# Azure Capstone Project

You are assigned the task of implementing the below architecture for the company's website. There are three web pages to be deployed:

1. The home page is the default page (VM2)

2. The upload page is where you can upload the files to your Azure Blob Storage (VM1) 3. The error page for 403 and 502 errors Application Gateway has to be configured in the following manner: 1. Example.com should be pointed to the home page

2. Example.com/upload should be pointed to the upload page

3. Application Gateway's error pages should be pointed to error.html which should be hosted as a static website in Azure Containers. The error.html file is present in the GitHub repository The term 'Example' here refers to the Traffic Manager's domain name. The client wants you to deploy them in the Central US and the West US regions such that the traffic is distributed optimally between both regions.

Storage Account has to be configured in the following manner:

1. You need to host your error.html as a static website here, and then point the application gateway's 403 and 502 errors to it.

2. Create a container named upload, this will be used by your code to upload the files. Technical specifications for the deployments are as follows:

1. Deployments in both regions should have VMs inside VNets.

2. Clone the GitHub repo https://github.com/azcloudberg/azproject to all the VMs.

3. On VM1, please run vm1.sh this will deploy the upload page, on VM2 please run VM2.sh, this will install the home page.

4. For running the scripts, please run the following command inside the GitHub directory from the terminal. VM1: ./vm1.sh VM2: ./vm2.sh

5. After running the scripts, please edit the config.py file on VM1, and enter the details related to your storage account where the files will be uploaded.

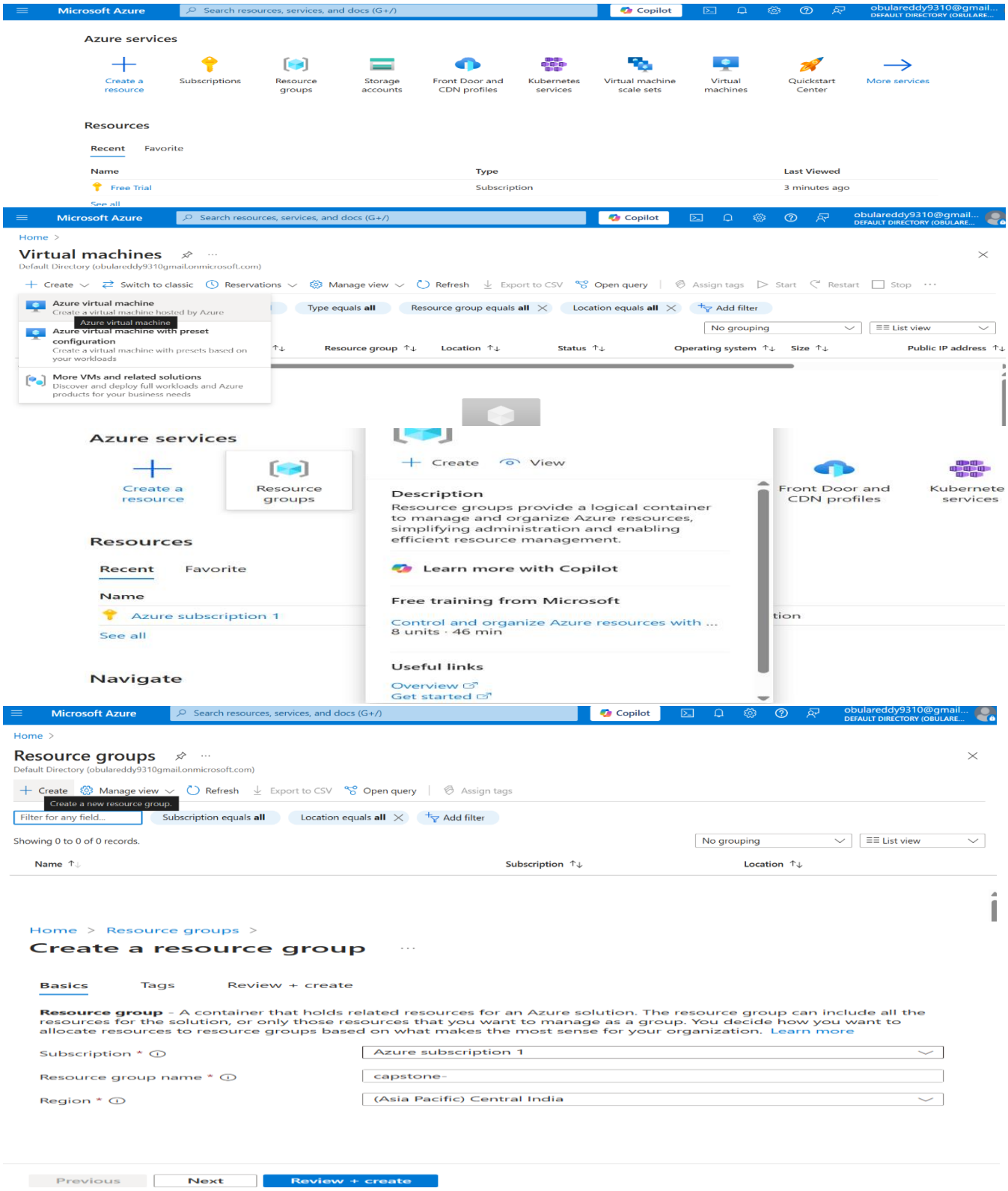
6. Once done, please run the following command: sudo python3 app.py

7. Both regions should be connected to each other using VNet-VNet Peering.

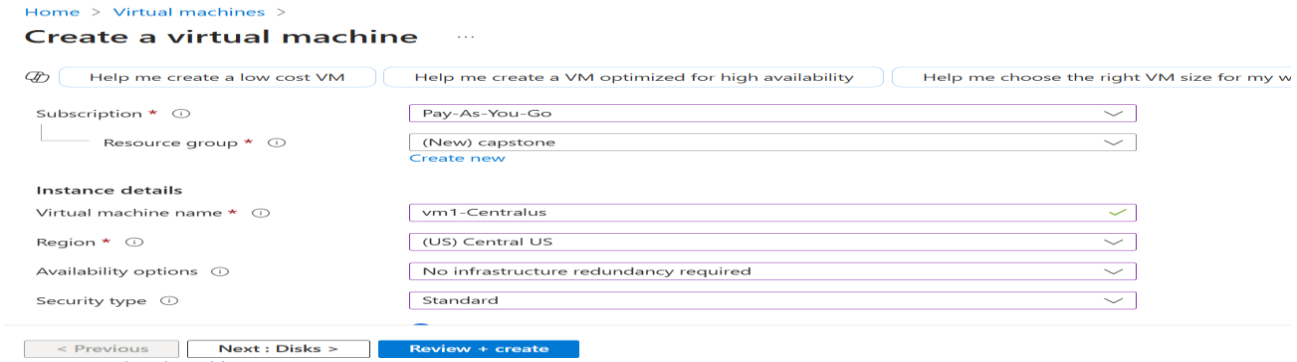
8. Finally, your Traffic Manager should be pointing to the application gateway of both the regions.

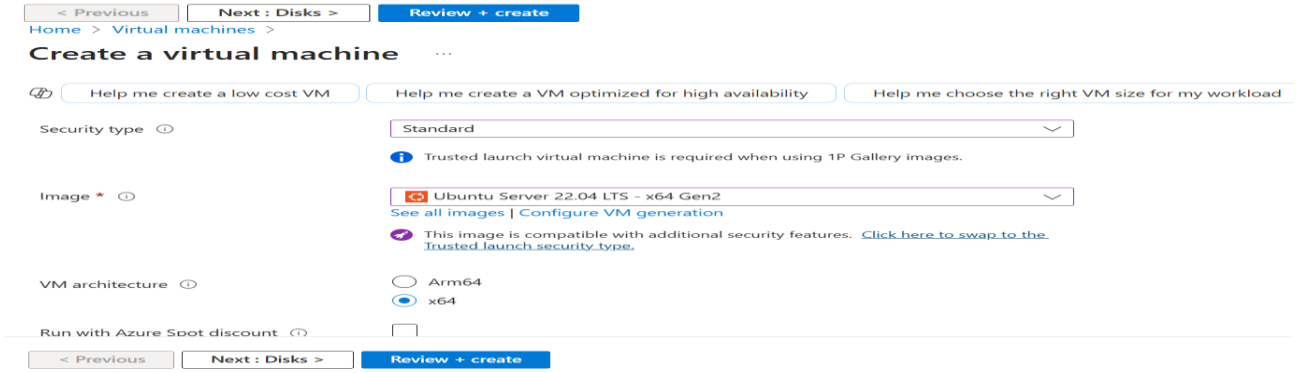
**Solution:**

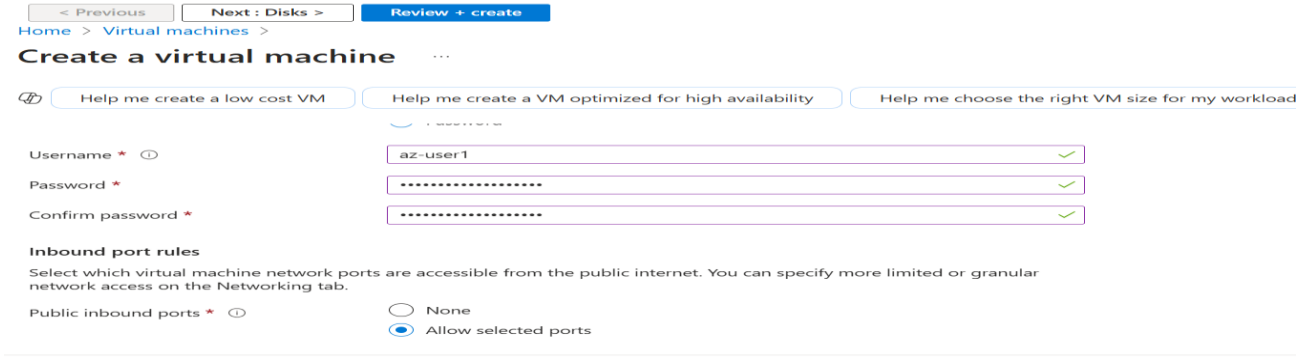
**Step-1:** Login into azure portal and search for virtual machines and create a resource group.

