Azure Administrator Capstone Project -1 Az-104

Task to be performed :

You work as an Azure professional for a Corporation. 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 o each other using VNet-VNet Peering.

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

Solution:

Virtual machines 📌 ⋯
Default Directory (aldrinfigeredo1508gmail.onmicrosoft.com)

+ Create ∨ | ⇄ Switch to classic | 🕐 Reservations ∨ | ⚙ Manage view ∨ | 🔄 Refresh | ⬇ Export to CSV | ⛓ Open query | 🏷 Assign tags | ▷ Start | ↻ Restart | ☐ Stop | 🗑 Delete | ☰ Services ∨ | 🔧 Maintenance ∨

Filter for any field... | Subscription equals **all** | Type equals **all** | Resource group equals **all** ✕ | Location equals **all** ✕ | ⊕ Add filter

Showing 1 to 4 of 4 records.   No grouping ∨   ☰ List view ∨

☐	Name ↑↓	Subscription ↑↓	Resource group ↑↓	Location ↑↓	Status ↑↓	Operating system ↑↓	Size ↑↓	Public IP address ↑↓	Disks ↑↓	
☐	Vm1CentralUS	Free Trial	CapstoneProject	Central US	Running	Linux	Standard_B1s	40.77.11.143	1	⋯
☐	Vm1WestUS	Free Trial	CapstoneProject	West US	Running	Linux	Standard_B1s	138.91.238.249	1	⋯
☐	Vm2CentralUS	Free Trial	CapstoneProject	Central US	Running	Linux	Standard_B1s	40.77.55.150	1	⋯
☐	Vm2WestUS	Free Trial	CapstoneProject	West US	Running	Linux	Standard_B1s	13.83.3.205	1	⋯

Storage accounts 📌 ⋯
Default Directory (aldrinfigeredo1508gmail.onmicrosoft.com)

+ Create | ⟲ Restore | ⚙ Manage view ∨ | 🔄 Refresh | ⬇ Export to CSV | ⛓ Open query | 🏷 Assign tags | 🗑 Delete

Filter for any field... | Subscription equals **all** | Resource group equals **all** ✕ | Location equals **all** ✕ | ⊕ Add filter

Showing 0 to 0 of 0 records.   No grouping ∨   ☰ List view ∨

Name ↑↓	Type ↑↓	Kind ↑↓	Resource group ↑↓	Location ↑↓	Subscription ↑↓

No storage accounts to display

Create a storage account to store up to 500TB of data in the cloud. Use a general-purpose storage account to store object data, use a NoSQL data store, define and use queues for message processing, and set up file shares in the cloud. Use the Blob storage account and the hot or cool access tiers to optimize your costs based on how frequently your object data is accessed.

Create storage account

Learn more ⬈

Create a storage account ···

Azure Storage is a Microsoft-managed service providing cloud storage that is highly available, secure, durable, scalable, and redundant. Azure Storage includes Azure Blobs (objects), Azure Data Lake Storage Gen2, Azure Files, Azure Queues, and Azure Tables. The cost of your storage account depends on the usage and the options you choose below. Learn more about Azure storage accounts ⌕

Project details

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 *   Free Trial   ⌄

    Resource group *   CapstoneProject   ⌄
                 Create new

Instance details

Storage account name * ⓘ   capstoneproject24

Region * ⓘ   (US) Central US   ⌄
                            Deploy to an Azure Extended Zone

Primary service ⓘ   Select a primary service   ⌄

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**]

Storage accounts 📌 ···
Default Directory (aldrinfigeredo1508gmail.onmicrosoft.com)   ✕

+ Create ↻ Restore ⚙ Manage view ⌄ ↻ Refresh ↓ Export to CSV ⟲ Open query | ⊘ Assign tags 🗑 Delete

[Filter for any field...] Subscription equals **all** Resource group equals **all** ✕ Location equals **all** ✕ ⁺ᵧ Add filter

Showing 1 to 1 of 1 records.   No grouping ⌄   ☰ List view ⌄

☐ Name ↑↓	Type ↑↓	Kind ↑↓	Resource group ↑↓	Location ↑↓	Subscription ↑↓	
☐ ▦ capstoneproject24	Storage account	StorageV2	CapstoneProject	Central US	Free Trial	···

Azure AI Search

∨ Settings

    🗄 Configuration

Allow Blob anonymous access ⓘ

○ Disabled ⦿ Enabled

ⓘ Some blobs may become anonymously rea

Home > Storage accounts > capstoneproject24

Storage accounts
Default Directory (aldrinfigeredo1508gmail.onmicr...

