Lab25– Understanding CDN Profiles and Endpoint – Azure

Content delivery network

A content delivery network (CDN) is a distributed network of servers that can efficiently deliver web content to users. CDNs store cached content on edge servers in point-of-presence (POP) locations that are close to end users, to minimize latency.

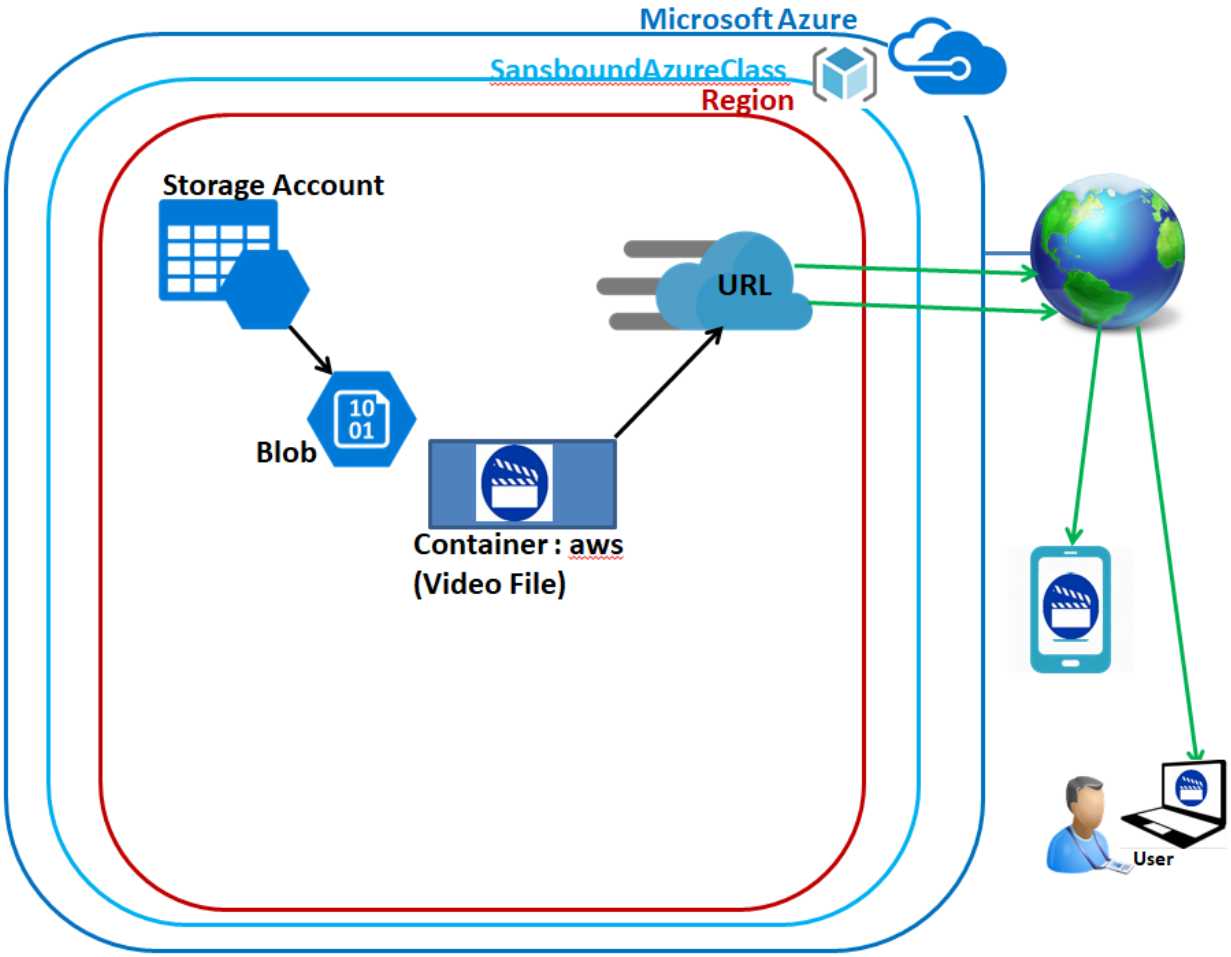
Azure Content Delivery Network (CDN) offers developers a global solution for rapidly delivering high-bandwidth content to users by caching their content at strategically placed physical nodes across the world. Azure CDN can also accelerate dynamic content, which cannot be cached, by leveraging various network optimizations using CDN POPs. For example, route optimization to bypass Border Gateway Protocol (BGP).

The benefits of using Azure CDN to deliver web site assets include:

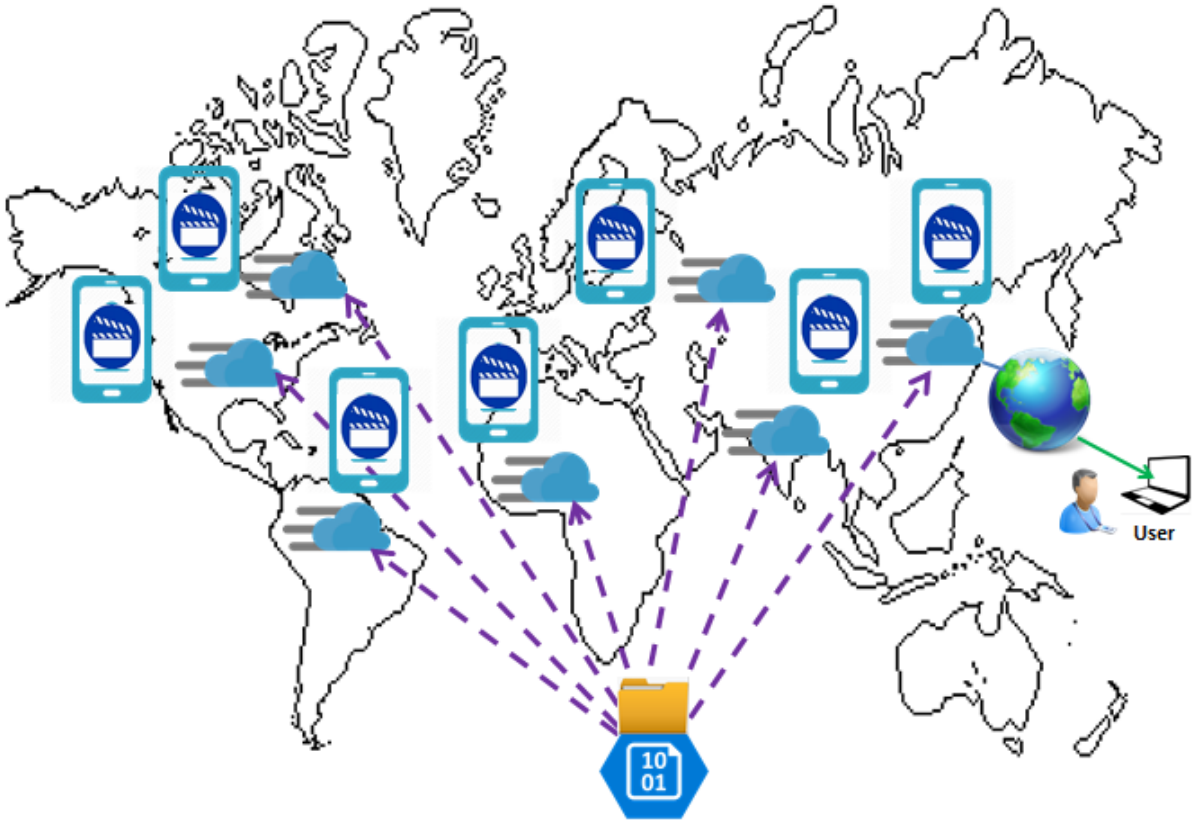
- Better performance and improved user experience for end users, especially when using applications in which multiple round-trips are required to load content.
- Large scaling to better handle instantaneous high loads, such as the start of a product launch event.
- Distribution of user requests and serving of content directly from edge servers so that less traffic is sent to the origin server.

Check Name Availability	Verify the uniqueness of resource names.
Check Resource Usage	Discover quotas and usage of CDN profiles.
Custom Domains	Provides operations for working with CDN custom domains.
Edge Nodes	Obtain information about CDN edge nodes.
Endpoints	Create, validate, start, stop, and delete CDN endpoints. Pre-load and purge cached endpoint content.
List Operations	Provides information about CDN REST API operations.
Origins	Manage origins within an endpoint.
Profiles	Operations for managing CDN profiles. A CDN profile is a collection of CDN endpoints.

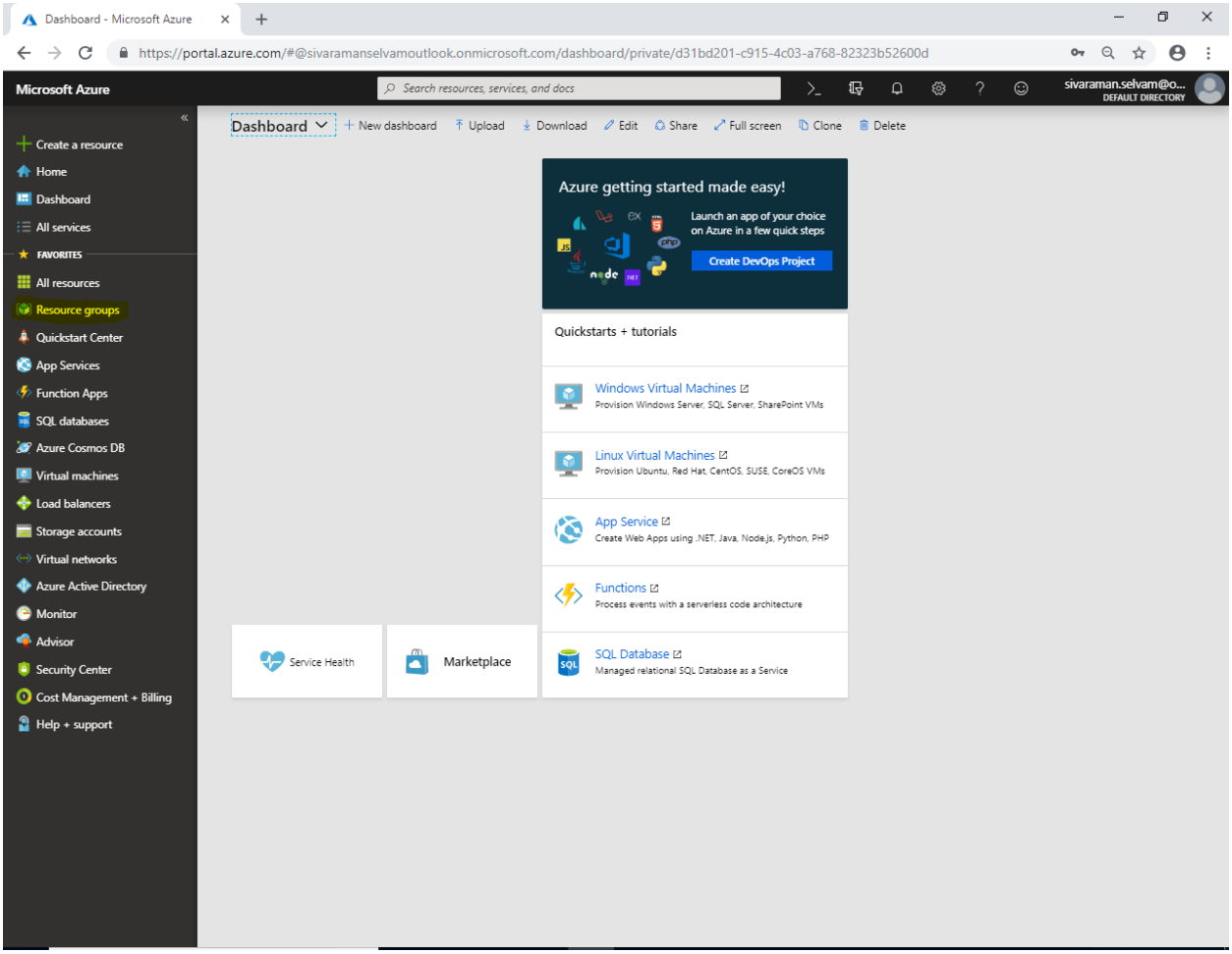
Topology:


Microsoft Azure
SansboundAzureClass
Region
Storage Account
URL
Blob
10
01
Container : aws
(Video File)
User

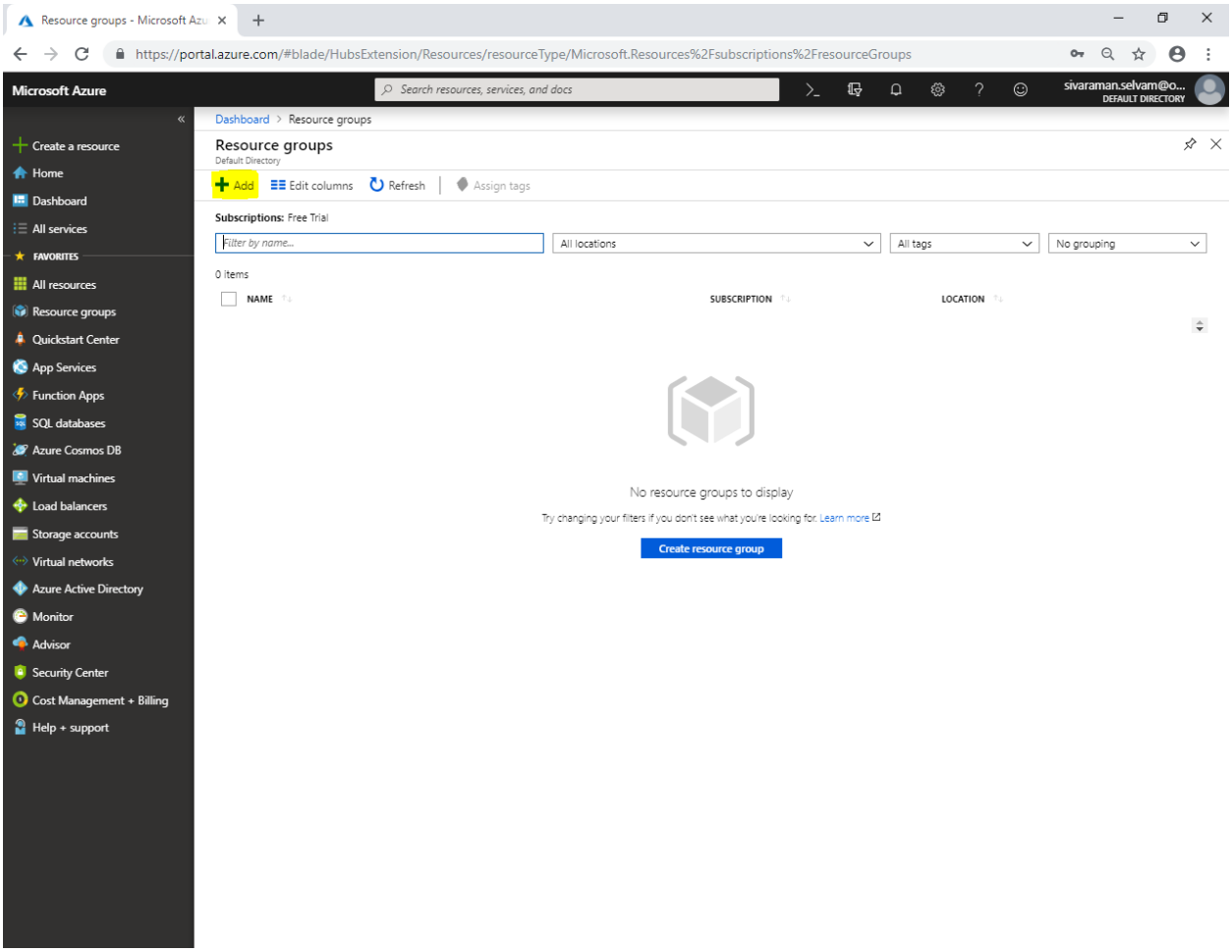
Backend Topology:



In Azure portal, click **“Resource groups”**.



In **“Resource groups”** click **“Add”**.

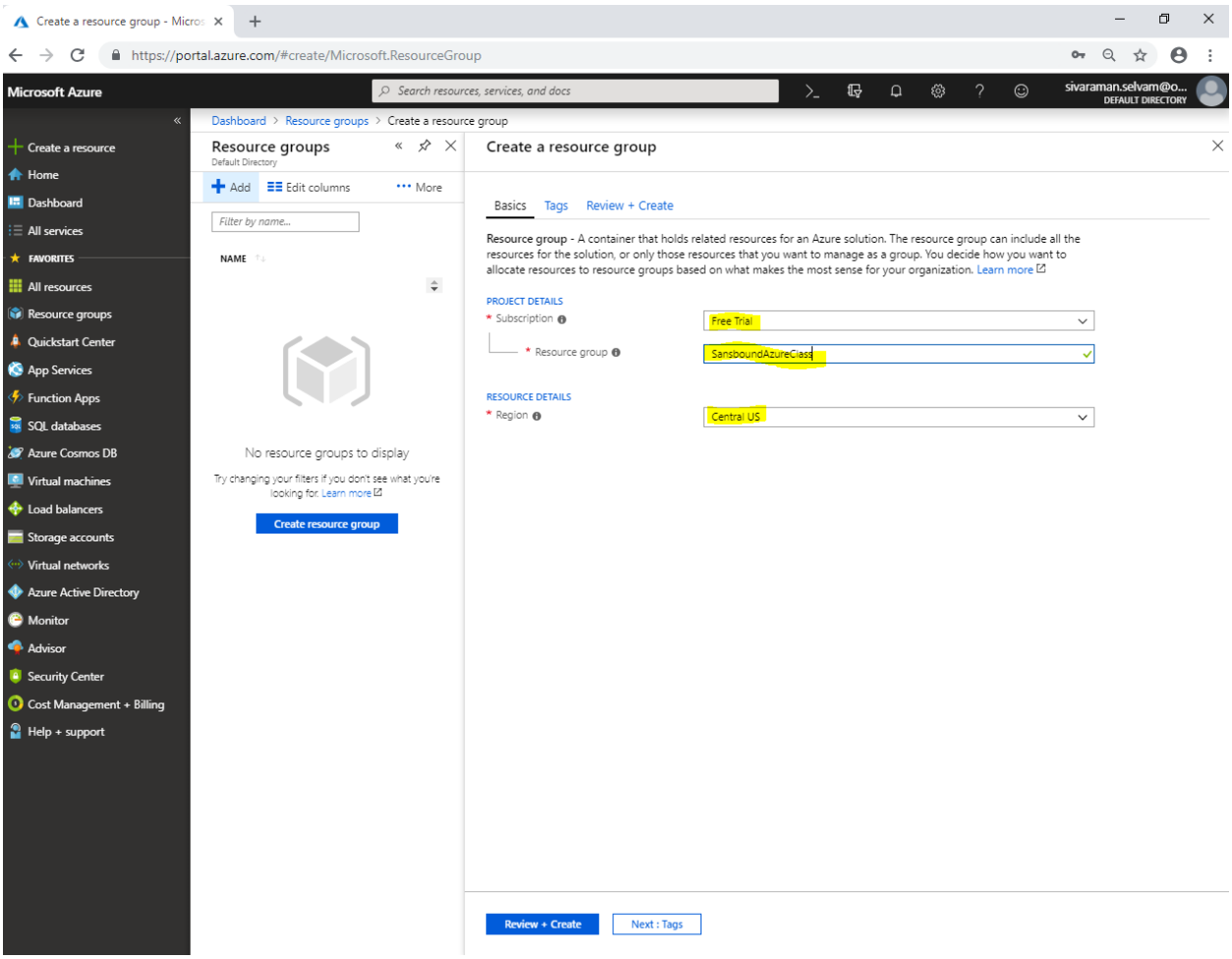


While create a resource group,

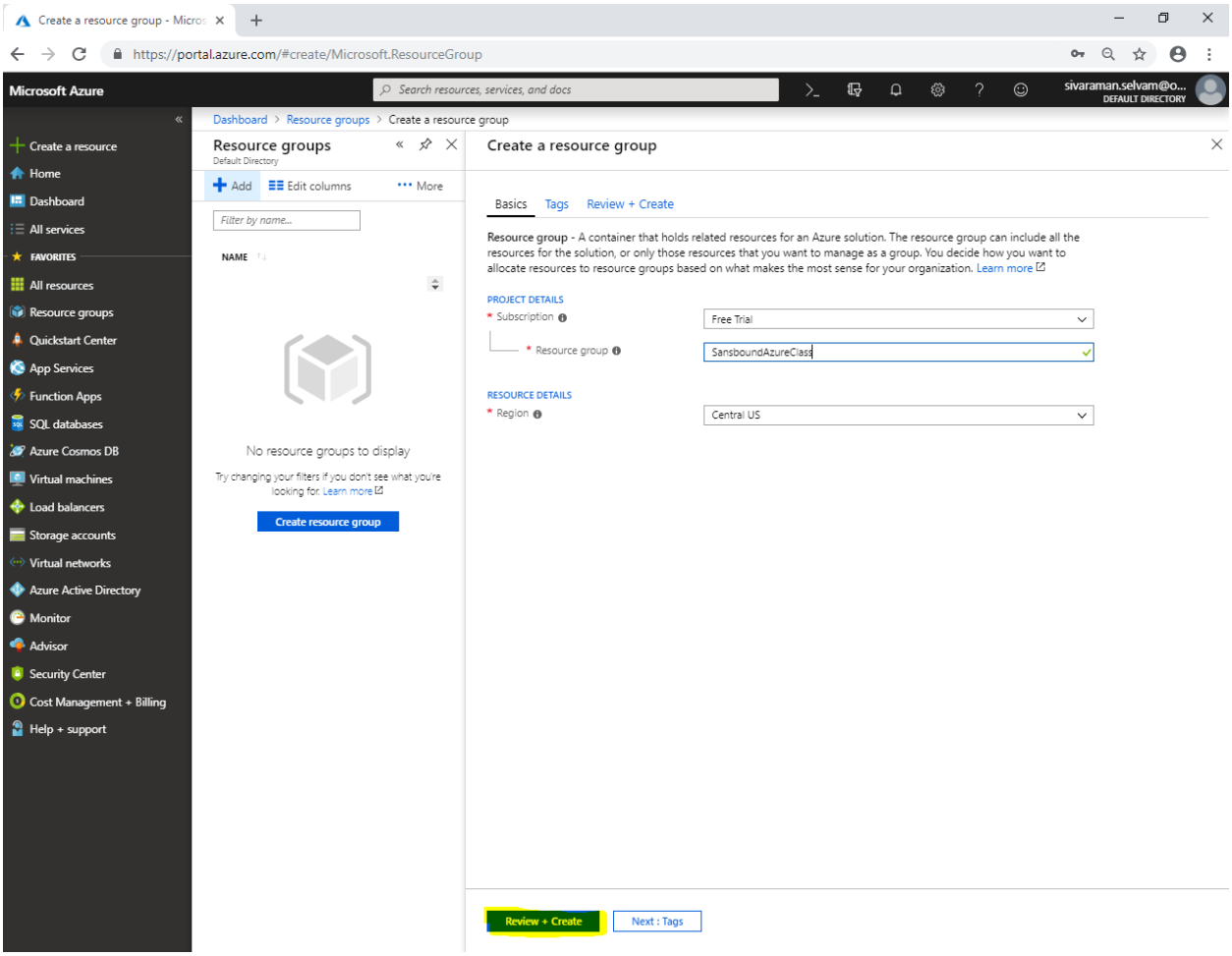
Select **“Subscription”** as **“Free Trial”.**

Type **“Resource group”** name as **“SansboundAzureClass”**.