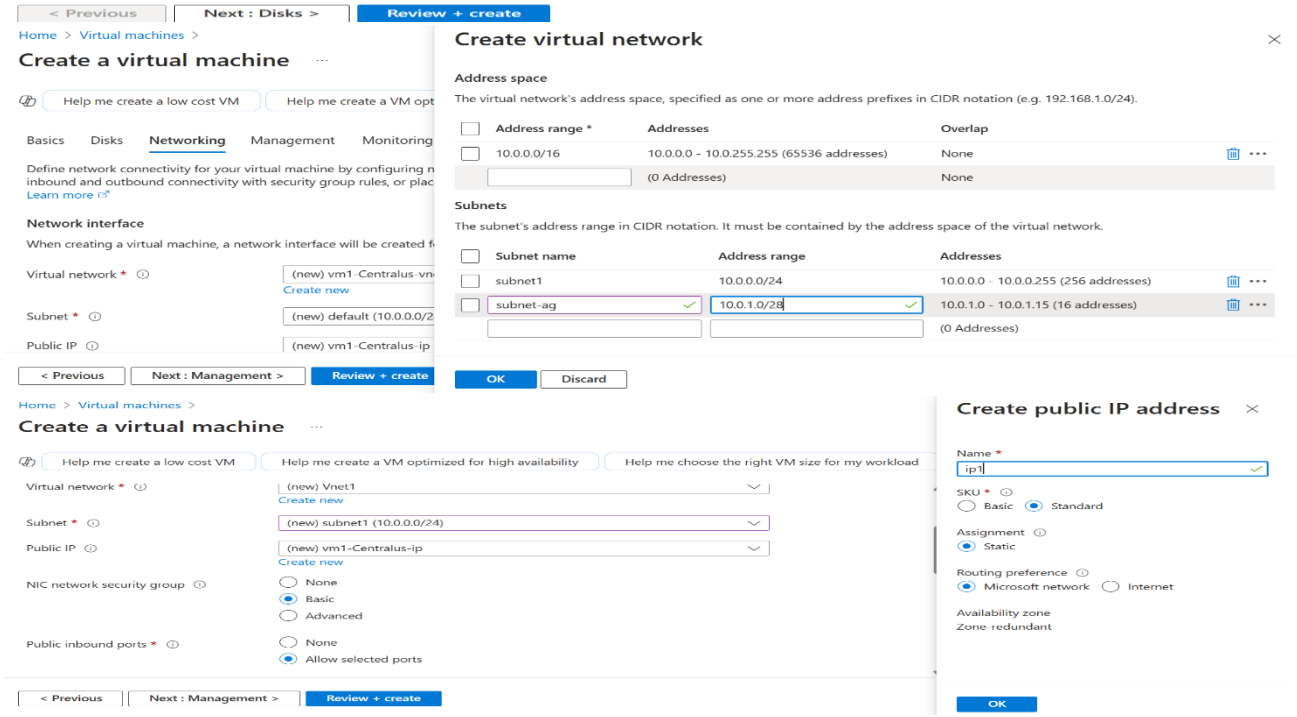



**Step-2:** Create 2 virtual machines in each two of machines belongs to CENTRAL US region.

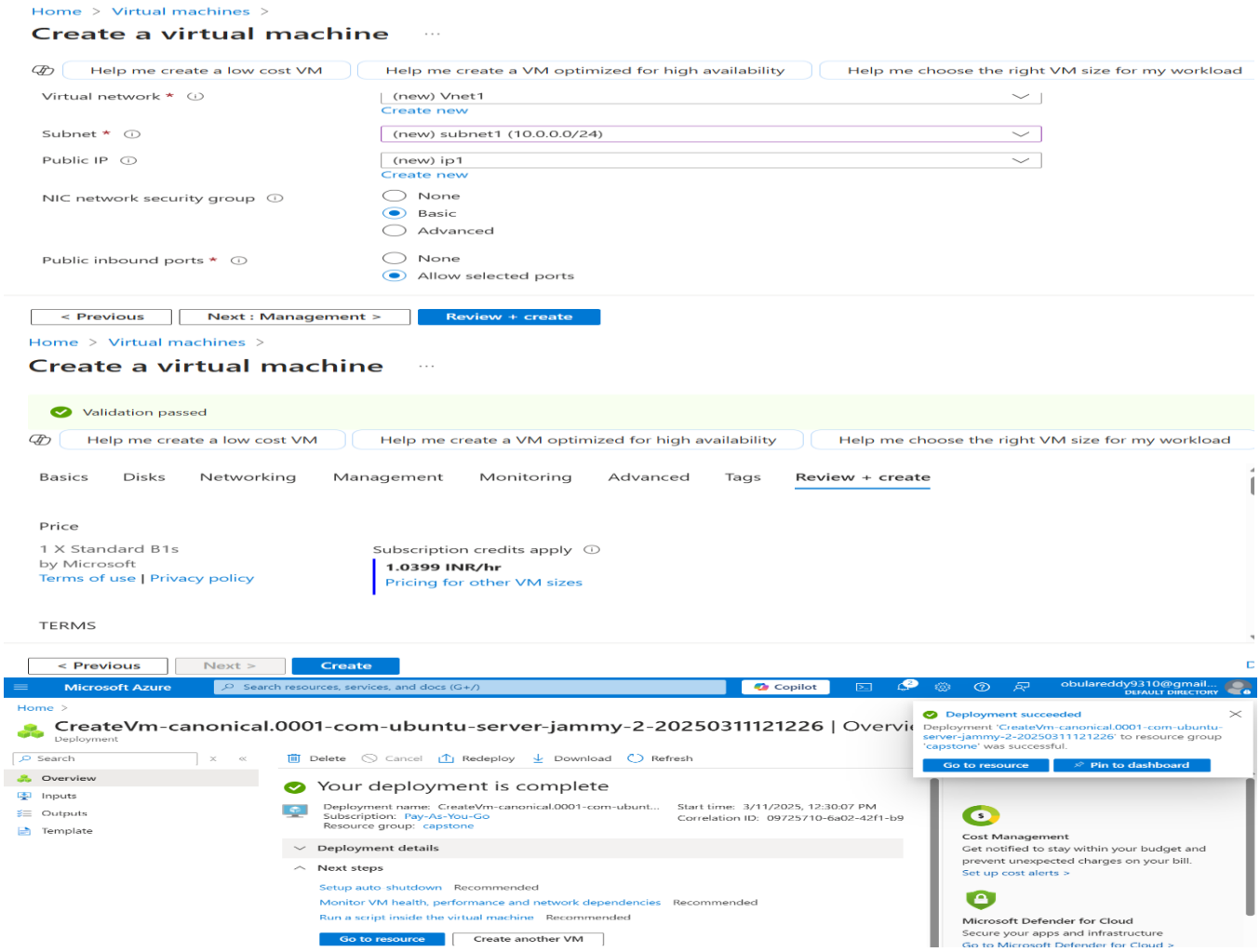

Home > Virtual machines >
Create a virtual machine
Help me create a low cost VM
Help me create a VM optimized for high availability
Help me choose the right VM size for my w
Subscription *
Pay-As-You-Go
Resource group *
(New) capstone
Create new
Instance details
Virtual machine name *
vm1-Centralus
Region *
(US) Central US
Availability options
No infrastructure redundancy required
Security type
Standard
< Previous
Next : Disks >
Review + create


Home > Virtual machines >
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
Security type
Standard
Trusted launch virtual machine is required when using 1P Gallery images.
Image *
Ubuntu Server 22.04 LTS - x64 Gen2
See all images | Configure VM generation
This image is compatible with additional security features. Click here to swap to the Trusted launch security type.
VM architecture
Arm64
x64
Run with Azure Spot discount
< Previous
Next : Disks >
Review + create

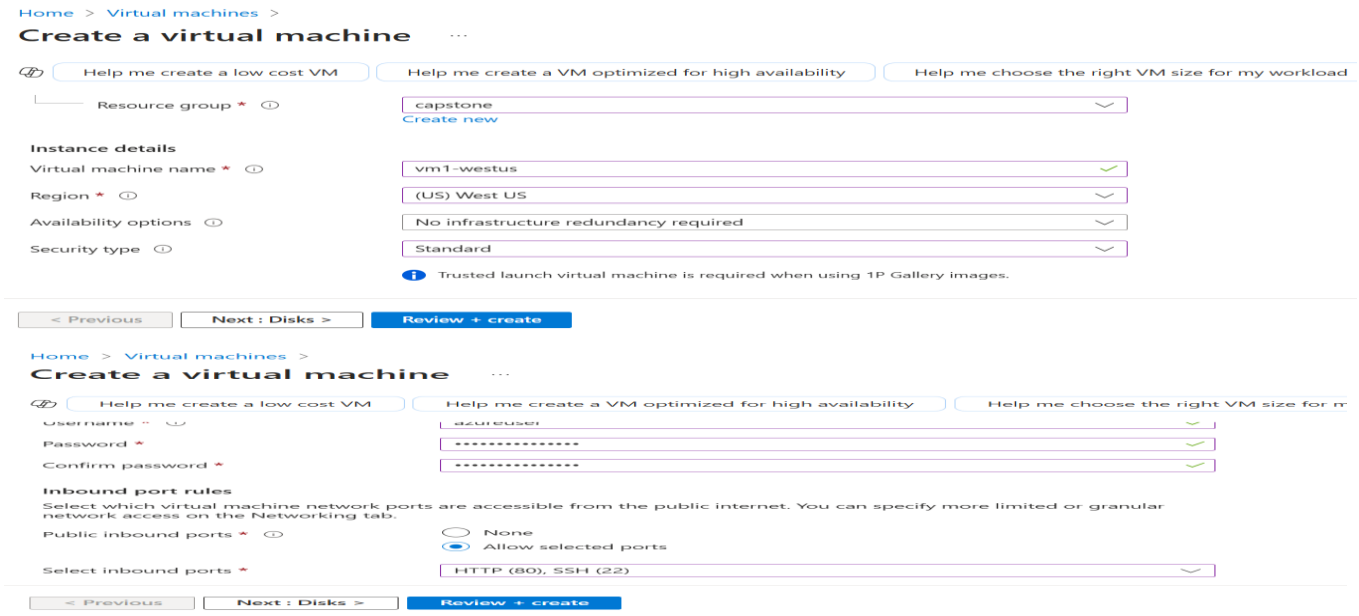

Home > Virtual machines >
Create a virtual machine
Help me create a low cost VM
Help me create a VM optimized for high availability
Help me choose the right VM size for my workload
Username *
az-user1
Password *
Confirm password *
Inbound port rules
Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.
Public inbound ports *
None
Allow selected ports
< Previous
Next : Disks >
Review + create

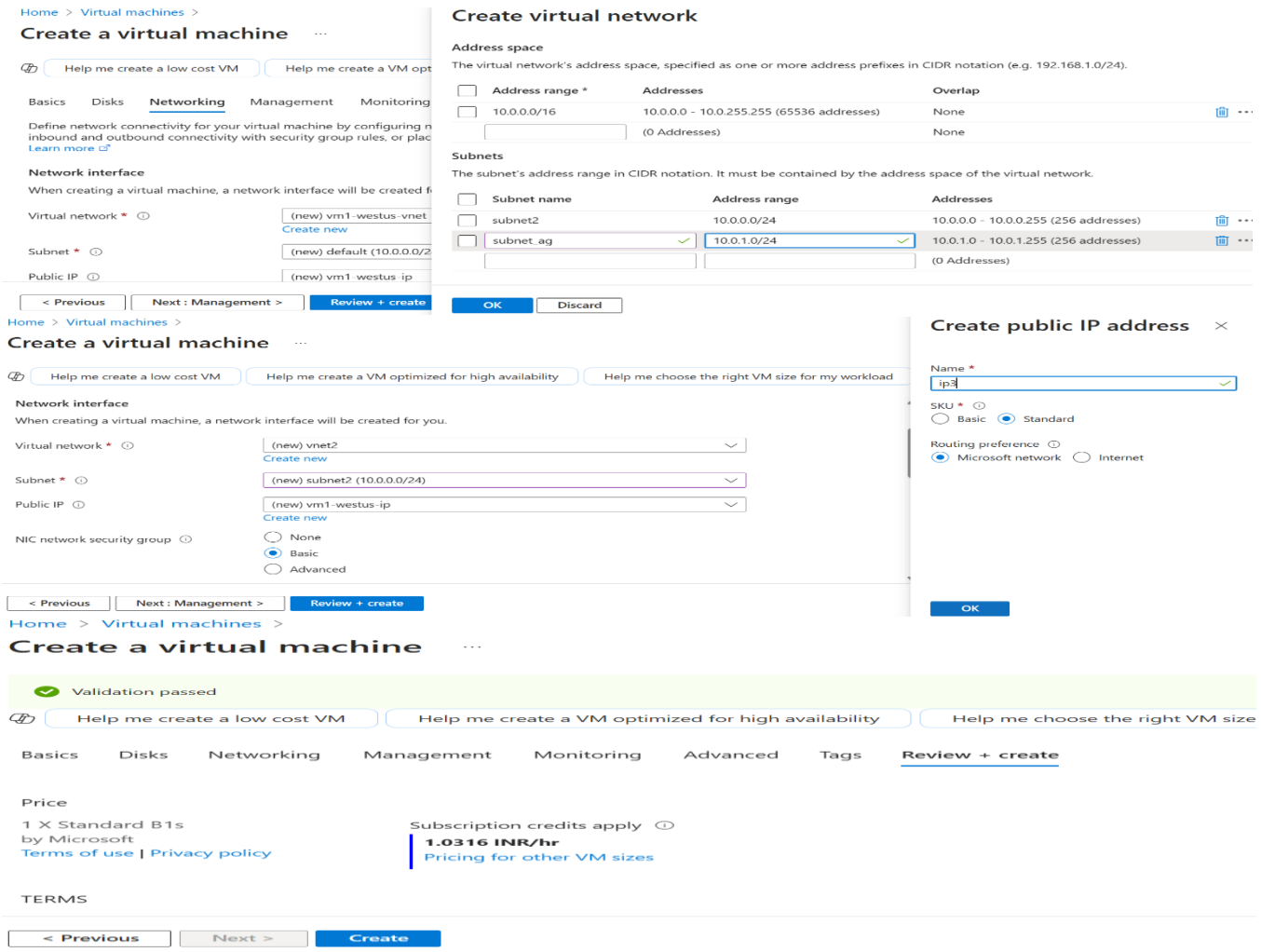

Home > Virtual machines >
Create a virtual machine
Basics
Disks
Networking
Management
Monitoring
Network interface
Virtual network *
(new) vm1-Centralus-vn
Create new
Subnet *
(new) default (10.0.0.0/2
Public IP
(new) vm1-Centralus-ip
< Previous
Next : Management >
Review + create
Create virtual network
Address space
The virtual network's address space, specified as one or more address prefixes in CIDR notation (e.g. 192.168.1.0/24).
Address range *
Addresses
Overlap
10.0.0.0/16
10.0.0.0 - 10.0.255.255 (65536 addresses)
None
(0 Addresses)
None
Subnets
The subnet's address range in CIDR notation. It must be contained by the address space of the virtual network.
Subnet name
Address range
Addresses
subnet1
10.0.0.0/24
10.0.0.0 - 10.0.0.255 (256 addresses)
subnet-ag
10.0.1.0/28
10.0.1.0 - 10.0.1.15 (16 addresses)
(0 Addresses)
OK
Discard


