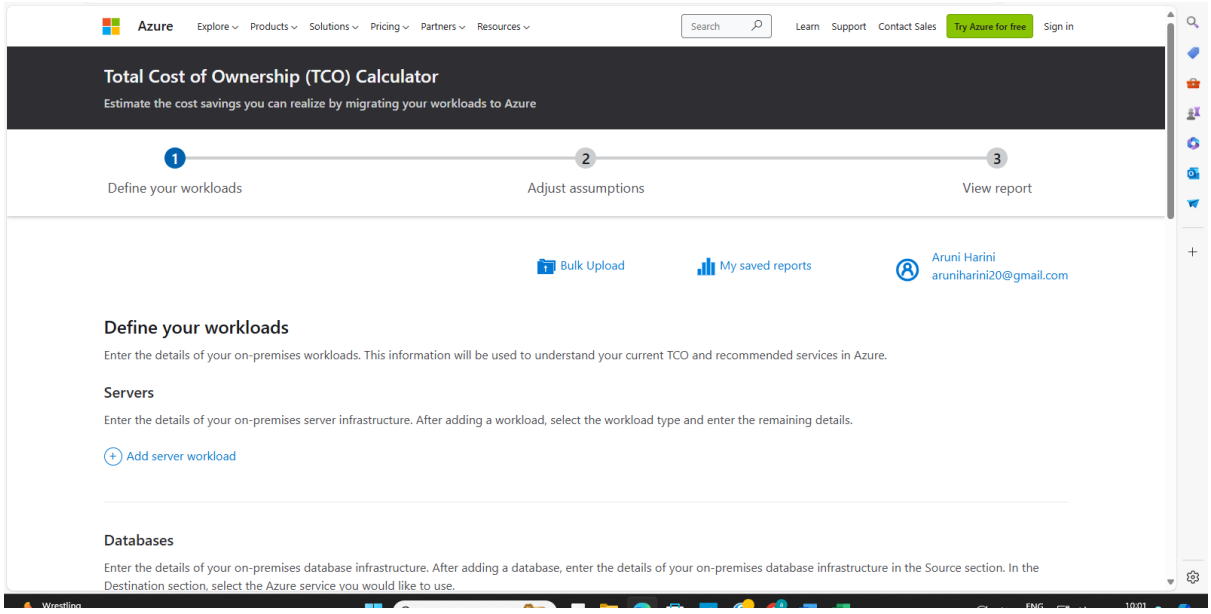
- In practice, you would adjust any cost assumptions and make any adjustments to match your current on-premises environment.
- At the top of the page, select your currency. This example uses **US Dollar ($)**.
- Select **Next**.
- **View the report**
- Take a moment to review the generated report.
- Remember, you've been tasked to investigate cost savings for your European datacenter over the next three years.

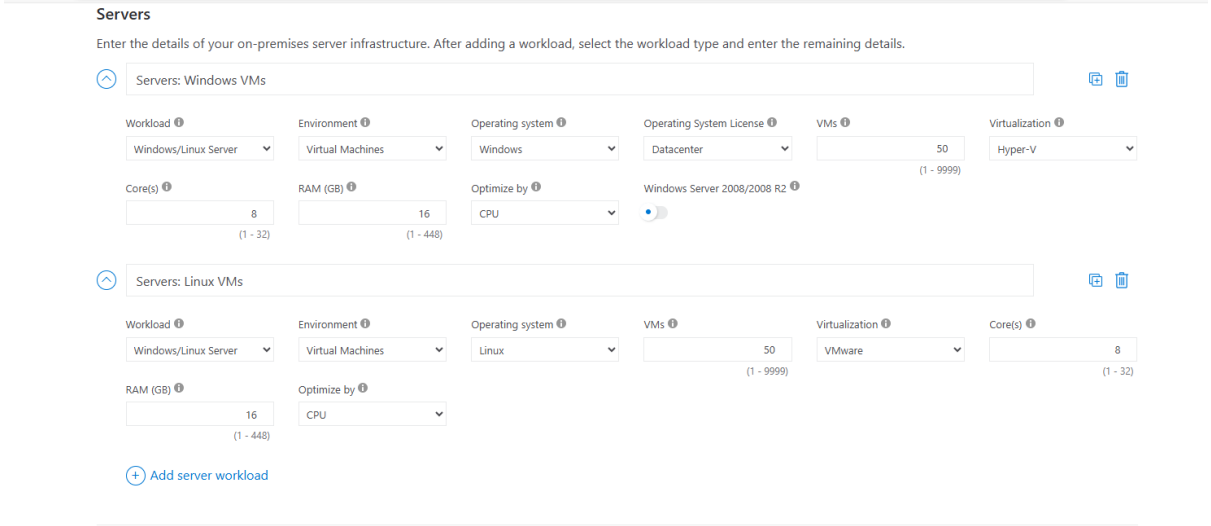
To make these adjustments:

