Міністерство освіти і науки України
Карпатський національний університет
імені В.Стефаника

Факультет математики та інформатики
Кафедра інформаційних технологій

Інформатика і програмування

Лабораторна робота No 7

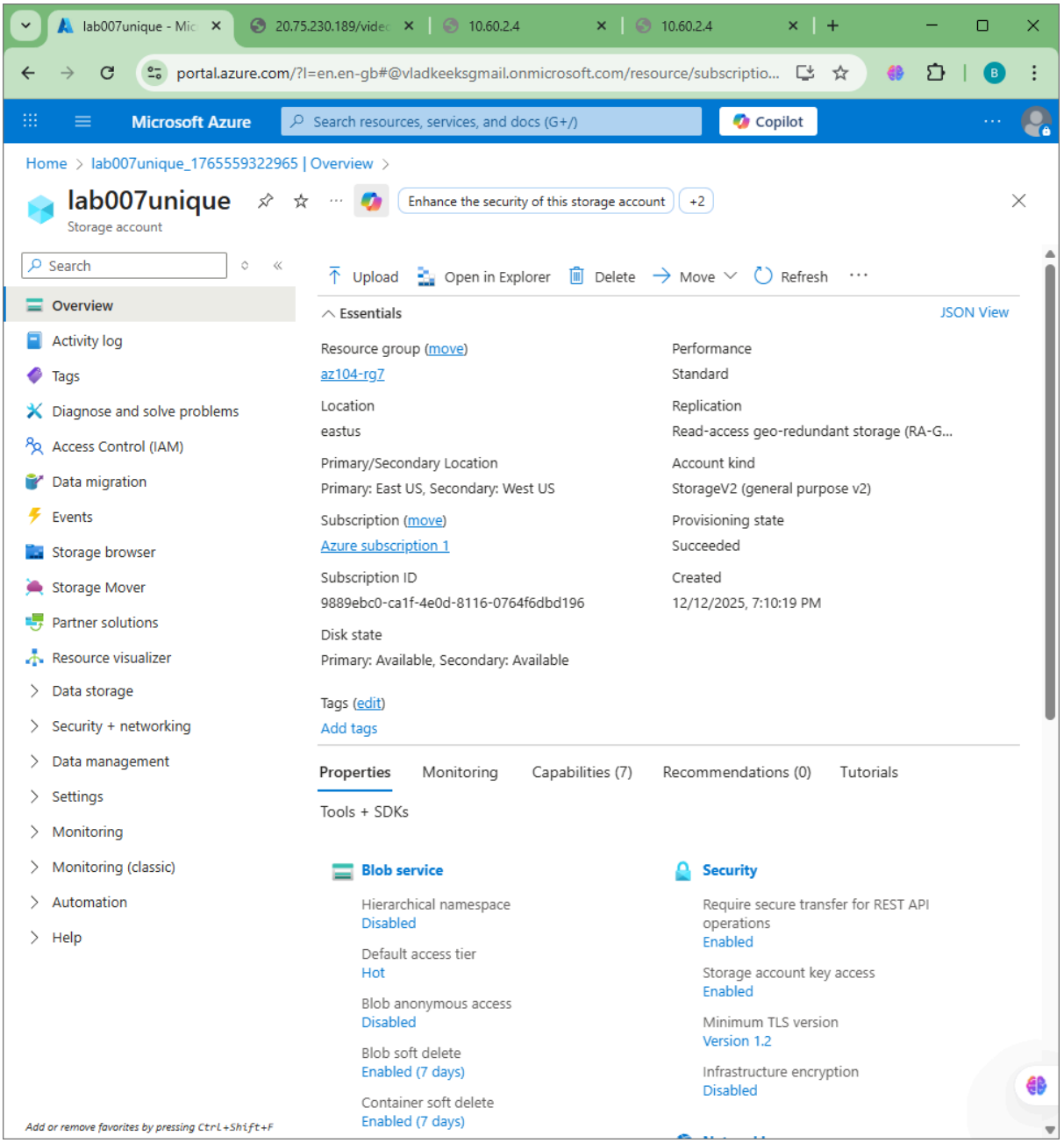
Тема: Manage Azure Storage

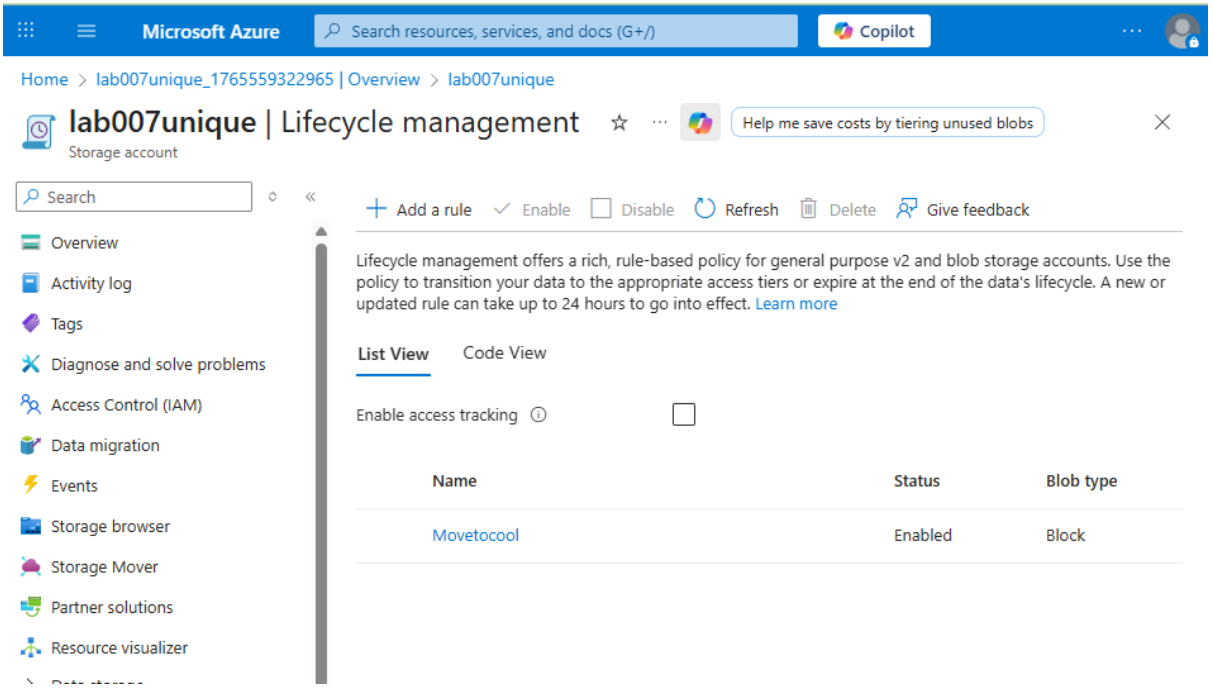