Home > Virtual machines >
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
Virtual network *
(new) Vnet1
Create new
Subnet *
(new) subnet1 (10.0.0.0/24)
Public IP
(new) vm1-Centralus-ip
Create new
NIC network security group
None
Basic
Advanced
Public inbound ports *
None
Allow selected ports
< Previous
Next : Management >
Review + create
Create public IP address
Name *
ip1
SKU *
Basic
Standard
Assignment
Static
Routing preference
Microsoft network
Internet
Availability zone
Zone redundant
OK

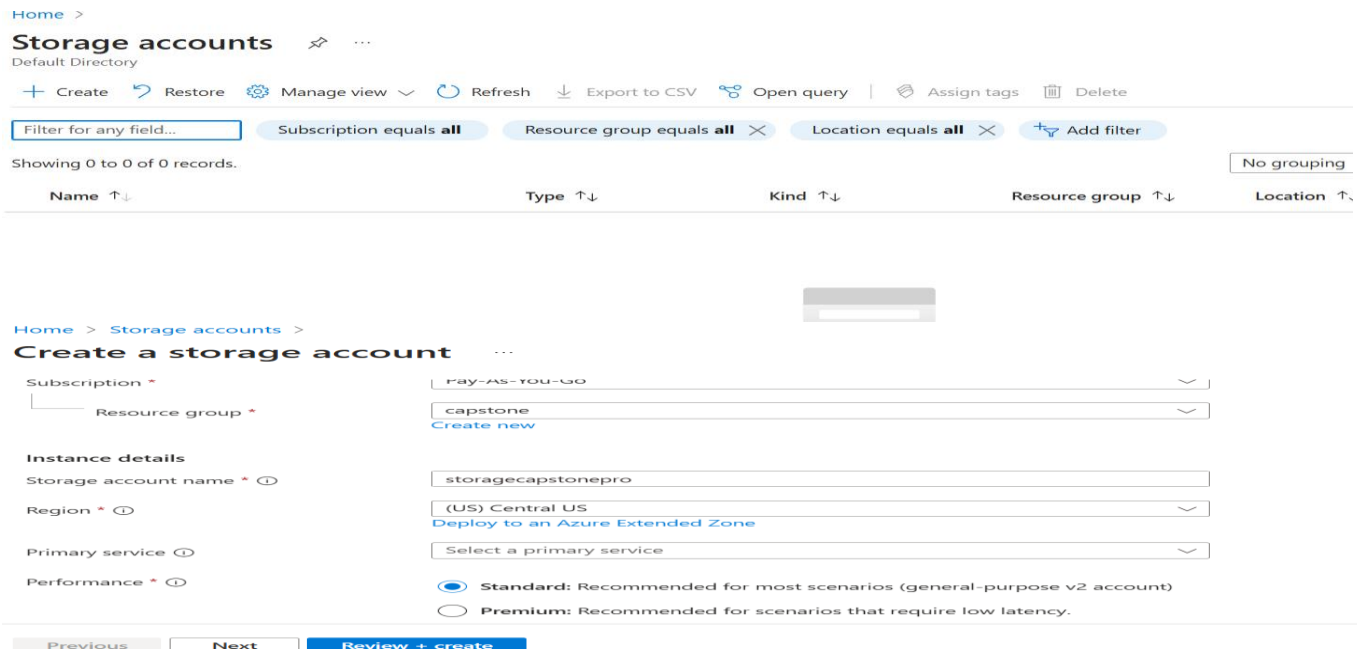


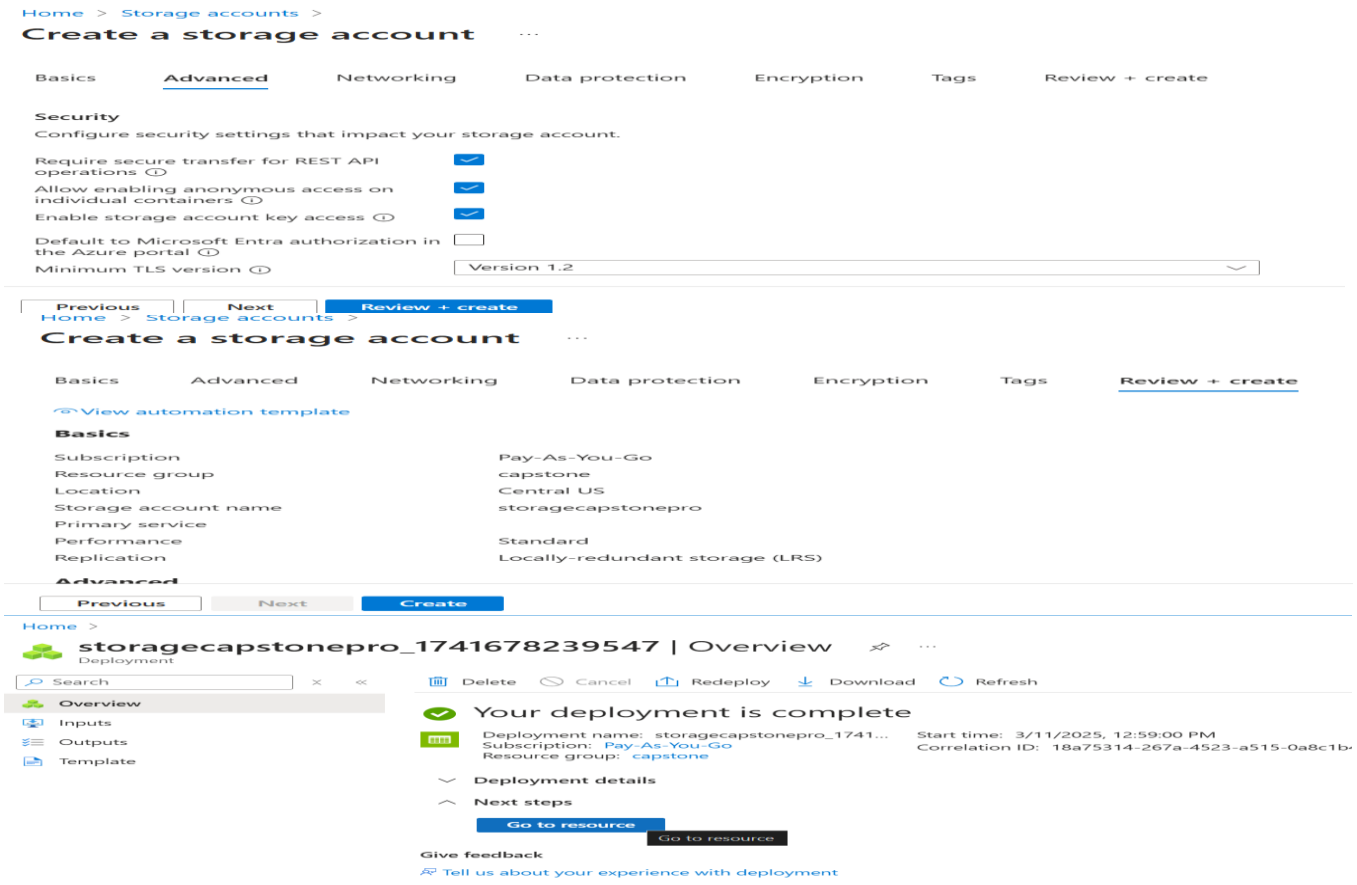

