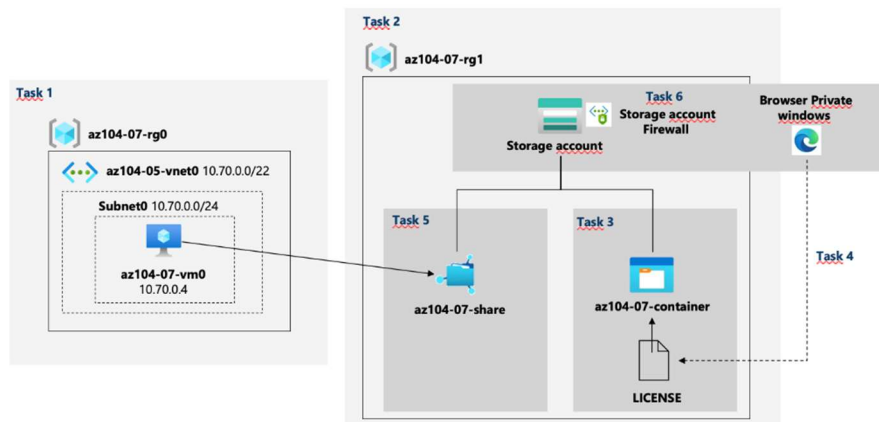


## Azure Storage Account – Assignment 6



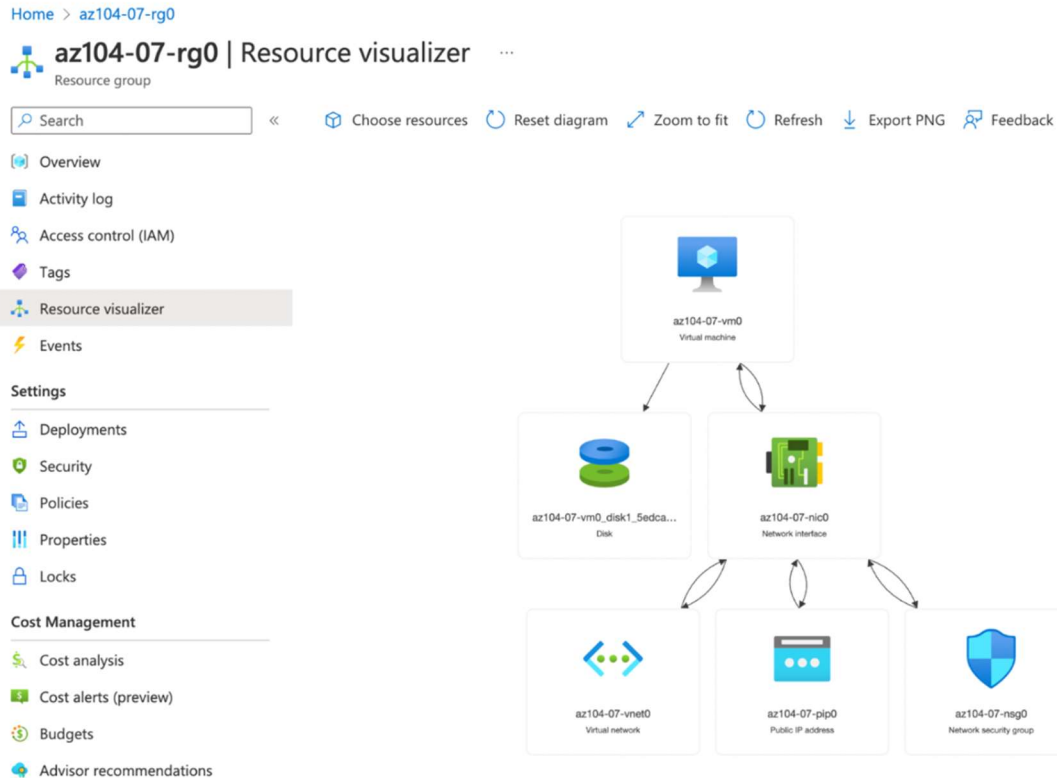
### Assignment – 6 Solution steps and screen shots:

#### • Task 1: Provision the lab environment:

In this step from Azure portal , I created resource groups, networks, subnets, and Virtual machine.