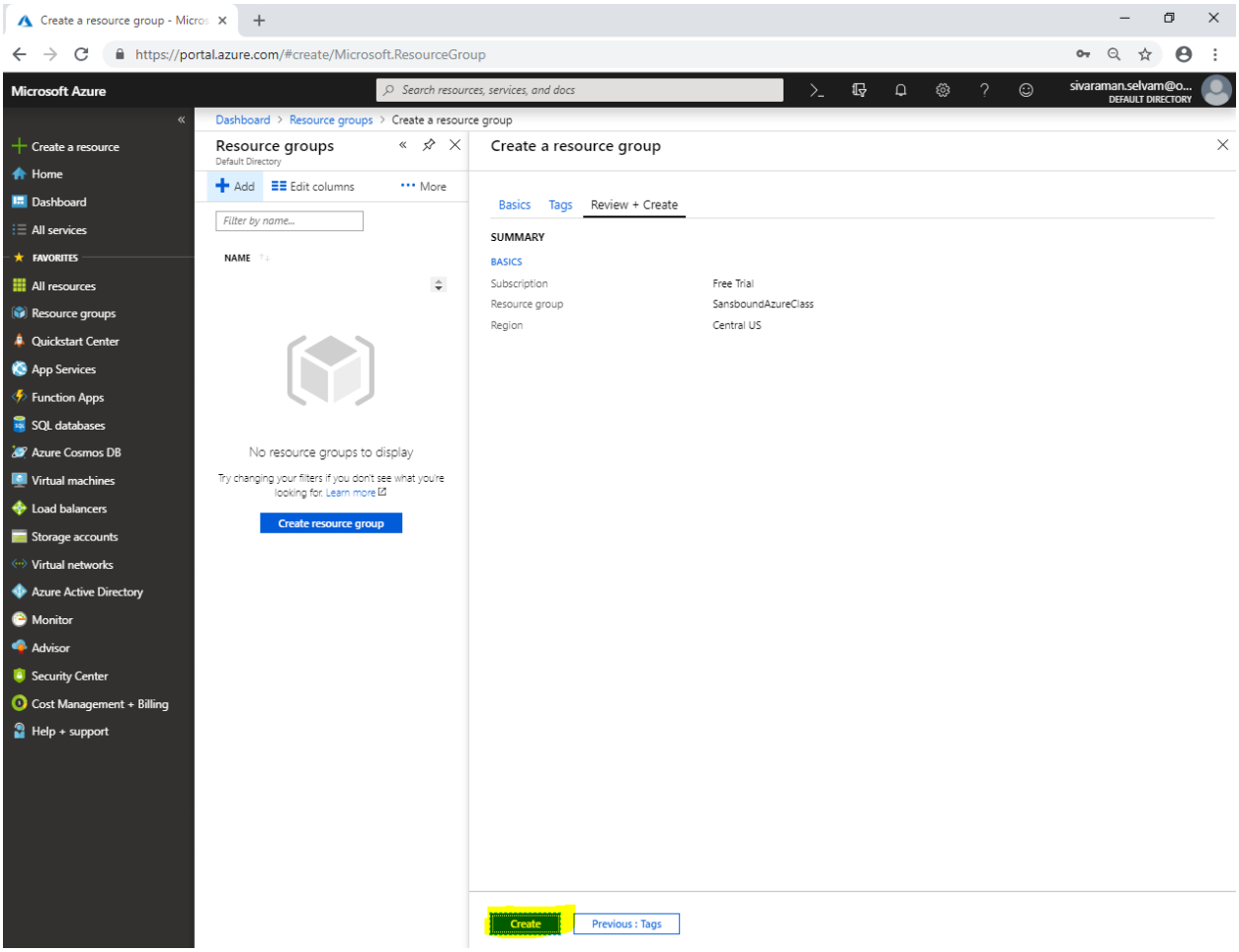
Select **“Region”** as **“Central US”**.



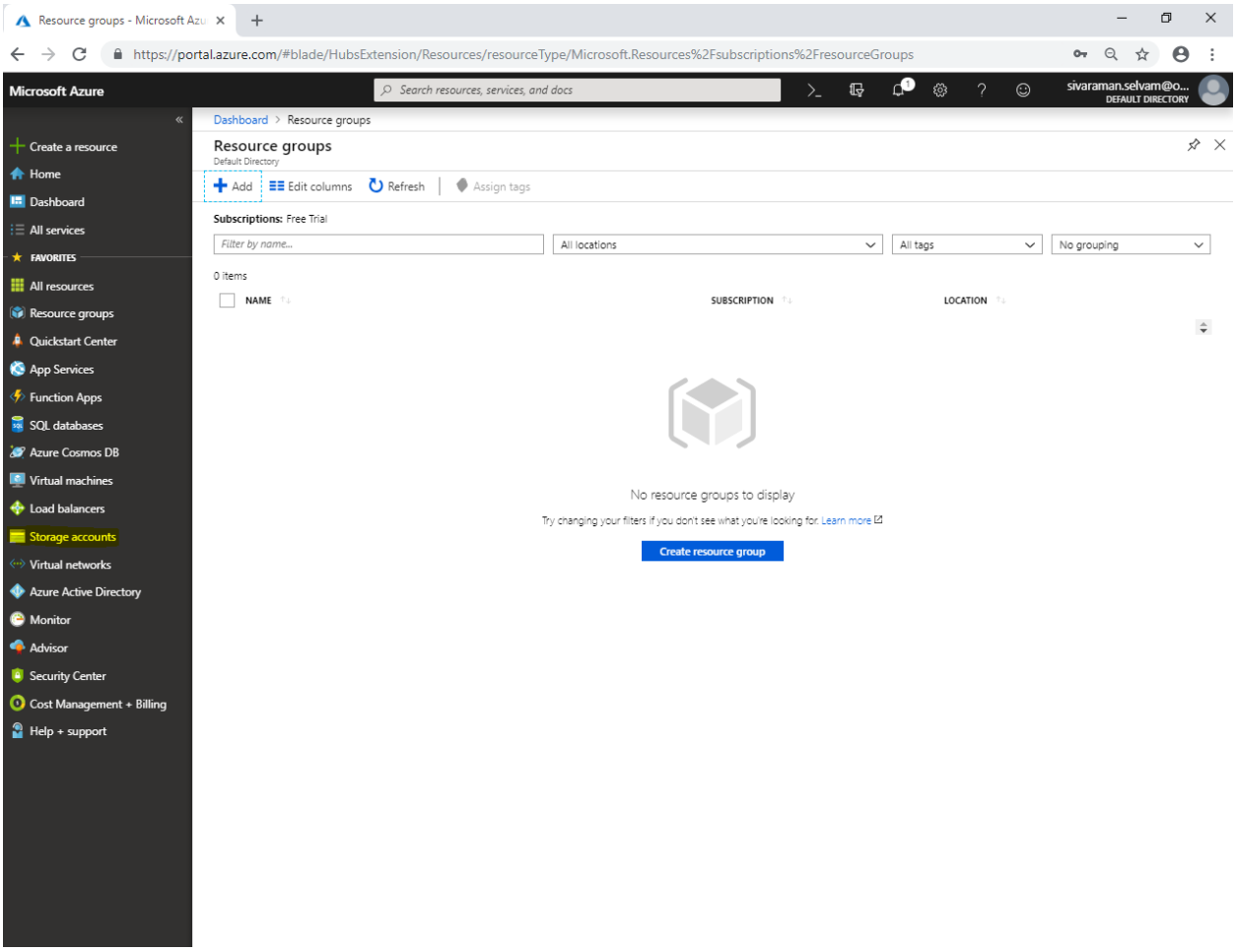
Click **“Review + create”**.



Click **"Create"**.

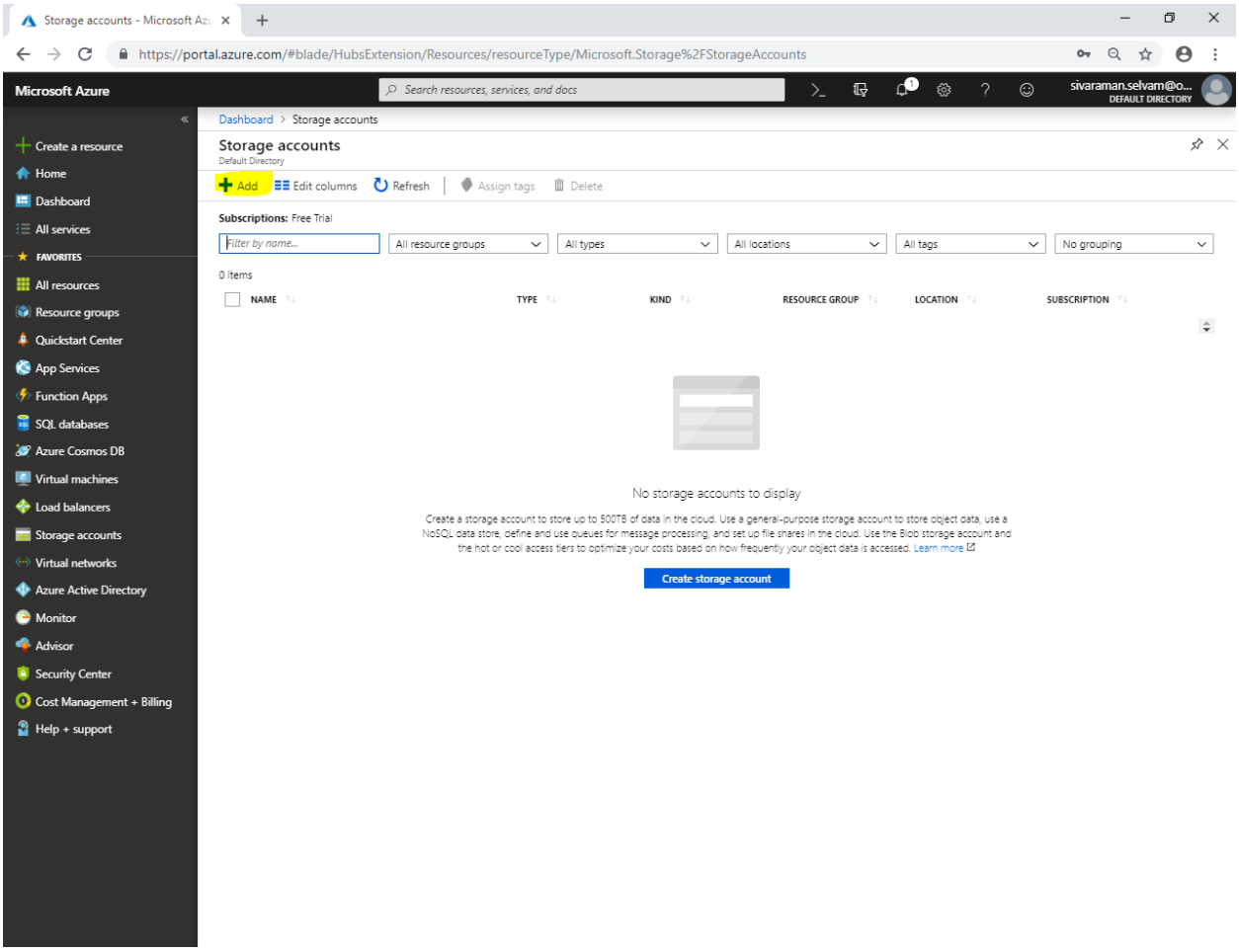


Click **“Storage accounts”**.



In **“Storage accounts”**,

Click **“Add”**.



While create a storage account,

Select **“Subscription”** as **“Free Trial”**.

Select **“Resource group”** as **“SansboundAzureClass”**.

Type **“storage account name”** as **“sansboundstorage”**.

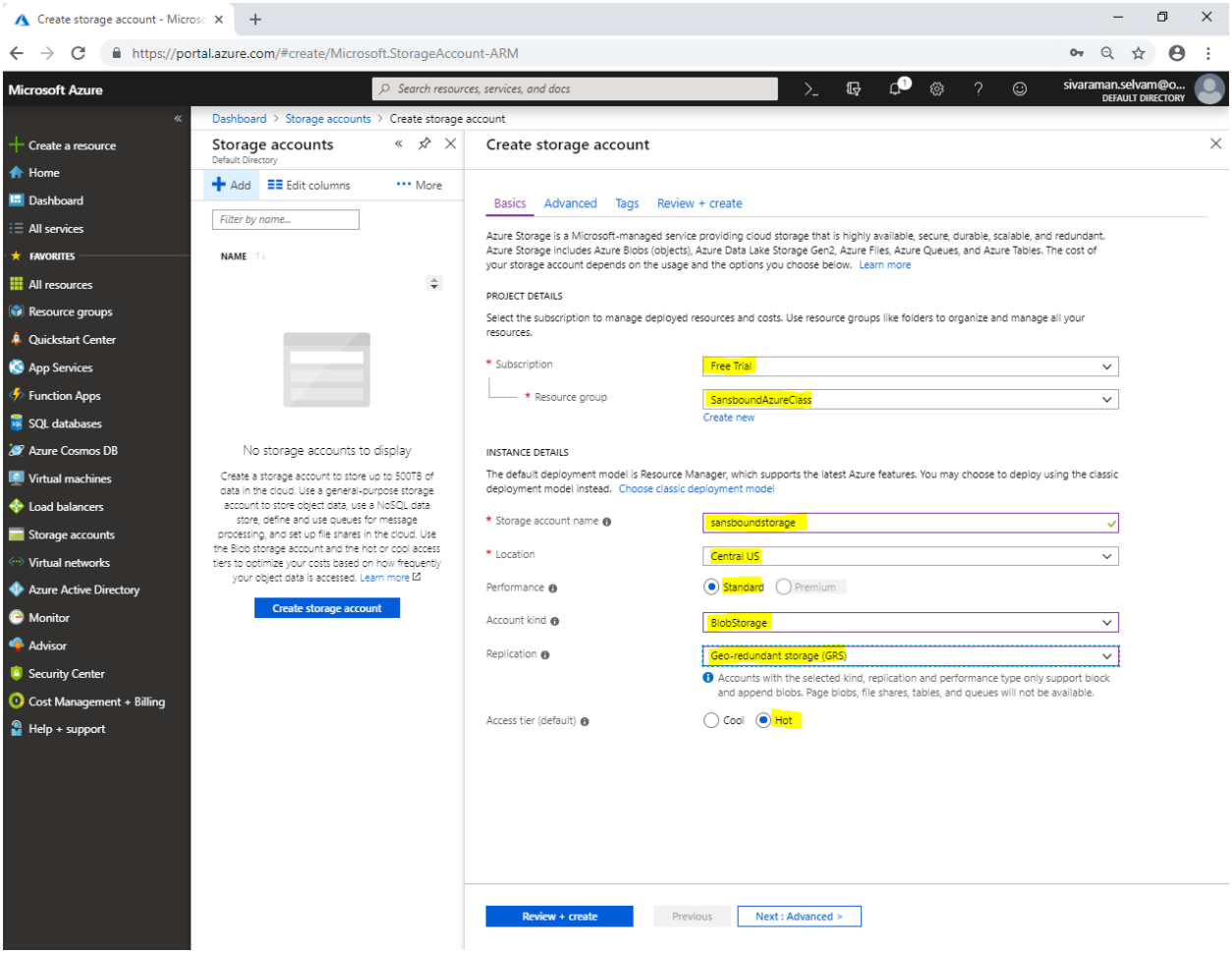
Select **“Location”** as **“Central US”**.

Select **“Performance”** as **“Standard”**.

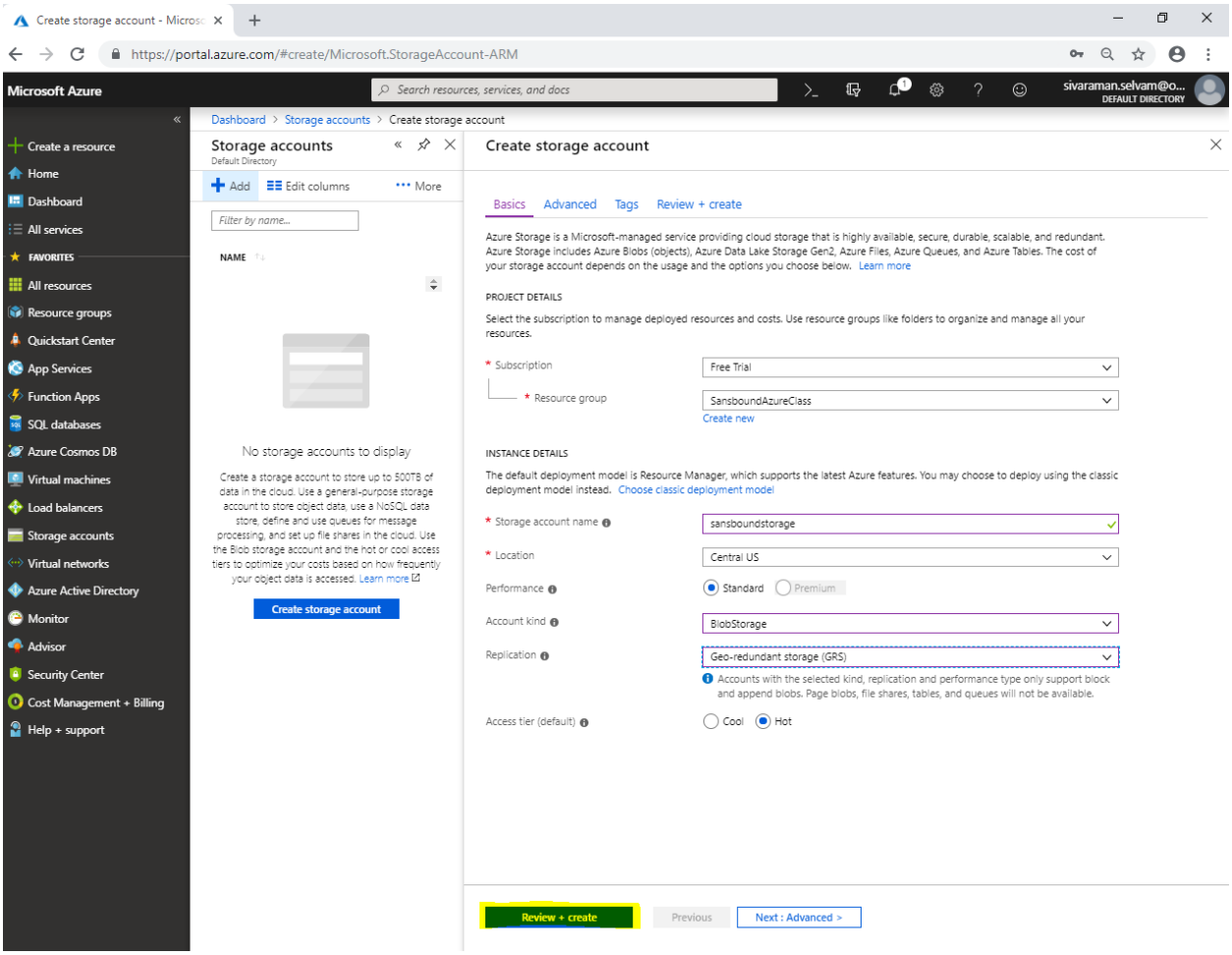
Select **“Account kind”** as **“Blobstorage”**.

Select **“Replication”** as **“GRS”**.