**Step-3:** Create 2 virtual machines which belongs to WEST US.



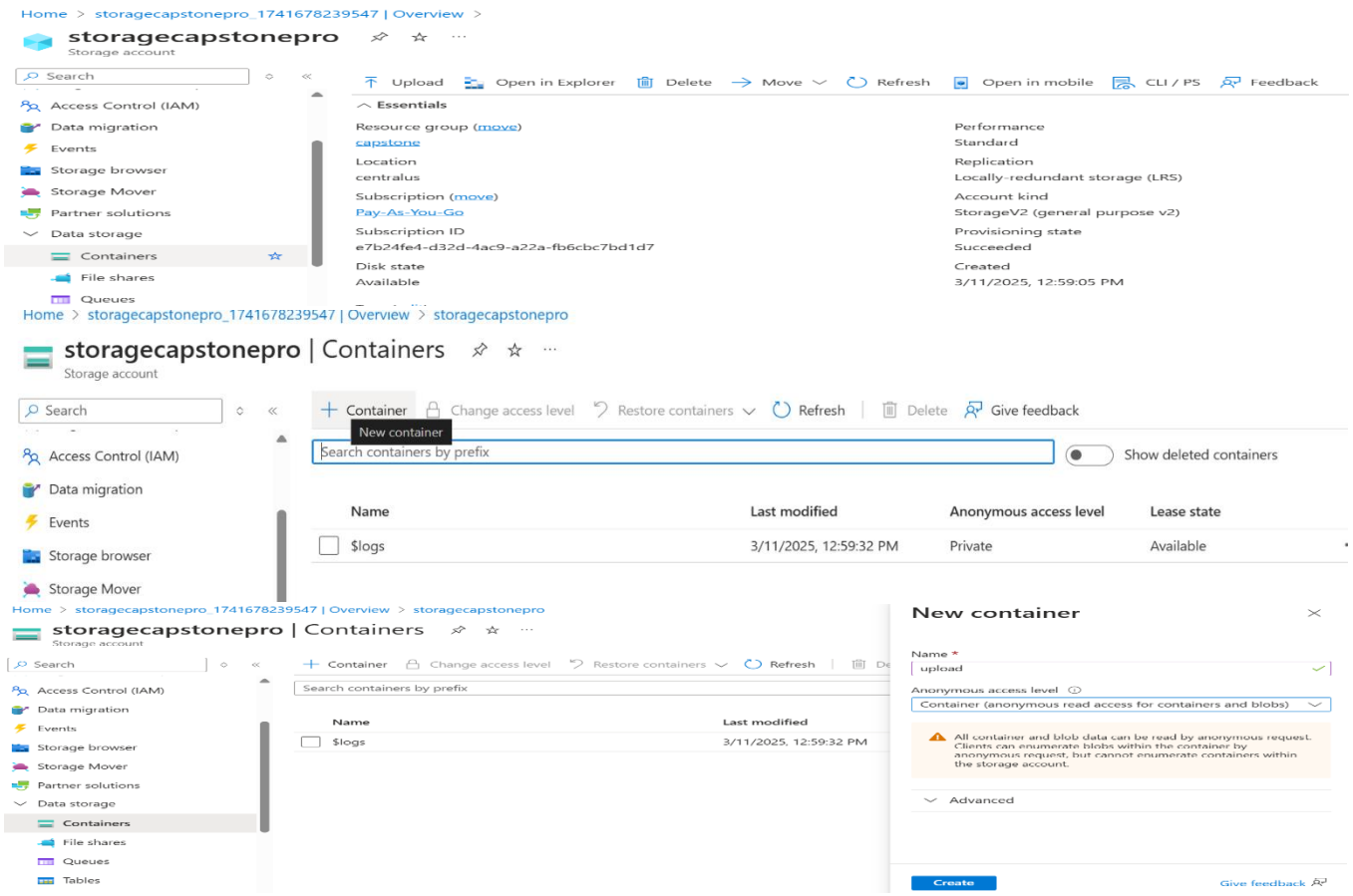



**Step-4:** Create a storage account.

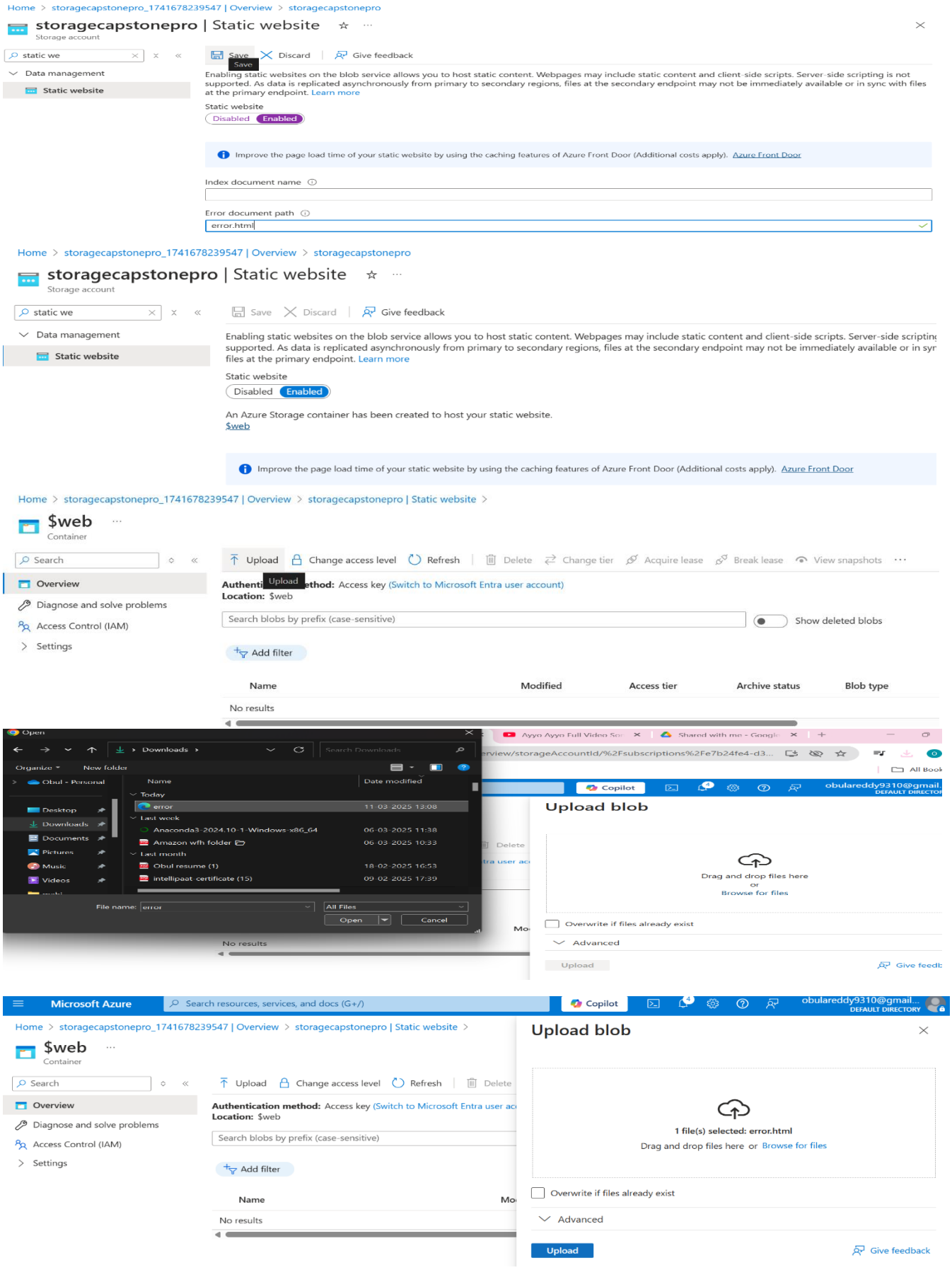




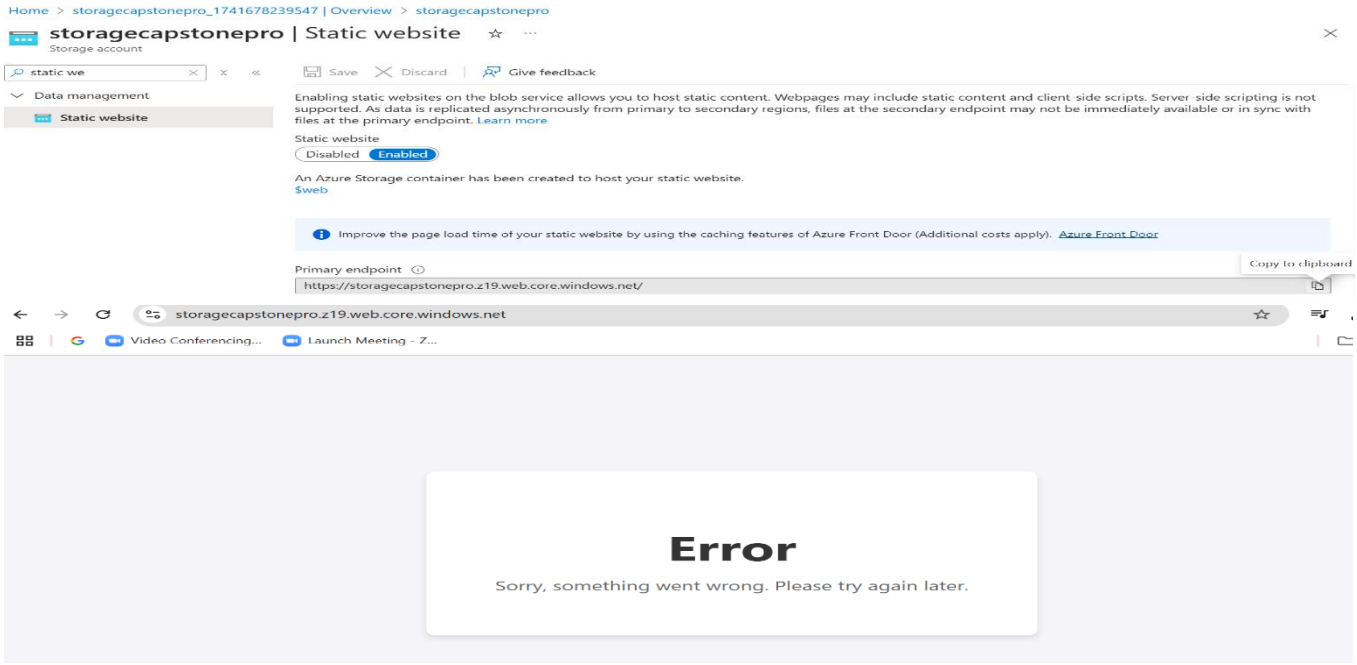

**Step-5:** Create a container and upload a file.



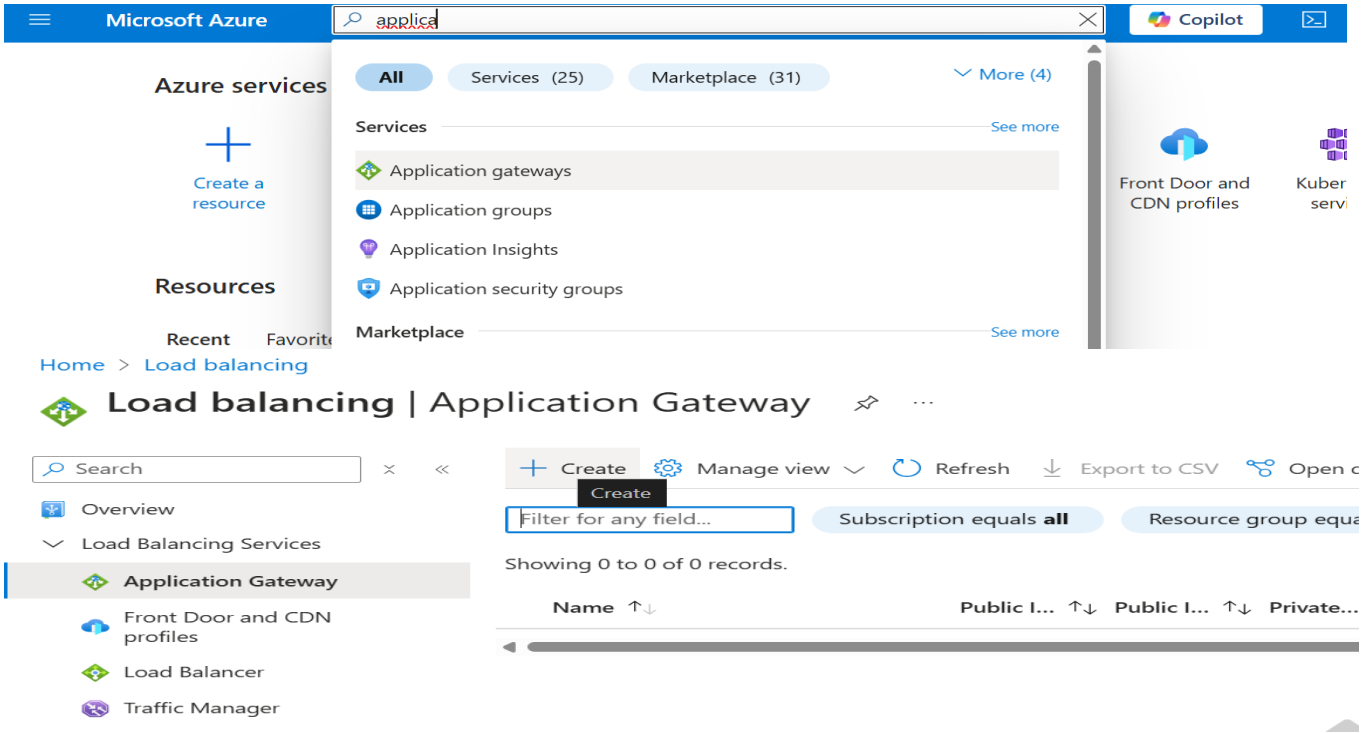
**Step-6:** Create and enable  static website for accesing the uploaded file.

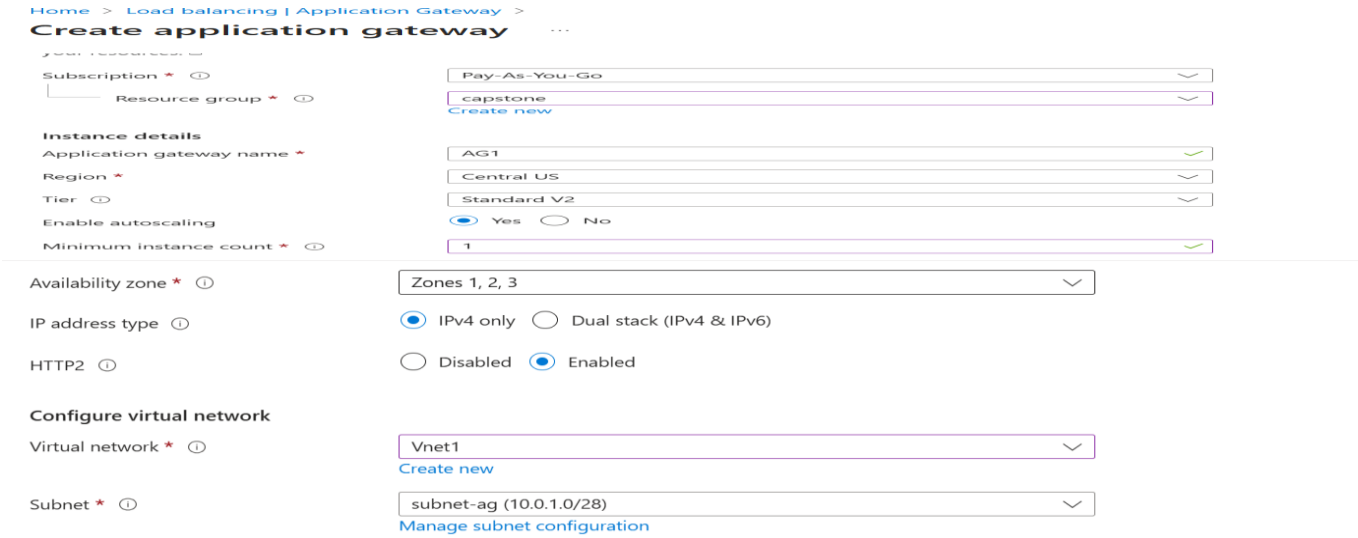


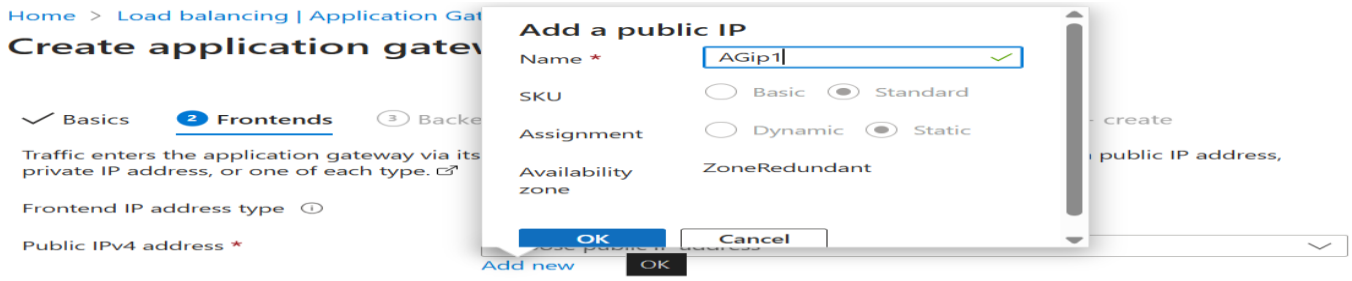
**Step-7:** Copy the primary endpoint and paste it and run in new tab.