Виконав: Прокутко В.В
Група ІПЗ-43
Дата: 12 грудня 2025
Викладач: Поварчук Д.Д

Івано-Франківськ – 2025

Task 1: Create and configure a storage account.

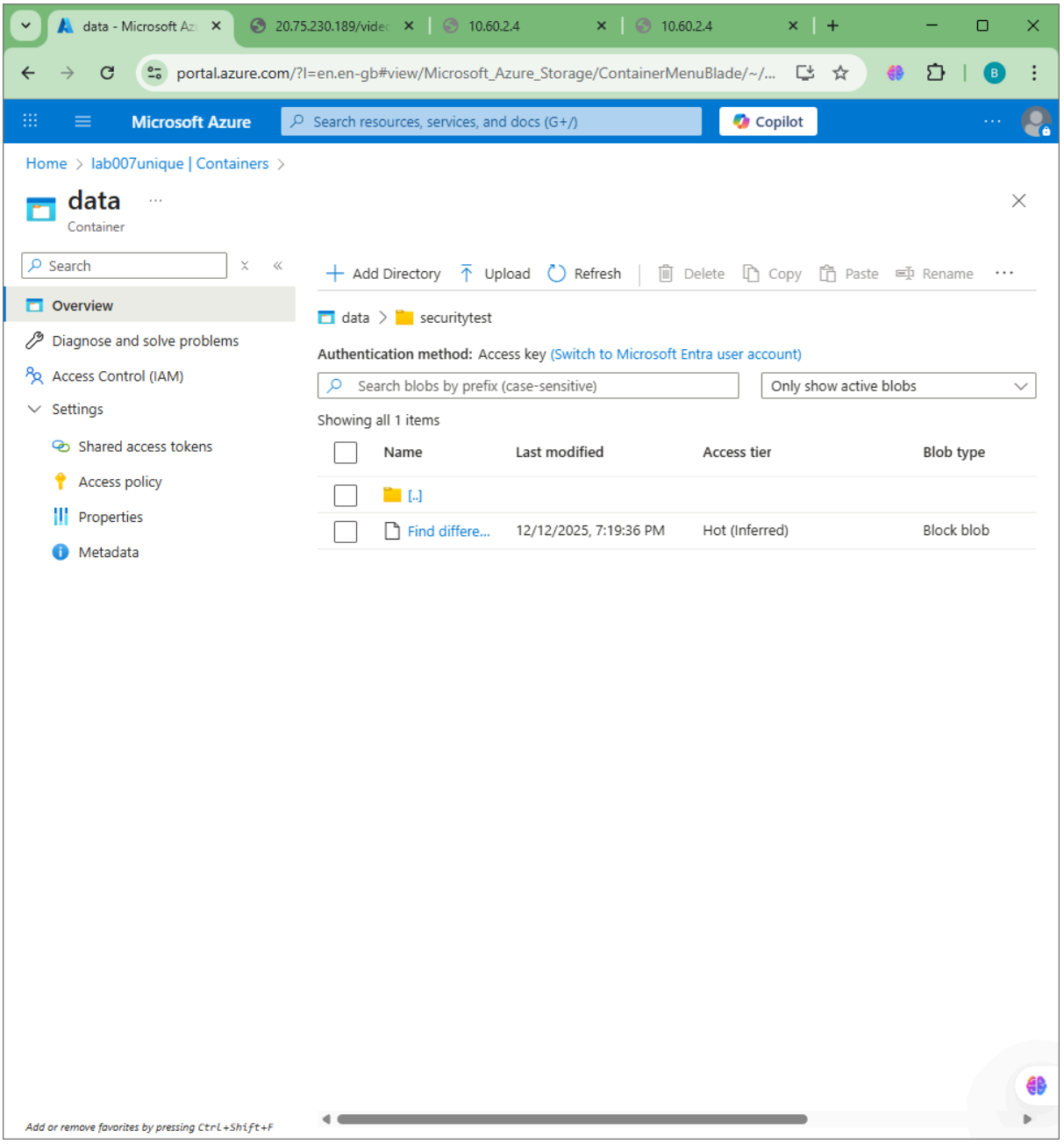
In this task, you will create and configure a storage account. The storage account will use geo-redundant storage and will not have public access.