The screenshot shows the Microsoft Azure portal interface for the resource group 'az104-07-rg0'. The Essentials section displays the subscription ID 'bba43e7b-5052-4045-95c6-5c893d7aef8c', location 'East US', and tags 'owner: Mustafa'. The Resources section shows a list of resources:

Name	Type	Location
az104-05-vnet0	Virtual network	East US
az104-07-vm0	Virtual machine	East US
az104-07-vm0-ip	Public IP address	East US
az104-07-vm0-nsg	Network security group	East US
az104-07-vm0697_z1	Network interface	East US



## • Task 2: Create and configure Azure Storage accounts:

In this task, I created and configured an Azure Storage account named “storageaccountgokmus12”

In the Redundancy scope Geo-Replication is as a “**LRS**” selected and Blob access tier is as “**cool**” configured.

Microsoft Azure Upgrade Search resources, services, and docs (G+)

Home > Storage accounts > storageaccountgokmus12

## storageaccountgokmus12 | Redundancy

Storage account

Save Discard Prepare for failover Refresh

Azure Storage replication copies your data so that it is protected from transient hardware failures, network or power outages, and natural disasters. [Learn more about storage account failover >](#)

Redundancy

Last failover time -

Storage endpoints [View all](#)

Location	Data center type	Status
East US	Primary	Available

Home > Storage accounts > storageaccountgokmus12

## storageaccountgokmus12 | Configuration

Storage account

Search

Save Discard Refresh

☒ Standard ☐ Premium

**This setting cannot be changed after the storage account is created.**

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

Permitted scope for copy operations (preview)

**Blob access tier (default)** ☒ Cool ☐ Hot

Large file shares ☒ Disabled ☐ Enabled

**Data management**

- Redundancy
- Data protection
- Object replication
- Blob inventory
- Static website
- Lifecycle management
- Azure search

**Settings**

- Configuration
- Data Lake Gen2 upgrade
- Resource sharing (CORS)
- Advisor recommendations
- Endpoints
- Locks

### • Task 3: Manage blob storage:

In this task, from Azure portal I created a blob container (az104-04-container) and uploaded a blob into it. After creating container , I added a blob (LICENSE.txt file) in to the container.

Home > Storage accounts > storageaccountgokmus12

## storageaccountgokmus12 | 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	12.11.2022, 00:13:42	Private	Available
<input type="checkbox"/> az104-07-container	12.11.2022, 00:31:39	Private	Available

Microsoft Azure Upgrade Search resources, services, and docs (G+)

Home > Storage accounts > storageaccountgokmus12 | Containers > az104-07-container

## az104-07-container

Container

Upload Change access level

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

Search blobs by prefix (case-...)  
☐ Show deleted blobs

+ Add filter

**Name**

- ☐ [.] ...
- ☒ LICENSE.txt ...