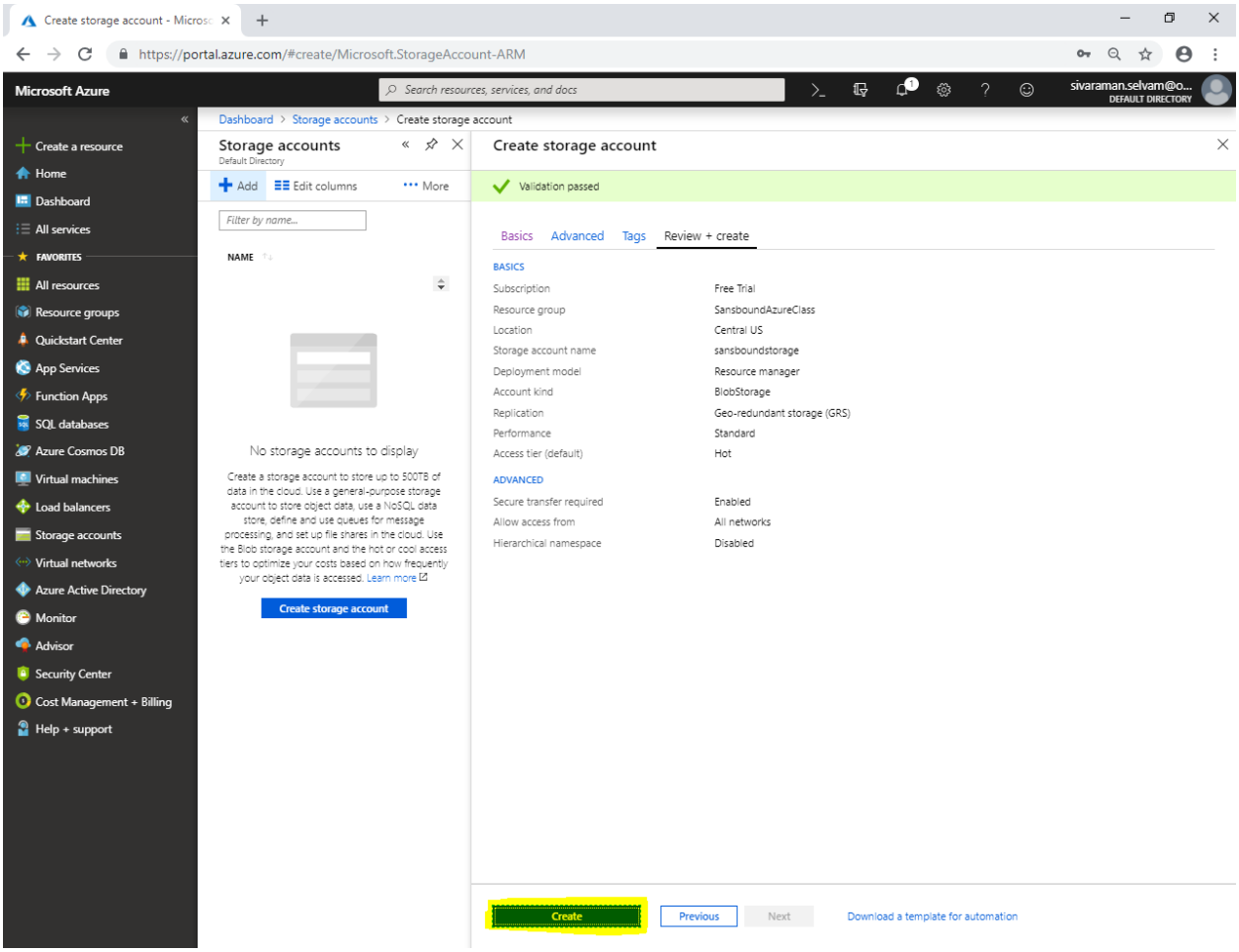
Select **“Access tier”** as **“Hot”**.



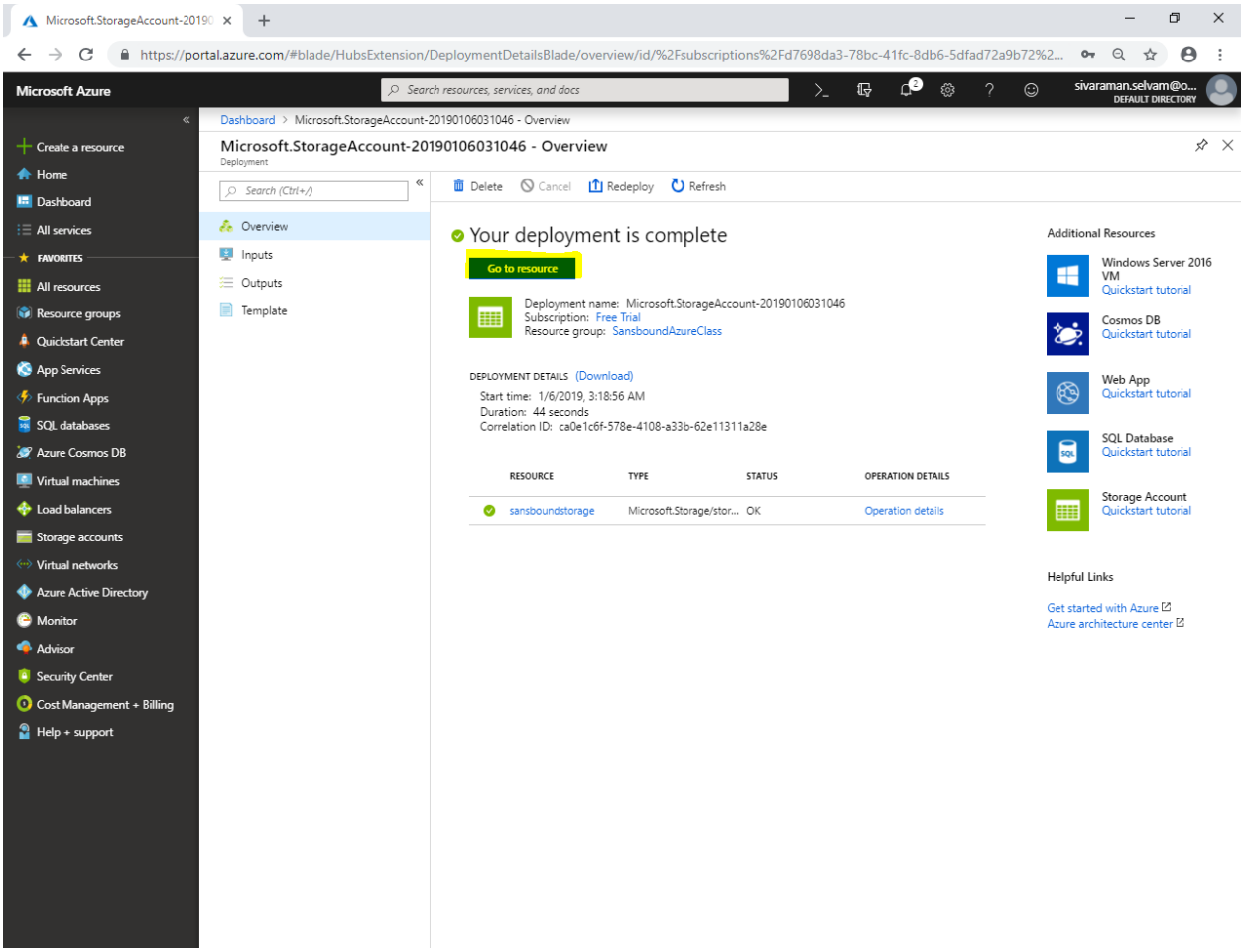
Click **"Review + create"**.



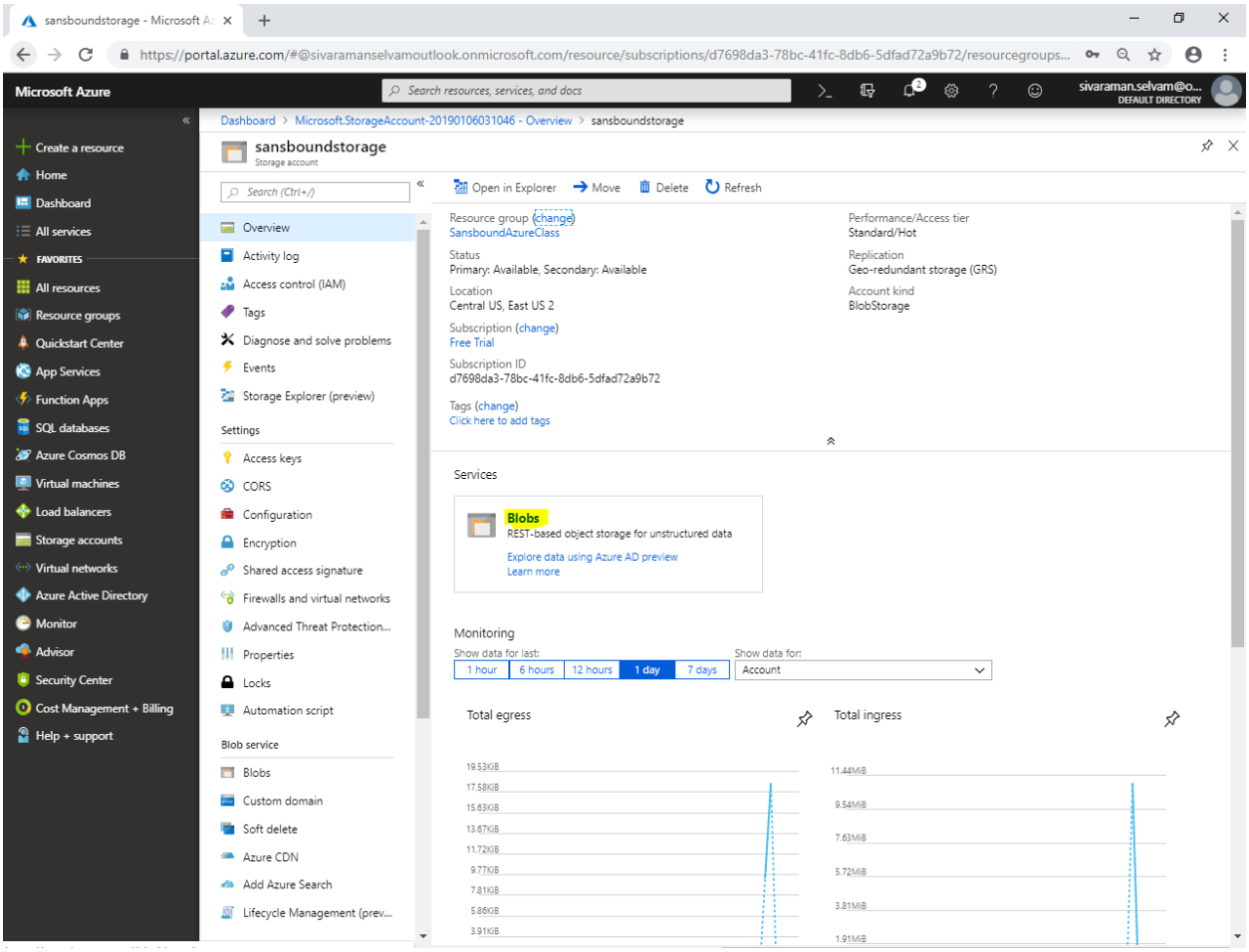
Click **"Create"**.



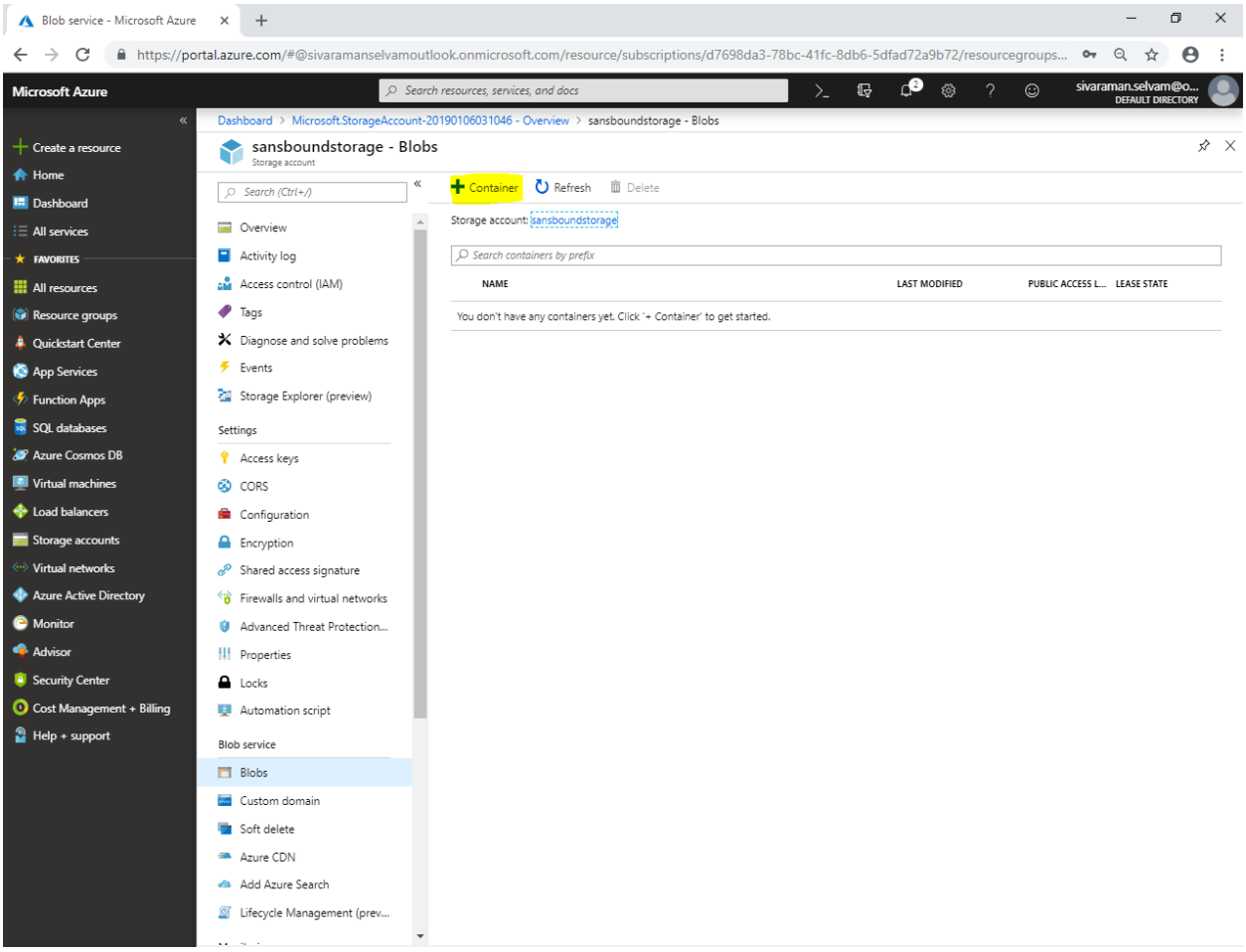
Click **"Go to resource"**.



Click **"Blobs"**.


sansboundstorage - Microsoft A
https://portal.azure.com/#@sivaramanselvamoutlook.onmicrosoft.com/resource/subscriptions/d7698da3-78bc-41fc-8db6-5dfad72a9b72/resourcegroups...
Microsoft Azure
Search resources, services, and docs
sivaraman.selvam@o...
DEFAULT DIRECTORY
Create a resource
Home
Dashboard
All services
FAVORITES
All resources
Resource groups
Quickstart Center
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Advisor
Security Center
Cost Management + Billing
Help + support
Dashboard > Microsoft.StorageAccount-20190106031046 - Overview > sansboundstorage
sansboundstorage
Storage account
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Events
Storage Explorer (preview)
Settings
Access keys
CORS
Configuration
Encryption
Shared access signature
Firewalls and virtual networks
Advanced Threat Protection...
Properties
Locks
Automation script
Blob service
Blobs
Custom domain
Soft delete
Azure CDN
Add Azure Search
Lifecycle Management (prev...
Open in Explorer
Move
Delete
Refresh
Resource group (change)
SansboundAzureClass
Status
Primary: Available, Secondary: Available
Location
Central US, East US 2
Subscription (change)
Free Trial
Subscription ID
d7698da3-78bc-41fc-8db6-5dfad72a9b72
Tags (change)
Click here to add tags
Performance/Access tier
Standard/Hot
Replication
Geo-redundant storage (GRS)
Account kind
BlobStorage
Services
Blobs
REST-based object storage for unstructured data
Explore data using Azure AD preview
Learn more
Monitoring
Show data for last:
1 hour
6 hours
12 hours
1 day
7 days
Show data for:
Account
Total egress
Total ingress
19.53KiB
17.58KiB
15.63KiB
13.67KiB
11.72KiB
9.77KiB
7.81KiB
5.86KiB
3.91KiB
11.44MiB
9.54MiB
7.63MiB
5.72MiB
3.81MiB
1.91MiB

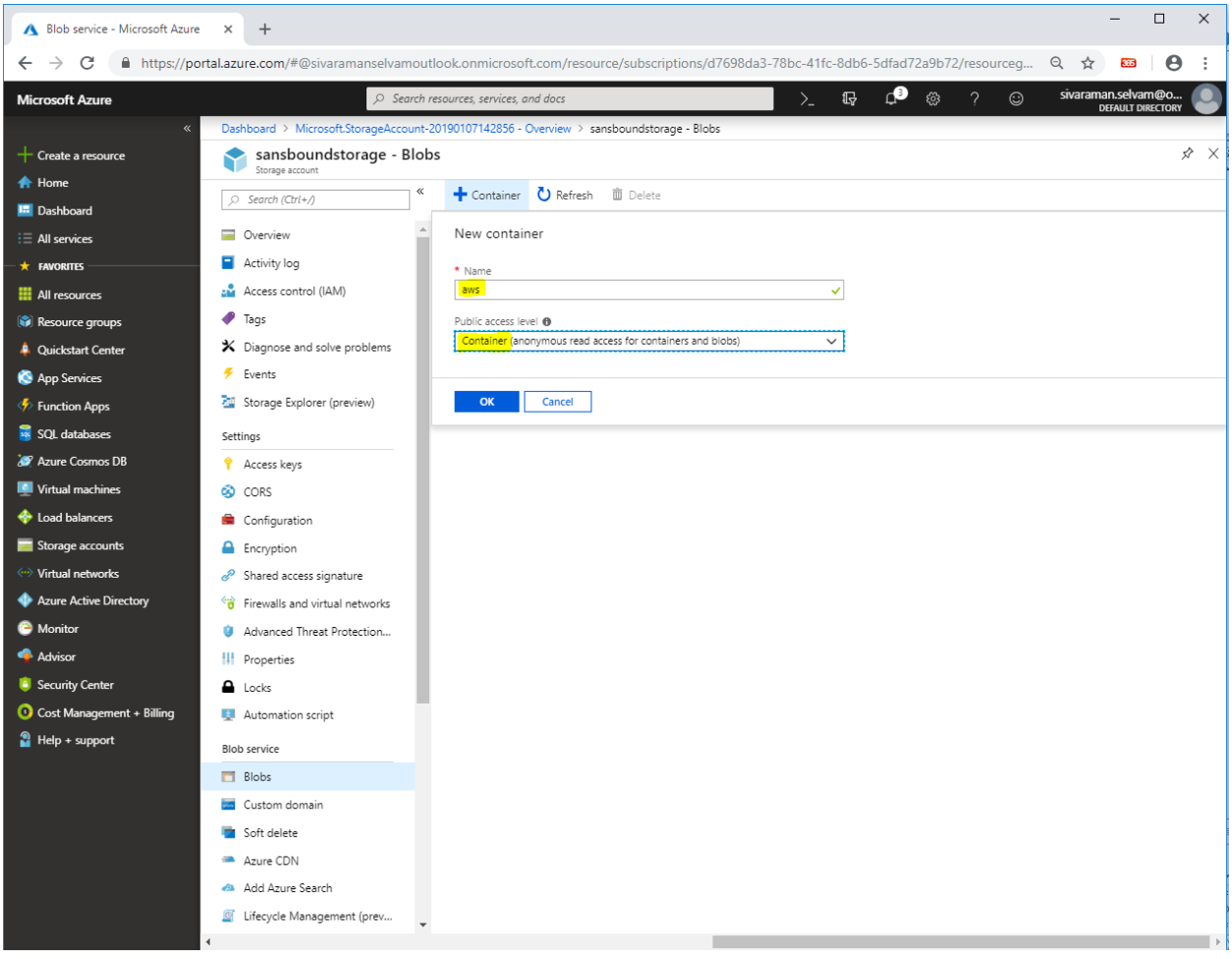
Click **“Container”** to create container.



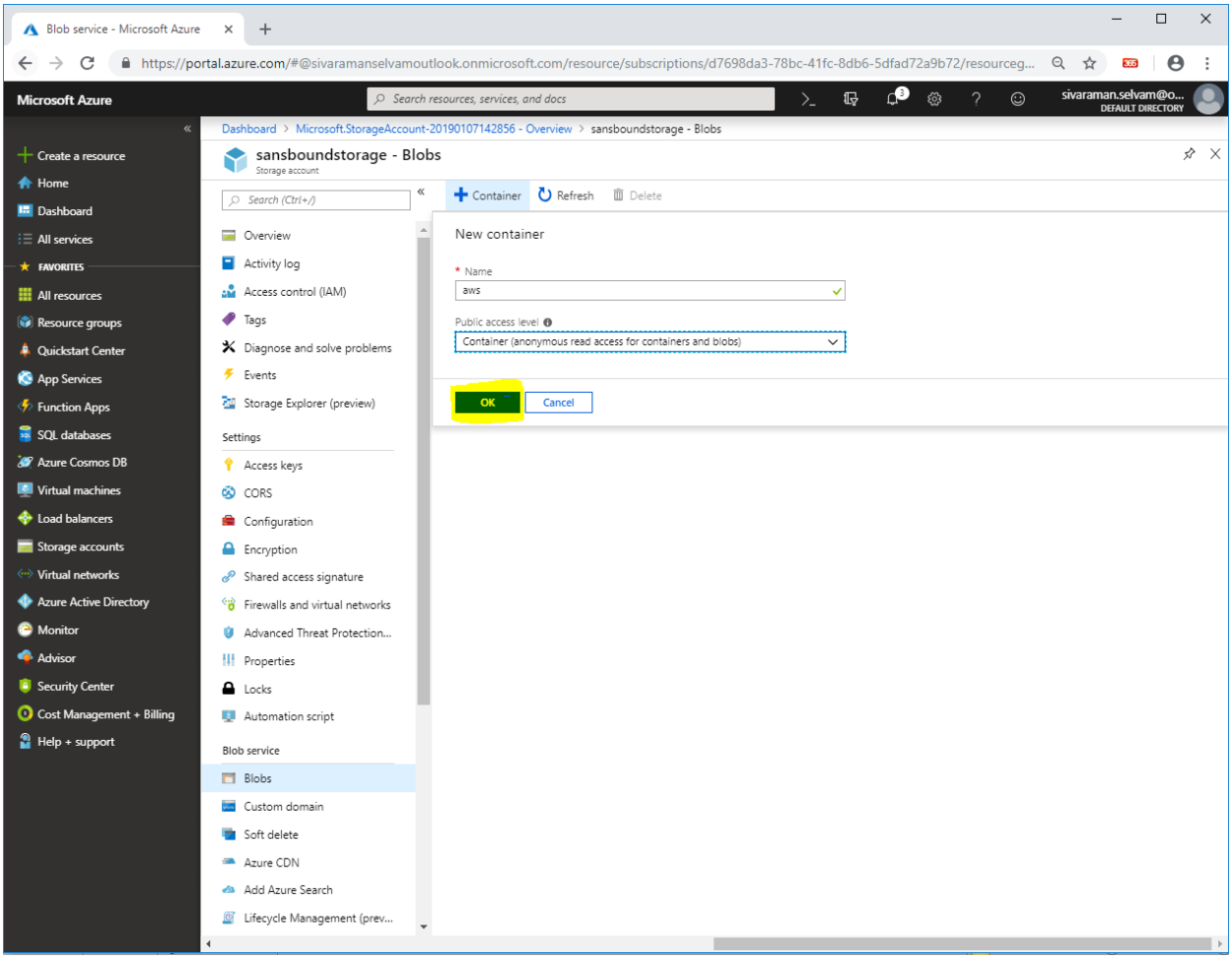
While create a container,

Type **“Name”** as **“aws”**.