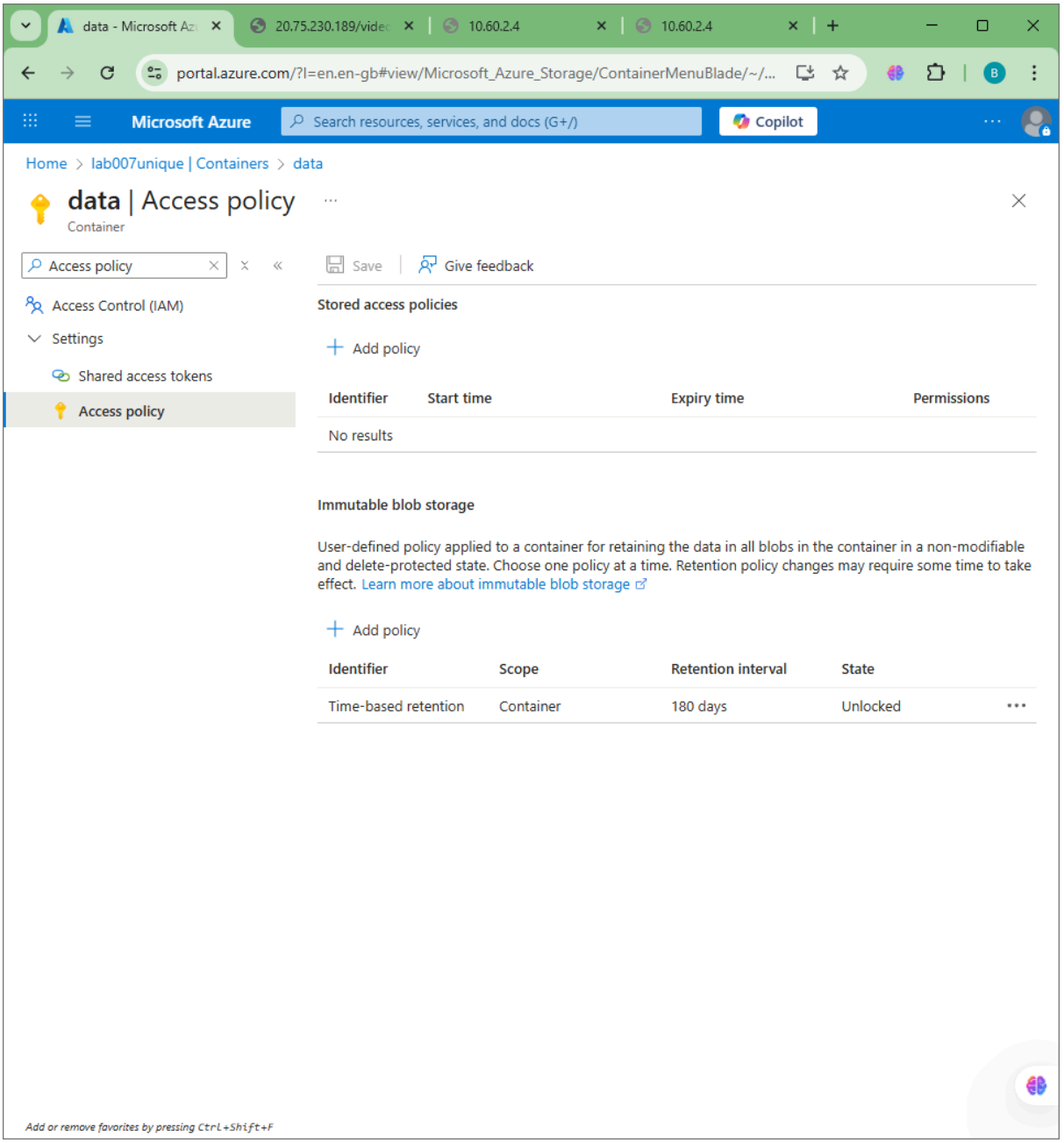

lab007unique - Mic
20.75.230.189/videc
10.60.2.4
10.60.2.4
portal.azure.com/?l=en.en-gb#@vladkeeksgmail.onmicrosoft.com/resource/subscriptio...
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
Home > lab007unique_1765559322965 | Overview >
lab007unique
Storage account
Enhance the security of this storage account
+2
Search
Overview
Activity log
Tags
Diagnose and solve problems
Access Control (IAM)
Data migration
Events
Storage browser
Storage Mover
Partner solutions
Resource visualizer
Data storage
Security + networking
Data management
Settings
Monitoring
Monitoring (classic)
Automation
Help
Add or remove favorites by pressing Ctrl+Shift+F
Upload
Open in Explorer
Delete
Move
Refresh
Essentials
JSON View
Resource group (move)
az104-rg7
Location
eastus
Primary/Secondary Location
Primary: East US, Secondary: West US
Subscription (move)
