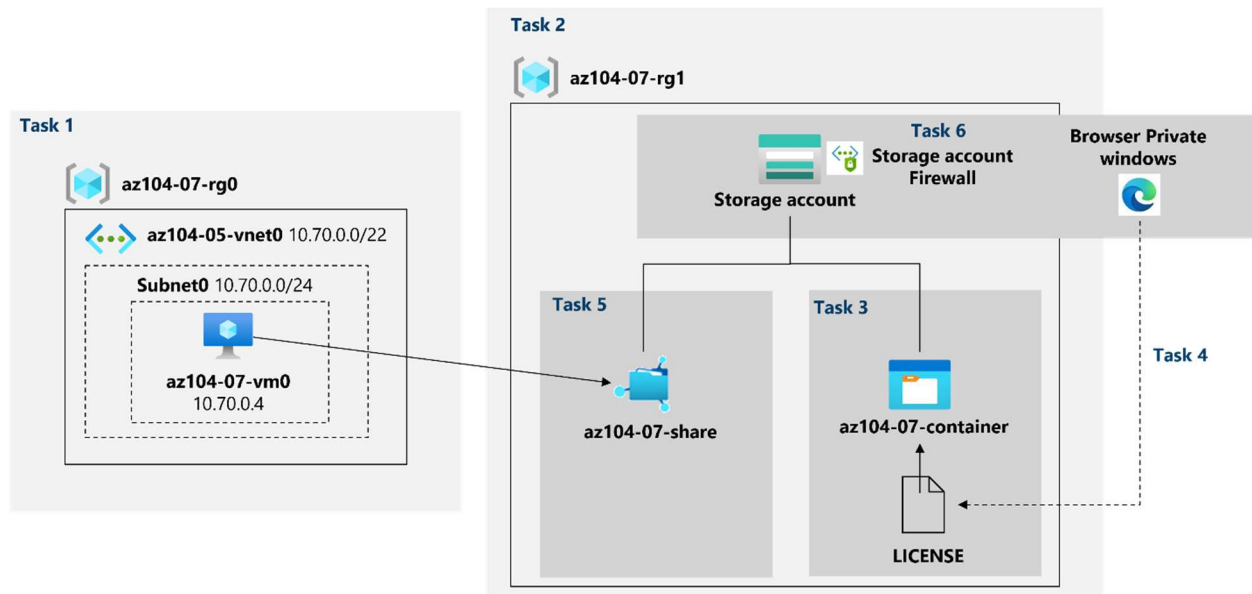


How to Azure Account Storage



Task 1: Provision the environment

Home >

All resources

Centennial College (CentennialCollegeEDU@microsoft.com)

+ Create Manage view Refresh Export to CSV Open query Assign tags Delete

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

0 Unsecure resources 0 Recommendations

No grouping List view

Name	Type	Resource group	Location	Subscription
cs21003200040875711	Storage account	cloud-shell-storage-eastus	East US	Azure for Students

< Previous Page 1 of 1 Next > Showing 1 to 1 of 1 records. Give feedback

```
PowerShell
Requesting a Cloud Shell.Succeeded.
Connecting terminal...

Welcome to Azure Cloud Shell

Type "az" to use Azure CLI
Type "help" to learn about Cloud Shell

MOID: Customize your experience: save your profile to $HOME/.config/PowerShell

VERBOSE: Authenticating to Azure ...
VERBOSE: Building your Azure drive ...
PS /home/mehmet>
```

Upload destination: /home/mehmet
az104-07-vm-parameters.json COMPLETE

Home >

All resources

Centennial College (CentennialCollegeEDU@microsoft.com)

+ Create Manage view Refresh Export to CSV Open query Assign tags Delete

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

0 Unsecure resources 0 Recommendations

No grouping List view

Name	Type	Resource group	Location	Subscription
cs21003200048b711	Storage account	cloud-shell-storage-eastus	East US	Azure for Students

< Previous Page 1 of 1 Next > Showing 1 to 1 of 1 records

Give feedback

```
PowerShell
Requesting a Cloud Shell.Succeeded.
Connecting terminal...

Welcome to Azure Cloud Shell

Type "az" to use Azure CLI
Type "help" to learn about Cloud Shell

MOTD: Customize your experience: save your profile to $HOME/.config/PowerShell

VERBOSE: Authenticating to Azure ...
VERBOSE: Building your Azure drive ...
PS /home/mehmet> 
```

Upload destination: /home/mehmet
az104-07-vm-template.json COMPLETE

```
Type "help" to learn about Cloud Shell

MOTD: Customize your experience: save your profile to $HOME/.config/PowerShell

VERBOSE: Authenticating to Azure ...
VERBOSE: Building your Azure drive ...
PS /home/mehmet> $location = 'eastus'
PS /home/mehmet> $rgName = 'az104-07-rg0'
PS /home/mehmet> New-AzResourceGroup -Name $rgName -Location $location

ResourceGroupName : az104-07-rg0
Location           : eastus
ProvisioningState  : Succeeded
Tags               :
ResourceId         : /subscriptions/ac1156f0-0914-4629-90c5-323d8c283fc7/resourceGroups/az104-07-rg0
PS /home/mehmet> 
```

```
PS /home/mehmet> New-AzResourceGroupDeployment `
>> -ResourceGroupName $rgName `
>> -TemplateFile $HOME/az104-07-vm-template.json `
>> -TemplateParameterFile $HOME/az104-07-vm-parameters.json `
>> -AsJob

Id      Name      PSJobTypeName State      HasMoreData Location      Command
--      -
2      Long Running O... AzureLongRunni... Running      True          localhost     New-AzResourceGroupDeplo...
```

az104-07-rg0
Resource group

Search

+ Create Manage view Delete resource group Refresh Export to CSV Open query Assign tags Move Delete Export template Open in mobile

Overview

Activity log

Access control (IAM)

Tags

Resource visualizer

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Policies

Properties

Locks

Cost Management

Cost analysis

Cost alerts (preview)

Budgets

Advisor recommendations

Monitoring

Insights (preview)

Alerts

Essentials

Subscription (move) : Azure for Students

Subscription ID : ac1156fd-0914-4629-90c5-323d8c283fc7

Location : East US

Deployments : 1 Deploying

Tags (edit) : Click here to add tags

Resources Recommendations

Filter for any field...