Select **“Public access level”** as **“Container”**.

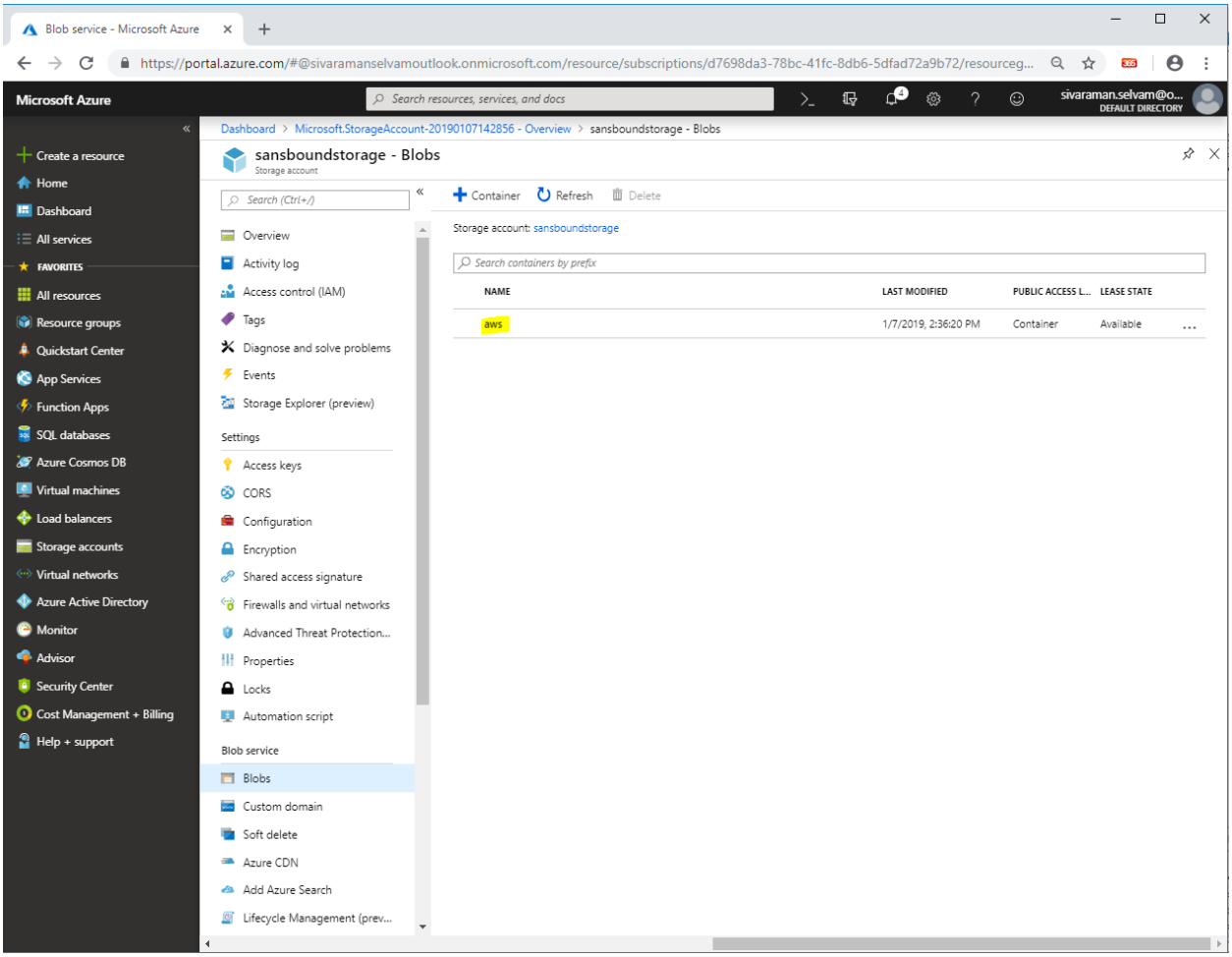


Click **“Ok”**.

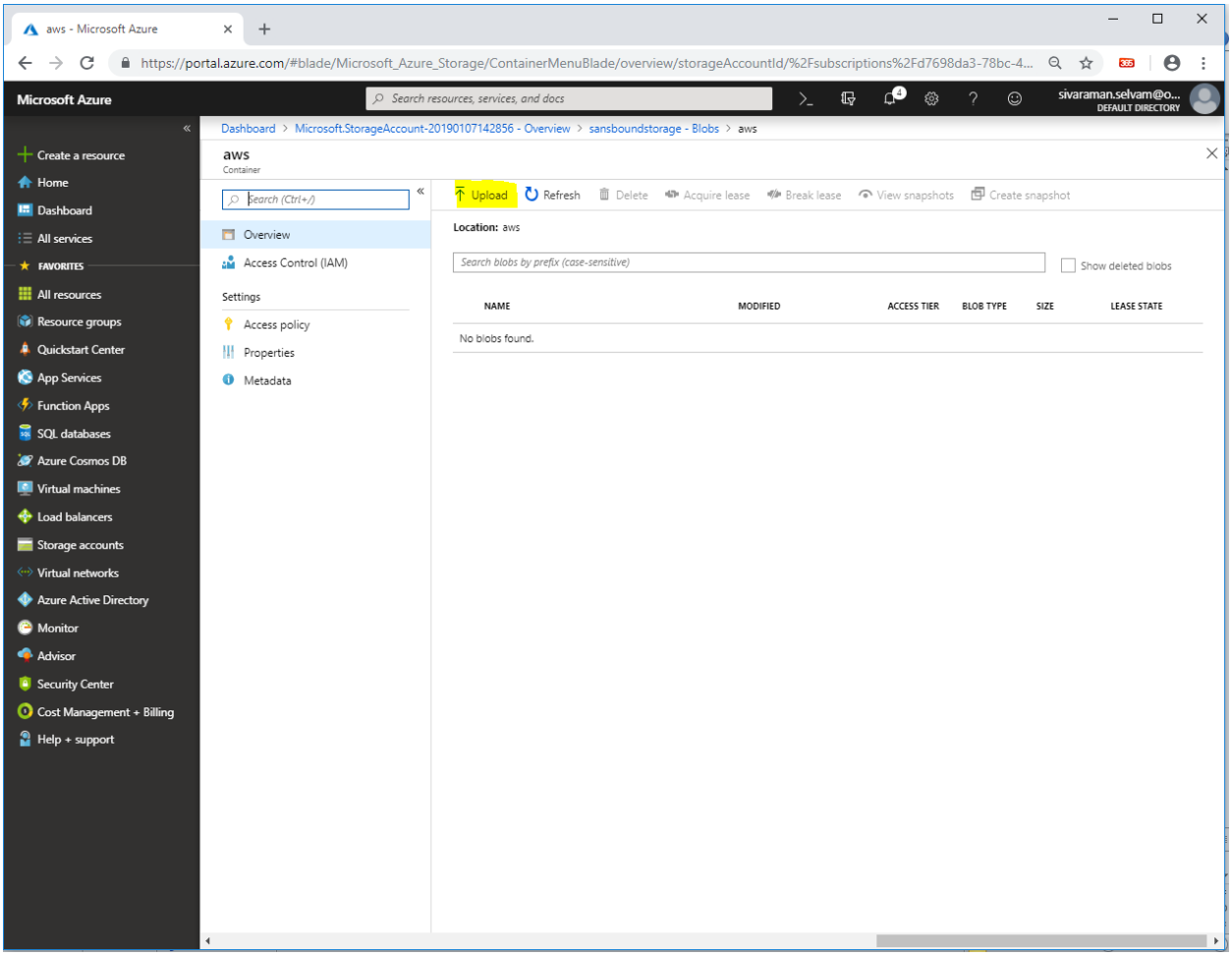

Blob service - Microsoft Azure
https://portal.azure.com/#@sivaramanselvamoutlook.onmicrosoft.com/resource/subscriptions/d7698da3-78bc-41fc-8db6-5dfad72a9b72/resourceg...
Microsoft Azure
Search resources, services, and docs
sivaraman.selvam@o...
DEFAULT DIRECTORY
Dashboard > Microsoft.StorageAccount-20190107142856 - Overview > sansboundstorage - Blobs
sansboundstorage - Blobs
Storage account
Search (Ctrl+/)
Container
Refresh
Delete
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Events
Storage Explorer (preview)
Settings
Access keys
CORS
Configuration
Encryption
Shared access signature
Firewalls and virtual networks
Advanced Threat Protection...
Properties
Locks
Automation script
Blob service
Blobs
Custom domain
Soft delete
Azure CDN
Add Azure Search
Lifecycle Management (prev...
New container
* Name
aws
Public access level
Container (anonymous read access for containers and blobs)
OK
Cancel
Create a resource
Home
Dashboard
All services
FAVORITES
All resources
Resource groups
Quickstart Center
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Advisor
Security Center
Cost Management + Billing
Help + support

You are able to see that container named **“aws”** has been created successfully.

Click **“aws”**.

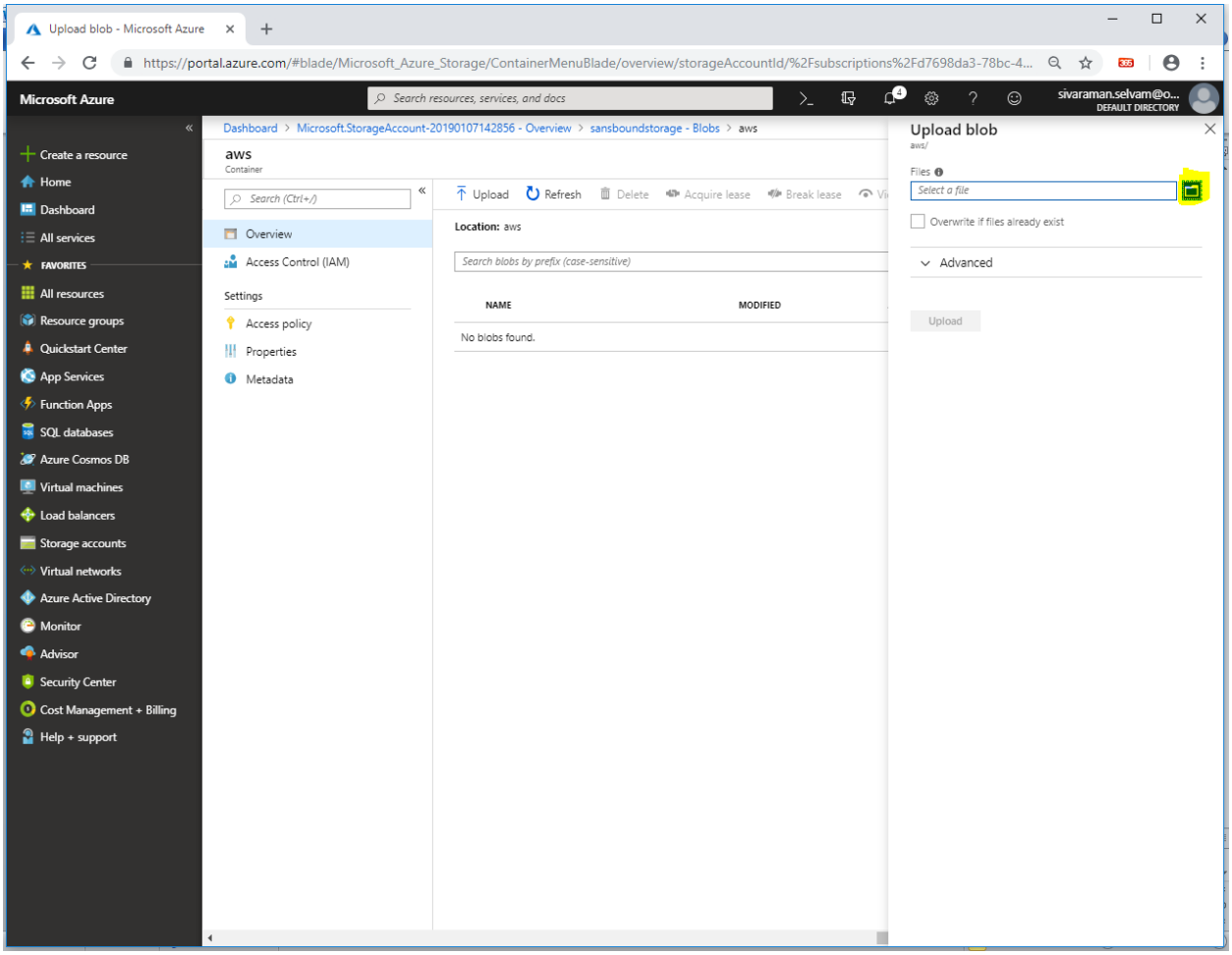


Click **“Upload”**.



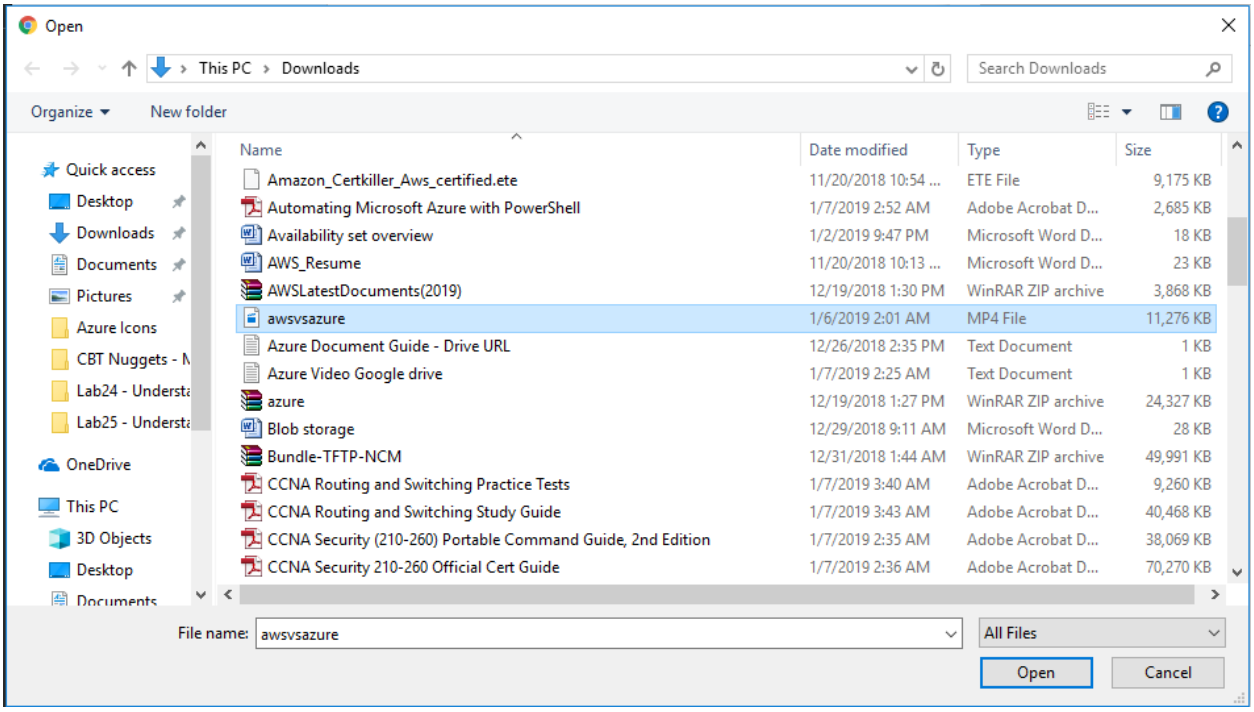
In **“Upload blob”,**

Click **“Icon”**.

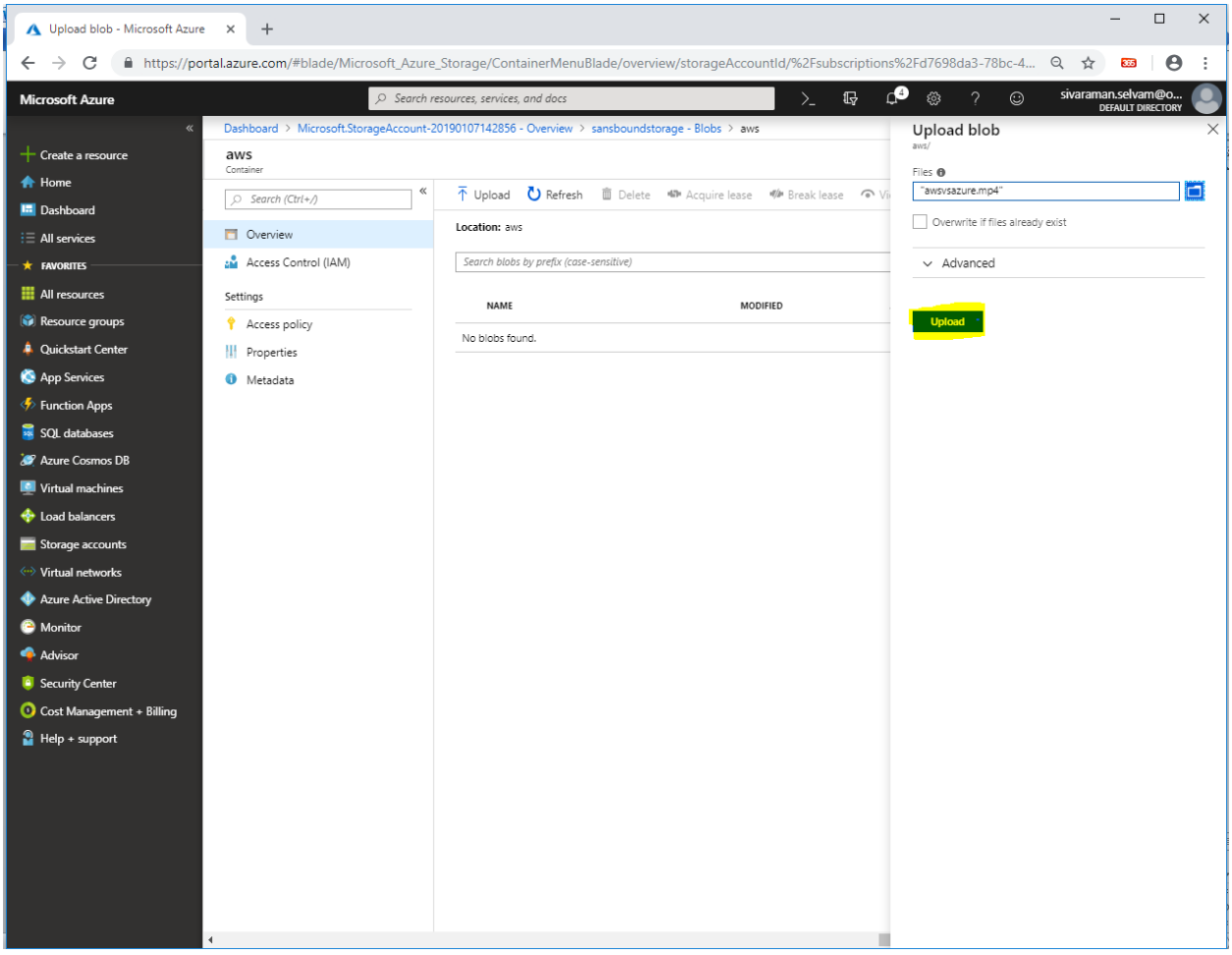


Browse and locate the file which you have required to upload.