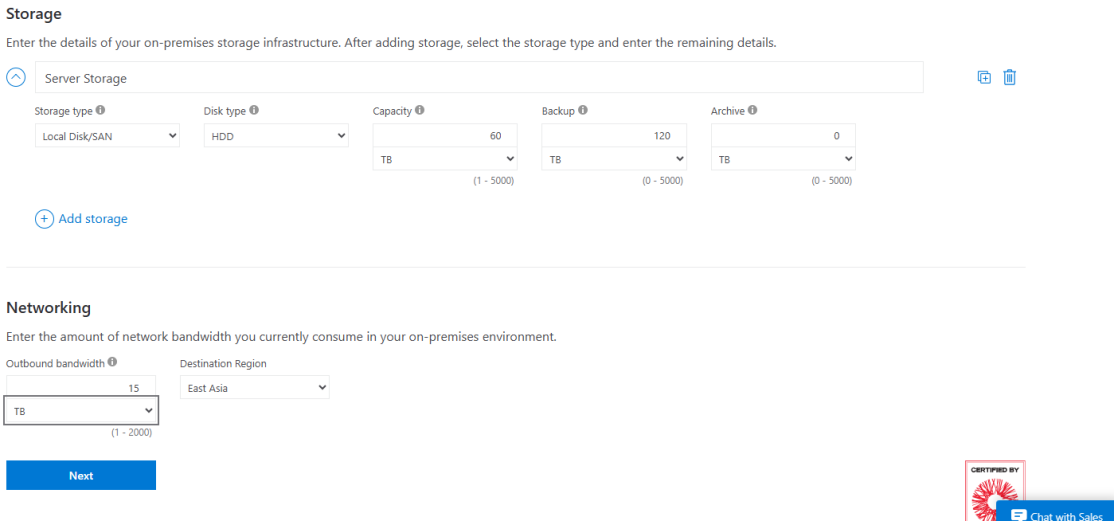
1. Set **Timeframe** to **3 Years**.
2. Set **Region** to **North Europe**.

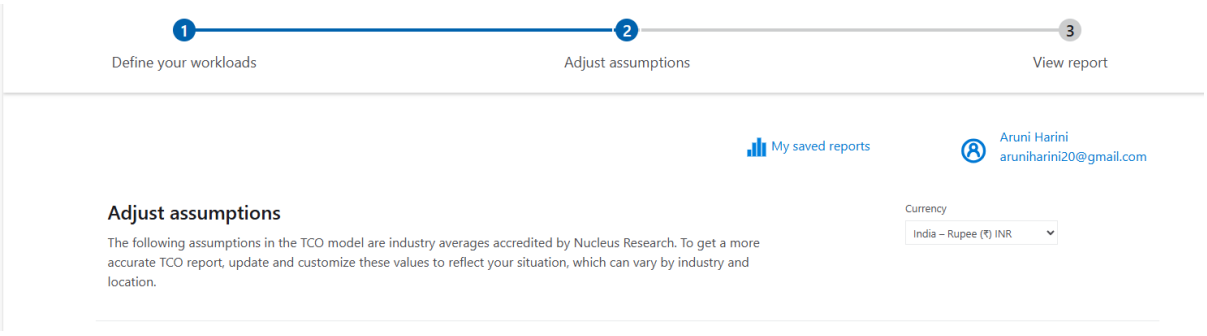
Scroll to the summary at the bottom. You see a comparison of running your workloads in the datacenter versus on Azure.