Type equals all Location equals all Add filter

Showing 1 to 6 of 6 records. Show hidden types

No grouping List view

Name	Type	Location
az104-07-nic0	Network Interface	East US
az104-07-nsg0	Network security group	East US
az104-07-pip0	Public IP address	East US
az104-07-vm0	Virtual machine	East US
az104-07-vm0_disk1_7d70db240d884de394e7fe44276a6804	Disk	East US
az104-07-vnet0	Virtual network	East US

Task 2: Create and configure Azure Storage accounts

Create a storage account ...

Basics Advanced Networking Data protection Encryption Tags Review

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 *	<div>Azure for Students</div>
Resource group *	<div>(New) az104-07-rg1</div> <div>Create new</div>

Instance details

If you need to create a legacy storage account type, please click [here](#).

Storage account name ⓘ *	<div>strgaz104t0711072022</div>
Region ⓘ *	<div>(US) East US</div>
Performance ⓘ *	<div><input checked="" type="radio"/> Standard: Recommended for most scenarios (general-purpose v2 account)</div> <div><input type="radio"/> Premium: Recommended for scenarios that require low latency.</div>
Redundancy ⓘ *	<div><div>Geo-redundant storage (GRS)</div><div><input checked="" type="checkbox"/> Make read access to data available in the event of regional unavailability.</div></div>

Review

< Previous

Next : Advanced >

Create a storage account ...

Basics Advanced Networking Data protection Encryption Tags Review

Data Lake Storage Gen2

The Data Lake Storage Gen2 hierarchical namespace accelerates big data analytics workloads and enables file-level access control lists (ACLs). [Learn more](#)


Enable hierarchical namespace ☐

Blob storage

Enable SFTP ⓘ ☐

 To enable SFTP, 'hierarchical namespace' must be enabled.

Enable network file system v3 ⓘ ☐

 To enable NFS v3 'hierarchical namespace' must be enabled. [Learn more about NFS v3](#)

Allow cross-tenant replication ⓘ ☒

Access tier ⓘ

- ☒ **Hot:** Frequently accessed data and day-to-day usage scenarios
- ☐ **Cool:** Infrequently accessed data and backup scenarios

Azure Files

Enable large file shares ⓘ ☐

Review

< Previous

Next : Networking >

Create a storage account ...

Basics Advanced Networking Data protection Encryption Tags Review

Network connectivity

You can connect to your storage account either publicly, via public IP addresses or service endpoints, or privately, using a private endpoint.

Network access *

- ☒ Enable public access from all networks
- ☐ Enable public access from selected virtual networks and IP addresses
- ☐ Disable public access and use private access
-  Enabling public access from all networks might make this resource available publicly. Unless public access is required, we recommend using a more restricted access type. [Learn more](#)

Network routing

Determine how to route your traffic as it travels from the source to its Azure endpoint. Microsoft network routing is recommended for most customers.

Routing preference ⓘ *

- ☒ Microsoft network routing
- ☐ Internet routing

[Review](#)

[< Previous](#)

[Next : Data protection >](#)

Create a storage account ...

Basics Advanced Networking Data protection Encryption Tags Review

Recovery

Protect your data from accidental or erroneous deletion or modification.

☐ Enable point-in-time restore for containers
Use point-in-time restore to restore one or more containers to an earlier state. If point-in-time restore is enabled, then versioning, change feed, and blob soft delete must also be enabled. [Learn more](#)

☒ Enable soft delete for blobs
Soft delete enables you to recover blobs that were previously marked for deletion, including blobs that were overwritten. [Learn more](#)

Days to retain deleted blobs ⓘ

☒ Enable soft delete for containers
Soft delete enables you to recover containers that were previously marked for deletion. [Learn more](#)

Days to retain deleted containers ⓘ

☒ Enable soft delete for file shares
Soft delete enables you to recover file shares that were previously marked for deletion. [Learn more](#)

Days to retain deleted file shares ⓘ

Tracking

Manage versions and keep track of changes made to your blob data.

☐ Enable versioning for blobs
Use versioning to automatically maintain previous versions of your blobs. [Learn more](#)

Consider your workloads, their impact on the number of versions created, and the resulting costs. Optimize costs by automatically managing the data lifecycle. [Learn more](#)

Review

< Previous

Next : Encryption >

Create a storage account ...

[Basics](#) [Advanced](#) [Networking](#) [Data protection](#) [Encryption](#) [Tags](#) [Review](#)

Basics

Subscription	Azure for Students
Resource Group	az104-07-rg1
Location	eastus
Storage account name	strgaz104t0711072022
Deployment model	Resource manager
Performance	Standard
Replication	Read-access geo-redundant storage (RA-GRS)

Advanced

Secure transfer	Enabled
Allow storage account key access	Enabled
Allow cross-tenant replication	Enabled
Default to Azure Active Directory authorization in the Azure portal	Disabled
Blob public access	Enabled
Minimum TLS version	Version 1.2
Permitted scope for copy operations (preview)	From any storage account
Enable hierarchical namespace	Disabled
Enable network file system v3	Disabled
Access tier	Hot
Enable SFTP	Disabled
Large file shares	Disabled

Create

< Previous

Next >

[Download a template for automation](#)

Home >

strgaz104t0711072022_1667854883256 | Overview

Deployment

Search

Delete Cancel Redeploy Download Refresh

Overview

Inputs

Outputs

Template

✓ Your deployment is complete

Deployment name: strgaz104t0711072022_1667854883256

Subscription: Azure for Students

Resource group: az104-07-ng1

Start time: 11/7/2022, 4:01:55 PM

Correlation ID: R9f5c1cb-fe65-458b-bb8e-c4d26833ee83

Deployment details

Resource	Type	Status	Operation details
✓ strgaz104t0711072022/default	Microsoft.Storage/storageAccounts/fileservices	OK	Operation details
✓ strgaz104t0711072022/default	Microsoft.Storage/storageAccounts/blobServices	OK	Operation details
✓ strgaz104t0711072022	Microsoft.Storage/storageAccounts	OK	Operation details

Next steps

Go to resource

Give feedback

Tell us about your experience with deployment

Cost Management

Get notified to stay within your budget and prevent unexpected charges on your bill.