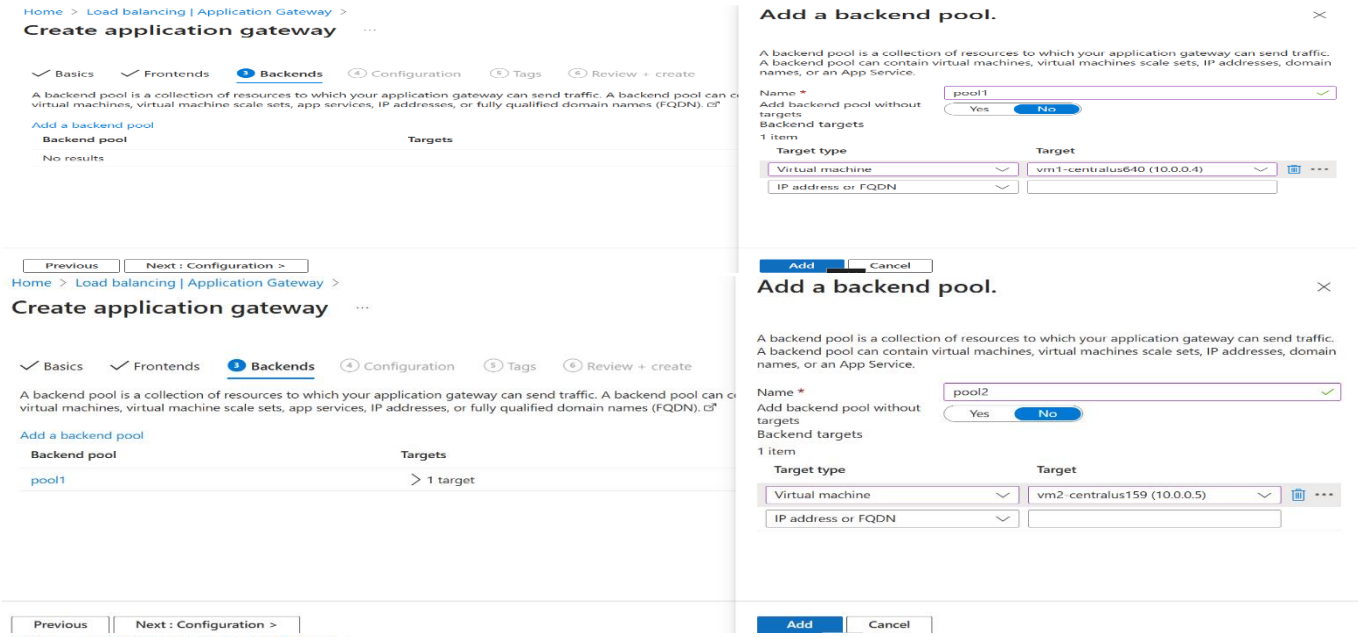


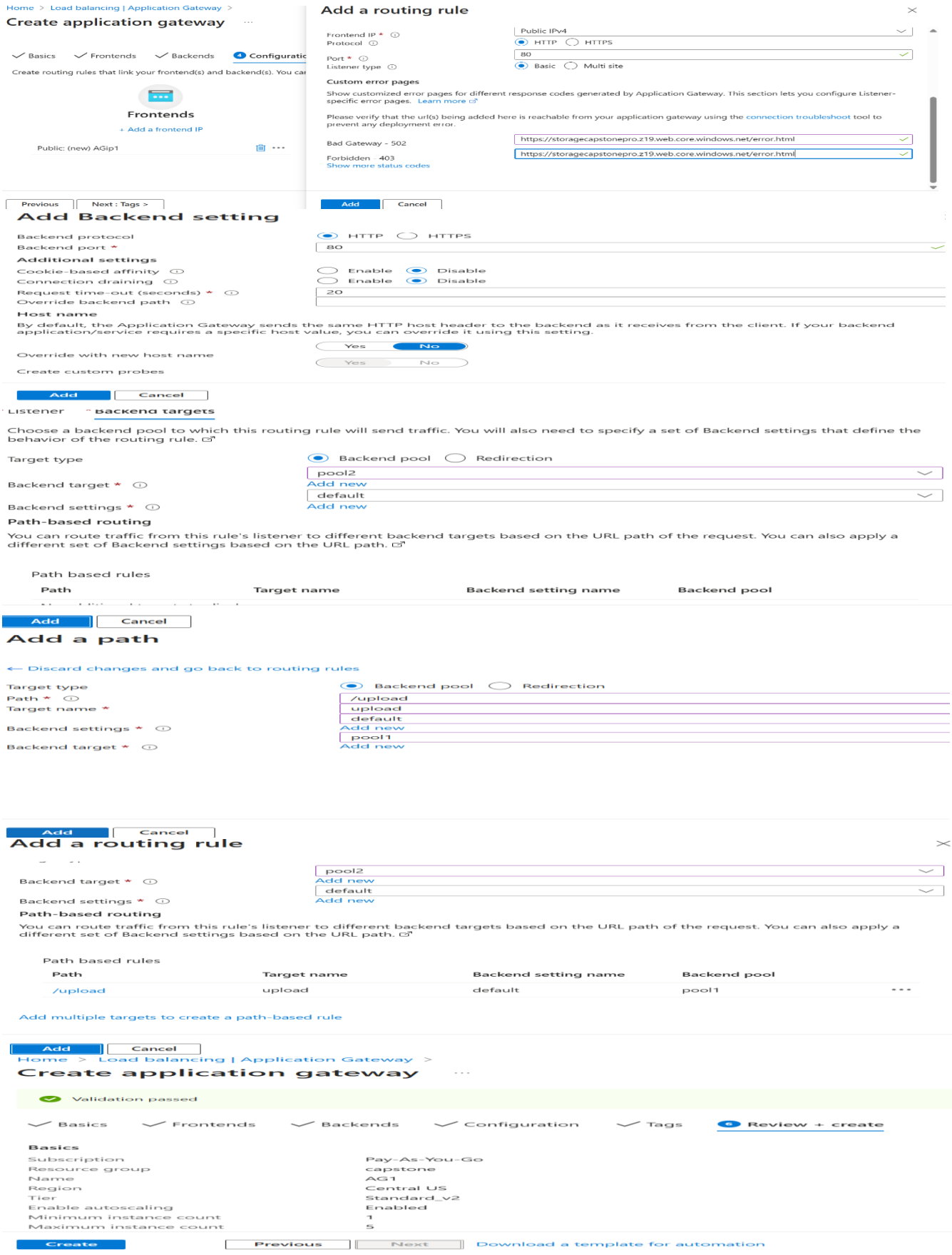

**Step-8:** Create two application gateways for loading/distributing the traffic with routing from backend path.

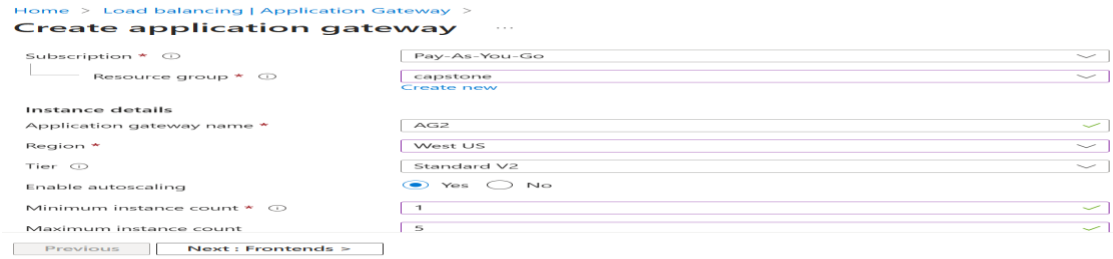


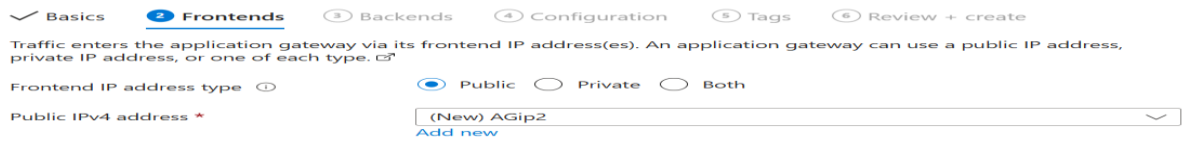

Home > Load balancing | Application Gateway >
Create application gateway
Subscription *
Pay-As-You-Go
Resource group *
capstone
Create new
Instance details
Application gateway name *
AG1
Region *
Central US
Tier
Standard V2
Enable autoscaling
Yes
No
Minimum instance count *
1
Availability zone *
Zones 1, 2, 3
IP address type
IPv4 only
Dual stack (IPv4 & IPv6)
HTTP2
Disabled
Enabled
Configure virtual network
Virtual network *
Vnet1
Create new
Subnet *
subnet-ag (10.0.1.0/28)
Manage subnet configuration

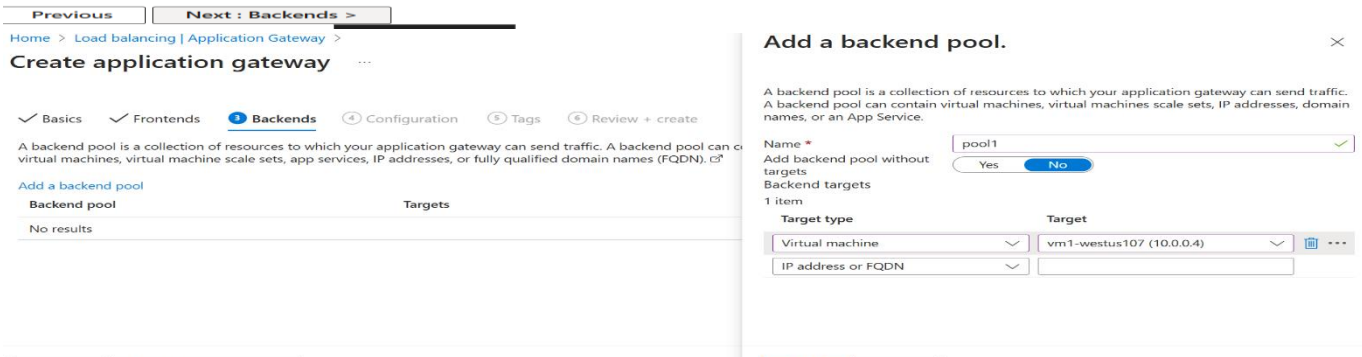

Home > Load balancing | Application Gat
Create application gatev
Add a public IP
Name *
AGip1
SKU
Basic
Standard
Assignment
Dynamic
Static
Availability zone
ZoneRedundant
OK
Cancel
Basics
2 Frontends
Backe
create
Traffic enters the application gateway via its
private IP address, or one of each type.
public IP address,
Frontend IP address type
Public IPv4 address *
Add new
OK