+ Create ⟲ Restore ⋯

Filter for any field...

Name ↑

capstoneproject24

capstoneproject24 | Containers
Storage account

+ Container 🔒 Change access level ⟲ Restore containers ⟳ Refresh 🗑 Delete 🗨 Give fee

Search containers by prefix

Name	Last modified	An...
$logs	9/9/2024, 9:52:29 PM	Priv...

Overview
Activity log
Tags
Diagnose and solve problems
Access Control (IAM)
Data migration
Events
Storage browser

Home > Storage accounts > capstoneproject24

Storage accounts
Default Directory (aldrinfigeredo1508gmail.onmicr...

+ Create ⟲ Restore ⋯

Filter for any field...

Name ↑

capstoneproject24

capstoneproject24 | Static website ☆ ⋯
Storage account

💾 Save ✕ Discard 🗨 Give feedback

Enabling static websites on the blob service allows you to host static content. Webpages may include static content and client-side scripts. Server-side scripting is not supported. As data is replicated asynchronously from primary to secondary regions, files at the secondary endpoint may not be immediately available or in sync with files at the primary endpoint. Learn more

Static website

Disabled Enabled

Overview
Data management
  Static website
Settings
  Endpoints

Home > Storage accounts > capstoneproject24

Storage accounts
Default Directory (aldrinfigeredo1508gmail.onmicr...

+ Create ⟲ Restore ⋯

Filter for any field...

Name ↑

capstoneproject24

capstoneproject24 | Static website ☆ ⋯
Storage account

💾 Save ✕ Discard 🗨 Give feedback

Enabling static websites on the blob service allows you to host static content. Webpages may include static content and client-side scripts. Server-side scripting is not supported. As data is replicated asynchronously from primary to secondary regions, files at the secondary endpoint may not be immediately available or in sync with files at the primary endpoint. Learn more

Static website

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Overview
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Home > Storage accounts > capstoneproject24

Storage accounts
Default Directory (aldrinfigeredo1508gmail.onmicr...

+ Create ⟲ Restore ⋯

Filter for any field...

Name ↑

capstoneproject24

capstoneproject24 | Static website ☆ ⋯
Storage account

💾 Save ✕ Discard 🗨 Give feedback

Enabling static websites on the blob service allows you to host static content. Webpages may include static content and client-side scripts. Server-side scripting is not supported. As data is replicated asynchronously from primary to secondary regions, files at the secondary endpoint may not be immediately available or in sync with files at the primary endpoint. Learn more

Static website

Disabled Enabled

An Azure Storage container has been created to host your static website.
$web

ⓘ Improve the page load time of your static website by using the caching features of Azure Front Door (Additional costs apply). Azure Front Door

Primary endpoint ⓘ
https://capstoneproject24.z19.web.core.windows.net/

Index document name ⓘ

Error document path ⓘ
error.html

Overview
Data management
  Static website
Settings
  Endpoints

An Azure Storage container has been created to host your static website.
$web

$web
Container

Search

Upload   Change access level   Refresh   Delete   Change tier   Acquire lease   Break lease   View snapshots

Overview
Diagnose and solve problems
Access Control (IAM)
Settings

Authentication method: Access key (Switch to Microsoft Entra user account)
Location: $web

Search blobs by prefix (case-sensitive)