Azure subscription 1
Subscription ID
9889ebc0-ca1f-4e0d-8116-0764f6dbd196
Disk state
Primary: Available, Secondary: Available
Performance
Standard
Replication
Read-access geo-redundant storage (RA-G...
Account kind
StorageV2 (general purpose v2)
Provisioning state
Succeeded
Created
12/12/2025, 7:10:19 PM
Tags (edit)
Add tags
Properties
Monitoring
Capabilities (7)
Recommendations (0)
Tutorials
Tools + SDKs
Blob service
Hierarchical namespace
Disabled
Default access tier
Hot
Blob anonymous access
Disabled
Blob soft delete
Enabled (7 days)
Container soft delete
Enabled (7 days)
Security
Require secure transfer for REST API operations
Enabled
Storage account key access
Enabled
Minimum TLS version
Version 1.2
Infrastructure encryption
Disabled

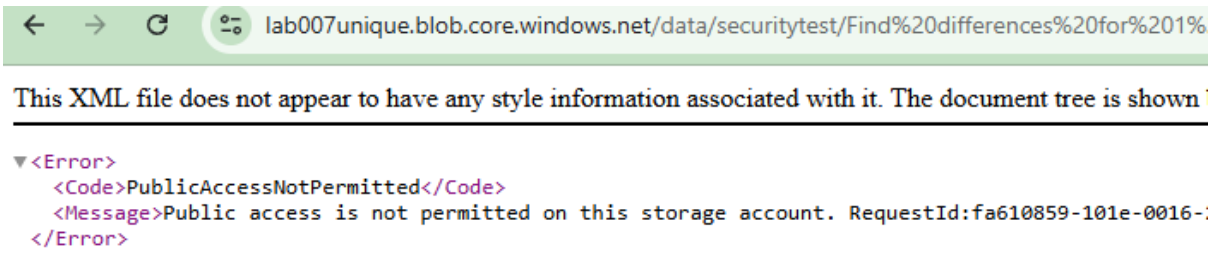


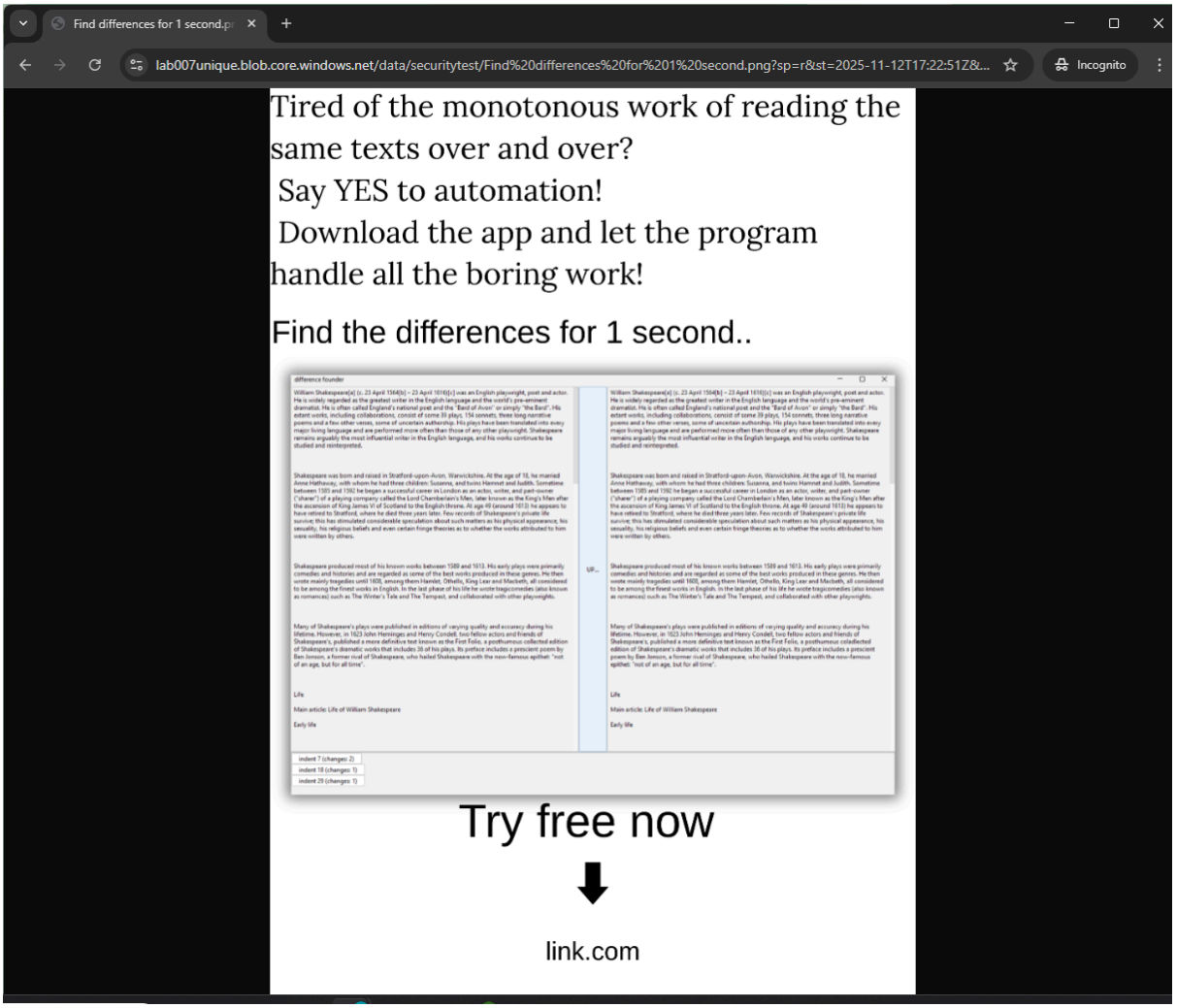
Task 2: Create and configure secure blob storage