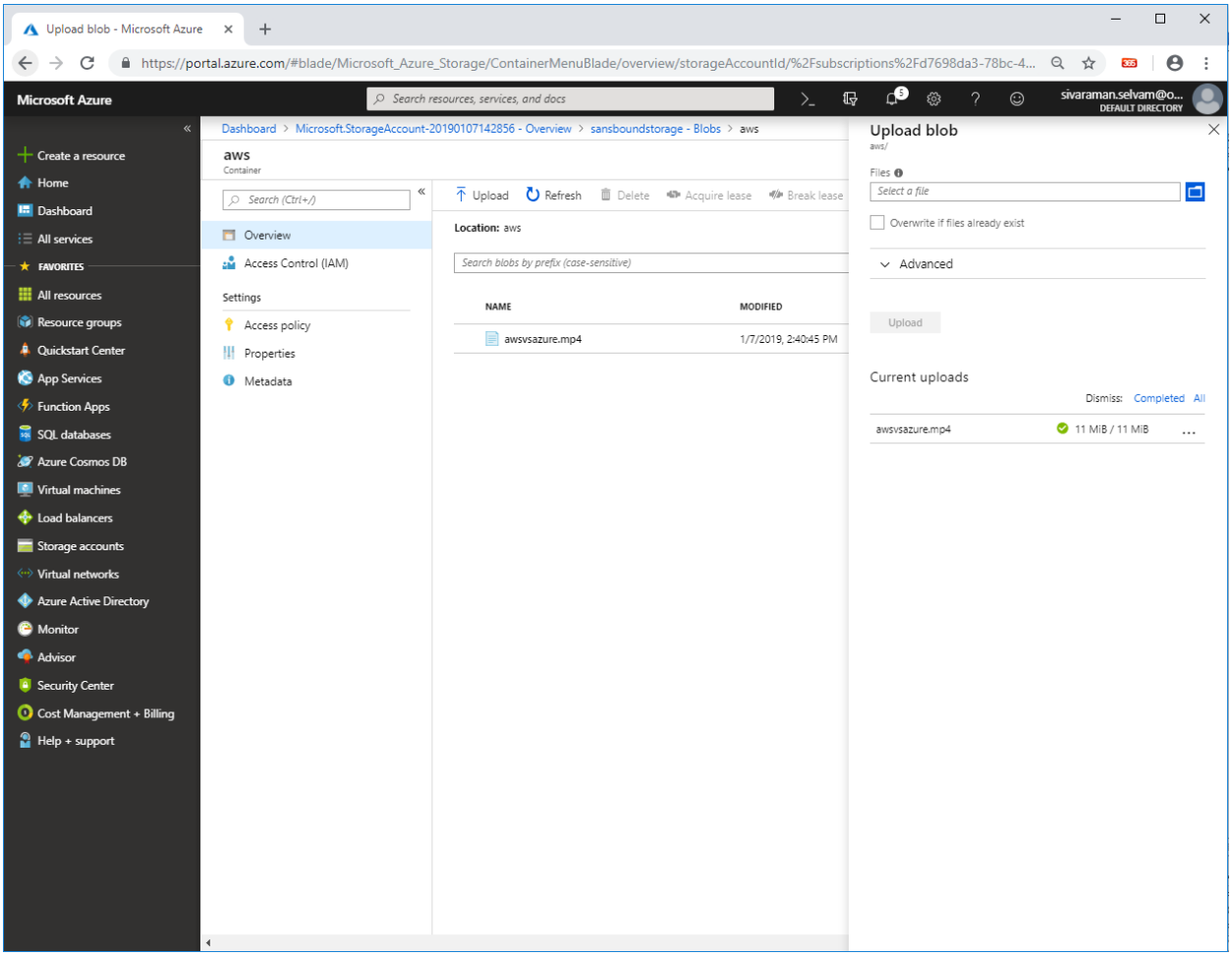
Select the file and click **"Open"**.



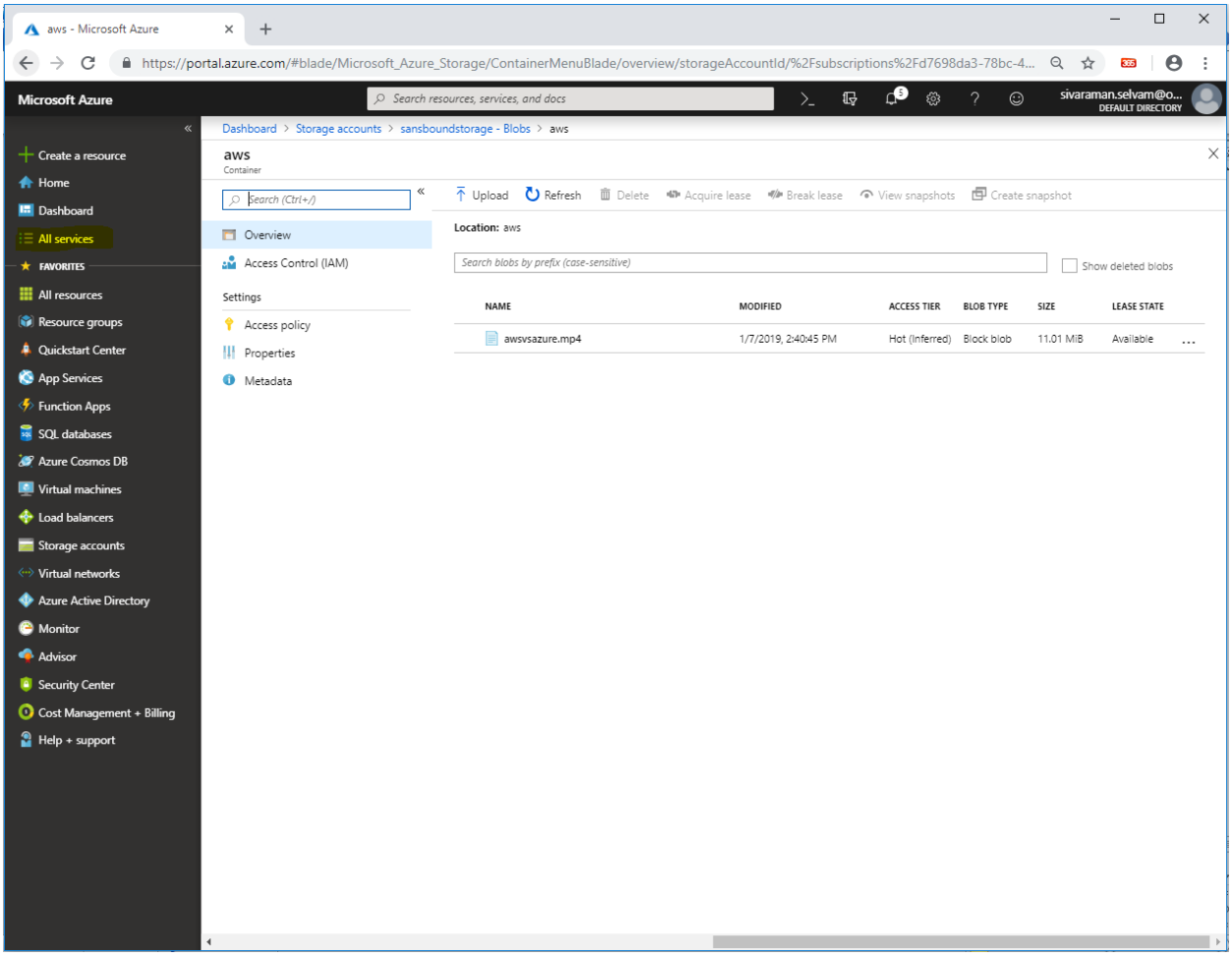
Click **“Upload”**.



You have successfully uploaded the awsvsazure.mp4 file in blob successfully.

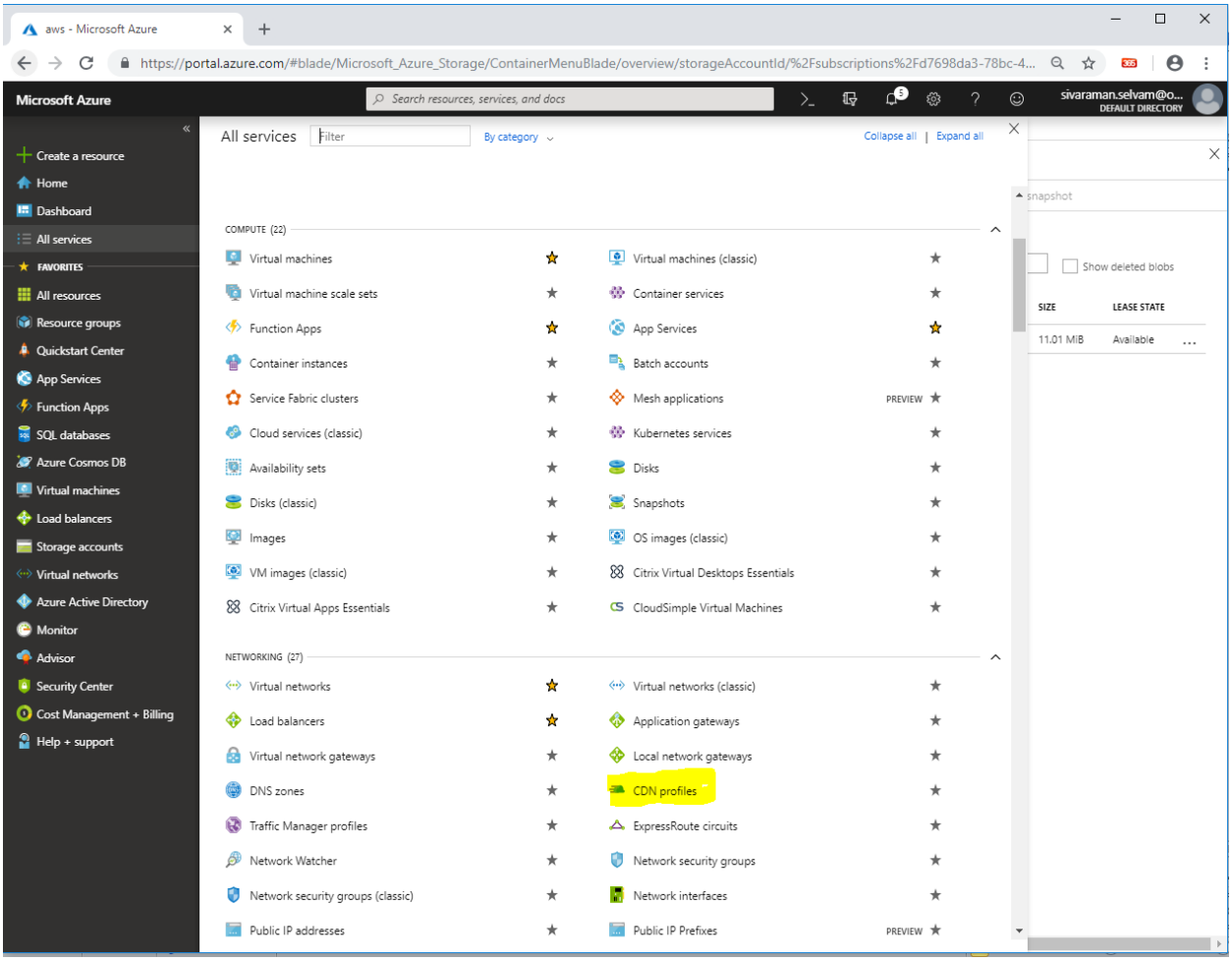


Click **"All services"**.

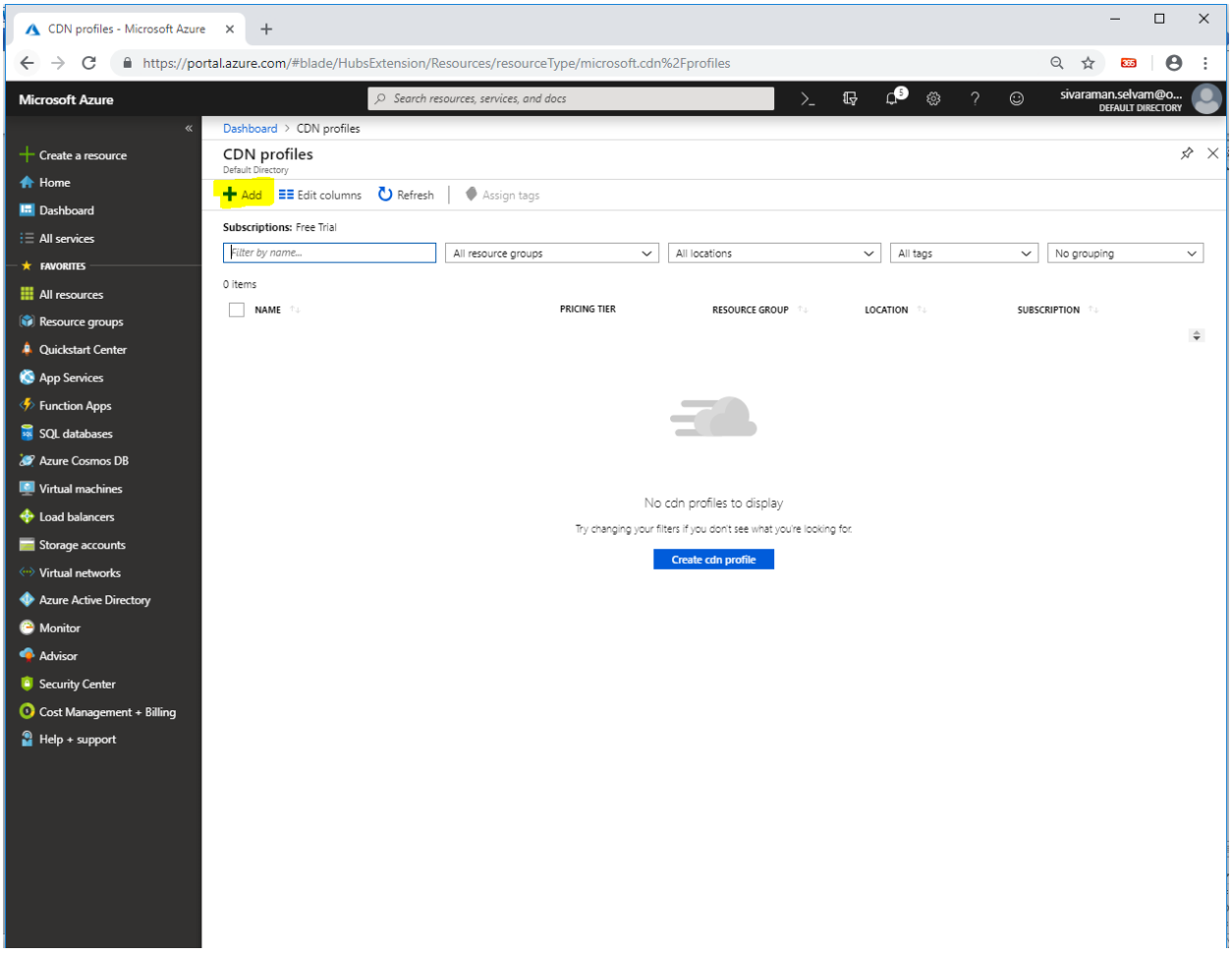


In **“All services”**,

Click **“CDN Profiles”**.



Click **“Add”**.


CDN profiles - Microsoft Azure
https://portal.azure.com/#blade/HubsExtension/Resources/resourceType/microsoft.cdn%2Fprofiles
Microsoft Azure
Search resources, services, and docs
sivaraman.selvam@o...
DEFAULT DIRECTORY
Dashboard > CDN profiles
CDN profiles
Default Directory
Add
Edit columns
Refresh
Assign tags
Subscriptions: Free Trial
Filter by name...
All resource groups
All locations
All tags
No grouping
0 items
NAME
PRICING TIER
RESOURCE GROUP
LOCATION
SUBSCRIPTION
No cdn profiles to display
Try changing your filters if you don't see what you're looking for.
Create cdn profile
Create a resource
Home
Dashboard
All services
FAVORITES
All resources
Resource groups
Quickstart Center
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Advisor
Security Center
Cost Management + Billing
Help + support

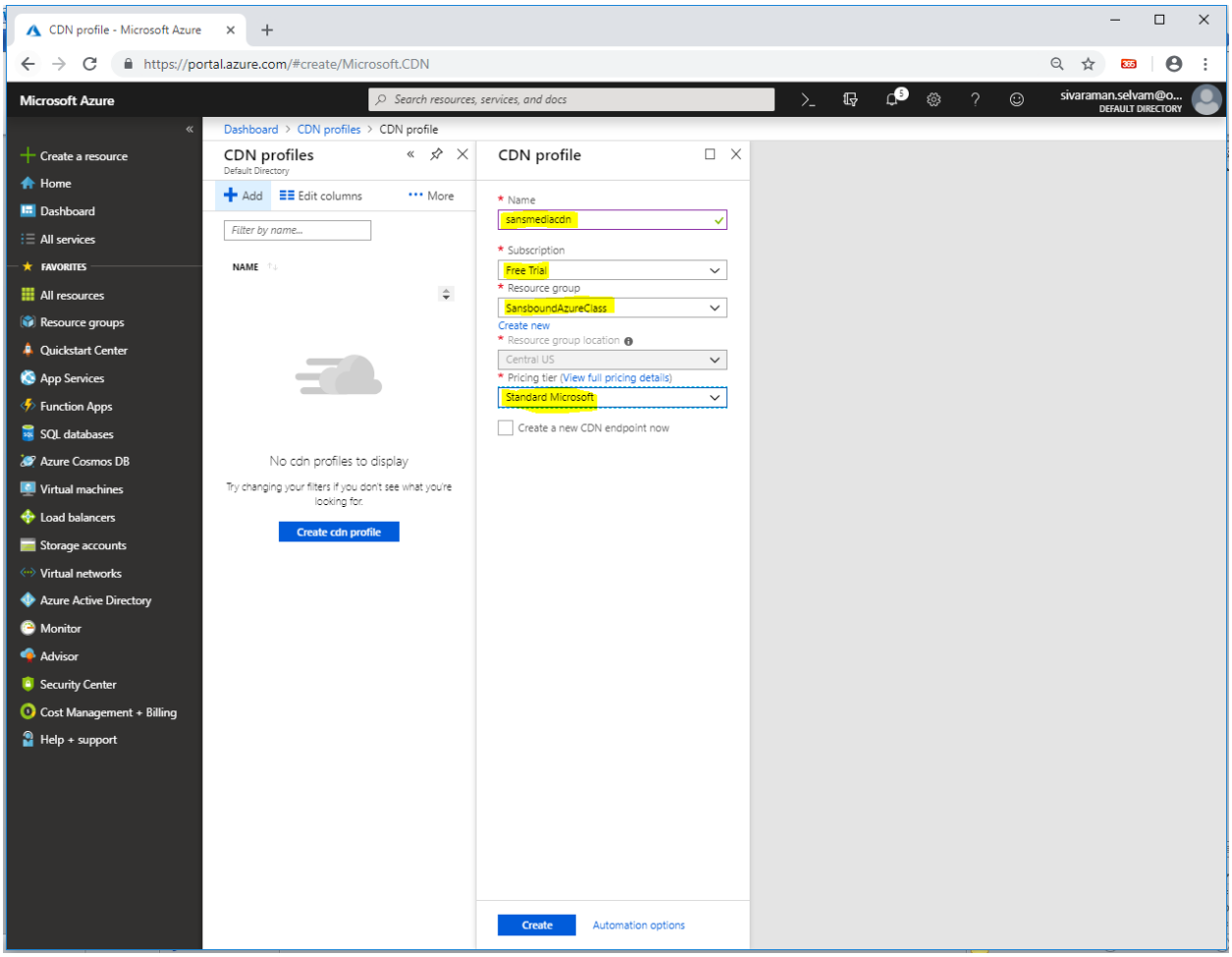
In **“CDN Profile”**,

Type **“Name”** as **“sansmediacdn”**.

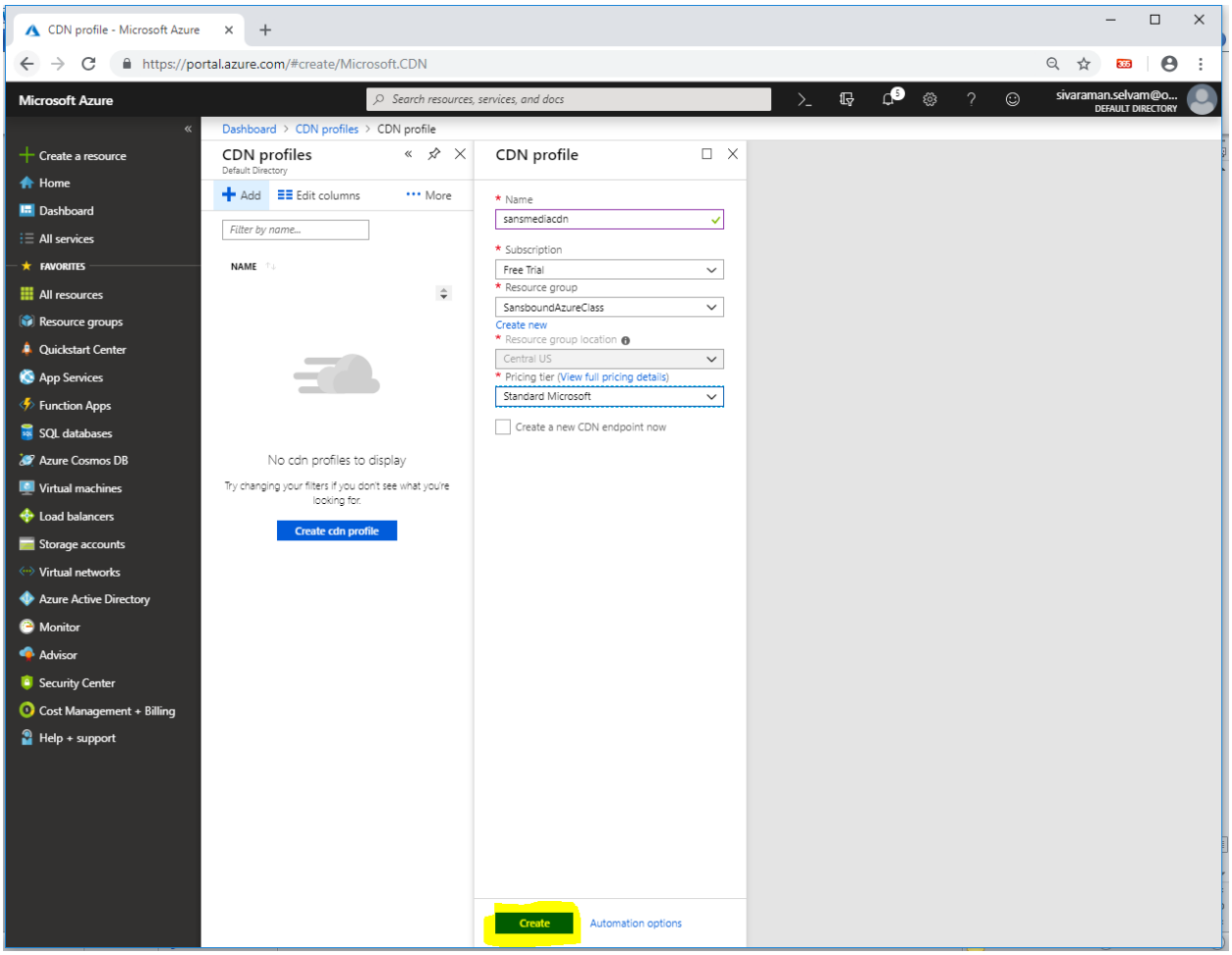
Select **“Subscription”** as **“Free Trial”**.