Add filter

Name	Modified	Access tier	Archive s
No results			

Upload blob   ✕

1 file(s) selected: error.html

Drag and drop files here or Browse for files

☐ Overwrite if files already exist

∨ Advanced

Upload   Give feedback

$web
Container

Search

Upload   Change access level   Refresh   Delete   Change tier   Acquire lease   Break lease   View snapshots   Create snapshot   Give feedback

Overview
Diagnose and solve problems
Access Control (IAM)
Settings

Authentication method: Access key (Switch to Microsoft Entra user account)
Location: $web

Search blobs by prefix (case-sensitive)   ⚪ Show deleted blobs

Add filter

Name	Modified	Access tier	Archive status	Blob type	Size	Lease state
☐ error.html	9/9/2024, 9:57:04 PM	Hot (Inferred)		Block blob	61 B	Available

Primary endpoint ⓘ

https://capstoneproject24.z19.web.core.windows.net/

⌄ 🅰 capstoneproject24 - Microsoft   ✕   🌐 capstoneproject24.z19.web.core   ✕   ➕

← → ⟳ ⊙ capstoneproject24.z19.web.core.windows.net

ERROR 404

Page Not Found

Create application gateway ...

① **Basics** ② Frontends ③ Backends ④ Configuration ⑤ Tags ⑥ Review + create

An application gateway is a web traffic load balancer that enables you to manage traffic to your web application. [Learn about creating application gateway](#) ⧉
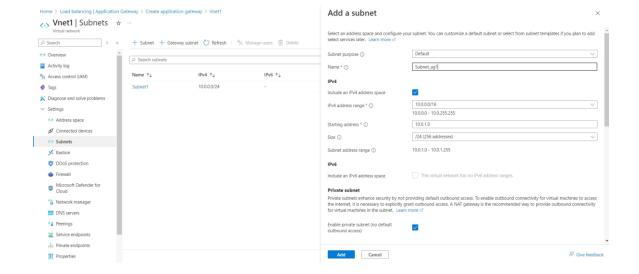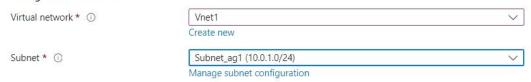
Project details

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

Subscription * ⓘ

Free Trial	⌄

⎿─ Resource group * ⓘ

CapstoneProject	⌄

Create new

Instance details

Application gateway name *

AG1	✓

Region *

Central US	⌄

Tier ⓘ

Standard V2	⌄

Enable autoscaling

⦿ Yes ◯ No

Minimum instance count * ⓘ

1	✓

Maximum instance count

5	✓

Availability zone * ⓘ

Zones 1, 2, 3	⌄

Previous   Next : Frontends >

Configure virtual network

Virtual network * ⓘ

Vnet1	⌄

Create new

Subnet * ⓘ

Subnet1 (10.0.0.0/24)	⌄

Manage subnet configuration

❌ Subnet must only have application gateway

Previous   Next : Frontends >

Vnet1 | Subnets ☆ ⋯
Virtual network

🔍 Search ○ «

- ↔ Overview
- 📋 Activity log
- 🔒 Access control (IAM)
- 🏷 Tags
- 🩺 Diagnose and solve problems
- ∨ Settings
  - ↔ Address space
  - 🖉 Connected devices
  - ↔ Subnets
  - 🗡 Bastion
  - 🛡 DDoS protection
  - 🌐 Firewall
  - 🛡 Microsoft Defender for Cloud
  - 🕸 Network manager
  - ▦ DNS servers
  - ↔ Peerings
  - 🖧 Service endpoints
  - ⋔ Private endpoints
  - ⫼ Properties

+ Subnet + Gateway subnet ○ Refresh | ৪ Manage users 🗑 Delete

🔍 Search subnets

Name ↑↓	IPv4 ↑↓	IPv6 ↑↓
Subnet1	10.0.0.0/24	-

Add a subnet ✕

Select an address space and configure your subnet. You can customize a default subnet or select from subnet templates if you plan to add select services later. Learn more ⧉

Subnet purpose ⓘ   Default ⌄

Name * ⓘ   Subnet_ag1

IPv4

Include an IPv4 address space   ☑

IPv4 address range * ⓘ   10.0.0.0/16 ⌄
10.0.0.0 - 10.0.255.255

Starting address * ⓘ   10.0.1.0

Size ⓘ   /24 (256 addresses) ⌄

Subnet address range ⓘ   10.0.1.0 - 10.0.1.255

IPv6

Include an IPv6 address space   ☐ This virtual network has no IPv6 address ranges.