In this task, you will create a blob container and upload an image. Blob containers are directory-like structures that store unstructured data.


data - Microsoft Az
20.75.230.189/vide
10.60.2.4
10.60.2.4
portal.azure.com/?l=en.en-gb#view/Microsoft_Azure_Storage/ContainerMenuBlade/~/...
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
Home > lab007unique | Containers >
data
Container
Search
Overview
Diagnose and solve problems
Access Control (IAM)
Settings
Shared access tokens
Access policy
Properties
Metadata
Add Directory
Upload
Refresh
Delete
Copy
Paste
Rename
data > securitytest
Authentication method: Access key (Switch to Microsoft Entra user account)
Search blobs by prefix (case-sensitive)
Only show active blobs
Showing all 1 items
Name
Last modified
Access tier
Blob type
[..]
Find differe...
12/12/2025, 7:19:36 PM
Hot (Inferred)
Block blob
Add or remove favorites by pressing Ctrl+Shift+F

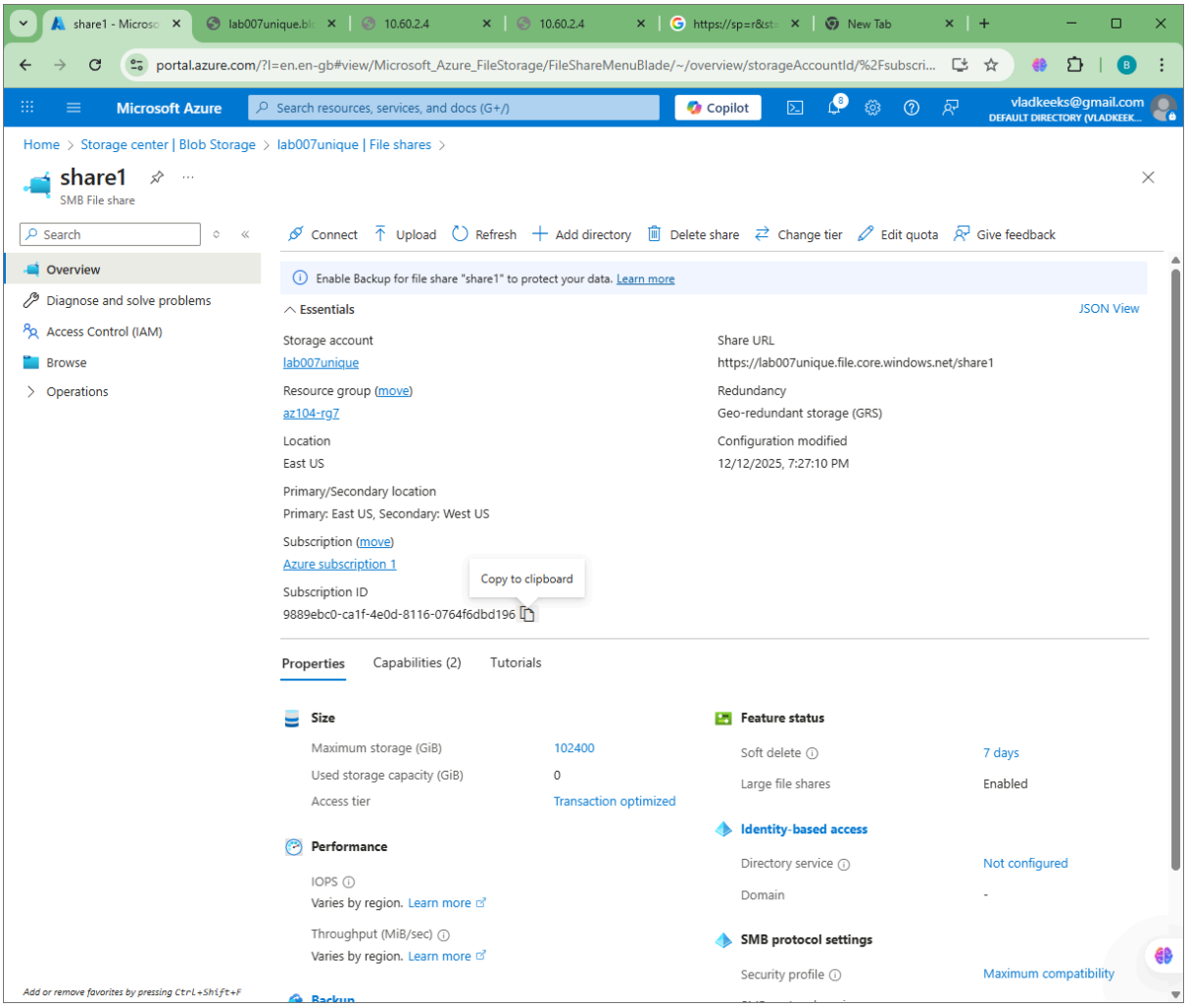

data - Microsoft Az
20.75.230.189/vide
10.60.2.4
10.60.2.4
portal.azure.com/?l=en.en-gb#view/Microsoft_Azure_Storage/ContainerMenuBlade/~/...
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
Home > lab007unique | Containers > data
data | Access policy
Container
Access policy
Save
Give feedback
Access Control (IAM)
Settings
Shared access tokens
Access policy
Stored access policies
Add policy
Identifier
Start time
Expiry time
Permissions
No results
Immutable blob storage
User-defined policy applied to a container for retaining the data in all blobs in the container in a non-modifiable and delete-protected state. Choose one policy at a time. Retention policy changes may require some time to take effect. Learn more about immutable blob storage
Add policy
Identifier
Scope
Retention interval
State
Time-based retention
Container
180 days
Unlocked
Add or remove favorites by pressing Ctrl+Shift+F