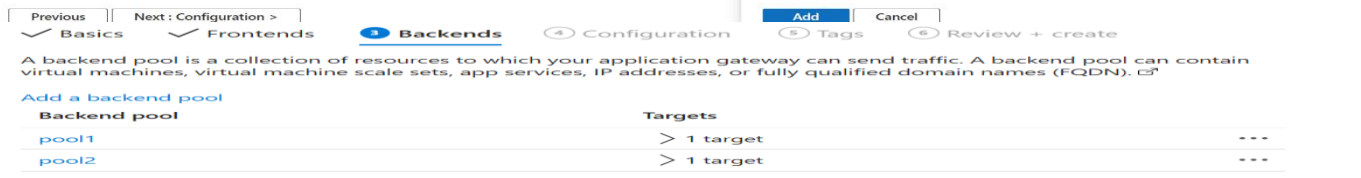

Home > Load balancing | Application Gateway >
Create application gateway
Basics
Frontends
3 Backends
Configuration
Tags
Review + create
A backend pool is a collection of resources to which your application gateway can send traffic. A backend pool can c
virtual machines, virtual machine scale sets, app services, IP addresses, or fully qualified domain names (FQDN).
Add a backend pool
Backend pool
Targets
No results
Add a backend pool.
A backend pool is a collection of resources to which your application gateway can send traffic.
A backend pool can contain virtual machines, virtual machines scale sets, IP addresses, domain
names, or an App Service.
Name *
pool1
Add backend pool without targets
Yes
No
Backend targets
1 item
Target type
Target
Virtual machine
vm1-centralus640 (10.0.0.4)
IP address or FQDN
Previous
Next : Configuration >
Add
Cancel
Home > Load balancing | Application Gateway >
Create application gateway
Basics
Frontends
3 Backends
4 Configuration
5 Tags
6 Review + create
A backend pool is a collection of resources to which your application gateway can send traffic. A backend pool can c
virtual machines, virtual machine scale sets, app services, IP addresses, or fully qualified domain names (FQDN).
Add a backend pool
Backend pool
Targets
pool1
1 target
Add a backend pool.
A backend pool is a collection of resources to which your application gateway can send traffic.
A backend pool can contain virtual machines, virtual machines scale sets, IP addresses, domain
names, or an App Service.
Name *
pool2
Add backend pool without targets
Yes
No
Backend targets
1 item
Target type
Target
Virtual machine
vm2-centralus159 (10.0.0.5)
IP address or FQDN
Previous
Next : Configuration >
Add
Cancel
Home > Load balancing | Application Gateway >
Create application gateway
Basics
Frontends
Backends
4 Configuration
5 Tags
6 Review + create
Create routing rules that link your frontend(s) and backend(s). You can also add more backend pools, add a second frontend IP configuration if you haven't already, or edit previous configurations.
Frontends
+ Add a frontend IP
Public: (new) AGip1
Routing rules
Add a routing rule
Backend pools
+ Add a backend pool
pool1
pool2

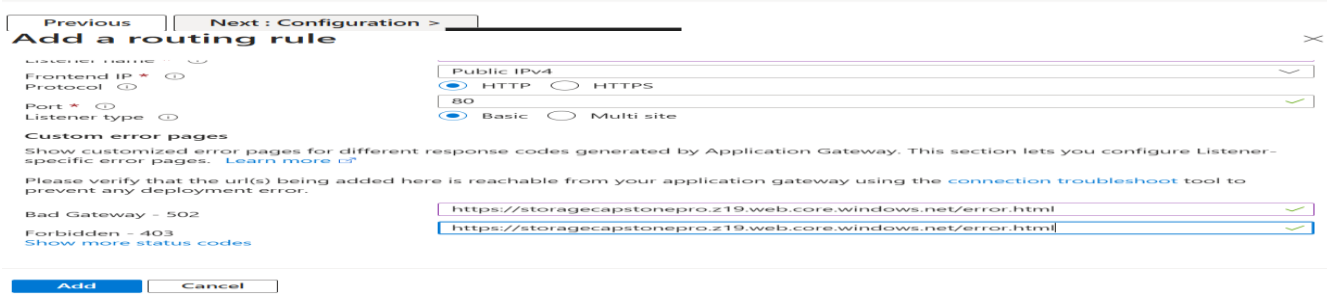

Home > Load balancing | Application Gateway >
Create application gateway
Basics
Frontends
Backends
Configuration
Create routing rules that link your frontend(s) and backend(s). You can
Frontends
+ Add a frontend IP
Public: (new) AGip1
Add a routing rule
Frontend IP *
Protocol
Public IPv4
HTTP
HTTPS
Port *
Listener type
80
Basic
Multi site
Custom error pages
Show customized error pages for different response codes generated by Application Gateway. This section lets you configure Listener-specific error pages. Learn more
Please verify that the url(s) being added here is reachable from your application gateway using the connection troubleshoot tool to prevent any deployment error.
Bad Gateway - 502
https://storagecapstonepro.z19.web.core.windows.net/error.html
Forbidden - 403
https://storagecapstonepro.z19.web.core.windows.net/error.html
Show more status codes
Previous
Next : Tags >
Add
Cancel
Add Backend setting
Backend protocol
HTTP
HTTPS
Backend port *
80
Additional settings
Cookie-based affinity
Enable
Disable
Connection draining
Enable
Disable
Request time-out (seconds) *
20
Override backend path
Host name
By default, the Application Gateway sends the same HTTP host header to the backend as it receives from the client. If your backend application/service requires a specific host value, you can override it using this setting.
Override with new host name
Yes
No
Create custom probes
Yes
No
Add
Cancel
Listener
backend targets
Choose a backend pool to which this routing rule will send traffic. You will also need to specify a set of Backend settings that define the behavior of the routing rule.
Target type
Backend pool
Redirection
Backend target *
pool2
Add new
Backend settings *
default
Add new
Path-based routing
You can route traffic from this rule's listener to different backend targets based on the URL path of the request. You can also apply a different set of Backend settings based on the URL path.
Path based rules
Path
Target name
Backend setting name
Backend pool
Add
Cancel
Add a path
Discard changes and go back to routing rules
Target type
Backend pool
Redirection
Path *
/upload
Target name *
upload
default
Backend settings *
Add new
pool1
Backend target *
Add new
Add
Cancel
Add a routing rule
Backend target *
pool2
Add new
Backend settings *
default
Add new
Path-based routing
You can route traffic from this rule's listener to different backend targets based on the URL path of the request. You can also apply a different set of Backend settings based on the URL path.
Path based rules
Path
Target name
Backend setting name
Backend pool
/upload
upload
default
pool1
Add multiple targets to create a path-based rule
Add
Cancel
Home > Load balancing | Application Gateway >
Create application gateway
Validation passed
Basics
Frontends
Backends
Configuration
Tags
Review + create
Basics
Subscription
Pay-As-You-Go
Resource group
capstone
Name
AG1
Region
Central US
Tier
Standard_v2
Enable autoscaling
Enabled
Minimum instance count
1
Maximum instance count
5
Create
Previous
Next
Download a template for automation

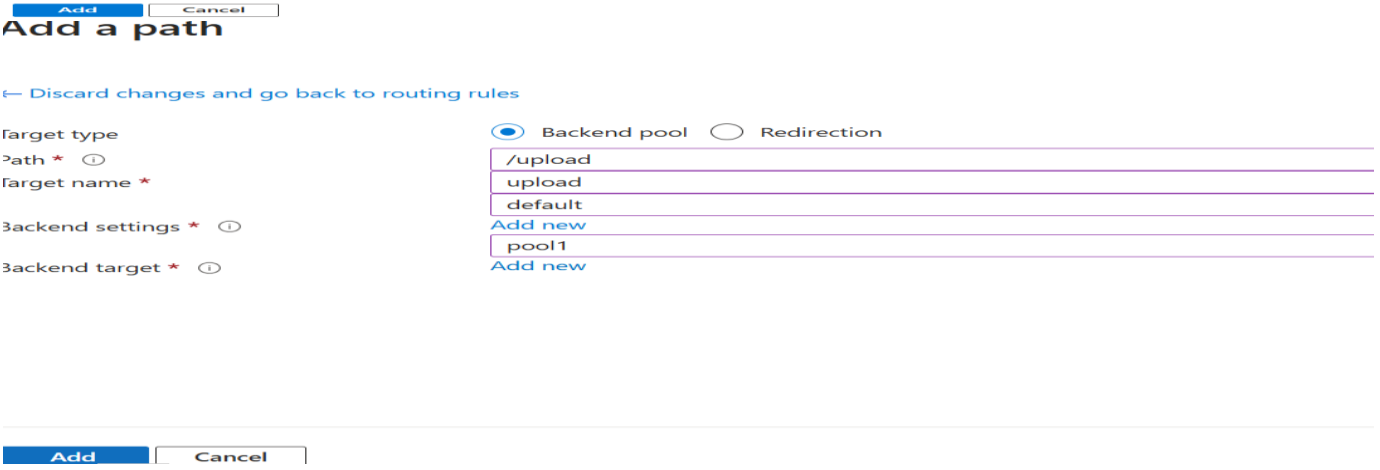

Home > Load balancing | Application Gateway >
Create application gateway
Subscription *
Pay-As-You-Go
Resource group *
capstone
Create new
Instance details
Application gateway name *
AG2
Region *
West US
Tier
Standard V2
Enable autoscaling
Yes
No
Minimum instance count *
1
Maximum instance count
5
Previous
Next : Frontends >

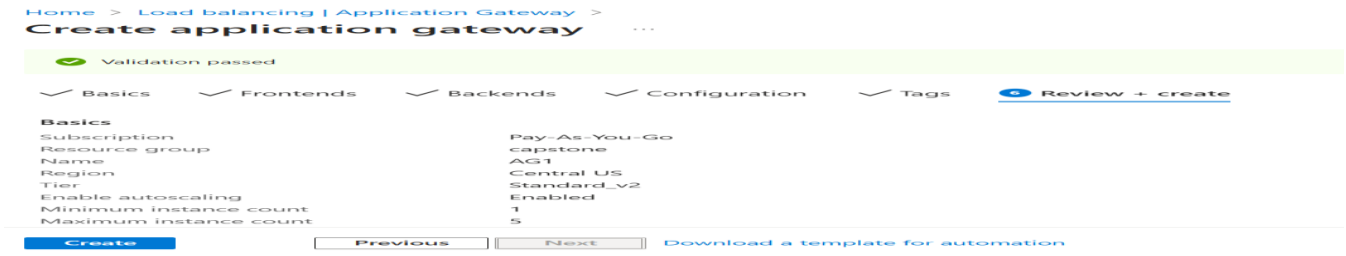

Basics
2 Frontends
3 Backends
4 Configuration
5 Tags
6 Review + create
Traffic enters the application gateway via its frontend IP address(es). An application gateway can use a public IP address, private IP address, or one of each type.
Frontend IP address type
Public
Private
Both
Public IPv4 address *
(New) AGip2
Add new


Previous
Next : Backends >
Home > Load balancing | Application Gateway >
Create application gateway
Basics
Frontends
3 Backends
4 Configuration
5 Tags
6 Review + create
A backend pool is a collection of resources to which your application gateway can send traffic. A backend pool can contain virtual machines, virtual machine scale sets, app services, IP addresses, or fully qualified domain names (FQDN).
Add a backend pool
Backend pool
Targets
No results
Add a backend pool.
A backend pool is a collection of resources to which your application gateway can send traffic. A backend pool can contain virtual machines, virtual machine scale sets, IP addresses, domain names, or an App Service.
Name *
pool1
Add backend pool without targets
Yes
No
Backend targets
1 item
Target type
Target
Virtual machine
vm1-westus107 (10.0.0.4)
IP address or FQDN
Add
Cancel

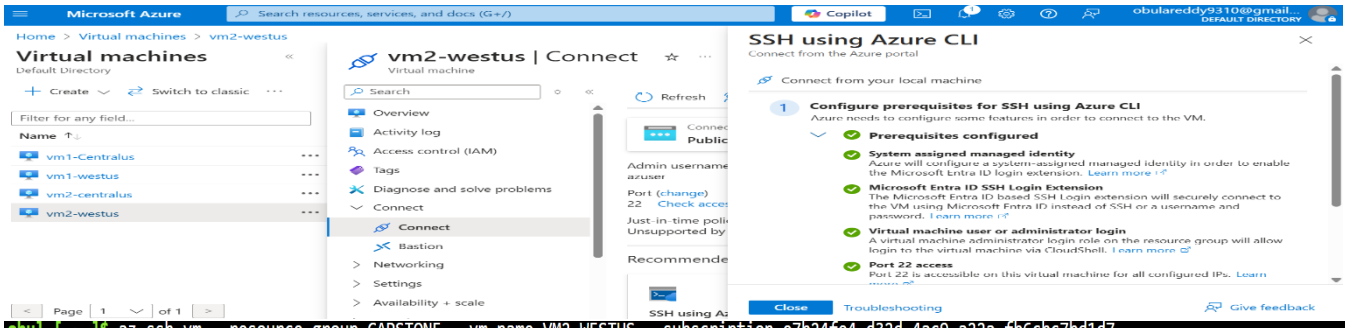

Previous
Next : Configuration >
Basics
Frontends
3 Backends
4 Configuration
5 Tags
6 Review + create
A backend pool is a collection of resources to which your application gateway can send traffic. A backend pool can contain virtual machines, virtual machine scale sets, app services, IP addresses, or fully qualified domain names (FQDN).
Add a backend pool
Backend pool
Targets
pool1
1 target
pool2
1 target