Private subnet

Private subnets enhance security by not providing default outbound access. To enable outbound connectivity for virtual machines to access the internet, it is necessary to explicitly grant outbound access. A NAT gateway is the recommended way to provide outbound connectivity for virtual machines in the subnet. Learn more ⧉

Enable private subnet (no default outbound access)   ☑

[**Add**] [Cancel]   ⚐ Give feedback

Configure virtual network

Virtual network * ⓘ

Vnet1 ⌄

Create new

Subnet * ⓘ

Subnet_ag1 (10.0.1.0/24) ⌄

Manage subnet configuration

[Previous] [Next : Frontends >]

Create application gateway ...

✓ 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 *

Choose public IP address	⌄

Add new

Add a public IP

Name *	ip1	✓

SKU	○ Basic ● Standard

Assignment	○ Dynamic ● Static

Availability zone	ZoneRedundant

OK   Cancel

Previous   Next : Backends >

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 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 ⌄	vm1centralus487 (10.0.0.4) ⌄ 🗑 ⋯
IP address or FQDN ⌄	

Previous   Next : Configuration >   **Add**   Cancel

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	
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   Yes   **No**
targets

Backend targets
1 item

Target type	Target		
Virtual machine ▾	vm2centralus375 (10.0.0.5) ▾	🗑	...
IP address or FQDN ▾			

Add   Cancel

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	
pool1	〉 1 target	...
pool2	〉 1 target	...

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   **Routing rules**   **Backend pools**
+ Add a frontend IP   ＋   + Add a backend pool
                                 Add a routing
Public: (new) ip1   🗑 ...   rule   pool1   🗑 ...
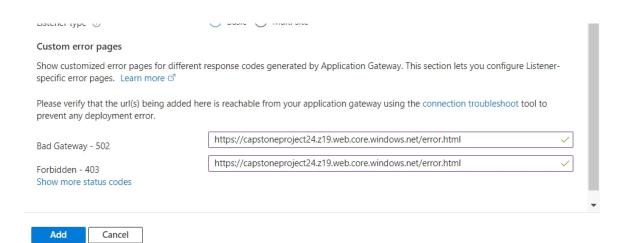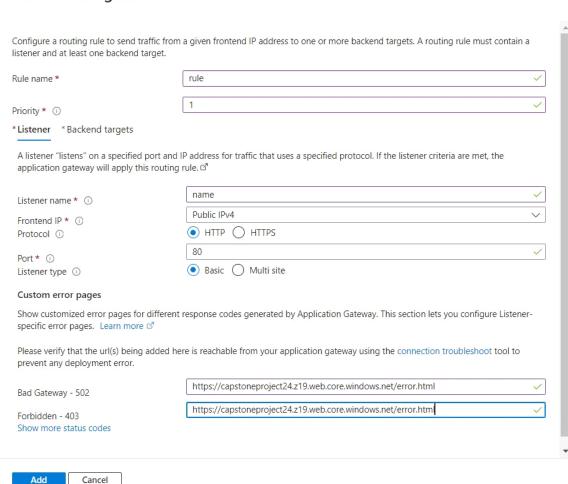   pool2   🗑 ...

capstoneproject24.z19.web.core.windows.net

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://capstoneproject24.z19.web.core.windows.net/

❌ The URL must point to a HTML file.

Forbidden - 403   Enter Html file URL

Show more status codes

Add   Cancel

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://capstoneproject24.z19.web.core.windows.net/error.html   ✓

Forbidden - 403   https://capstoneproject24.z19.web.core.windows.net/error.html   ✓

Show more status codes

Add   Cancel

Add a routing rule

Configure a routing rule to send traffic from a given frontend IP address to one or more backend targets. A routing rule must contain a listener and at least one backend target.