Select **“Resource group”** as **“SansboundAzureClass”**.

Select **“Pricing tier”** as **“Standard Microsoft”**.

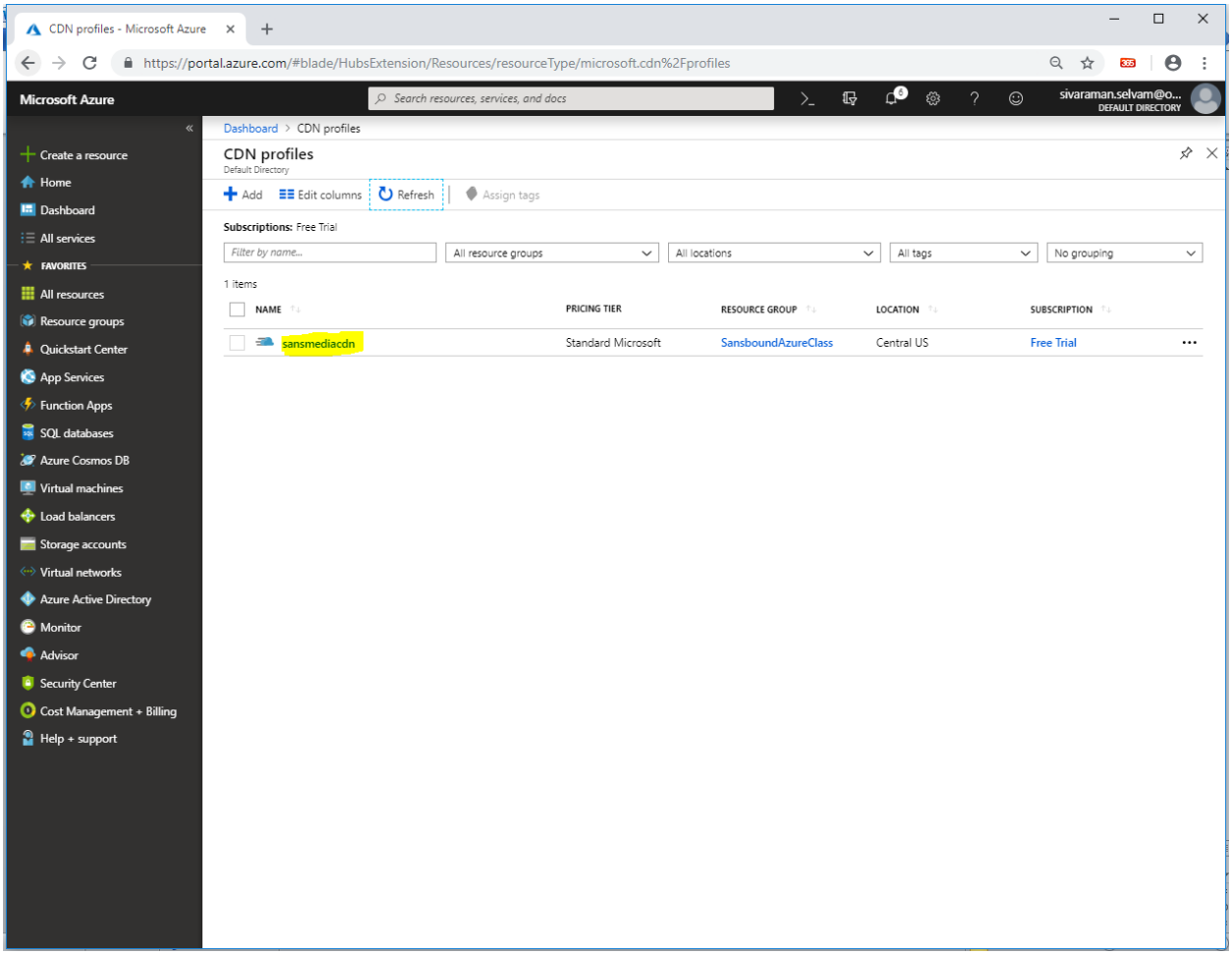


Click **”Create”**.

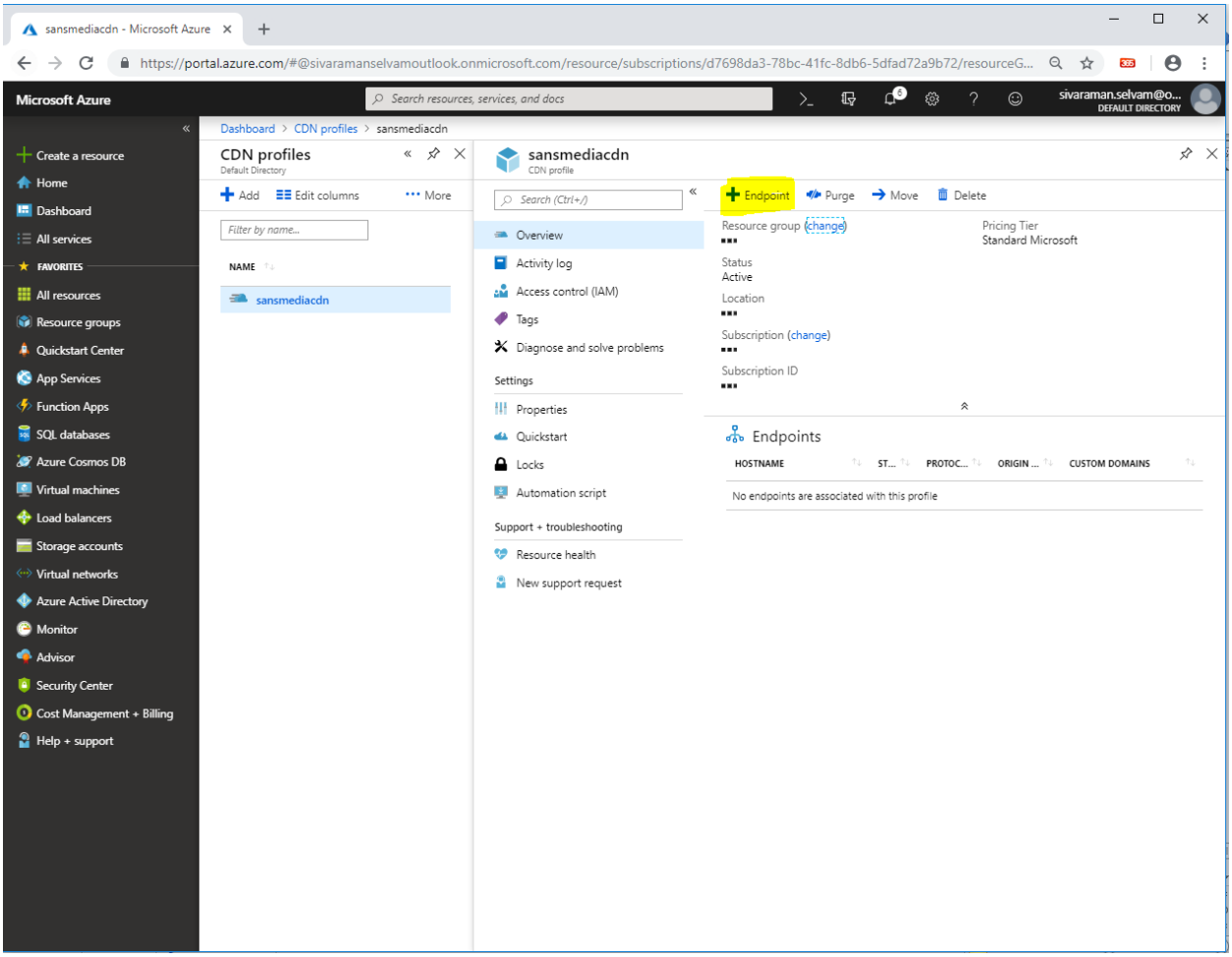


In **“CDN profiles”**,

Click **“sansmediacdn”**.



Click **"Endpoint"**.



While **“Add an endpoint”**,

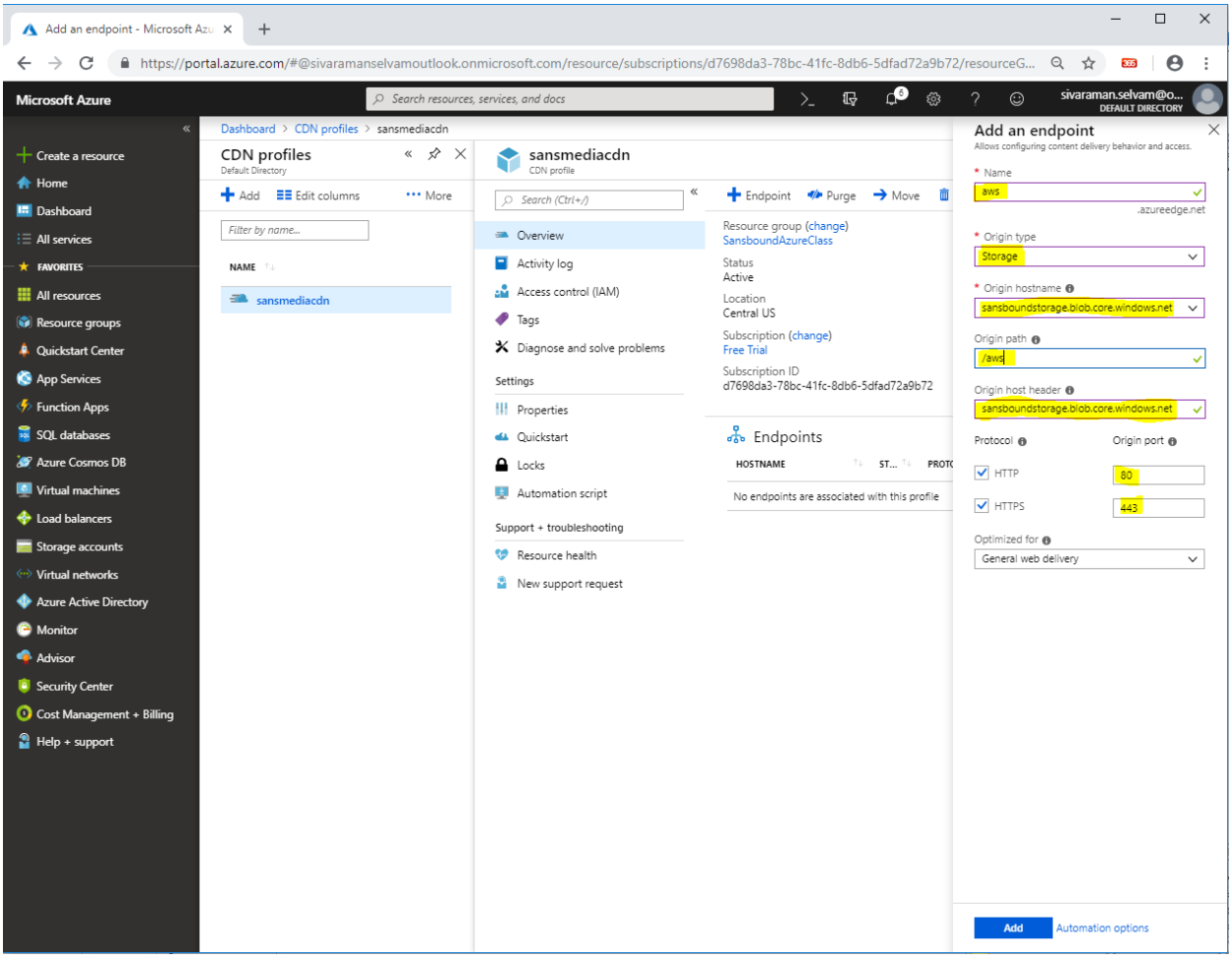
Type **“Name”** as **“aws”**.

Select **“Origin”** as **“Storage”**.

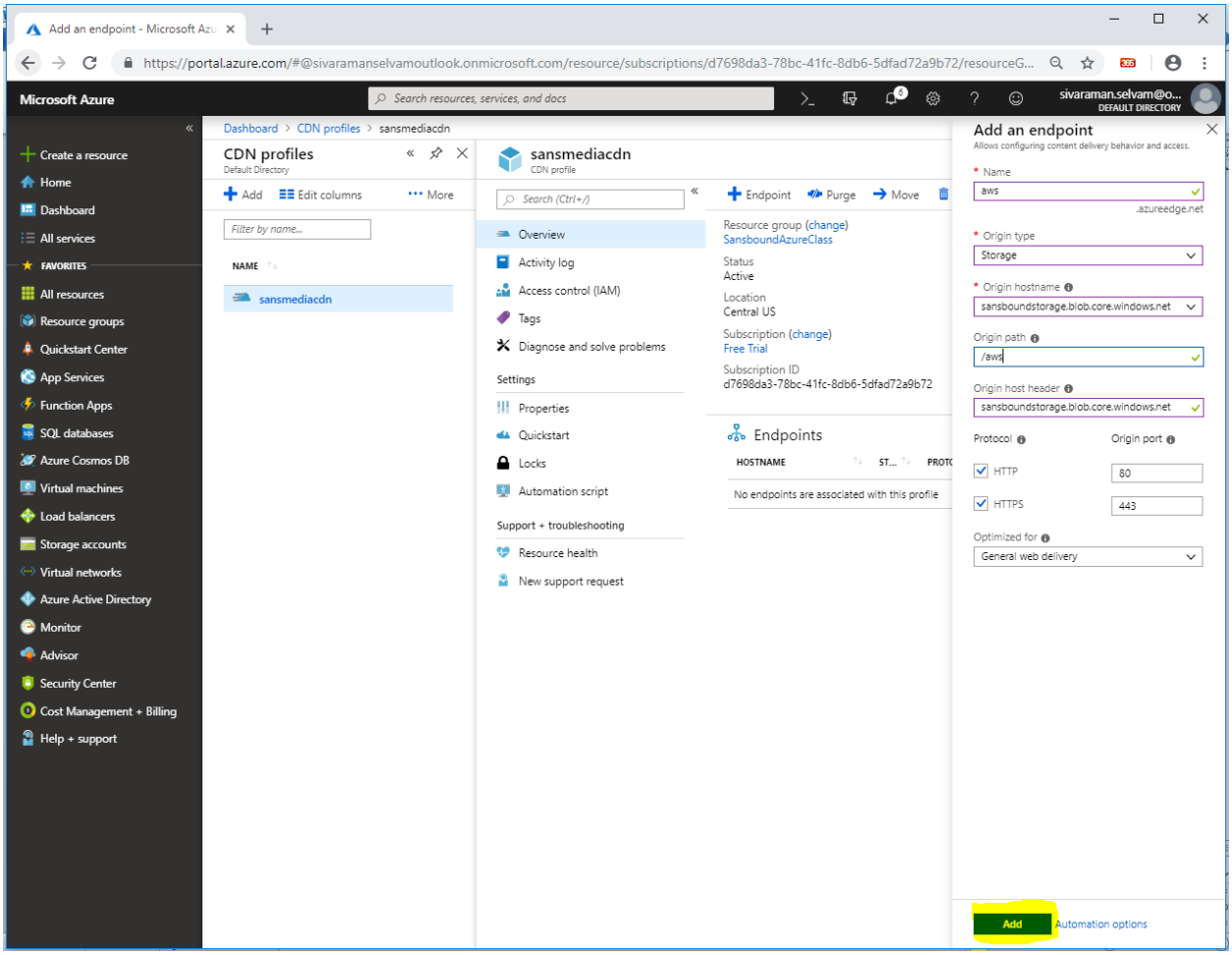
Select **“Origin hostname”** as **“sansboundstorage.blob.core.windows.net”** (Name of the storage account).

Select **“Origin path”** as **“/aws”** (aws is a container name).

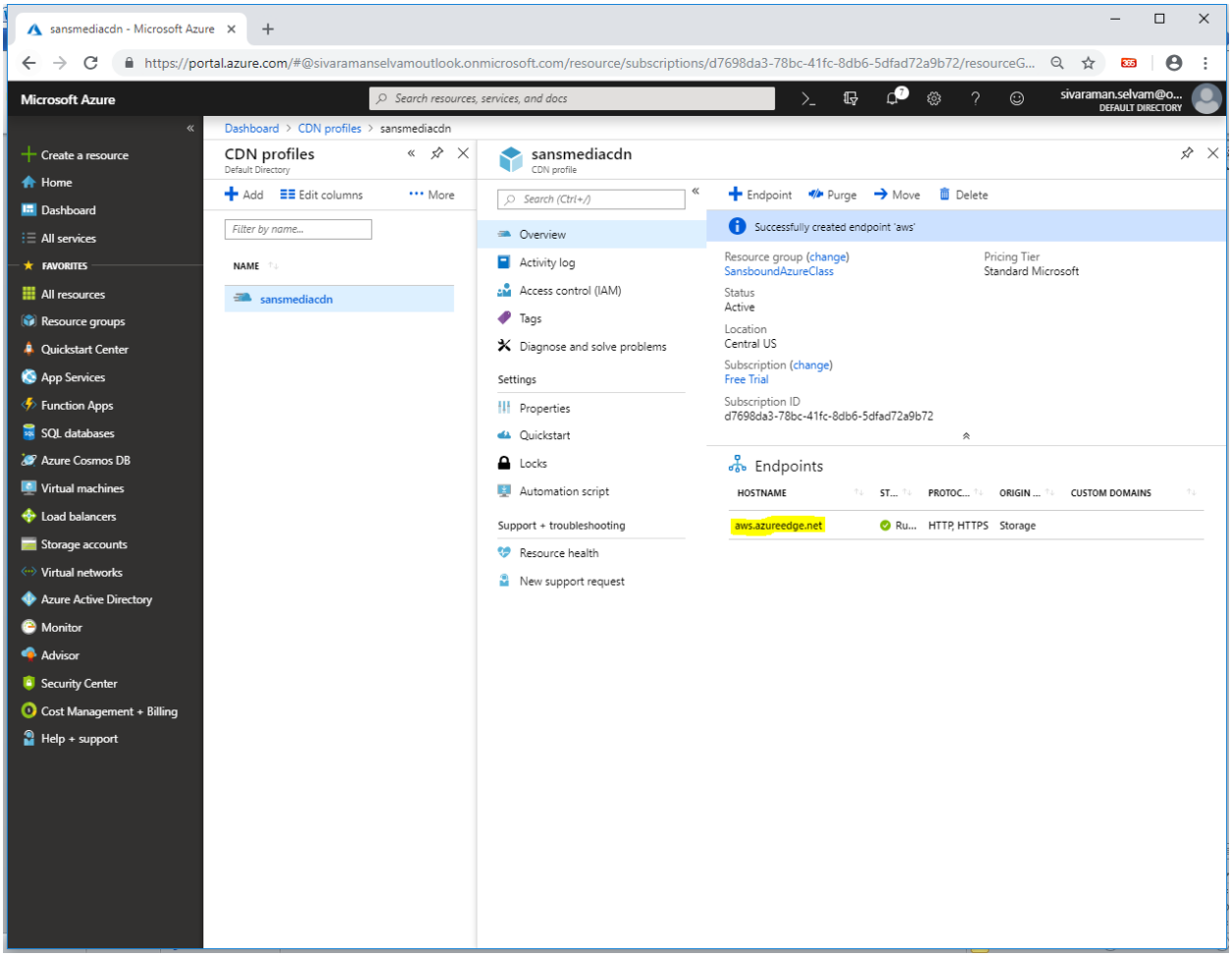
Ensure **“http”** and **“https”** are selected.