Previous
Next : Configuration >
Add a routing rule
Frontend IP *
Public IPv4
Protocol
HTTP
HTTPS
Port *
80
Listener type
Basic
Multi site
Custom error pages
Show customized error pages for different response codes generated by Application Gateway. This section lets you configure Listener-specific error pages. Learn more
Please verify that the url(s) being added here is reachable from your application gateway using the connection troubleshoot tool to prevent any deployment error.
Bad Gateway - 502
https://storagecapstonepro.z19.web.core.windows.net/error.html
Forbidden - 403
https://storagecapstonepro.z19.web.core.windows.net/error.html
Show more status codes
Add
Cancel


Add a path
← Discard changes and go back to routing rules
Target type
Backend pool
Redirection
Path *
/upload
Target name *
upload
default
Backend settings *
Add new
pool1
Backend target *
Add new
Add
Cancel




**Step-9: Connect all four virtual machines and update the machines.**




```
obul [ ~ ]$ az ssh vm --resource-group CAPSTONE --vm-name VM2-WESTUS --subscription e7b24fe4-d32d-4ac9-a22a-fb6cbc7bd1d7
OpenSSH_8.9p1, OpenSSL 1.1.1k  FIPS 25 Mar 2021
The authenticity of host '52.137.187.175 (52.137.187.175)' can't be established.
ED25519 key fingerprint is SHA256:nd62Ys1SJyWv5k/L2AFX/kGB4jDPWVfmSyPHtV1PLjQ.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '52.137.187.175' (ED25519) to the list of known hosts.
Learned new hostkey: ECDSA SHA256:C98PN2HFzJDi0iLladSKq2UAN/rHwATALMsKuZAsGi0
                                                    Adding new key for 52.137.187.175 to /home/obul/.ssh/known_hosts: ec
dsa-sha2-nistp256 SHA256:C98PN2HFzJDi0iLladSKq2UAN/rHwATALMsKuZAsGi0

Broadcast message from root@vm2-westus (Tue 2025-03-11 08:32:58 UTC):
```

```
obulareddy9310@gmail.com@vm2-westus:~$ sudo apt update
Hit:1 http://azure.archive.ubuntu.com/ubuntu focal InRelease
Get:2 http://azure.archive.ubuntu.com/ubuntu focal-updates InRelease [128 kB]
Hit:3 http://azure.archive.ubuntu.com/ubuntu focal-backports InRelease
Hit:4 http://azure.archive.ubuntu.com/ubuntu focal-security InRelease
Hit:5 https://packages.microsoft.com/repos/microsoft-ubuntu-focal-prod focal InRelease
Get:6 http://azure.archive.ubuntu.com/ubuntu focal-updates/main amd64 Packages [3810 kB]
Get:7 http://azure.archive.ubuntu.com/ubuntu focal-updates/universe amd64 Packages [1257 kB]
Fetched 5194 kB in 2s (2411 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
```

**Step-10:** Clone into the git-Hub repository to all virtual machines.

```
obulareddy9310@gmail.com@vm2-westus:~$ git clone https://github.com/azcloudberg/azproject.git
Cloning into 'azproject'...
remote: Enumerating objects: 229, done.
remote: Counting objects: 100% (26/26), done.
remote: Compressing objects: 100% (12/12), done.
remote: Total 229 (delta 21), reused 14 (delta 14), pack-reused 203 (from 1)
Receiving objects: 100% (229/229), 52.16 KiB | 1.41 MiB/s, done.
Resolving deltas: 100% (108/108), done.
obulareddy9310@gmail.com@vm2-westus:~$
```

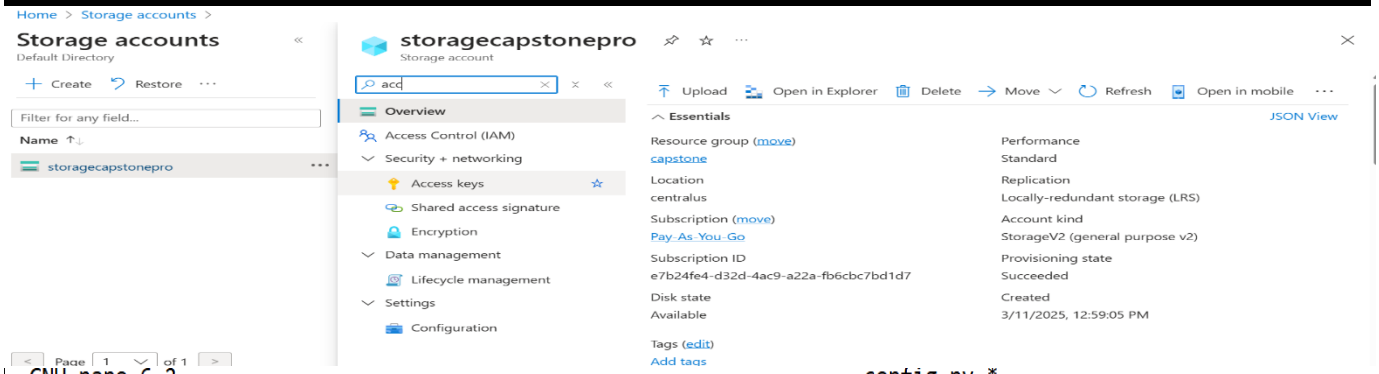
```
obulareddy9310@gmail.com@vm2-westus:~$ ls
azproject
obulareddy9310@gmail.com@vm2-westus:~$ cd azproject
obulareddy9310@gmail.com@vm2-westus:~/azproject$ ls
README.md  app.py  config.py  error.html  index.html  templates  vm1.sh  vm2.sh
obulareddy9310@gmail.com@vm2-westus:~/azproject$
```

**Step-11:** On VM1, please run vm1.sh this will deploy the upload page. VM1: ./vm1.sh

```
obulareddy9310@gmail.com@vm1-Centralus:~$ sudo apt update
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
Get:5 https://packages.microsoft.com/repos/microsoft-ubuntu-jammy-prod jammy InRelease [3631 B]
Get:6 https://packages.microsoft.com/repos/microsoft-ubuntu-jammy-prod jammy/main amd64 Packages [187 kB]
Fetched 191 kB in 1s (208 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
1 package can be upgraded. Run 'apt list --upgradable' to see it.
obulareddy9310@gmail.com@vm1-Centralus:~$ git clone https://github.com/azcloudberg/azproject.git
Cloning into 'azproject'...
remote: Enumerating objects: 229, done.
remote: Counting objects: 100% (26/26), done.
remote: Compressing objects: 100% (12/12), done.
remote: Total 229 (delta 21), reused 14 (delta 14), pack-reused 203 (from 1)
Receiving objects: 100% (229/229), 52.16 KiB | 1007.00 KiB/s, done.
Resolving deltas: 100% (108/108), done.
obulareddy9310@gmail.com@vm1-Centralus:~$ ls
azproject
obulareddy9310@gmail.com@vm1-Centralus:~$ cd azproject
obulareddy9310@gmail.com@vm1-Centralus:~/azproject$ ls
README.md   app.py   config.py   error.html   index.html   templates   vm1.sh   vm2.sh
obulareddy9310@gmail.com@vm1-Centralus:~/azproject$ ./vm1.sh
Rules updated
Rules updated (v6)
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
Hit:5 https://packages.microsoft.com/repos/microsoft-ubuntu-jammy-prod jammy InRelease
Reading package lists... Done
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
python3 is already the newest version (3.10.6-1~22.04.1).
python3 set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 1 not upgraded.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
```

**Step-12:** After running the scripts, please edit the config.py file on VM1, and enter the details related to your storage account where the files will be uploaded.

```
  GNU nano 6.2                                                config.py
[DEFAULT]
# Account name
account =projectsg16
# Azure Storage account access key
key =10cthiqNfjVNv0UpJkGY3X/Q4ouBd9hWxCjfWpkq0/SrUTSCoXHOfgHOlCrzDhoqQZf3HqlAAagF+AStYblMWw==
# Container name
container =upload
```

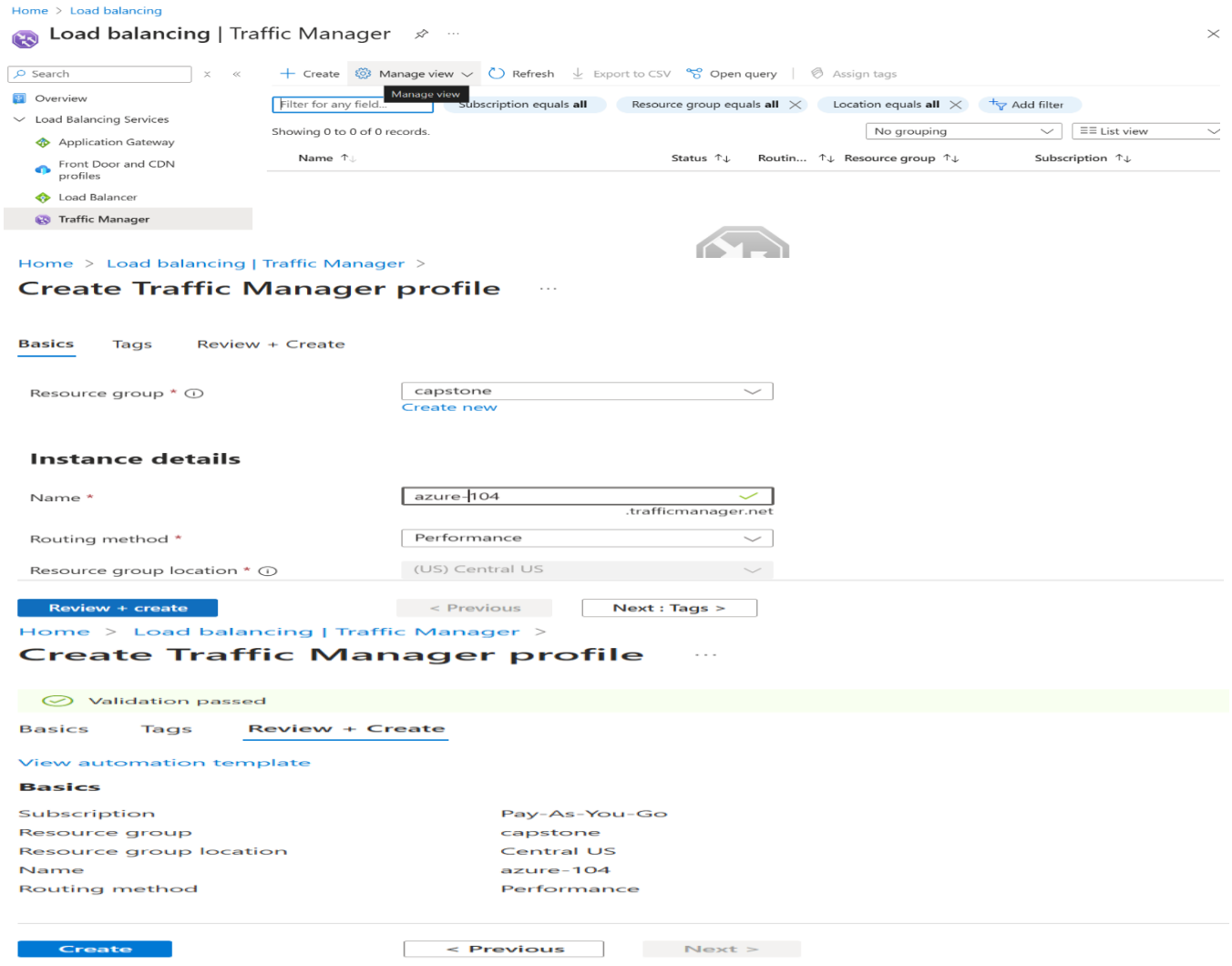


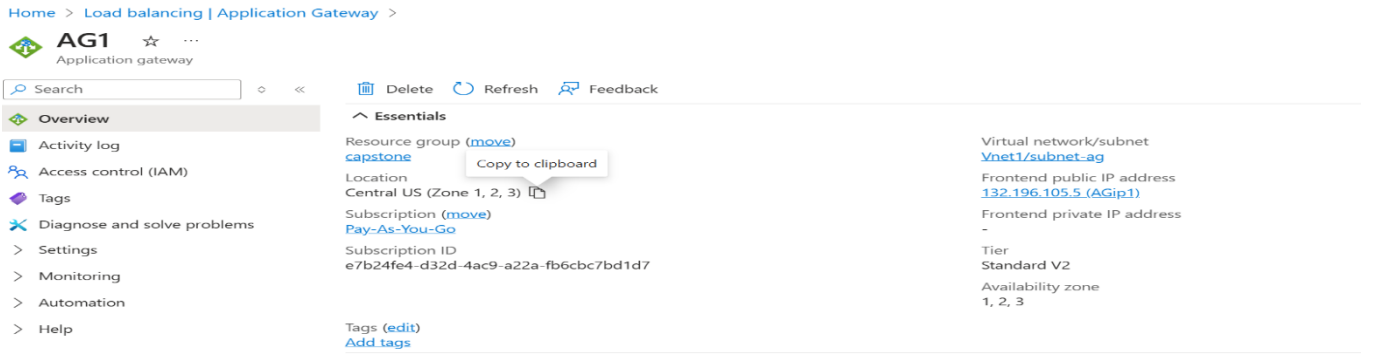

```
  GNU nano 6.2                                                config.py *
[DEFAULT]
# Account name
account =storagecapstonepro
# Azure Storage account access key
key =9CMsOb0NOOeJ0Oa0Yn9E0/a21+od3TaqTv/4FZfiyZ+FYz9VJxO4s+ZE1PfPGYCZn1l9wl3/nd6H+AStbmPhlg==
# Container name
container =upload
```