Set up cost alerts >

Microsoft Defender for Cloud

Secure your apps and infrastructure

Go to Microsoft Defender for Cloud >

Free Microsoft tutorials

Start learning today >

Work with an expert

Azure experts are service provider partners who can help manage your assets on Azure and be your first line of support.

Find an Azure expert >

Home > strgaz104t0711072022

strgaz104t0711072022 | Redundancy

Storage account

Search

Save Discard Prepare for failover Refresh

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Queues

Tables

Security + networking

Networking

Azure CDN

Access keys

Shared access signature

Encryption

Microsoft Defender for Cloud

Data management

Redundancy

Data protection

Azure Storage replication copies your data so that it is protected from transient hardware failures, network or power outages, and natural disasters. If an outage renders the primary endpoint unavailable, then you can initiate a failover to the secondary endpoint to rapidly restore write access to your data.

[Learn more about storage account failover](#)

Redundancy Read-access geo-redundant storage (RA-GRS)

Last failover time -

Storage endpoints [View all](#)

Location	Data center type	Status	Failover
East US	Primary	Available	-
West US	Secondary	Available	-

Home > strgaz104t0711072022

strgaz104t0711072022 | Redundancy

Storage account

Search Save Discard Prepare for failover Refresh

Redundancy

Azure Storage replication copies your data so that it is protected from transient hardware failures, network or power outages, and natural disasters. If an outage renders the primary endpoint unavailable, then you can initiate a failover to the secondary endpoint to rapidly restore write access to your data. [Learn more about storage account failover](#)

Redundancy ☐ Locally-redundant storage (LRS)

Last failover time -

Storage endpoints [View all](#)

Location	Data center type	Status
East US	Primary	Available

Primary location

Home > strgaz104t0711072022

strgaz104t0711072022 | Configuration

Storage account

Search Save Discard Refresh

Configuration

The cost of your storage account depends on the usage and the options you choose below. [Learn more about storage pricing](#)

Account kind
StorageV2 (general purpose v2)

Performance ☒ Standard ☐ Premium

Secure transfer required ☐ Disabled ☒ Enabled

Allow Blob public access ☐ Disabled ☒ Enabled

Allow storage account key access ☐ Disabled ☒ Enabled

Allow recommended upper limit for shared access signature (SAS) expiry interval ☒ Disabled ☐ Enabled

Default to Azure Active Directory authorization in the Azure portal ☒ Disabled ☐ Enabled

Minimum TLS version ☐ Version 1.2

Permitted scope for copy operations (preview) ☐ From any storage account

Blob access tier (default) ☒ cool ☐ Hot

Large file shares ☒ Disabled ☐ Enabled

Successfully updated storage account
Successfully updated storage account 'strgaz104t0711072022'. Settings may take up to 30 seconds to take effect.

Task 3: Manage blob storage

Home > strgaz1040711072022

strgaz1040711072022 | Containers

Storage account

Search

+ Container

Change access level

Restore containers

Refresh

Delete

Search containers by prefix

Show deleted containers

Name	Last modified	Public access level	Lease state
<input type="checkbox"/> \$logs	11/7/2022, 4:01:50 PM	Private	Available

New container

Name *

az104-07-container

Public access level

Private (no anonymous access)

Advanced

Home > strgaz1040711072022

strgaz1040711072022 | Containers

Storage account

Search

+ Container

Change access level

Restore containers

Refresh

Delete

Search containers by prefix

Show deleted containers

Name	Last modified	Public access level	Lease state
<input type="checkbox"/> \$logs	11/7/2022, 4:01:50 PM	Private	Available
<input type="checkbox"/> az104-07-container	11/7/2022, 4:21:03 PM	Private	Available

Home > strgaz1040711072022 | Containers

az104-07-container

Container

Search

Upload

Change access level

Refresh

Delete

Change tier

Acquire lease

Break lease

View snapshots

Create snapshot

Authentication method: Access key (Switch to Azure AD User Account)

Location: az104-07-container

Search blobs by prefix (case-sensitive)

Add filter

Name	Modified	Access tier	Archive status	Blob
No results				

Upload blob

az104-07-container/

Files

"LICENSE"

Overwrite if files already exist

Advanced

Authentication type

Azure AD user account

Account key

Blob type

Block blob

Upload vhd files as page blobs (recommended)

Block size

4 MB

Access tier

Hot

Upload to folder

licensed

Blob index tags

Key

Value

Encryption scope

Use existing default container scope

Choose an existing scope

Retention policy

No retention

Choose custom retention period:

11/07/2022

14:21:42 PM

Enable version-level immutability on the container to set a retention policy.

Home > strgaz1040711072022 | Containers

az104-07-container

Container

Search

Upload

Change access level

Refresh

Delete

Change tier

Acquire lease

Break lease

View snapshots

Create snapshot

Authentication method: Access key (Switch to Azure AD User Account)

Location: az104-07-container

Search blobs by prefix (case-sensitive)

Add filter

Name	Modified	Access tier	Archive status
<input type="checkbox"/> licenses			

Notifications

More events in the activity log

Dismiss all

Upload Completed for LICENSE

1.05 KiB | strgaz1040711072022

a few seconds ago

Successfully created storage container

Successfully created storage container 'az104-07-container'.

3 minutes ago

Successfully updated storage account

Successfully updated storage account 'strgaz1040711072022'. Settings may take up to 30 seconds to take effect.

10 minutes ago

Home > strgaz1040711072022 | Containers > az104-07-container >

az104-07-container
Container

Search

Upload Change access level

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Shared access tokens

Access policy

Properties

Metadata

Authentication method: Access key (Switch to Azure AD User Account)

Location: az104-07-container / licenses

Search blobs by prefix (case-sensitive)

Show deleted blobs

Add filter

Name

[.]