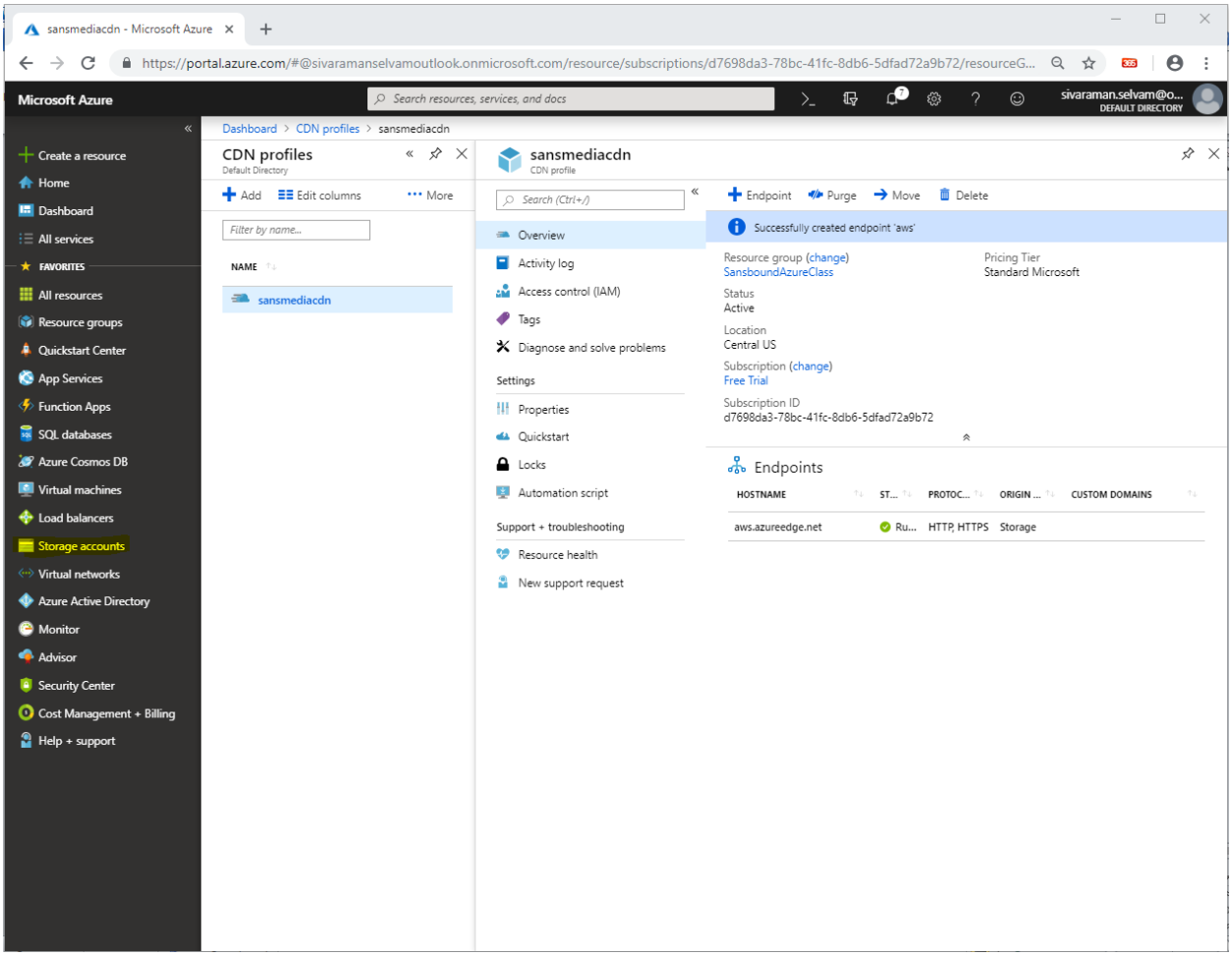
Click **“Add”**.


Add an endpoint - Microsoft Azu
https://portal.azure.com/#@sivaramanselvamoutlook.onmicrosoft.com/resource/subscriptions/d7698da3-78bc-41fc-8db6-5dfad72a9b72/resourceG...
Microsoft Azure
Search resources, services, and docs
sivaraman.selvam@o...
DEFAULT DIRECTORY
Dashboard > CDN profiles > sansmediacdn
CDN profiles
Default Directory
Add
Edit columns
More
Filter by name...
NAME
sansmediacdn
sansmediacdn
CDN profile
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Properties
Quickstart
Locks
Automation script
Support + troubleshooting
Resource health
New support request
Endpoint
Purge
Move
Resource group (change)
SansboundAzureClass
Status
Active
Location
Central US
Subscription (change)
Free Trial
Subscription ID
d7698da3-78bc-41fc-8db6-5dfad72a9b72
Endpoints
HOSTNAME
No endpoints are associated with this profile
Add an endpoint
Allows configuring content delivery behavior and access.
Name
aws
.azureedge.net
Origin type
Storage
Origin hostname
sansboundstorage.blob.core.windows.net
Origin path
/aws
Origin host header
sansboundstorage.blob.core.windows.net
Protocol
Origin port
HTTP
80
HTTPS
443
Optimized for
General web delivery
Add
Automation options
Create a resource
Home
Dashboard
All services
FAVORITES
All resources
Resource groups
Quickstart Center
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Advisor
Security Center
Cost Management + Billing
Help + support

You are able to see the endpoint for **“sansmediacdn”.**

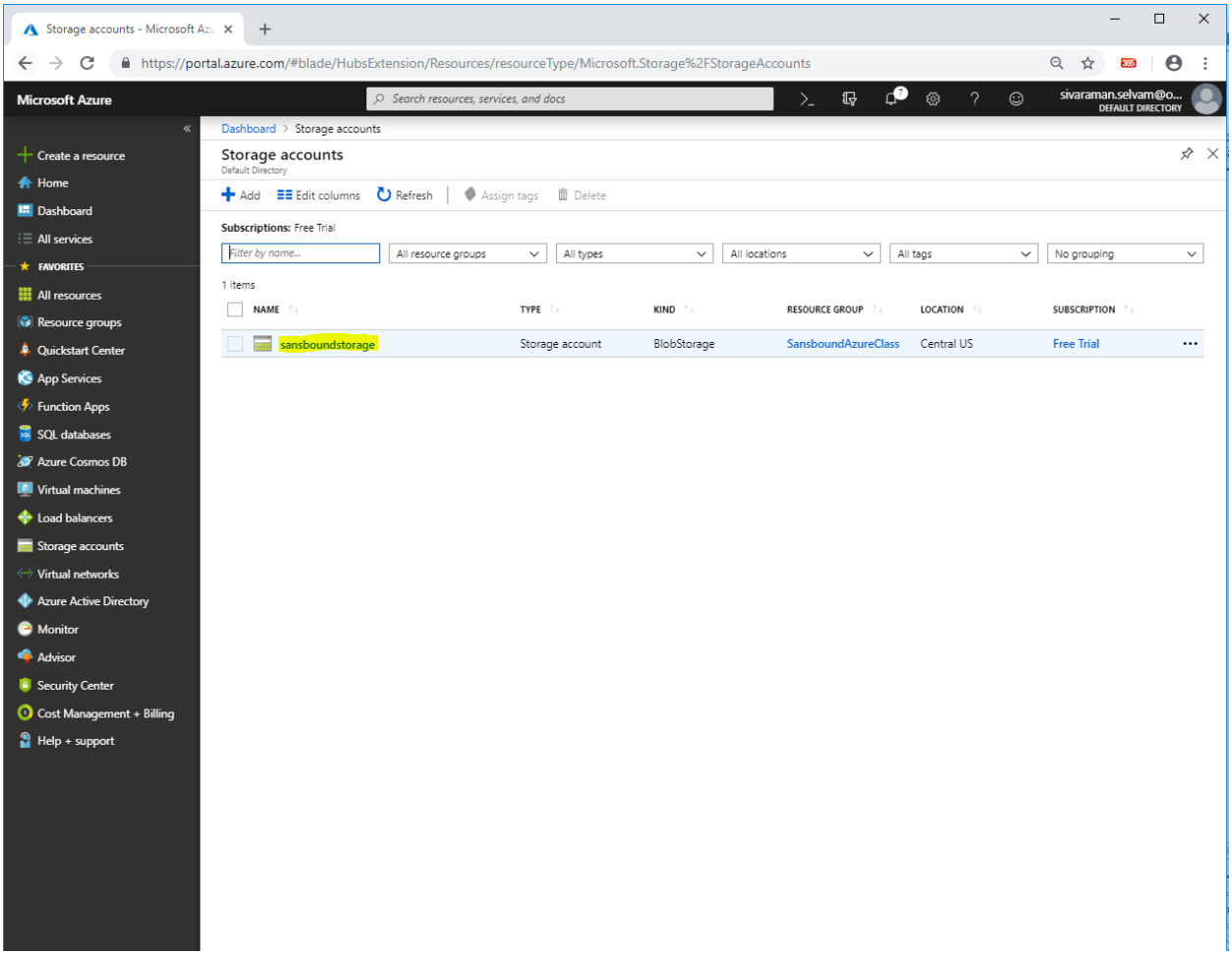


Click **“Storage accounts”** in left side panel.

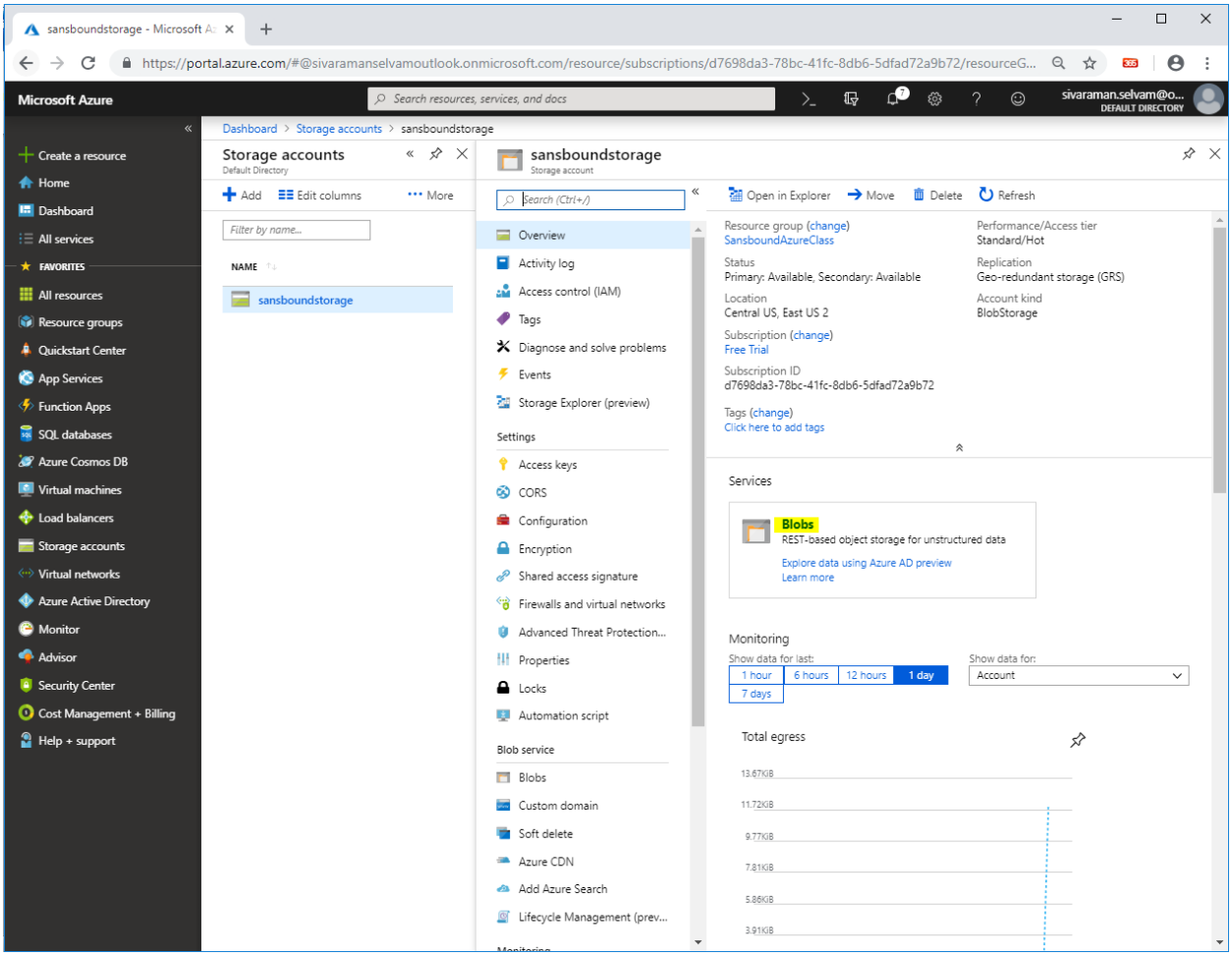


In **“Storage accounts”**,

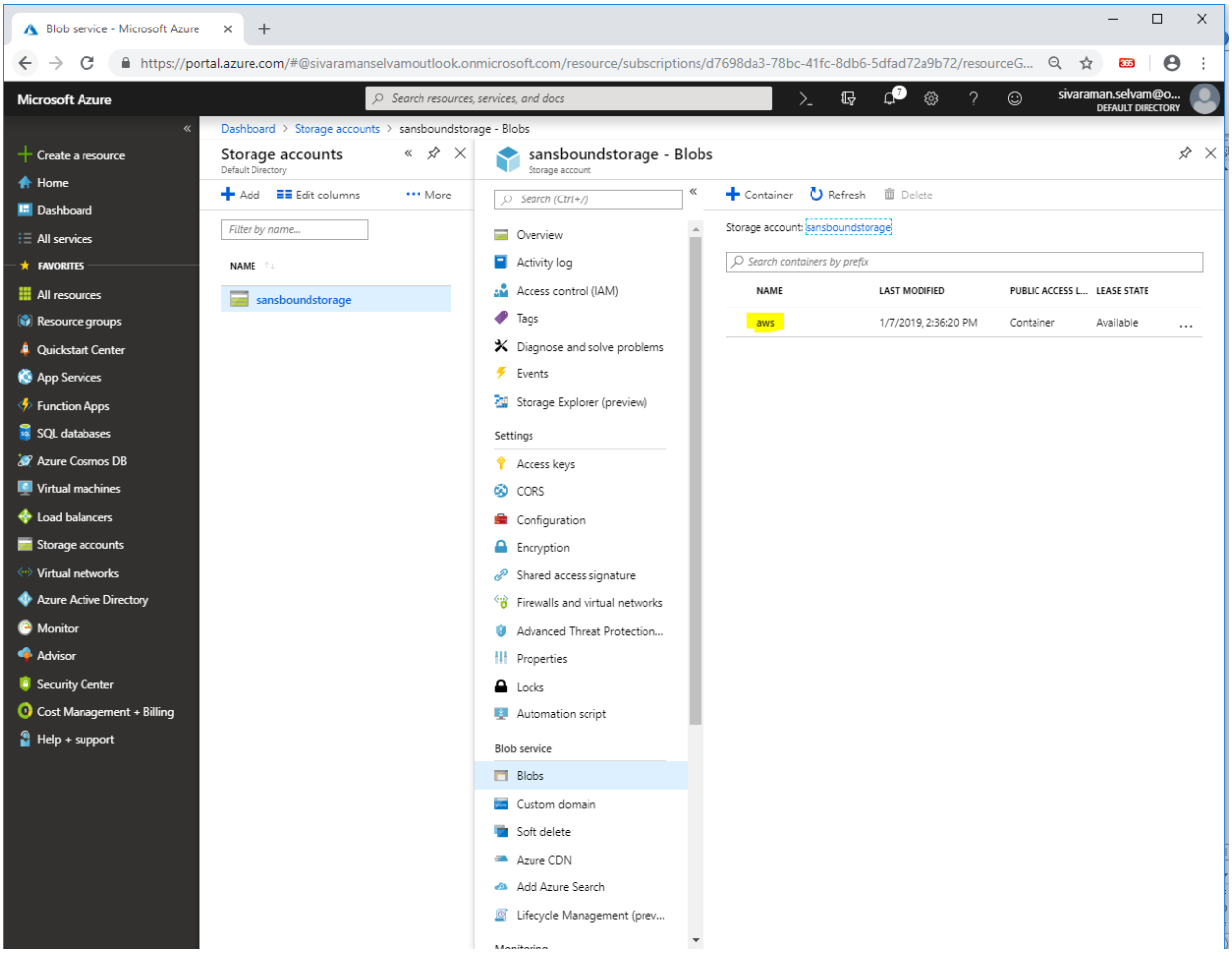
Click **“sansboundstorage”**.



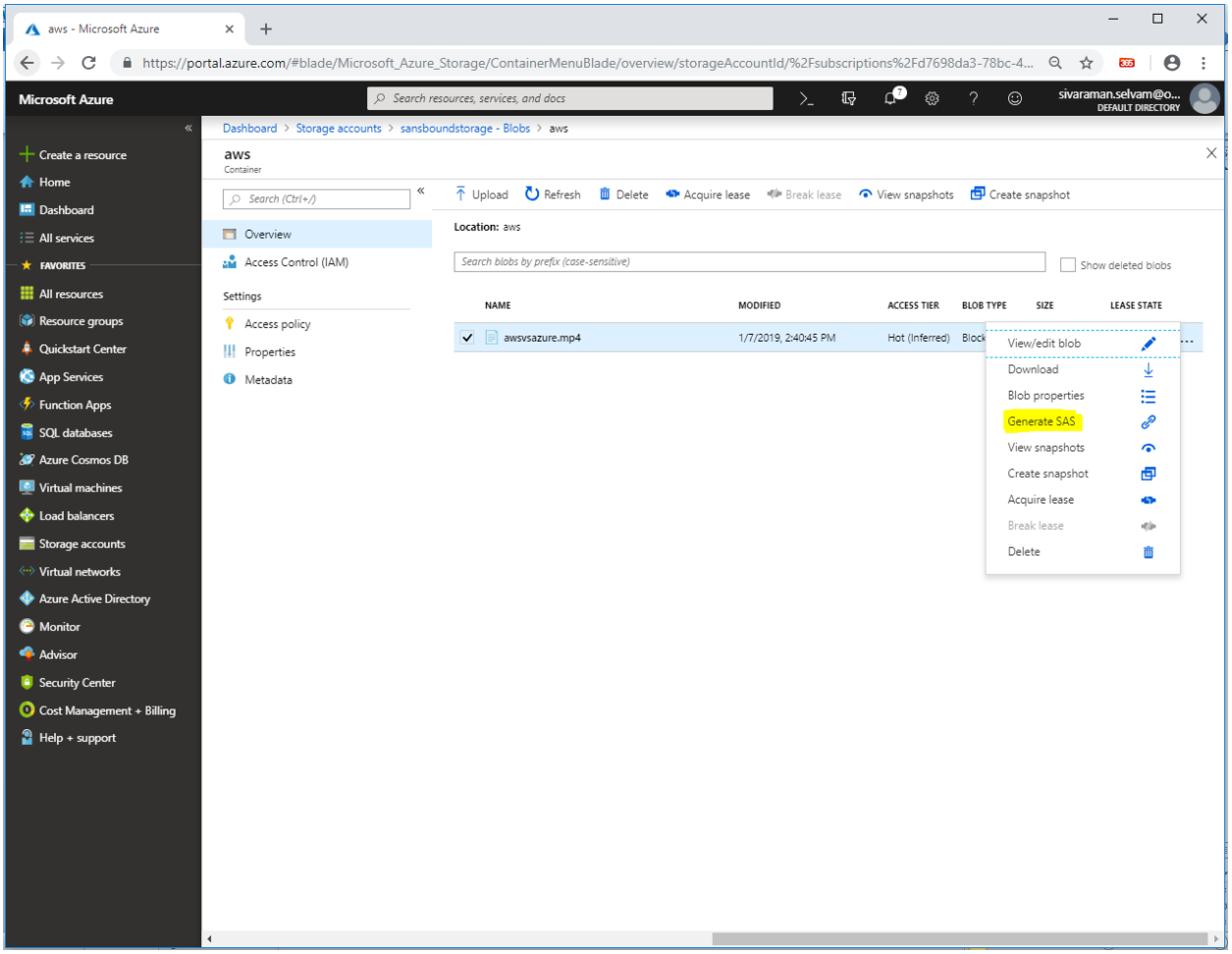
Click **"Blobs"**.


sansboundstorage - Microsoft A
https://portal.azure.com/#@sivaramanselvamoutlook.onmicrosoft.com/resource/subscriptions/d7698da3-78bc-41fc-8db6-5dfad72a9b72/resourceG...
Microsoft Azure
Search resources, services, and docs
sivaraman.selvam@o...
DEFAULT DIRECTORY
Dashboard > Storage accounts > sansboundstorage
Create a resource
Home
Dashboard
All services
FAVORITES
All resources
Resource groups
Quickstart Center
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Advisor
Security Center
Cost Management + Billing
Help + support
Storage accounts
Default Directory
Add
Edit columns
More
Filter by name...
NAME
sansboundstorage
sansboundstorage
Storage account
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Events
Storage Explorer (preview)
Settings
Access keys
CORS
Configuration
Encryption
Shared access signature
Firewalls and virtual networks
Advanced Threat Protection...
Properties
Locks
Automation script
Blob service
Blobs
Custom domain
Soft delete
Azure CDN
Add Azure Search
Lifecycle Management (prev...
Open in Explorer
Move
Delete
Refresh
Resource group (change)
SansboundAzureClass
Status
Primary: Available, Secondary: Available
Location
Central US, East US 2
Subscription (change)
Free Trial
Subscription ID
d7698da3-78bc-41fc-8db6-5dfad72a9b72
Tags (change)
Click here to add tags
Performance/Access tier
Standard/Hot
Replication
Geo-redundant storage (GRS)
Account kind
BlobStorage
Services
Blobs
REST-based object storage for unstructured data
Explore data using Azure AD preview
Learn more
Monitoring
Show data for last:
1 hour
6 hours
12 hours
1 day
7 days
Show data for:
Account
Total egress
13.67KiB
11.72KiB
9.77KiB
7.81KiB
5.86KiB
3.91KiB

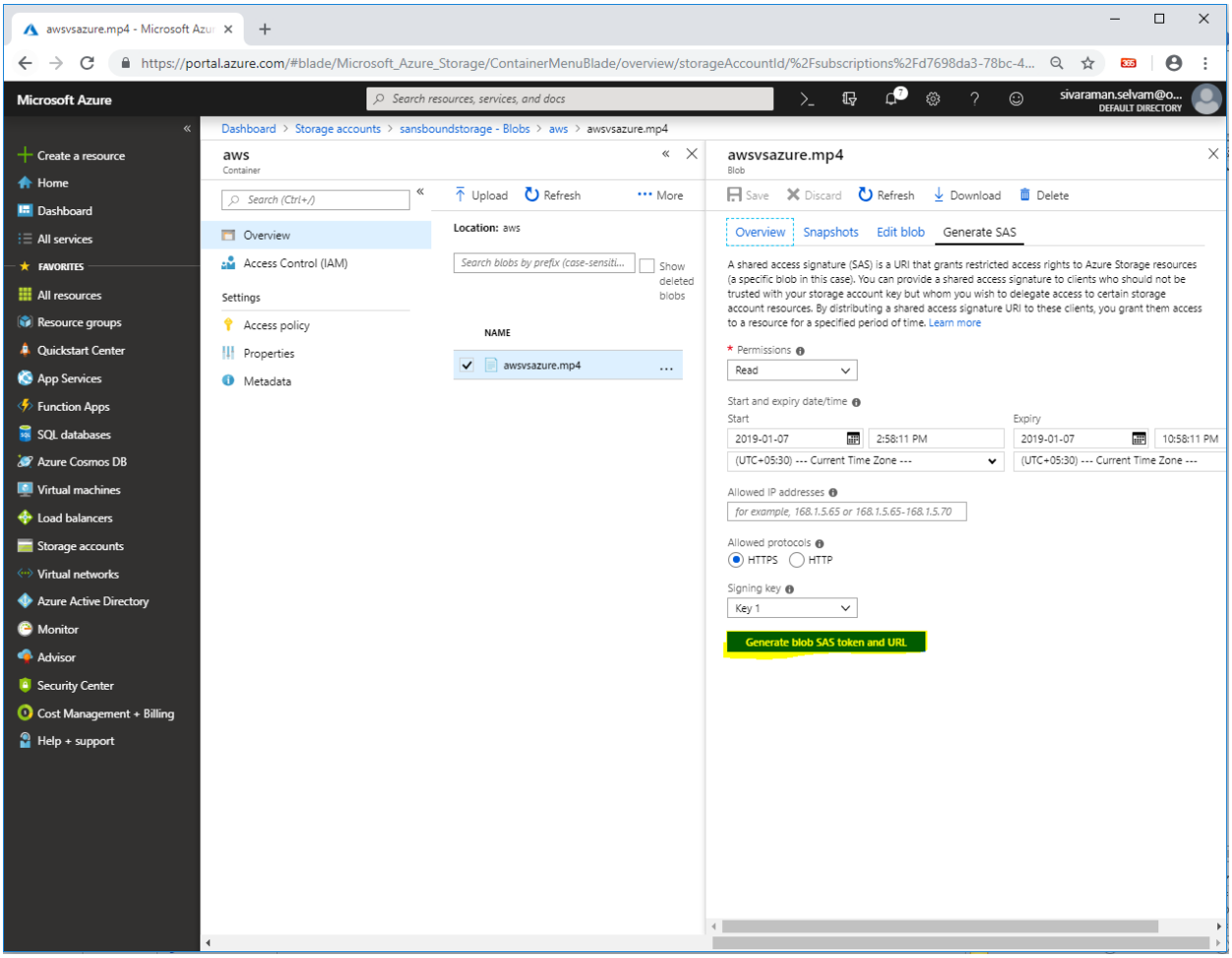
Click **“aws”** container.