WORKING :

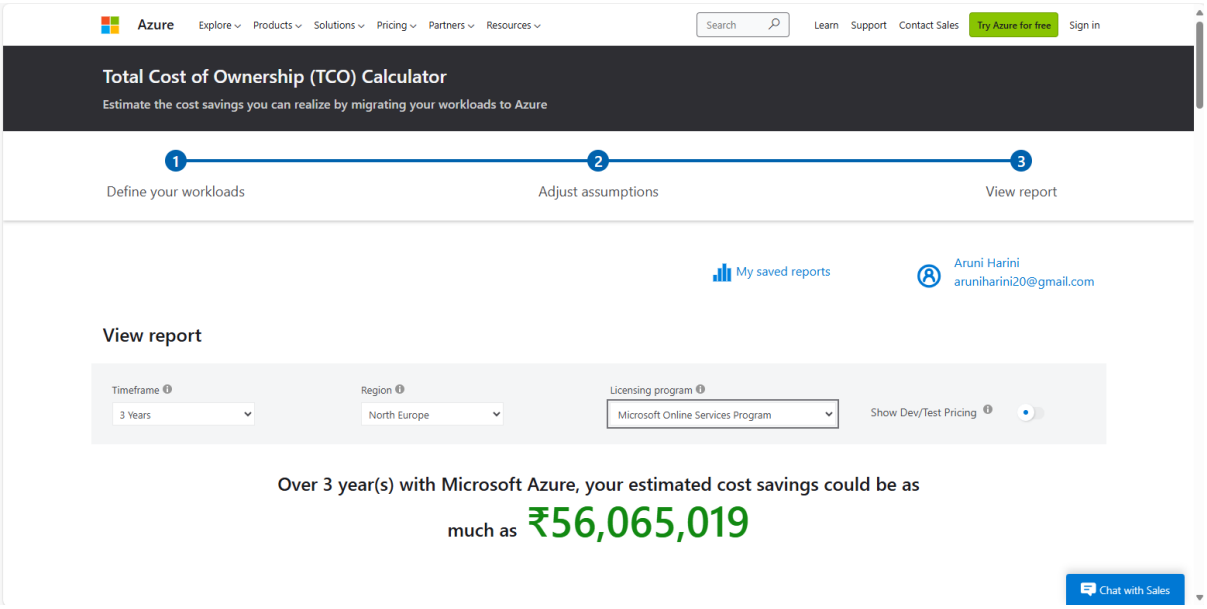





Storage
Enter the details of your on-premises storage infrastructure. After adding storage, select the storage type and enter the remaining details.
Server Storage
Storage type
Local Disk/SAN
Disk type
HDD
Capacity
60
TB
(1 - 5000)
Backup
120
TB
(0 - 5000)
Archive
0
TB
(0 - 5000)
Add storage
Networking
Enter the amount of network bandwidth you currently consume in your on-premises environment.
Outbound bandwidth
15
TB
(1 - 2000)
Destination Region
East Asia
Next
Chat with Sales