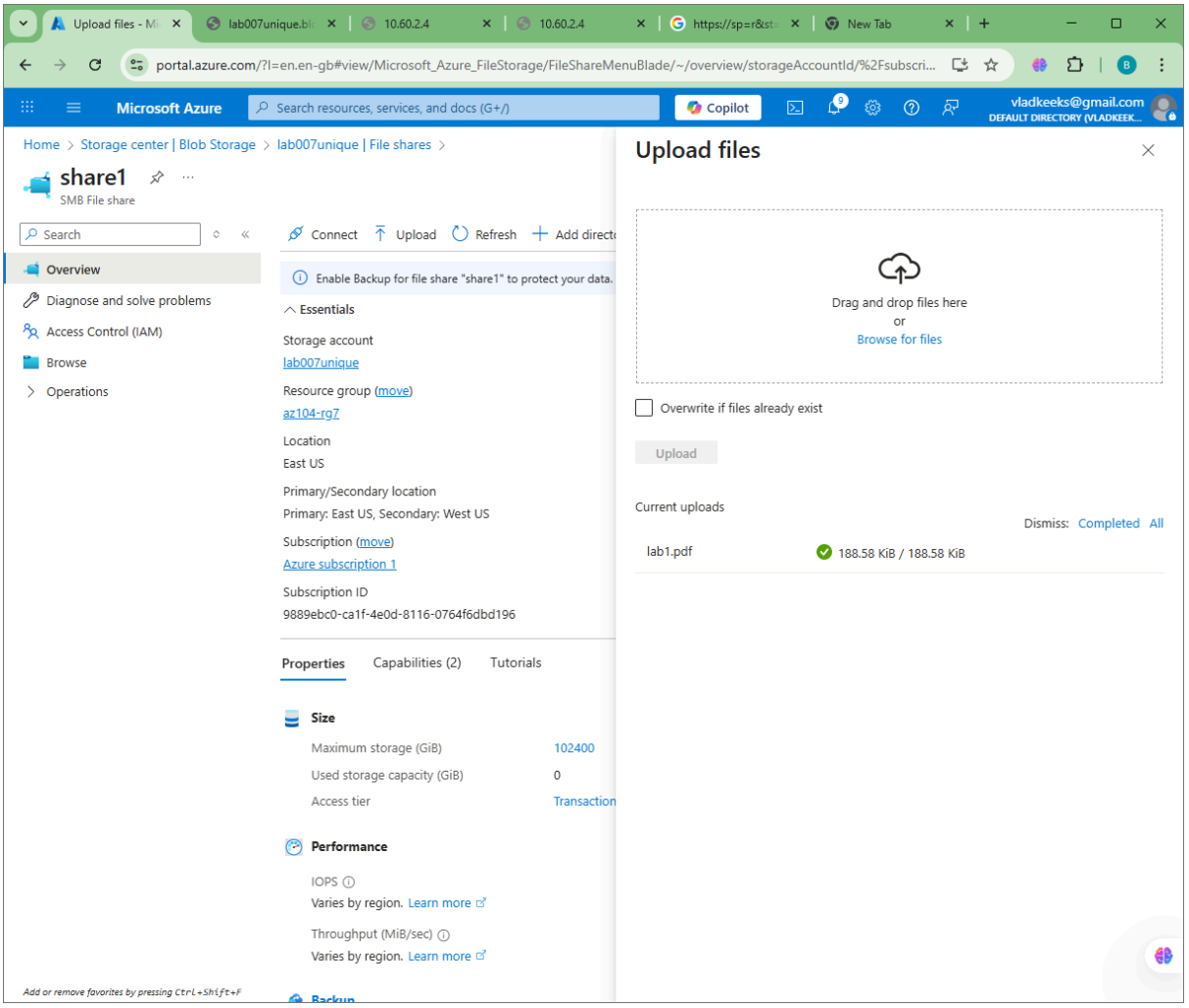

lab007unique.blob.core.windows.net/data/securitytest/Find%20differences%20for%201%
This XML file does not appear to have any style information associated with it. The document tree is shown
<Error>
<Code>PublicAccessNotPermitted</Code>
<Message>Public access is not permitted on this storage account. RequestId:fa610859-101e-0016-
</Error>