Rule name *

rule ✓

Priority * ⓘ

1 ✓

* Listener   * Backend targets

A listener "listens" on a specified port and IP address for traffic that uses a specified protocol. If the listener criteria are met, the application gateway will apply this routing rule. ⬀

Listener name * ⓘ

name ✓

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://capstoneproject24.z19.web.core.windows.net/error.html ✓

Forbidden - 403

https://capstoneproject24.z19.web.core.windows.net/error.html ✓

Show more status codes

Add   Cancel

Add Backend setting

✕

Backend settings name *   default ✓

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.

                                 Yes   No

Override with new host name   Yes   No

Create custom probes

Add   Cancel

Add a path   ✕

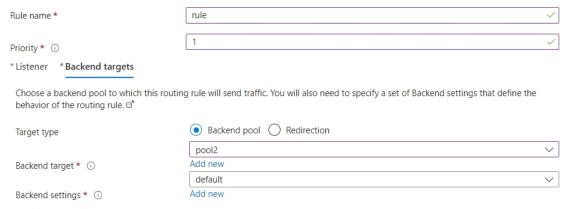|	
Target type	◉ Backend pool ○ Redirection
Path * ⓘ	/upload ✓
Target name *	upload ✓
	default ⌄
Backend settings * ⓘ	Add new
	pool1 ⌄
Backend target * ⓘ	Add new

Add   Cancel

Add a routing rule

Configure a routing rule to send traffic from a given frontend IP address to one or more backend targets. A routing rule must contain a listener and at least one backend target.
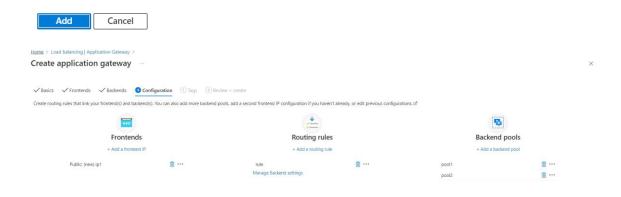
Rule name *   rule ✓

Priority * ⓘ   1 ✓

* 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

                       pool2   ⌄

Backend target * ⓘ   Add new

                       default   ⌄

Backend settings * ⓘ   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**

Create application gateway ···   ✕

✓ Basics   ✓ Frontends   ✓ Backends   ◉ 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	Routing rules	Backend pools
+ Add a frontend IP	+ Add a routing rule	+ Add a backend pool
Public: (new) ip1 🗑 •••	rule 🗑 •••	pool1 🗑 •••
	Manage Backend settings	pool2 🗑 •••

Create application gateway ···

✅ Validation passed

✔ Basics   ✔ Frontends   ✔ Backends   ✔ Configuration   ✔ Tags   ⑥ Review + create

Basics

Subscription	Free Trial
Resource group	CapstoneProject
Name	AG1
Region	Central US
Tier	Standard_v2
Enable autoscaling	Enabled
Minimum instance count	1
Maximum instance count	5
Availability zone	Zones 1, 2, 3
HTTP2	Enabled
Virtual network	Vnet1
Subnet	Subnet_ag1 (10.0.1.0/24)
Subnet address space	10.0.1.0/24

Frontends

Public IPv4 address name	ip1
SKU	Standard
Assignment	Static
Availability zone	ZoneRedundant

Create   Previous   Next   Download a template for automation

Create application gateway ...

🛈 Running final validation...