LICENSE

licenses/LICENSE
Blob

Save Discard Download Refresh Delete Change tier Acquire lease Break lease

Overview Versions Snapshots Edit Generate SAS

Properties

URL <https://strgaz1040711072022.blob.core.windows.net/az104-07-container/licenses/LICENSE>

LAST MODIFIED 11/7/2022, 4:23:54 PM

CREATION TIME 11/7/2022, 4:23:54 PM

VERSION ID -

TYPE Block blob

SIZE 1.05 KiB

ACCESS TIER Hot

ACCESS TIER LAST MODIFIED 11/7/2022, 4:23:54 PM

ARCHIVE STATUS -

REHYDRATE PRIORITY -

SERVER ENCRYPTED true

ETAG 0x8DAC1065FEA426A

VERSION-LEVEL IMMUTABILITY POLICY Disabled

CACHE-CONTROL

CONTENT-TYPE application/octet-stream

CONTENT-MD5 GO0FGaT2X70BDVqzYKwG...

CONTENT-ENCODING

CONTENT-LANGUAGE

CONTENT-DISPOSITION

LEASE STATUS Unlocked

LEASE STATE Available

LEASE DURATION -

COPY STATUS -

COPY COMPLETION TIME -

Task 4: Manage authentication and authorization for Azure Storage

Home > strgaz1040711072022 | Containers > az104-07-container >

az104-07-container
Container

Search

Upload Change access level

Overview

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Access Control (IAM)

Settings

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Properties

Metadata

Authentication method: Access key (Switch to Azure AD User Account)

Location: az104-07-container / licenses

Search blobs by prefix (case-sensitive)

Show deleted blobs

Add filter

Name

[.]

LICENSE

licenses/LICENSE
Blob

Save Discard Download Refresh Delete Change tier Acquire lease Break lease

Overview Versions Snapshots Edit Generate SAS

Properties

URL <https://strgaz1040711072022.blob.core.windows.net/az104-07-container/licenses/LICENSE>