## licences/Licences/LICENSE.txt

Blob

Save Discard Download Refresh Delete Change tier Acquire lease Break

**Overview** Versions Snapshots Edit Generate SAS

**Properties**

URL

LAST MODIFIED 12.11.2022, 1:20:48 PM

CREATION TIME 12.11.2022, 1:20:48 PM

VERSION ID -

TYPE Block blob

SIZE 1.07 KiB

ACCESS TIER Hot

ACCESS TIER LAST MODIFIED 12.11.2022, 1:20:48 PM

ARCHIVE STATUS -

REHYDRATE PRIORITY -

SERVER ENCRYPTED true

ETAG 0x8DAC4A8552B39BB

VERSION-LEVEL IMMUTABILITY POLICY Disabled

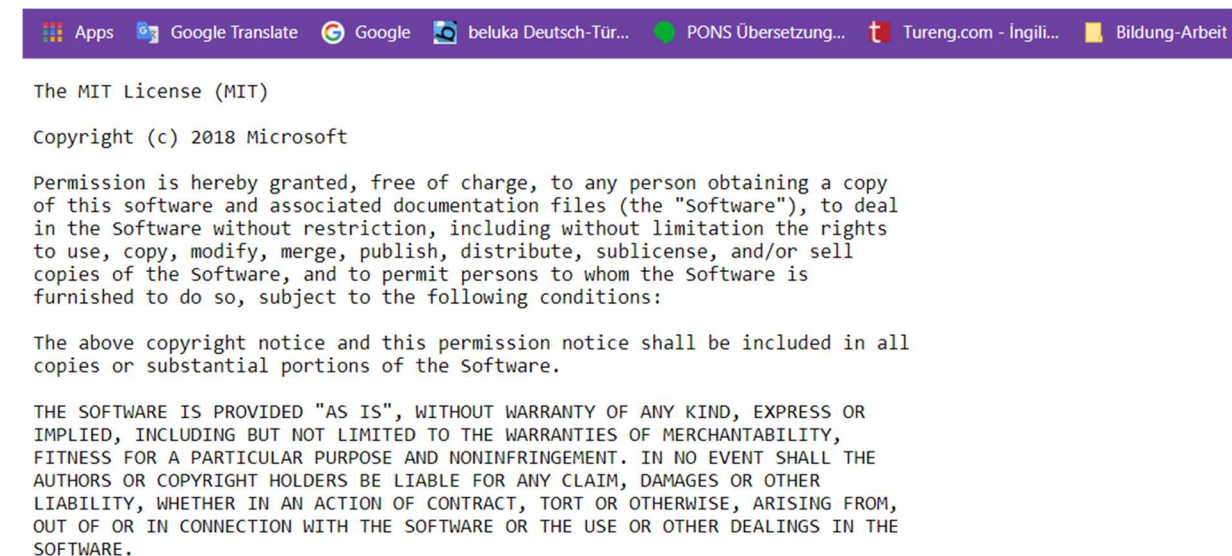
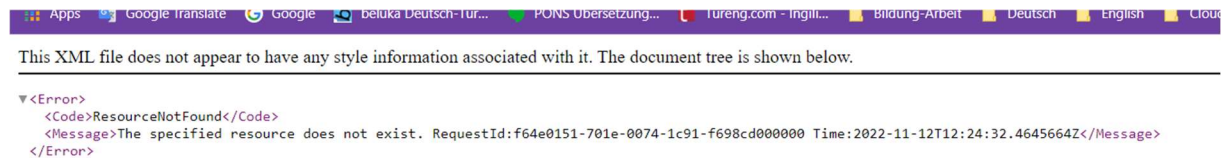
CACHE-CONTROL

CONTENT-TYPE text/plain

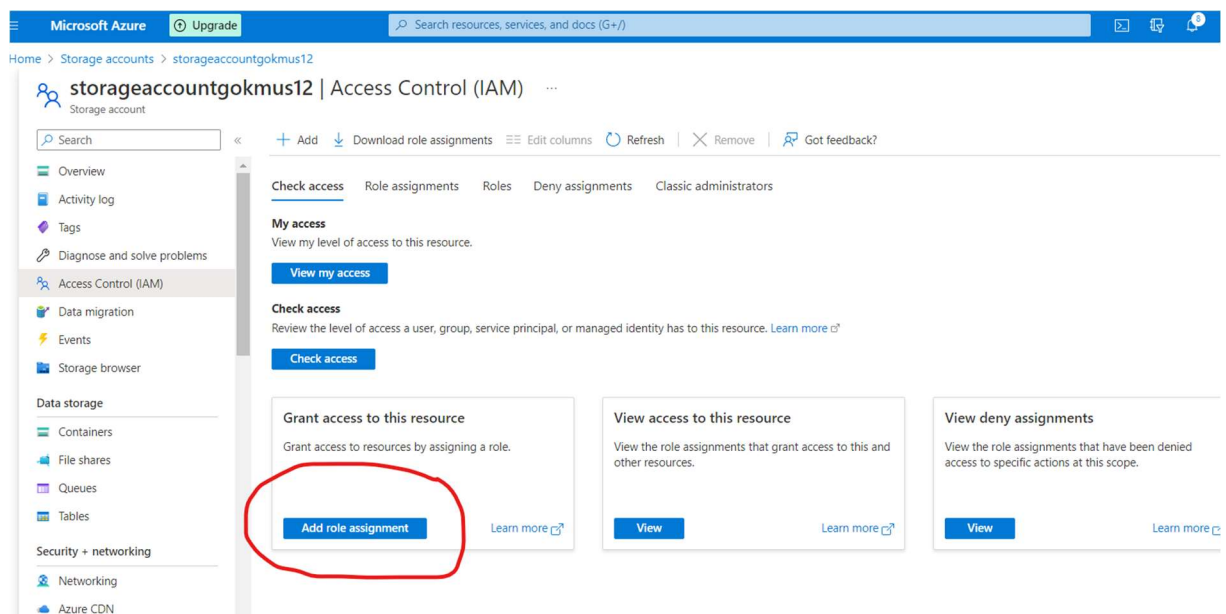
#### • Task 4: Manage authentication and authorization for Azure Storage:

In this task, I configured authentication and authorization for Azure Storage. First I copied the URL address and tested IE on browser, I cannot reach the LICENSE.txt file. (as shown following)

Then I generated SAS token, again tested the entering. This time I reached and downloaded LICENSE file.



As a new step I assigned a new role -Storage blob data owner- for the container from the menu IAM



Microsoft Azure | Upgrade | Search resources, services, and docs (G+)

Home > Storage accounts > storageaccountgokmus12 | Containers > az104-07-container

az104-07-container | Access Control (IAM)

Search

Overview

Diagnose and solve problems

Access Control (IAM)

Settings

Shared access tokens

Access policy

Properties

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.