✓ Basics ✓ Frontends ✓ Backends ✓ Configuration ✓ Tags ⑥ Review + create

Basics

Subscription	Free Trial
Resource group	CapstoneProject
Name	AG2
Region	West US
Tier	Standard_v2
Enable autoscaling	Enabled
Minimum instance count	1
Maximum instance count	5
Availability zone	None
HTTP2	Enabled
Virtual network	Vnet2
Subnet	Subnet_AG2 (10.0.1.0/24)
Subnet address space	10.0.1.0/24

Frontends

Public IPv4 address name	ip2
SKU	Standard
Assignment	Static
Availability zone	None

Tags

None

Create   Previous   Next   Download a template for automation

```
Hit:3 http://azure.archive.ubuntu.com/ubuntu jammy-backports InRelease
Get:4 http://azure.archive.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Get:5 http://azure.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1988 kB]
Get:6 http://azure.archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [17.8 kB]
Get:7 http://azure.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1123 kB]
Get:8 http://azure.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [26.1
kB]
Get:9 http://azure.archive.ubuntu.com/ubuntu jammy-security/main amd64 Packages [1771 kB]
Get:10 http://azure.archive.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [901 kB]
Get:11 http://azure.archive.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [19
.2 kB]
Fetched 6103 kB in 2s (3778 kB/s)
Reading package lists... Done
Jungkook@Vm1CentralUS:~$ 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 | 2.48 MiB/s, done.
Resolving deltas: 100% (108/108), done.
Jungkook@Vm1CentralUS:~$
```

```
Jungkook@Vm1WestUS:~$ 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 | 2.17 MiB/s, done.
Resolving deltas: 100% (108/108), done.
Jungkook@Vm1WestUS:~$
```

```
Jungkook@Vm2WestUS:~$ 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 | 1.80 MiB/s, done.
Resolving deltas: 100% (108/108), done.
Jungkook@Vm2WestUS:~$
```

```
Jungkook@Vm2CentralUS:~$ 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 | 1.37 MiB/s, done.
Resolving deltas: 100% (108/108), done.
Jungkook@Vm2CentralUS:~$
```
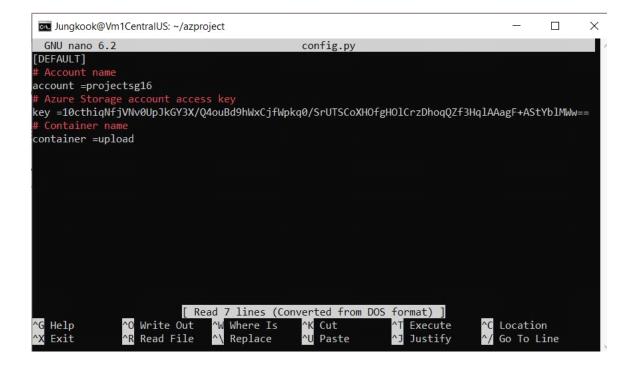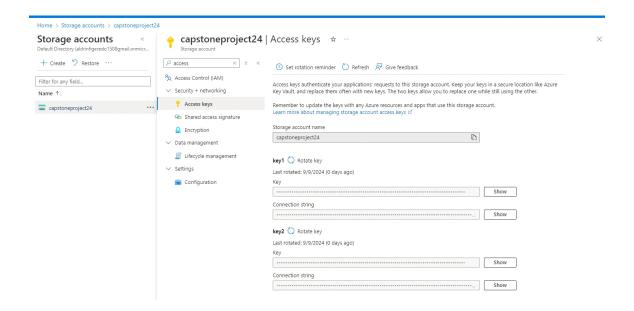
```
Jungkook@Vm1WestUS:~$ Jungkook@Vm1WestUS:~$ git clone https://github.com/azcloudberg/azproject.git
Cloning into 'azproject'...
remote: Enumerating objects: 229, done.
remote: Counting objects: 100% (26/26), done.
remote: Compressing objects: 100% (12/12), done.
remote: Total 229 (delta 21), reused 14 (delta 14), pack-reused 203 (from 1)
Receiving objects: 100% (229/229), 52.16 KiB | 2.17 MiB/s, done.
Resolving deltas: 100% (108/108), done.
Jungkook@Vm1WestUS:~$ ls
azproject
Jungkook@Vm1WestUS:~$ cd azproject
Jungkook@Vm1WestUS:~/azproject$ ls
README.md  app.py  config.py  error.html  index.html  templates  vm1.sh  vm2.sh
Jungkook@Vm1WestUS:~/azproject$ ./vm1.sh
```

```
Jungkook@Vm1CentralUS:~$ cd azproject
Jungkook@Vm1CentralUS:~/azproject$ ls
README.md  app.py  config.py  error.html  index.html  templates  vm1.sh  vm2.sh
Jungkook@Vm1CentralUS:~/azproject$ ./vm1.sh
Rules updated
```

```
Jungkook@Vm2WestUS:~$ 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 | 1.80 MiB/s, done.
Resolving deltas: 100% (108/108), done.
Jungkook@Vm2WestUS:~$ ls
azproject
Jungkook@Vm2WestUS:~$ cd azproject
Jungkook@Vm2WestUS:~/azproject$ ls
README.md  app.py  config.py  error.html  index.html  templates  vm1.sh  vm2.sh
Jungkook@Vm2WestUS:~/azproject$ ./vm2.sh
```

```
Jungkook@Vm2CentralUS:~$ ls
azproject
Jungkook@Vm2CentralUS:~$ cd azproject
Jungkook@Vm2CentralUS:~/azproject$ ls
README.md  app.py  config.py  error.html  index.html  templates  vm1.sh  vm2.sh
Jungkook@Vm2CentralUS:~/azproject$ ./vm2.sh
Hit:1 http://azure.archive.ubuntu.com/ubuntu jammy InRelease
```

```
  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
```

```
                    [ Read 7 lines (Converted from DOS format) ]
^G Help        ^O Write Out   ^W Where Is    ^K Cut         ^T Execute     ^C Location
^X Exit        ^R Read File   ^\ Replace     ^U Paste       ^J Justify     ^/ Go To Line
```