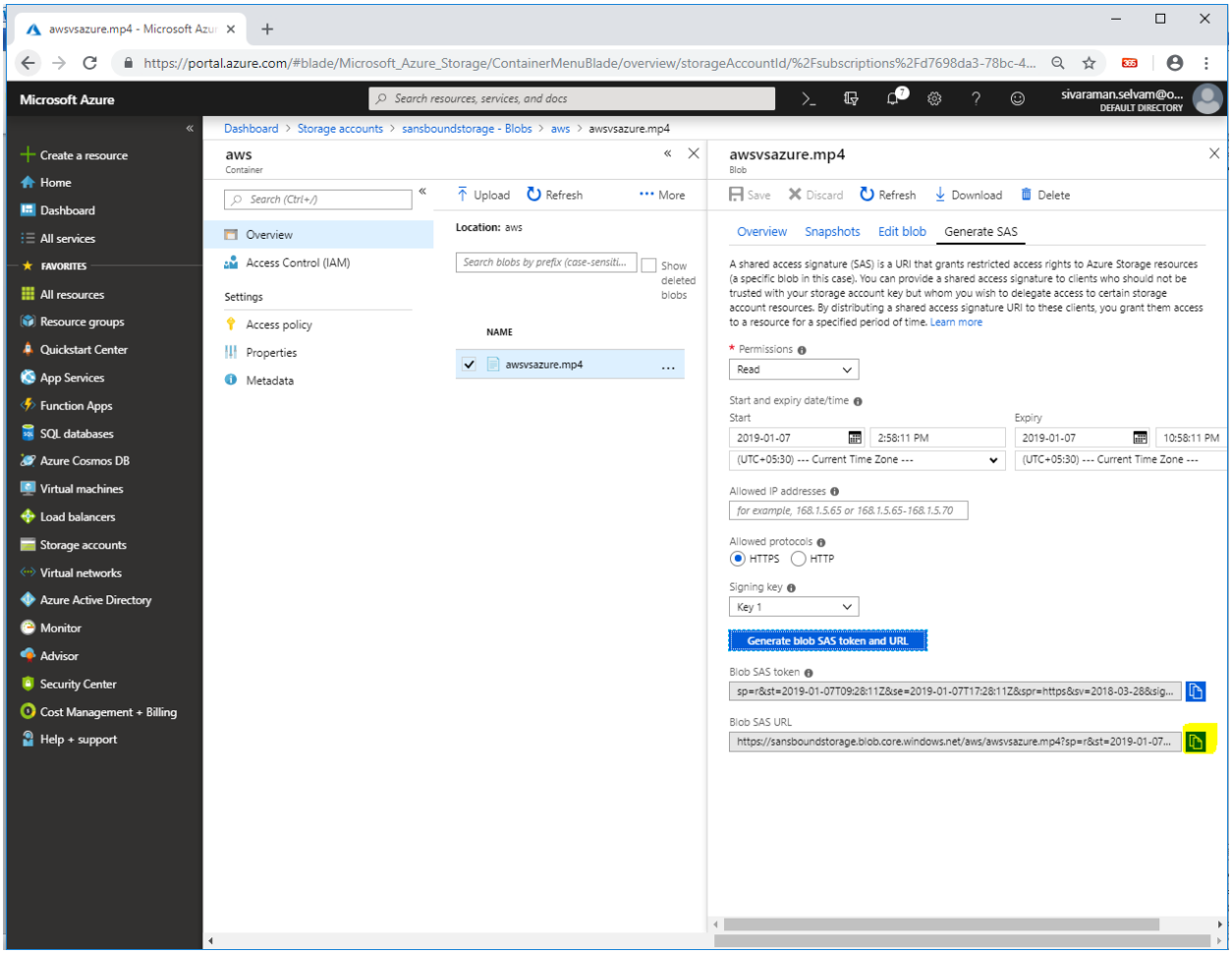
Click **"Generate SAS"**.



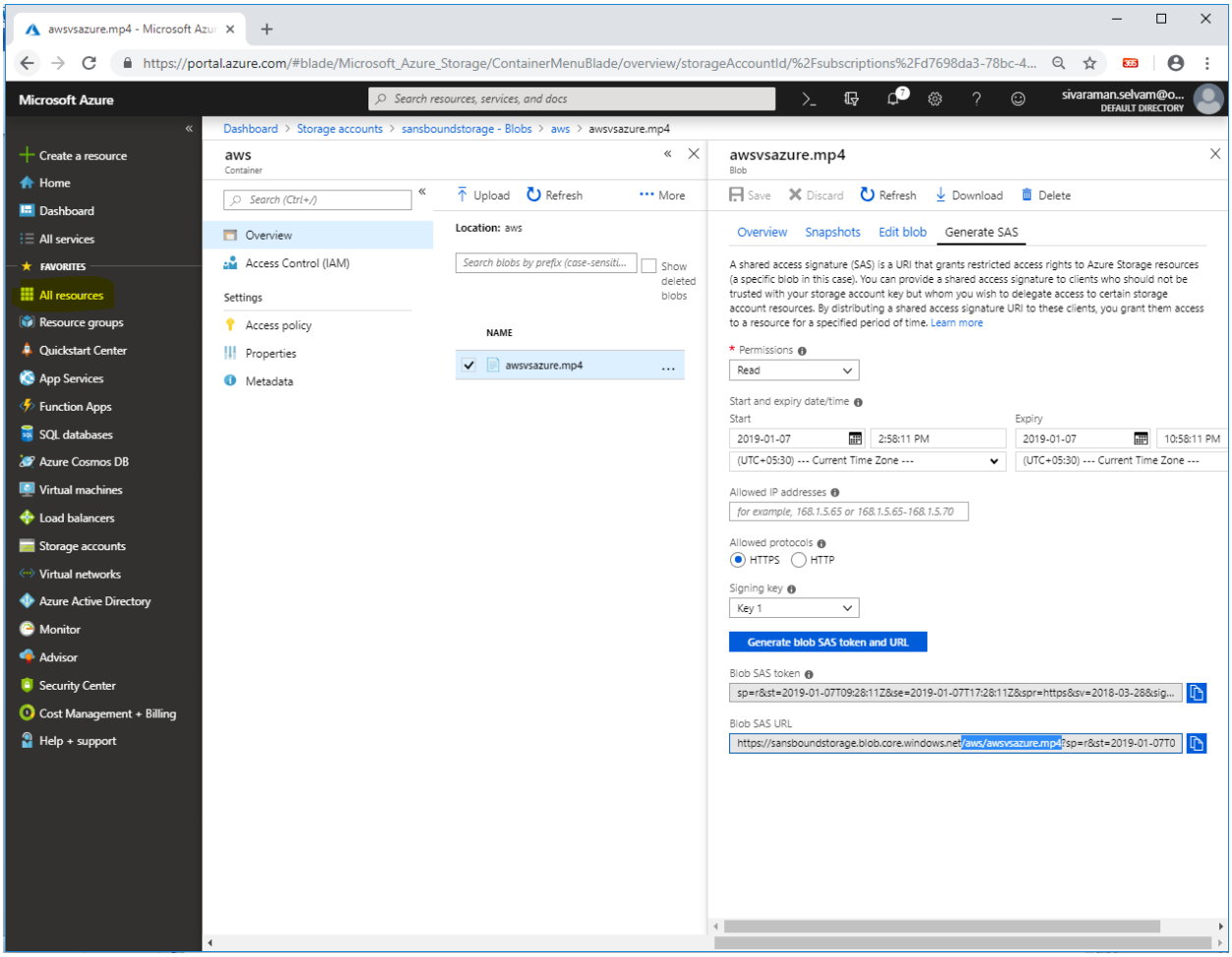
Click **"Generate blob SAS token and URL"**.



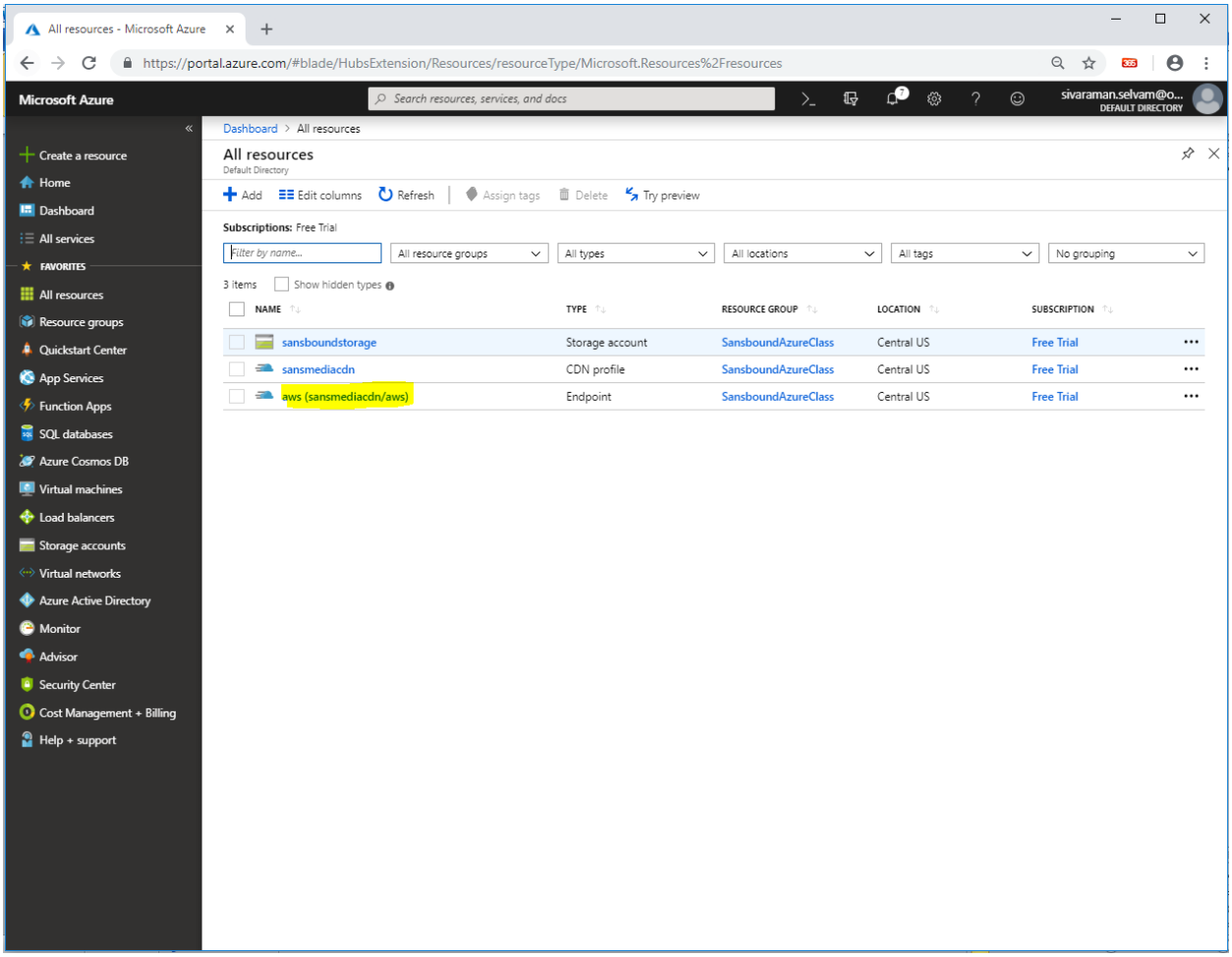
Click **"Icon"** to copy the Blob SAS URL Path.



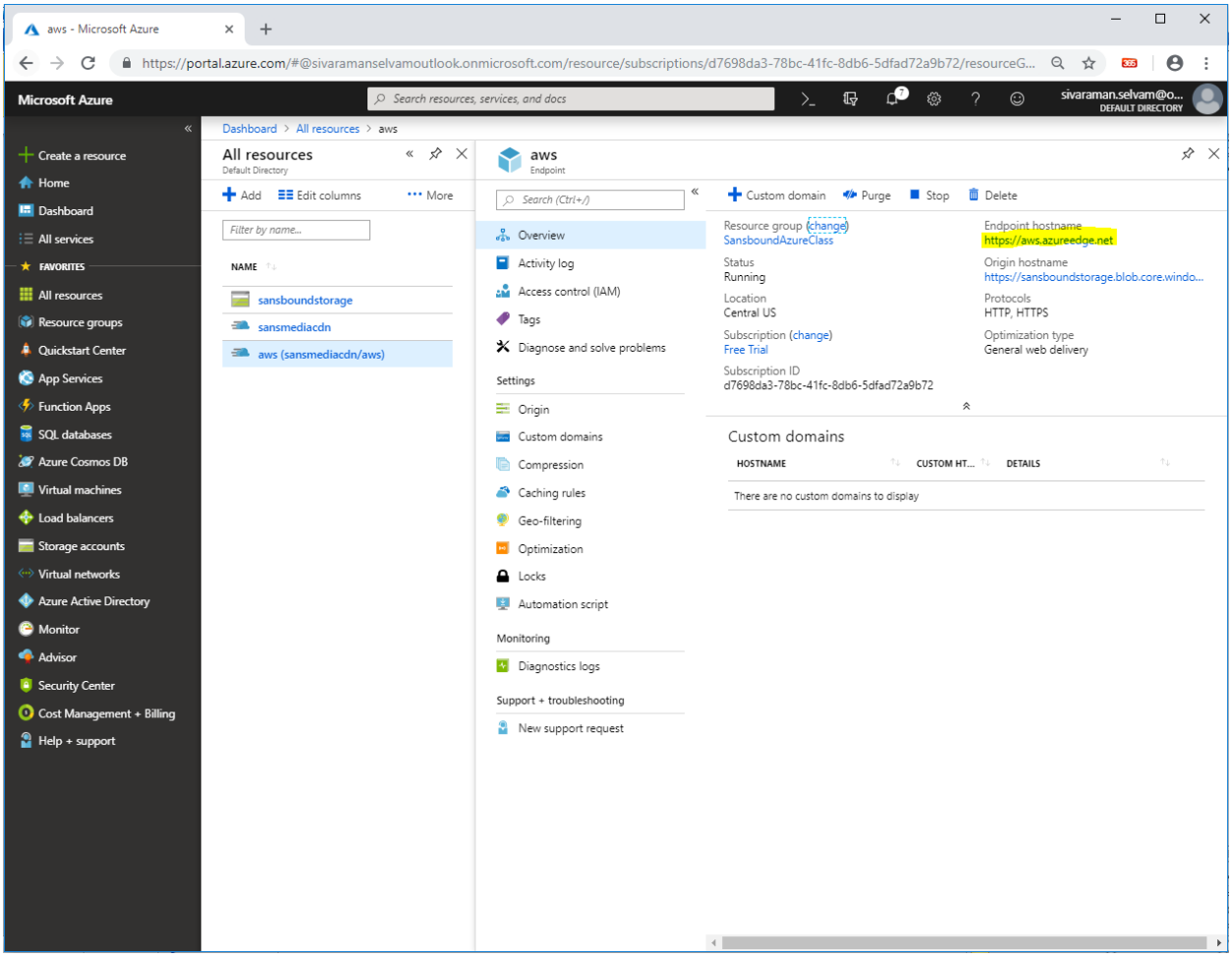
Click **“All resources”**.



Click **“sansmedia/aws”** endpoint of CDN.



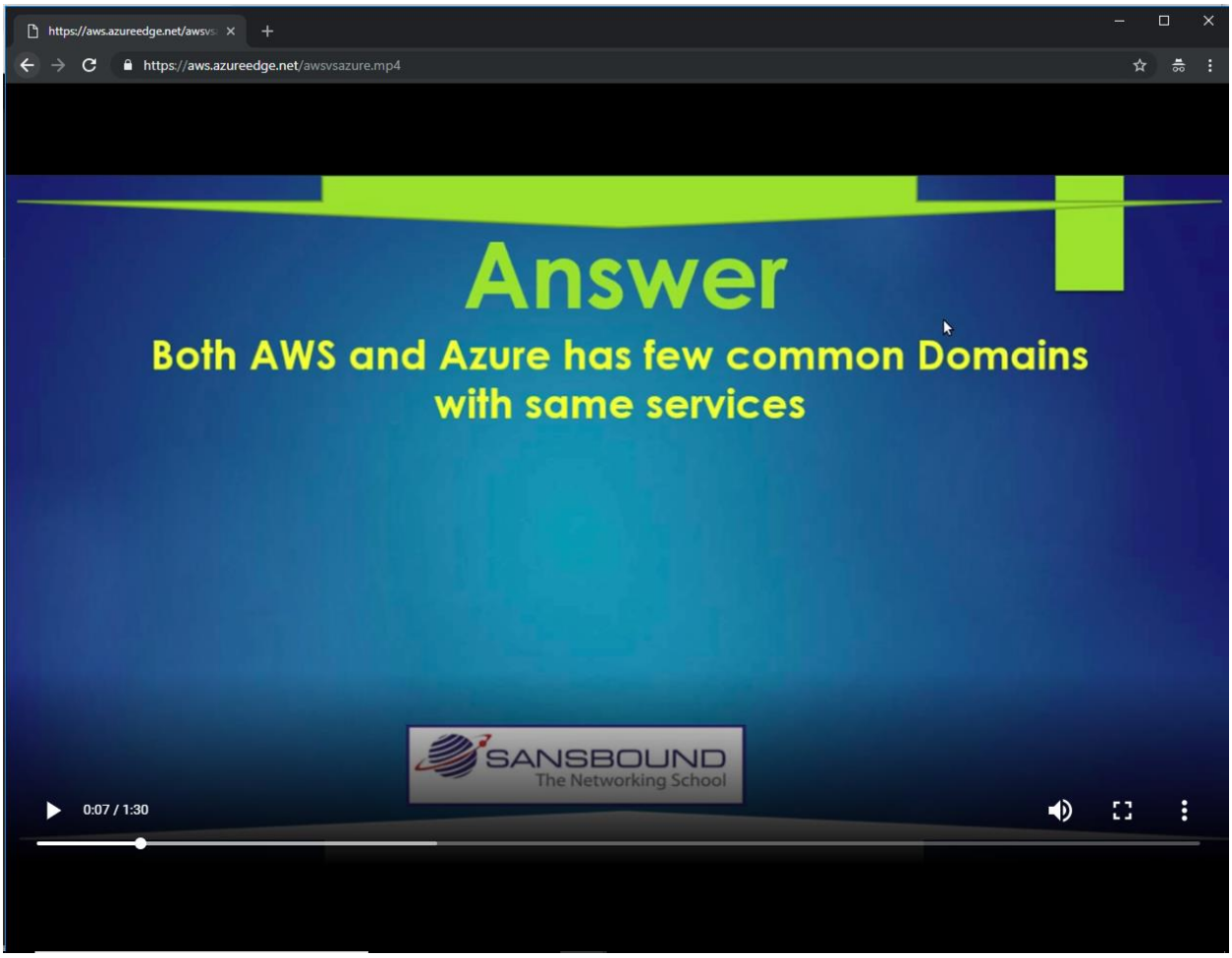
Copy the path **“https://aws.azureedge.net”**



Paste the path into browser with “filename”.

https://aws.azureedge.net/**awsvsazure.mp4**

and press “Enter”.



I have got the video file through Endpoint of CDN profile.