LAST MODIFIED 11/7/2022, 4:23:54 PM

CREATION TIME 11/7/2022, 4:23:54 PM

VERSION ID -

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<?xml version="1.0" encoding="utf-8"?>
<Error>
  <Code>ResourceNotFound</Code>
  <Message>The specified resource does not exist. RequestId:01bbc220-e81e-0040-11ef-f2a6c5000000 Time:2022-11-07T21:26:21.6443373Z</Message>
</Error>
```

Home > strgaz1040711072022 | Containers > az104-07-container >

az104-07-container

Container

Search [] Upload Change access level ...

Overview

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Access Control (IAM)

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Metadata

Authentication method: Access key (Switch to Azure AD User Account)

Location: az104-07-container / licenses

Search blobs by prefix (case-sensitive)

Show deleted blobs

Add filter

Name

[] [] ...

[] LICENSE ...

licenses/LICENSE

Blob

Save Discard Download Refresh Delete

Overview Versions Snapshots Edit **Generate SAS**

A shared access signature (SAS) is a URI that grants restricted access to an Azure Storage blob. Use it when you want to grant access to storage account resources for a specific time range without sharing your storage account key. Learn more about creating an account SAS.

Signing method

☒ Account key ☐ User delegation key

Signing key

Key 1

Stored access policy

None

Permissions *

Read

Start and expiry date/time

Start

11/07/2022 4:27:37 PM

(UTC-05:00) Eastern Time (US & Canada)

Expiry

11/08/2022 12:27:37 AM

(UTC-05:00) Eastern Time (US & Canada)

Allowed IP addresses

for example, 168.1.5.65 or 168.1.5.65-168.1...

Allowed protocols

☒ HTTPS only ☐ HTTPS and HTTP

Generate SAS token and URL

licenses/LICENSE

Blob

Save Discard Download Refresh Delete

account key. Learn more about creating an account SAS

Signing method

☒ Account key ☐ User delegation key

Signing key

Key 1

Stored access policy

None

Permissions *

Read

Start and expiry date/time

Start

11/06/2022

(UTC-05:00) Eastern Time (US & Canada)

Expiry

11/08/2022

(UTC-05:00) Eastern Time (US & Canada)

Allowed IP addresses

for example, 168.1.5.65 or 168.1.5.65-168.1...

Allowed protocols

☒ HTTPS only ☐ HTTPS and HTTP

Generate SAS token and URL

Blob SAS token

sp=r&st=2022-11-06T21:27:37Z&se=2022-11-08T05:27:37Z&spr=https&sv=2021-06-08&sr=b&sig=2E2av3bjKLxZIoCum11b0D%2BuicrdlrxQ49Wjwak6HI%3D

Blob SAS URL

https://strgaz1040711072022.blob.core.windows.net/az104-07-container/licenses/LICENSE?sp=r&st=2022-11-06T21:27:37Z&se=2022-11-08T05:27:37Z&spr=https&sv=2021-06-08&sr=b&sig=2E2av3bjKLxZIoCum11b0D%2BuicrdlrxQ49Wjwak6HI%3D

Downloads

- LICENSE Open file
- LICENSE (1) Removed
- LICENSE Removed

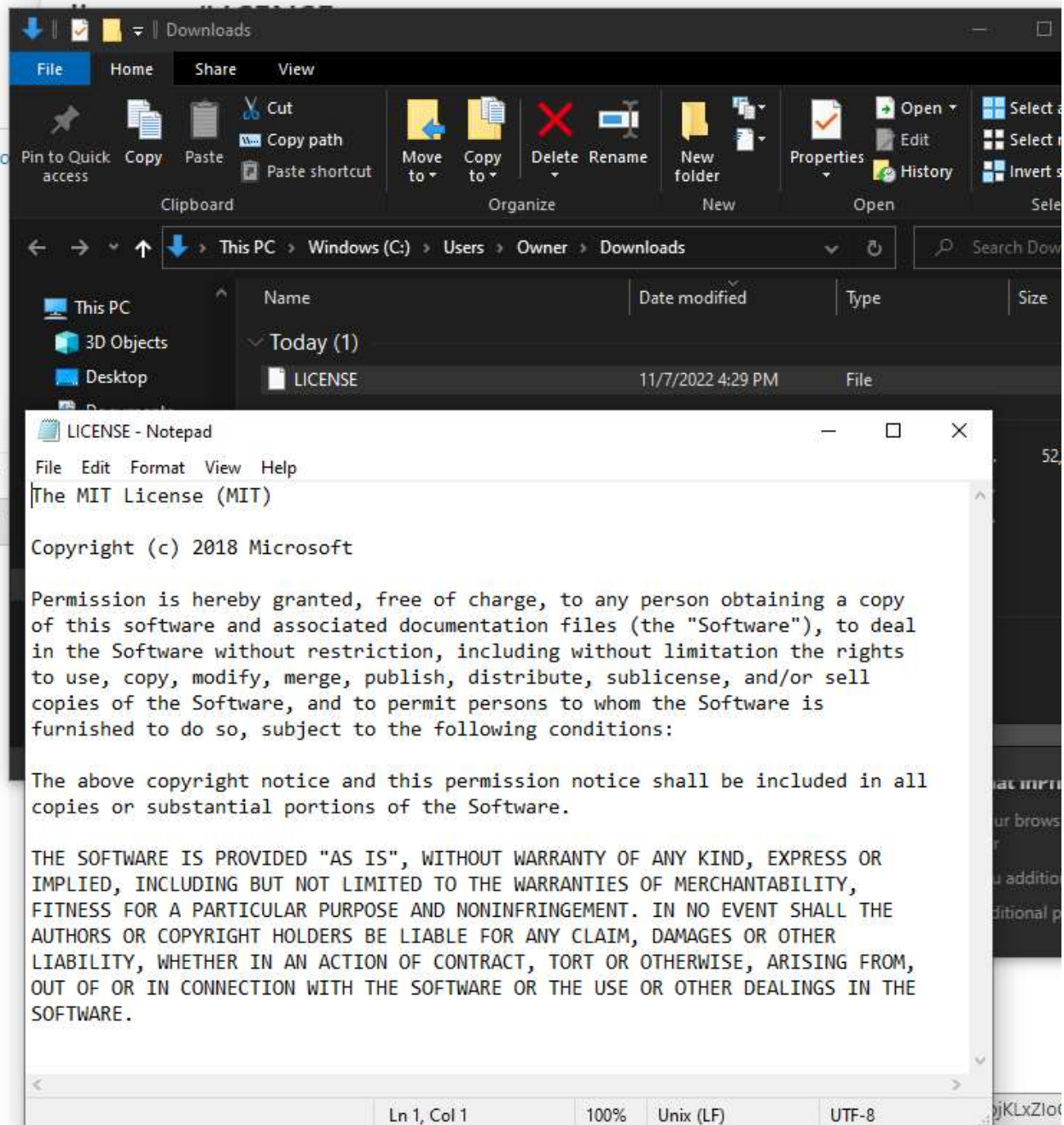
See more

What InPrivate browsing does

- Deletes your browsing info when you close all InPrivate windows
- Saves collections, favorites, and downloads (but not download history)
- Prevents Microsoft Bing searches from being associated with you

What InPrivate browsing doesn't do

- Hide your browsing from your school, employer, or internet service provider
- Give you additional protection from tracking by default
- Add additional protection to what's available in normal browsing



az104-07-container

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

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You do not have permissions to list the data using your user account with Azure AD. Click to learn more about authenticating with Azure AD. This request is not authorized to perform this operation using this permission. RequestId:01c1792a-e01e-0040-4440-f2a6c5000000 Time:2022-11-07T21:32:45.2237354Z

Authentication method: Azure AD User Account (Switch to Access key) Location: az104-07-container / licenses

Search blobs by prefix (case-sensitive)

Add filter

Name	Modified	Access tier	Archive status
<input type="checkbox"/> [-]			

az104-07-container | Access Control (IAM)

Search + Add Download role assignments Edit columns Refresh Remove Got feedback?

Overview

Diagnose and solve problems

Access Control (IAM)

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Metadata

Check access Role assignments Roles Deny assignments Classic administrators

My access

View my level of access to this resource.

View my access

Check access

Review the level of access a user, group, service principal, or managed identity has to this resource. Learn more

Check access

Grant access to this resource

Grant access to resources by assigning a role.

Add role assignment

Learn more

View access to this resource

View the role assignments that grant access to this and other resources.

View

Learn more

View deny assignments

View the role assignments that have been denied access to specific actions at this scope.

View

Learn more

Add role assignment

Got feedback?

Role Members Conditions (optional) Review + assign

A role definition is a collection of permissions. You can use the built-in roles or you can create your own custom roles. Learn more

storage blob Type: All Category: All

Showing 4 of 33 roles

Name ↑↓	Description ↑↓
Storage Blob Data Contributor	Allows for read, write and delete access to Azure Storage blob containers and data
Storage Blob Data Owner	Allows for full access to Azure Storage blob containers and data, including assigning POSIX access control.
Storage Blob Data Reader	Allows for read access to Azure Storage blob containers and data
Storage Blob Delegator	Allows for generation of a user delegation key which can be used to sign SAS tokens

Add role assignment

 Got feedback?

Role **Members** Conditions (optional) Review + assign

Selected role Storage Blob Data Owner

Assign access to ☒ User, group, or service principal
☐ Managed identity

Members [+ Select members](#)

Name	Object ID	Type
No members selected		

Description

Optional

Select members


Select 
mosanmaz

No users, groups, or service principals found.

Selected members:

 Mehmet Osanmaz
mosanmaz@my.centennialcollege.ca [Remove](#)

Add role assignment

 Got feedback?

Role Members **Conditions (optional)** **Review + assign**

Role Storage Blob Data Owner

Scope /subscriptions/ac1156f0-0914-4629-90c5-323d8c283fc7/resourcegroups/az104-07-rg1/providers/Microsoft.Storage/storageAccounts/strgaz104t0711072022/blobServices/default/containers/az104-07-container

Members	Name	Object ID	Type
	Mehmet Osanmaz	de0bab34-796d-4d9e-b706-c4c2bec6dc2f	User

Description No description

Condition None

[Review + assign](#)

[Previous](#)

Home >

az104-07-container Container

Search

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

Overview

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Properties

Metadata

Authentication method: Azure AD User Account (Switch to Access key)

Location: az104-07-container

Search blobs by prefix (case-sensitive)

+ Add filter

Name	Modified	Access tier	Archive status
<input type="checkbox"/> licenses			

Task 5: Create and configure an Azure Files shares

Home > Storage accounts > strgaz1040711072022

strgaz1040711072022 | File shares

Search

+ File share Refresh

File share settings

Active Directory: Not configured Default share-level permissions: Disabled Soft delete: 7 days Maximum capacity: 5 TiB Security: Maximum compatibility

Search file shares by prefix (case-sensitive)

Name	Modified
You don't have any file shares yet. Click '+ File share' to get started.	

New file share

Name * az104-07-share

Tier Transaction optimized

Performance

Maximum I/Os 1000

Egress Rate 60 MiB / s

Ingress Rate 60 MiB / s

Maximum capacity 5 TiB

Large file shares Disabled

You can improve performance and maximum share capacity by enabling large file shares for this storage account. [Learn more](#)

To use the SMB protocol with this share, check if you can communicate over port 445. These scripts for [Windows clients](#) and [Linux clients](#) can help. Learn how to [configure port 445](#).

Create Cancel

Successfully created storage file share

Backup is not enabled for file share 'az104-07-share'. Click here to enable.

strgaz1040711072022 | File shares

Search

+ File share Refresh

File share settings

Active Directory: Not configured Default share-level permissions: Disabled Soft delete: 7 days Maximum capacity: 5 TiB Security: Maximum compatibility

Search file shares by prefix (case-sensitive) Show deleted shares

Name	Modified	Tier	Quota
az104-07-share	11/7/2022, 4:46:12 PM	Transaction optimized	5 TiB

Home > Storage accounts > strgaz1040711072022 | File shares >

az104-07-share

File share

Search

Connect Upload Add directory Refresh Delete share Change tier Edit quota

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Settings

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Operations

Snapshots

Backup

Search files by prefix

Name	Type
No files found.	

Connect

az104-07-share

Drive letter

Z

Authentication method

Active Directory

Storage account key

Connecting to a share using the storage account key is only appropriate for admin access. Mounting the Azure file share with the Active Directory identity of the user is preferred.

Learn more

Hide Script