Storage accounts
Default Directory (aldrinfigeredo1508gmail.onmicr...

+ Create ⟳ Restore ···

Filter for any field...

Name ↑↓

capstoneproject24

🔑 **capstoneproject24 | Access keys** ☆ ···
Storage account

🔍 access

⬡ Access Control (IAM)

∨ Security + networking

🔑 **Access keys**

⬡ Shared access signature

🔒 Encryption

∨ Data management

⬡ Lifecycle management

∨ Settings

⬡ Configuration

⊕ Set rotation reminder   ⟳ Refresh   ⊞ Give feedback

Access keys authenticate your applications' requests to this storage account. Keep your keys in a secure location like Azure Key Vault, and replace them often with new keys. The two keys allow you to replace one while still using the other.

Remember to update the keys with any Azure resources and apps that use this storage account.
Learn more about managing storage account access keys ⧉

Storage account name

| capstoneproject24 | 📋 |

key1 ⟳ Rotate key
Last rotated: 9/9/2024 (0 days ago)
Key

| ●● | Show |

Connection string

| ●● | Show |

key2 ⟳ Rotate key
Last rotated: 9/9/2024 (0 days ago)
Key

| ●● | Show |

Connection string

| ●● | Show |

```
Jungkook@Vm1CentralUS:~/azproject$ sudo nano config.py
Jungkook@Vm1CentralUS:~/azproject$
```

Jungkook@Vm1WestUS: ~/azproject

```
  GNU nano 6.2                          config.py *
[DEFAULT]
# Account name
account =capstoneproject24
# Azure Storage account access key
key =2MwHIIonJg+5Y5bPbX6xoBJadQSnEqLW5SgBkmHaD++E7YuDQpHnWycxX7q1GUMlKRElFL82beZL+AStziN8CQ==
# Container name
container =upload
```

```
^G Help      ^O Write Out   ^W Where Is   ^K Cut      ^T Execute   ^C Location
^X Exit      ^R Read File   ^\ Replace    ^U Paste    ^J Justify   ^/ Go To Line
```

```
Jungkook@Vm1CentralUS: ~/azproject                                    —    □    ✕

flask-3.0.3 itsdangerous-2.2.0
WARNING: Running pip as the 'root' user can result in broken permissions and conflicting behav
iour with the system package manager. It is recommended to use a virtual environment instead:
https://pip.pypa.io/warnings/venv
Jungkook@Vm1CentralUS:~/azproject$ sudo nano config.py
Jungkook@Vm1CentralUS:~/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 product
ion 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
10.0.1.6 - - [09/Sep/2024 18:15:25] "GET / HTTP/1.1" 200 -
10.0.1.7 - - [09/Sep/2024 18:15:27] "GET / HTTP/1.1" 200 -
10.0.1.6 - - [09/Sep/2024 18:15:55] "GET / HTTP/1.1" 200 -
10.0.1.7 - - [09/Sep/2024 18:15:57] "GET / HTTP/1.1" 200 -
10.0.1.6 - - [09/Sep/2024 18:16:25] "GET / HTTP/1.1" 200 -
10.0.1.7 - - [09/Sep/2024 18:16:27] "GET / HTTP/1.1" 200 -
```