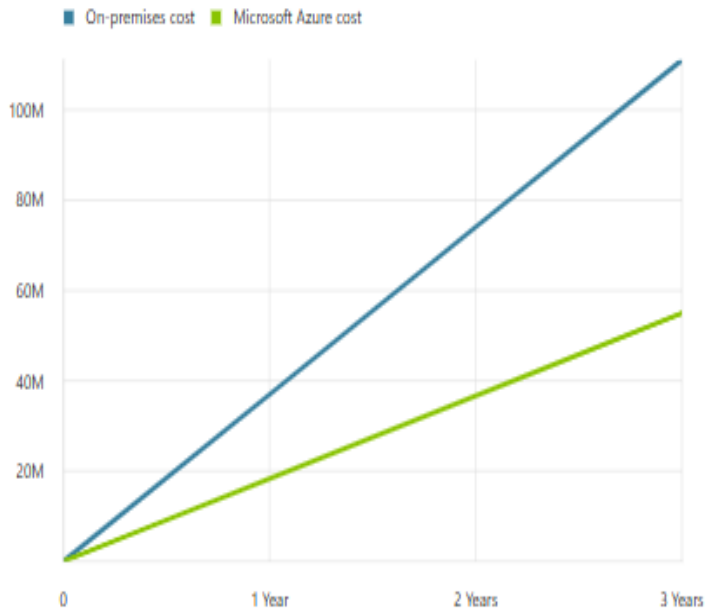

1
Define your workloads
2
Adjust assumptions
3
View report
My saved reports
Aruni Harini
aruniharini20@gmail.com
Adjust assumptions
The following assumptions in the TCO model are industry averages accredited by Nucleus Research. To get a more accurate TCO report, update and customize these values to reflect your situation, which can vary by industry and location.
Currency
India – Rupee (₹) INR

OUTPUT:


Azure
Explore
Products
Solutions
Pricing
Partners
Resources
Search
Learn
Support
Contact Sales
Try Azure for free
Sign in
Total Cost of Ownership (TCO) Calculator
Estimate the cost savings you can realize by migrating your workloads to Azure
1
Define your workloads
2
Adjust assumptions
3
View report
My saved reports
Aruni Harini
aruniharini20@gmail.com
View report
Timeframe
3 Years
Region
North Europe
Licensing program
Microsoft Online Services Program
Show Dev/Test Pricing
Over 3 year(s) with Microsoft Azure, your estimated cost savings could be as
much as ₹56,065,019
Chat with Sales

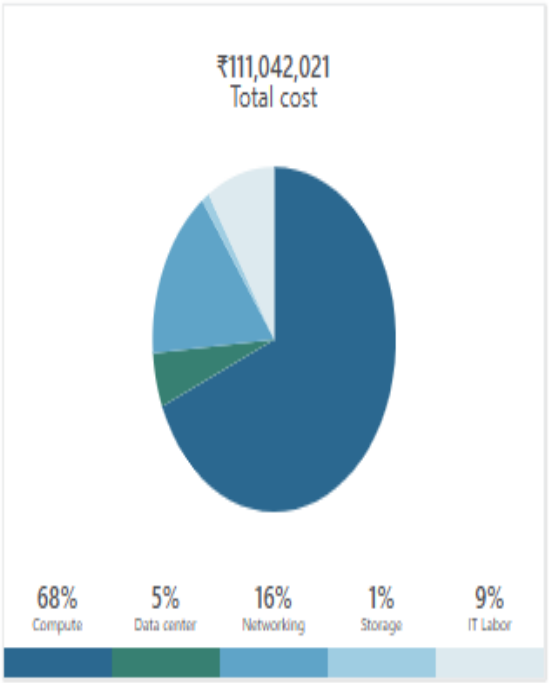
Total on-premises vs. Azure cost over time

Savings from running workloads in Azure accrue over time. The following shows how those savings add up over years.



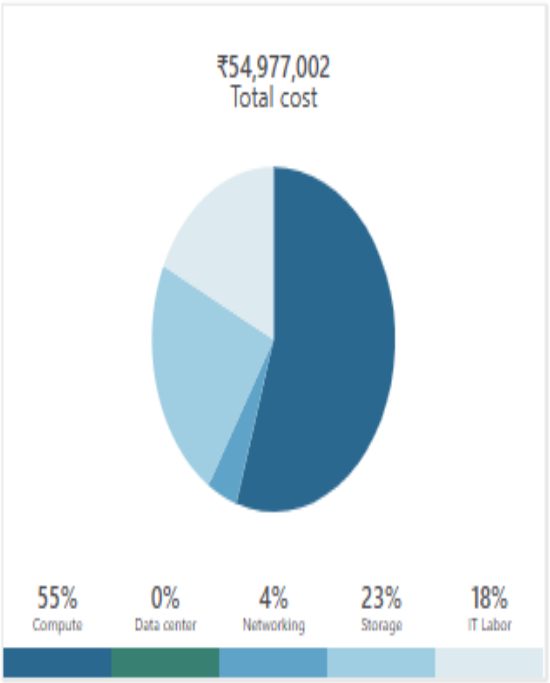
Total on-premises over 3 year(s)

TCO of on-premises environments tends to be driven by compute and data center costs.