```
$connectTestResult = Test-NetConnection -ComputerName strgaz1040711072022.file.core.windows.net -Port 445
if ($connectTestResult.TcpTestSucceeded) {
    # Save the password so the drive will persist on reboot
    cmd.exe /C "cmdkey /add:"strgaz1040711072022.file.core.windows.net"/user:"localhost\strgaz1040711072022" /pass:"Z04JUSY9hJkSpERKhtLmM0kx3C4Wg7vVkdWPWEeR9ePmPgXUjDTF80u42m5p9kdo+4GfPwv7g=="
    # Mount the drive
    New-PSDrive -Name Z -PSProvider FileSystem -Root "\\strgaz1040711072022.file.core.windows.net\az104-07-share" -Persist
} else {
    Write-Error -Message "Unable to reach the Azure storage account via port 445. Check to make sure your organization or ISP is not blocking port 445, or use Azure P2S VPN, Azure S2S VPN, or Express Route to tunnel SMB traffic over a different port."
}
```

Copied

This script will check to see if this storage account is accessible via TCP port 445, which is the port SMB uses. If port 445 is available, your Azure file share will be persistently mounted. Your organization or internet service provider (ISP) may block port 445, however you may use Azure Point-to-Site (P2S) VPN, Azure Site-to-Site (S2S) VPN, or ExpressRoute to tunnel SMB traffic to your Azure file share over a different port.

Note: The script will only work on Windows Server 2012 and above.

[Learn how to circumvent the port 445 problem \(VPN\)](#)

Home > Virtual machines > az104-07-vm0

Virtual machines

Centennial College (CentennialCollegeEDU)omnicur...

Create Switch to classic

Filter for any field...

Name

az104-07-vm0

Availability + scaling

Configuration

Identity

Properties

Locks

Operations

Bastion

Auto-shutdown

Backup

Disaster recovery

Updates

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Automanage

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Policies

Run command

Monitoring

Insights

Alerts

Metrics

Diagnostic settings

az104-07-vm0 | Run command

Virtual machine

Search

Run Command uses the VM agent to let you run a script inside this virtual machine for maintenance. Select a command below to see details.

Name	Description
RunPowerShellScript	Execute PowerShell script
DisableNLA	Disable Network Level Authentication
DisableWindowsUpdate	Disable Windows Update
EnableAdminAccount	Enable the local administrator account
EnableEMS	Enable the local EMS service
EnableRemotePS	Enable Remote PowerShell
EnableWindowsUpdate	Enable Windows Update
IPConfig	Display IP configuration
RDPSettings	Display Remote Desktop Settings
ResetRDPcert	Reset the Remote Desktop certificate
SetRDPport	Set the Remote Desktop port

Run Command Script

RunPowerShellScript

Script execution complete

PowerShell Script

```
1 $connectTestResult = Test-NetConnection -ComputerName strgaz1040711072022.file.core.windows.net
2 if ($connectTestResult.TcpTestSucceeded) {
3     # Save the password so the drive will persist on reboot
4     cmd.exe /C "cmdkey /add:"strgaz1040711072022.file.core.windows.net"/user:"localhost\st
5     # Mount the drive
6     New-PSDrive -Name Z -PSProvider FileSystem -Root "\\strgaz1040711072022.file.core.windows
7 } else {
8     Write-Error -Message "Unable to reach the Azure storage account via port 445. Check to make
9 }
```

Run

Output

```
CHREY: Credential added successfully.