Create Traffic Manager profile ...

Name *

Capstoneproject24

.trafficmanager.ne

Routing method

Performance

Subscription *

Free Trial

Resource group *

CapstoneProject

Create new

Resource group location ⓘ

Central US

Create   Automation options

Load balancing | Traffic Manager 📌 ...

Search

+ Create ⊚ Manage view ∨ ↻ Refresh ↓ Export to CSV ⟨⟩ Open query ⊘ Assign tags

- Overview
- Load Balancing Services
  - Application Gateway
  - Front Door and CDN profiles
  - Load Balancer
  - Traffic Manager

Filter for any field...   Subscription equals **all**   Resource group equals **all**   Location equals **all**   + Add filter

Showing 1 to 1 of 1 records.

Name ↑↓		Status ↑↓	Routin... ↑↓	Resource group ↑↓	Subscription ↑↓
Capstoneproject24		Enabled	Performance	CapstoneProject	Free Trial

---

Load balancing | Traffic Manager «

Capstoneproject24 | Endpoints 📌 ☆ ...
Traffic Manager profile

Add endpoint ✕
Capstoneproject24

- Overview
- Load Balancing Services
  - Application Gateway
  - Front Door and CDN profiles
  - Load Balancer
  - Traffic Manager

Search endpoints

Name ↑↓	Status ↑↓	Monitor st

No results.

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Settings
  - Configuration
  - Real user measurements
  - Traffic view
  - Endpoints
  - Properties
  - Locks
- Monitoring
- Automation
- Help

Type * ⓘ

Azure endpoint

Name *

ep1

Enable Endpoint ☑

Target resource type

Public IP address

Public IP address *

ip1 (4.249.238.103)

Custom Header settings ⓘ

Configure in this format, host:contoso.com,customheader:contoso

⚠ Do NOT input sensitive customer data in this field (i.e. APIKeys, Secrets, and Auth tokens etc.).

Health Checks ⓘ
- ⦿ Enable
  Health check will determine if traffic can be served to the endpoint.
- ○ Always serve traffic
  No health check will run. Traffic will be always served to the endpoint.

Load balancing | Traffic Manager

Capstoneproject24 📌 ☆ ...
Traffic Manager profile

- Overview
- Load Balancing Services
  - Application Gateway
  - Front Door and CDN profiles
  - Load Balancer

▷ Enable profile ⊘ Disable profile ↻ Refresh → Move ∨ 🗑 Delete profile

∧ Essentials   JSON View

Resource group (move)	: CapstoneProject	DNS name	: http://capstoneproject24.trafficmanager.net
Status	: Enabled	Monitor status	: Online
Subscription (move)	: Free Trial	Routing method	: Performance
Subscription ID	: b38e9b3d-e40f-4a03-9ae8-665ffd950134		
Tags (edit)	: Add tags		

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Settings

DNS name   : http://capstoneproject24.trafficmanager.net

Monitor status : Online

Capstoneproject24 - Microsoft × | capstoneproject24.z19.web.com × | Create application gateway - M × | New support request - Microso × | Official Website × +

Not secure capstoneproject24.trafficmanager.net

Welcome to the Home Page.

www.intellipaat.com

Upload Your File Here

Drag and Drop or Click here to upload your file

Upload

www.intellipaat.com