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 other resources.

View

Mustafa Gok assignments - az104-07-container

Current role assignments

Eligible assignments

Assignments for the selected user, group, service principal, or managed identity at this scope or inherited to this scope.

Search by assignment name or description

Role assignments (2)

Role	Description	Scope	Group assignment	Condition
Owner	Grants full access to manage all r...	Subscription (Inherited)	--	None
Storage Blob Data Owner	Allows for full access to Azure St...	This resource	--	Add

Deny assignments (0)

Classic administrators (0)

## • Task 5: Create and configure an Azure Files shares:

In this task, from the Azure portal I created and configured Azure Files shares (named az104-07-share). Then a folder and a txt file is created using powershell command line. I connected the file share with VM.

az104-07-vm0 | Run command

Virtual machine

run com

Settings

Advisor recommendations

Operations

Run command

Run PowerShellScript

DisableNLA

DisableWindowsUpdate

EnableAdminAccount

EnableEMS

EnableRemotePS

EnableWindowsUpdate

IPConfig

RDPSettings

ResetRDPcert

SetRDPPort

Run Command Script

RunPowerShellScript

Script execution complete

PowerShell Script

```
1 $connectTestResult = Test-NetConnection -ComputerName storageaccountgokmus12.file.core.windows.net
2 if ($connectTestResult.TcpTestSucceeded) {
3     # Save the password so the drive will persist on reboot
4     cmd.exe /C "cmdkey /add:"storageaccountgokmus12.file.core.windows.net" /user:"localhost"
5     # Mount the drive
6     New-PSDrive -Name Z -PSProvider FileSystem -Root "\\storageaccountgokmus12.file.core.windows.net\az104-07-share"
7 } else {
8     Write-Error -Message "Unable to reach the Azure storage account via port 445. Check to make sure the storage account is accessible from the VM."
9 }
```

Run

Output

```
CMDKEY: Credential added successfully.

Name      Used (GB)  Free (GB) Provider    Root
-----
urrentLocation
-----
Z          0.00      5120.00 FileSystem  \\storageaccountgokmus12.file.co...
```

az104-07-vm0 | Run command

Virtual machine

run com

Settings

Advisor recommendations

Operations

Run command

Run PowerShellScript

DisableNLA

DisableWindowsUpdate

EnableAdminAccount

EnableEMS

EnableRemotePS

EnableWindowsUpdate

IPConfig

RDPSettings

ResetRDPcert

SetRDPPort

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

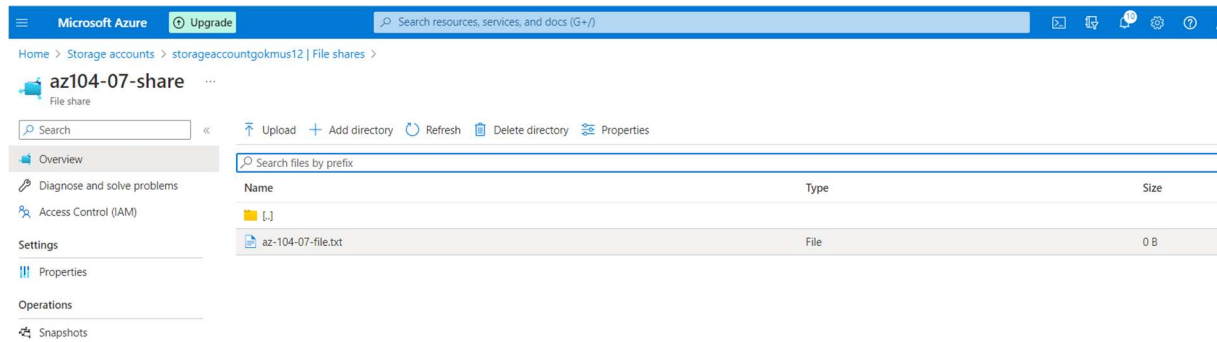
```
Directory: Z:\

Mode                LastWriteTime         Length Name
----                -
d-----          11/13/2022 11:26 AM             az104-07-folder

Directory: Z:\az104-07-folder

Mode                LastWriteTime         Length Name
----                -
-a-----          11/13/2022 11:26 AM              0 az-104-07-file.txt
```





## • Task 6: Manage network access for Azure Storage:

In this task, I configured network access for Azure Storage.

From the azure portal left pane on the storage account page, select networking and enabled from selected virtual networks and IP address (select your client pip) (shown as picture below ) • After managing PIP, from internet explorer click previously used URL for blob. We can see download file.