Name      Used (GB)  Free (GB) Provider      Root
-----
rrerlocation
-----
Z          0.00      5120.00  FileSystem    \\strgaz1040711072022.file.core...
```

Home > Virtual machines > az104-07-vm0

Virtual machines

Centennial College (CentennialCollegeEDU.ornic...

+ Create Switch to classic

Filter for any field...

Name ↑

az104-07-vm0

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az104-07-vm0 | Run command

Run Command uses the VM agent to let you run a script inside this virtual machine. Select a command below to see details.

Name	Description
RunPowerShellScript	Execute PowerShell script
DisableNLA	Disable Network Level Authentication
DisableWindowsUpdate	Disable Windows Update
EnableAdminAccount	Enable the local administrator account
EnableETMS	Enable the ETMS service
EnableRemotePS	Enable Remote PowerShell
EnableWindowsUpdate	Enable Windows Update
IPConfig	Get IP configuration
RDPSettings	Get RDP settings
ResetRDPcert	Reset the RDP certificate
SetRDPport	Set the RDP port

Run Command Script

RunPowerShellScript

Script execution complete

```
PowerShell Script
1 New-Item -Type Directory -Path 'Z:\az104-07-folder'
2
3 New-Item -Type File -Path 'Z:\az104-07-folder\az-104-07-file.txt'
```

Run

Output

```
Directory: Z:\

Mode                LastWriteTime         Length Name
----                -
d-----          11/7/2022   9:52 PM             az104-07-folder