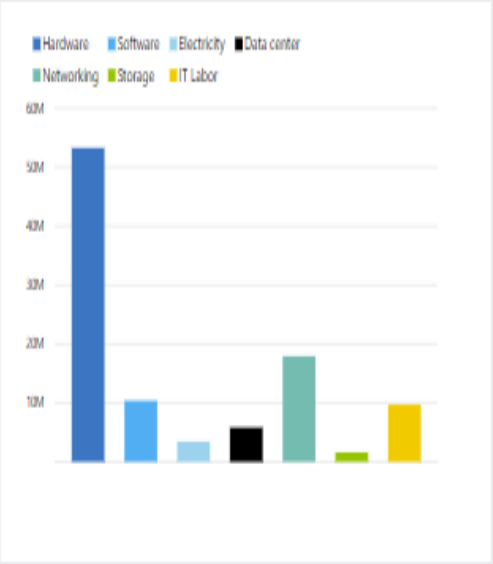
Total Azure cost over 3 year(s)

In Azure, certain cost categories decrease or go away completely.



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.

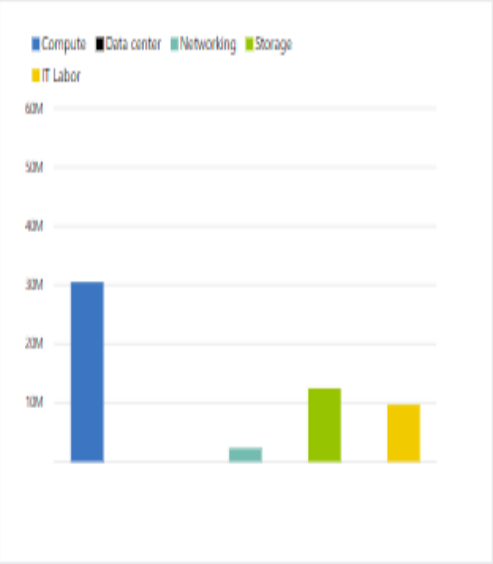


₹111,042,021

Cost over 3 year(s)

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.



₹54,977,002

Cost over 3 year(s)

On-premises cost breakdown summary

Category	Cost
Compute	₹76,005,384.60
Hardware	₹53,287,872.24
Software	₹10,375,700.10
Electricity	₹3,440,858.75
Virtualization	₹8,900,953.52
Data Center	₹5,808,873.37
Networking	₹17,927,593.05
Storage	₹1,607,398.80
IT Labor	₹9,692,779.61
Total	₹111,042,021.06

Azure cost breakdown summary

Category	Cost
Compute	₹30,504,686.92
Data Center	₹0.00
Networking	₹2,314,455.32
Storage	₹12,465,084.92
IT Labor	₹9,692,779.7334
Total	₹54,977,001.74

On-premises cost breakdown summary

Category	Cost
Compute	₹76,005,384.60
Hardware	₹53,287,872.24
Software	₹10,375,700.10
Electricity	₹3,440,858.75
Virtualization	₹8,900,953.52
Data Center	₹5,808,873.37
Networking	₹17,927,593.05
Storage	₹1,607,398.80
IT Labor	₹9,692,779.61
Total	**₹111,042,021.06**

Azure cost breakdown summary

Category	Cost
Compute	₹30,504,686.92
Data Center	₹0.00
Networking	₹2,314,455.32
Storage	₹12,465,084.92
IT Labor	₹9,692,779.7334
Total	**₹54,977,001.74**

Estimated on-premises cost (3 year(s))

- Compute cost
- Data center cost
- Networking cost
- Storage cost
- IT labor cost

Estimated Azure cost (3 year(s))

- Azure compute cost
- Azure data center cost
- Azure networking cost
- Azure storage cost
- Azure IT labor cost

Total on-premises cost over three year(s)	**₹111,042,021.06**
Total Azure cost over three year(s)	**₹54,977,001.74**

A total **savings** of ₹56,065,019.32 with **Microsoft Azure**

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Create your Azure free account and start exploring as you plan

Back