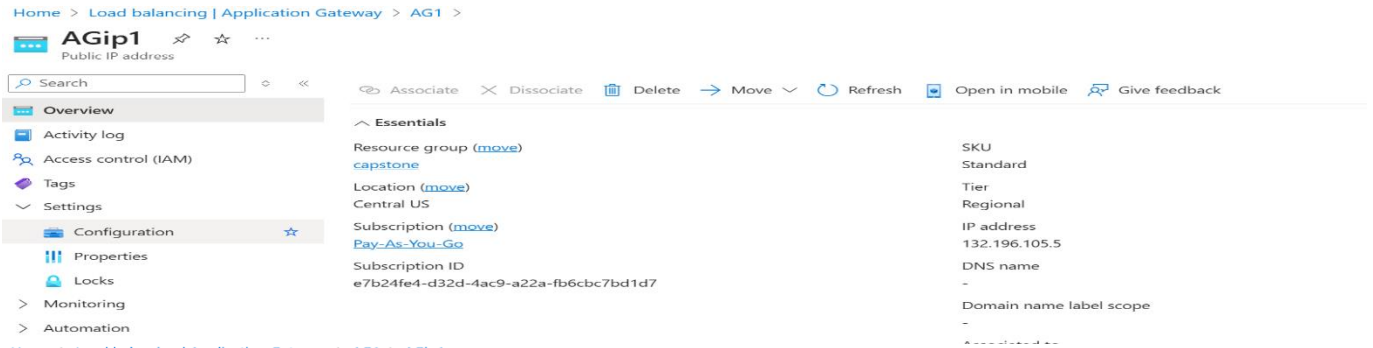
**Step-13:** Once done, please run the following command: sudo python3 app.py.

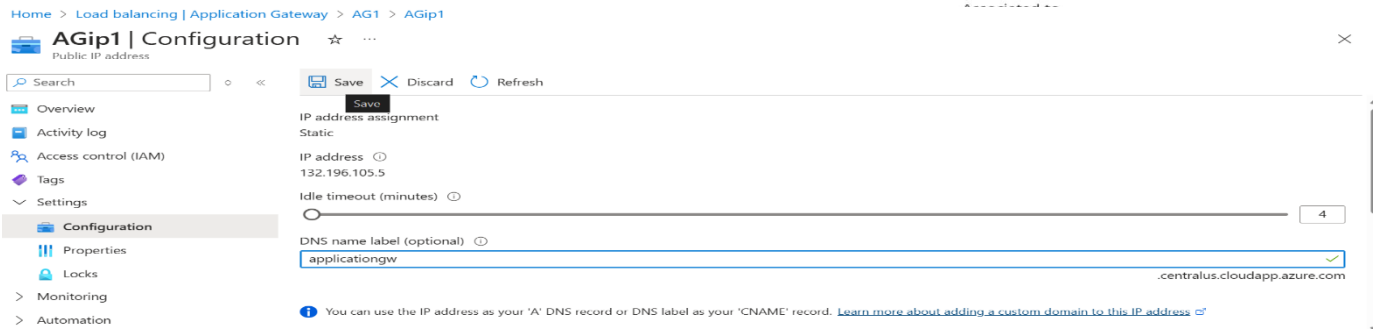
```
obulareddy9310@gmail.com@vm1-Centralus:~/azproject$ sudo nano config.py
obulareddy9310@gmail.com@vm1-Centralus:~/azproject$ sudo python3 app.py
 * Serving Flask app 'app'
 * Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on all addresses (0.0.0.0)
 * Running on http://127.0.0.1:80
 * Running on http://10.0.0.4:80
Press CTRL+C to quit
10.0.1.5 - - [11/Mar/2025 08:56:45] "GET / HTTP/1.1" 200 -
10.0.1.7 - - [11/Mar/2025 08:56:45] "GET / HTTP/1.1" 200 -
```

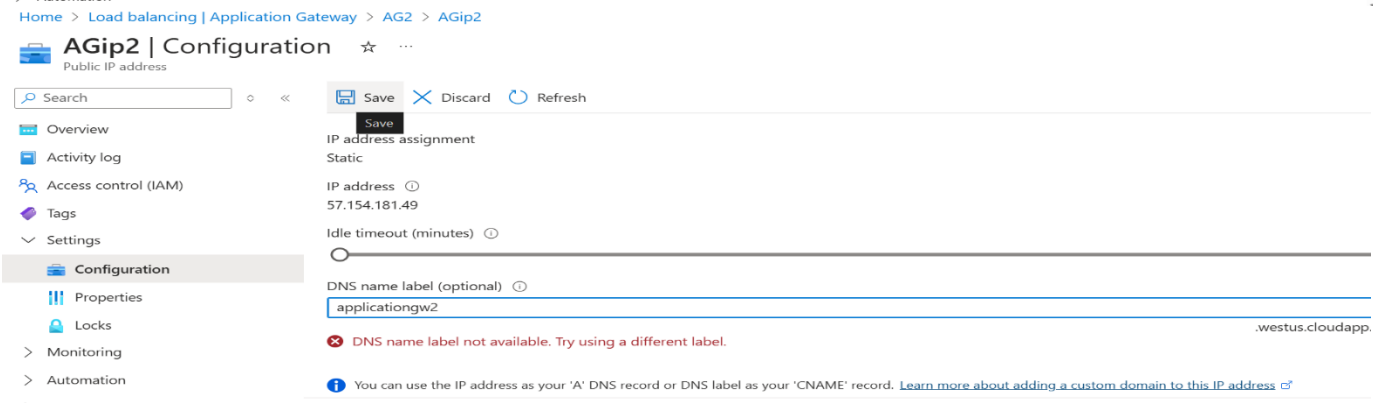
**Step-14:** Create traffic manager for pointing the application gateway of both regions**.**

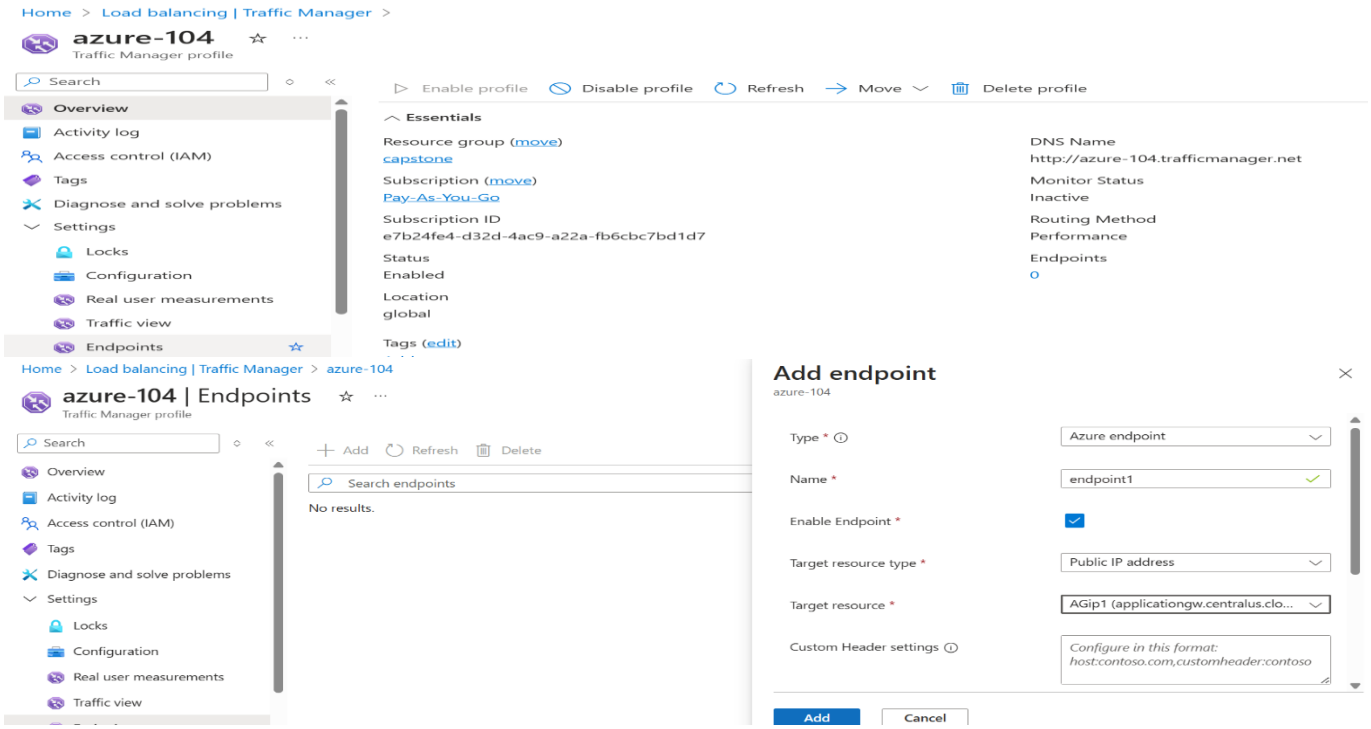



Home > Load balancing | Application Gateway >
AG1
Application gateway
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Monitoring
Automation
Help
Delete
Refresh
Feedback
Essentials
Resource group (move)
capstone
Copy to clipboard
Location
Central US (Zone 1, 2, 3)
Subscription (move)
Pay-As-You-Go
Subscription ID
e7b24fe4-d32d-4ac9-a22a-fb6cbc7bd1d7
Tags (edit)
Add tags
Virtual network/subnet
Vnet1/subnet-ag
Frontend public IP address
132.196.105.5 (AGip1)
Frontend private IP address
-
Tier
Standard V2
Availability zone
1, 2, 3


Home > Load balancing | Application Gateway > AG1 >
AGip1
Public IP address
Search
Overview
Activity log
Access control (IAM)
Tags
Settings
Configuration
Properties
Locks
Monitoring
Automation
Associate
Dissociate
Delete
Move
Refresh
Open in mobile
Give feedback
Essentials
Resource group (move)
capstone
Location (move)
Central US
Subscription (move)
Pay-As-You-Go
Subscription ID
e7b24fe4-d32d-4ac9-a22a-fb6cbc7bd1d7
SKU
Standard
Tier
Regional
IP address
132.196.105.5
DNS name
-
Domain name label scope
-


Home > Load balancing | Application Gateway > AG1 > AGip1
AGip1 | Configuration
Public IP address
Search
Overview
Activity log
Access control (IAM)
Tags
Settings
Configuration
Properties
Locks
Monitoring
Automation
Save
Discard
Refresh
Save
IP address assignment
Static
IP address
132.196.105.5
Idle timeout (minutes)
4
DNS name label (optional)
applicationgw
.centralus.cloudapp.azure.com
You can use the IP address as your 'A' DNS record or DNS label as your 'CNAME' record. Learn more about adding a custom domain to this IP address


Home > Load balancing | Application Gateway > AG2 > AGip2
AGip2 | Configuration
Public IP address
Search
Overview
Activity log
Access control (IAM)
Tags
Settings
Configuration
Properties
Locks
Monitoring
Automation
Save
Discard
Refresh
Save
IP address assignment
Static
IP address
57.154.181.49
Idle timeout (minutes)
DNS name label (optional)
applicationgw2
.westus.cloudapp.
DNS name label not available. Try using a different label.
You can use the IP address as your 'A' DNS record or DNS label as your 'CNAME' record. Learn more about adding a custom domain to this IP address




**Step-15:** Copy the endpoint and paste it and run in new page it will give the home page.


**Step-16:** Add /upload at the end of the endpoint link and run. It shows the file upload page here and upload the files and check in container for uploaded files.