Directory: Z:\az104-07-folder

Mode                LastWriteTime         Length Name
----                -
-a-----          11/7/2022   9:52 PM             0 az-104-07-file.txt
```

Home > strgaz104t0711072022 | File shares >

az104-07-share

File share

Search

Connect Upload Add directory Refresh Delete share

Overview

Diagnose and solve problems

Access Control (IAM)

Settings

Properties

Operations

Snapshots

Backup

Search files by prefix

Name

az104-07-folder

Home > strgaz104t0711072022 | File shares >

az104-07-share

File share

Search

Upload Add directory Refresh Delete directory Properties

Overview

Diagnose and solve problems

Access Control (IAM)

Settings

Properties

Operations

Snapshots

Backup

Search files by prefix

Name
[..]
az-104-07-file.txt

Task 6: Manage network access for Azure Storage

Home > strgaz104t0711072022

strgaz104t0711072022 | Networking

Storage account

Search

Overview

Activity log

Tags

Diagnose and solve problems

Access Control (IAM)

Data migration

Events

Storage browser

Data storage

Containers

File shares

Queues

Tables

Security + networking

Networking

Azure CDN

Access keys

Shared access signature

Encryption

Microsoft Defender for Cloud

Data management

Redundancy

Data protection

Firewalls and virtual networks Private endpoint connections Custom domain

Save Discard Refresh

Firewall settings restricting access to storage services will remain in effect for up to a minute after saving updated settings allowing access.

Public network access

☐ Enabled from all networks

☒ Enabled from selected virtual networks and IP addresses

☐ Disabled

Configure network security for your storage accounts. [Learn more](#)

Virtual networks

+ Add existing virtual network + Add new virtual network

Virtual Network	Subnet	Address range	Endpoint Status
No network selected.			

Firewall

Add IP ranges to allow access from the internet or your on-premises networks. [Learn more](#).

☒ Add your client IP address (*174.89.41.211) ☐

Address range

IP address or CIDR

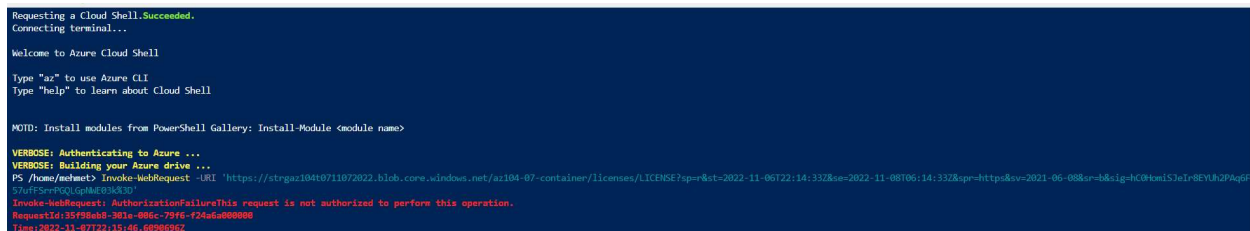
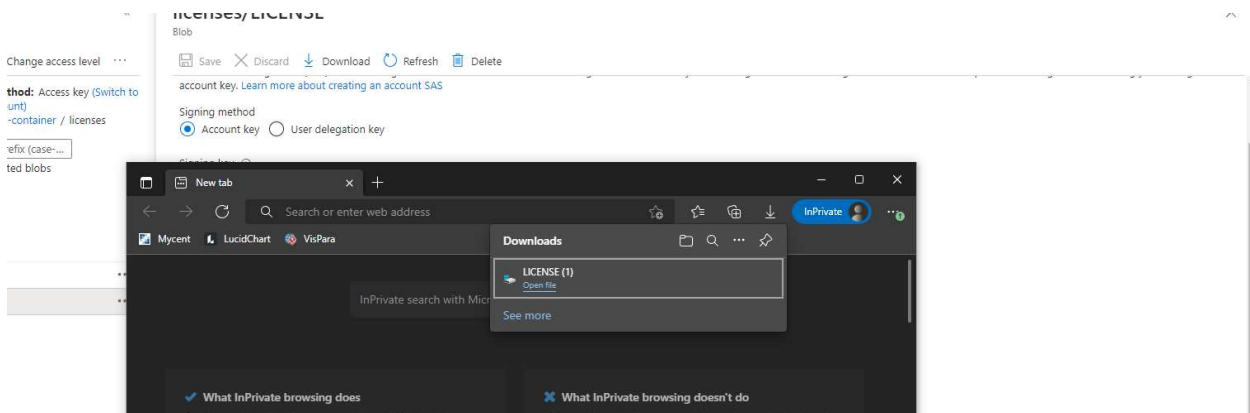
Resource instances

Specify resource instances that will have access to your storage account based on their system-assigned managed identity.

Resource type	Instance name
Select a resource type	Select one or more instances

Exceptions

☒ Allow Azure services on the trusted services list to access this storage account. ☐



Home > Resource groups > az104-07-rg0

az104-07-rg0 | Resource visualizer

Resource group

Search

Choose resources

Reset diagram

Zoom to fit

Refresh

Export PNG

Feedback

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Access control (IAM)

Tags

Resource visualizer

Events

Settings

Deployments

Security

Policies

Properties

Locks

Cost Management

Cost analysis

Cost alerts (preview)

Budgets

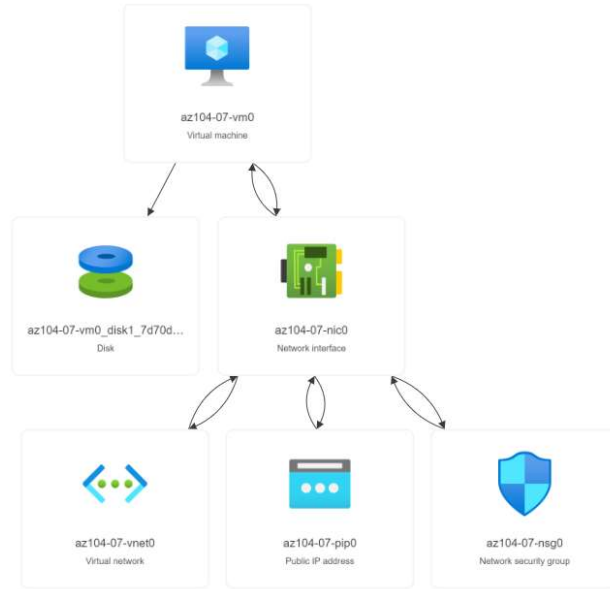
Advisor recommendations

Monitoring

Insights (preview)

Alerts

Metrics



az104-07-rg1 | Resource visualizer

Resource group

Search

Choose resources

Reset diagram

Zoom to fit

Refresh

Export PNG

Feedback

Overview

Activity log

Access control (IAM)

Tags

Resource visualizer

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Properties

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Cost Management

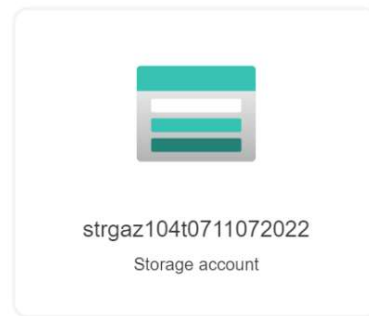
Cost analysis

Cost alerts (preview)

Budgets

Advisor recommendations

Monitoring



Home >

All resources

Centennial College (CentennialCollegeEDU@microsoft.com)

+ Create Manage view Refresh Export to CSV Open query Assign tags Delete

Filter for any field...

Subscription equals all

Resource group equals all

Type equals all

Location equals all

Add filter

0 Unsecured resources

0 Recommendations

No grouping

List view

Name	Type	Resource group	Location	Subscription
az104-07-nic0	Network interface	az104-07-rg0	East US	Azure for Students
az104-07-nsg0	Network security group	az104-07-rg0	East US	Azure for Students
az104-07-pip0	Public IP address	az104-07-rg0	East US	Azure for Students
az104-07-vm0	Virtual machine	az104-07-rg0	East US	Azure for Students
az104-07-vm0_disk1_7d70db240d8845e394e7fe44276a6804	Disk	AZ104-07-RG0	East US	Azure for Students
az104-07-vnet0	Virtual network	az104-07-rg0	East US	Azure for Students
cs21003200048b46711	Storage account	cloud-shell-storage-eastus	East US	Azure for Students
NetworkWatcher_eastus	Network Watcher	NetworkWatcherRG	East US	Azure for Students
strgaz1040711072022	Storage account	az104-07-rg1	East US	Azure for Students

Home > Network Watcher

Network Watcher | Topology

Search

Download topology

Give feedback

Overview

Get started

Monitoring

Topology

Connection monitor (classic)

Connection monitor

Network Performance Monitor

Network diagnostic tools

IP flow verify

NSG diagnostics

Next hop

Effective security rules

VPN troubleshoot

Packet capture

Connection troubleshoot

Metrics

Usage + quotas

Logs

Subscription

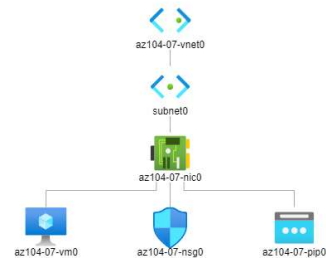
Azure for Students

Resource Group

az104-07-rg0

Virtual Network

az104-07-vnet0



Requesting a Cloud Shell.**Succeeded.**
Connecting terminal...

MOTD: Scripts installed with 'Install-Script' can be run from the shell

VERBOSE: Authenticating to Azure ...

VERBOSE: Building your Azure drive ...

PS /home/mehmet> Get-AzResourceGroup -Name 'az104-07*'

ResourceGroupName : az104-07-rg0

Location : eastus

ProvisioningState : Succeeded

Tags :

ResourceId : /subscriptions/ac1156f0-0914-4629-90c5-323d8c283fc7/resourceGroups/az104-07-rg0

ResourceGroupName : az104-07-rg1

Location : eastus

ProvisioningState : Succeeded

Tags :

ResourceId : /subscriptions/ac1156f0-0914-4629-90c5-323d8c283fc7/resourceGroups/az104-07-rg1

PS /home/mehmet> Get-AzResourceGroup -Name 'az104-07*' | Remove-AzResourceGroup -Force -AsJob

Id	Name	PSJobTypeName	State	HasMoreData	Location	Command
--	----	-----	-----	-----	-----	-----
2	Long Running 0...	AzureLongRunni...	Running	True	localhost	Remove-AzResourceGroup
3	Long Running 0...	AzureLongRunni...	Running	True	localhost	Remove-AzResourceGroup