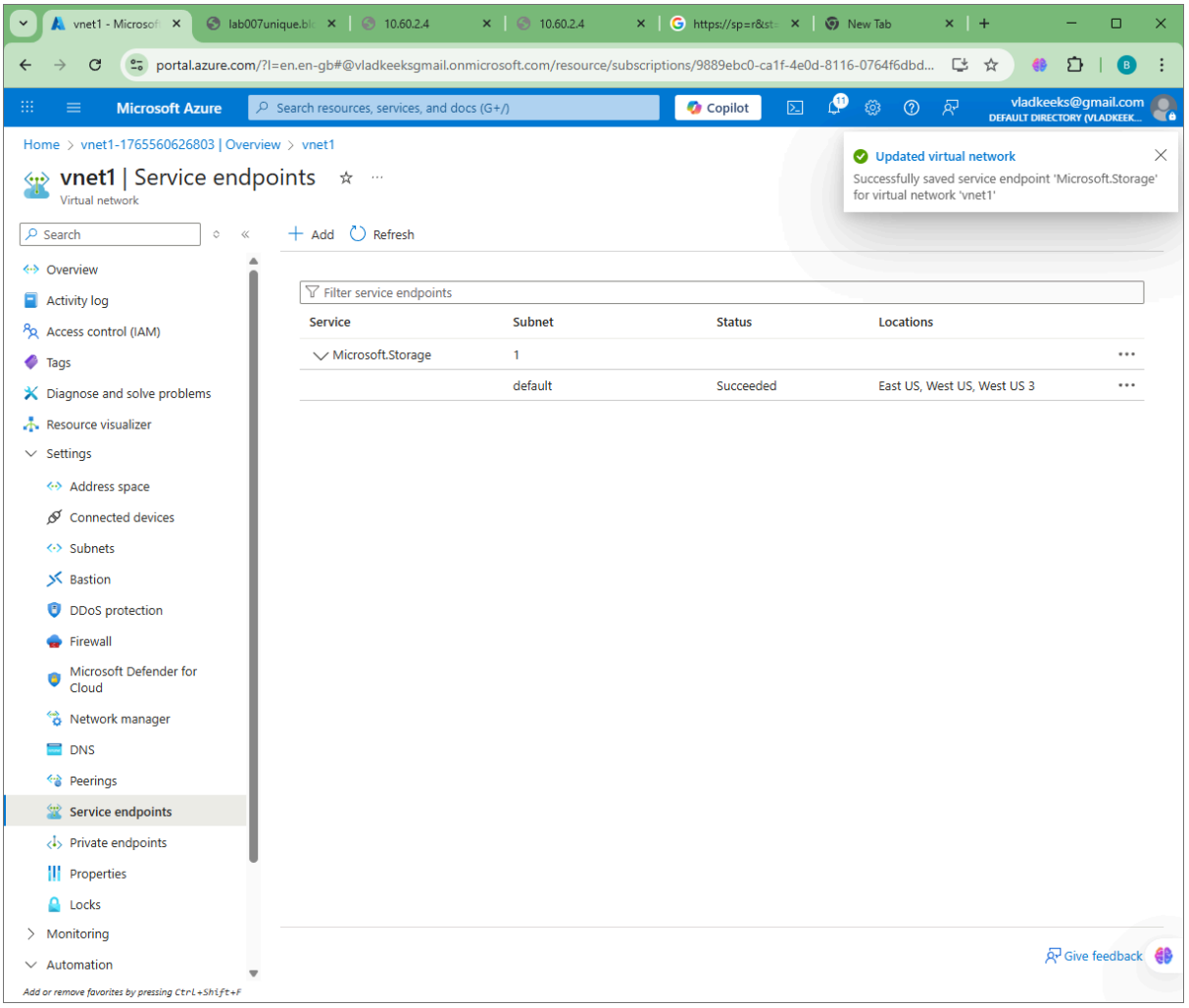


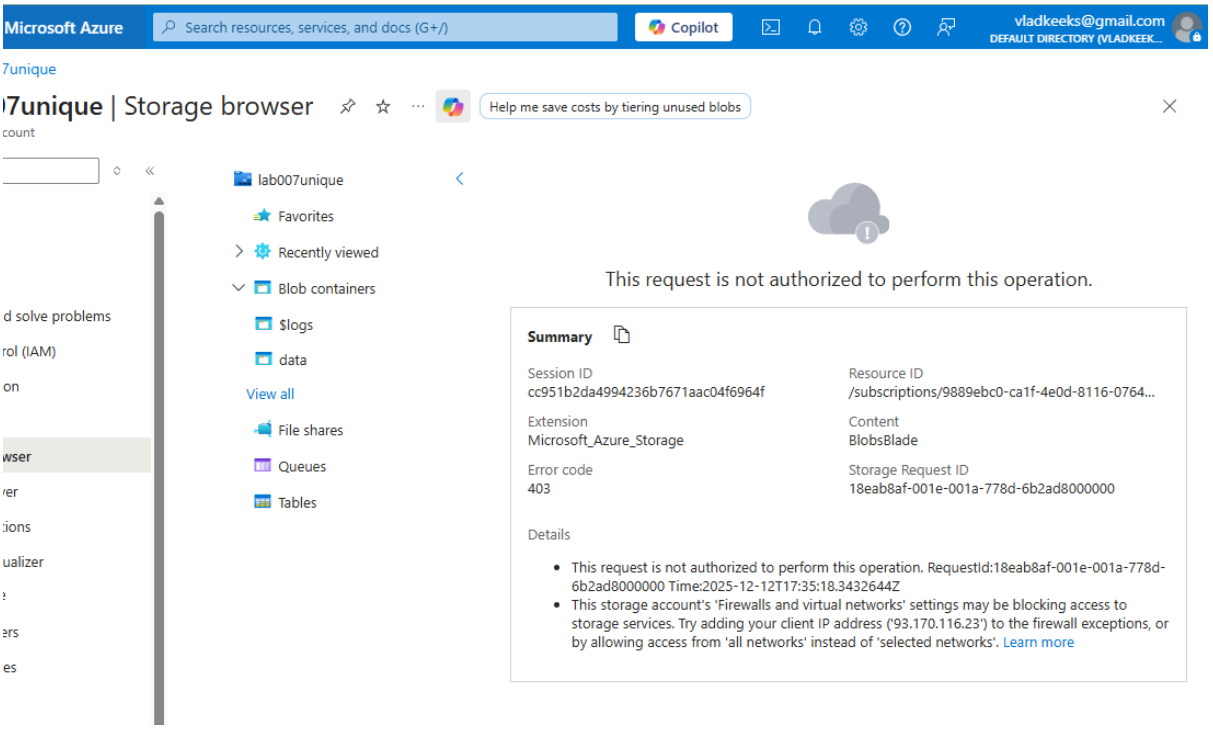
Task 3: Create and configure an Azure File storage

In this task, you will create and configure Azure File shares. You will use Storage Browser to manage the file share.


share1 - Microso
lab007unique.bl
10.60.2.4
10.60.2.4
https://sp=r&st=
New Tab
portal.azure.com/?l=en.en-gb#view/Microsoft_Azure_FileStorage/FileShareMenuBlade/~/overview/storageAccountId/%2Fsubscri...
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
vladkeeks@gmail.com
DEFAULT DIRECTORY (VLADKEEK...
Home > Storage center | Blob Storage > lab007unique | File shares >
share1
SMB File share
Search
Overview
Diagnose and solve problems
Access Control (IAM)
Browse
Operations
Add or remove favorites by pressing Ctrl+Shift+F
Connect
Upload
Refresh
Add directory
Delete share
Change tier
Edit quota
Give feedback
Enable Backup for file share "share1" to protect your data. Learn more
Essentials
JSON View
Storage account
lab007unique
Resource group (move)
az104-rg7
Location
East US
Primary/Secondary location
Primary: East US, Secondary: West US
Subscription (move)
Azure subscription 1
Subscription ID
9889ebc0-ca1f-4e0d-8116-0764f6dbd196
Copy to clipboard
Share URL
https://lab007unique.file.core.windows.net/share1
Redundancy
Geo-redundant storage (GRS)
Configuration modified
12/12/2025, 7:27:10 PM
Properties
Capabilities (2)
Tutorials
Size
Maximum storage (GiB)
102400
Used storage capacity (GiB)
0
Access tier
Transaction optimized
Performance
IOPS
Varies by region. Learn more
Throughput (MiB/sec)
Varies by region. Learn more
Backup
Feature status
Soft delete
7 days
Large file shares
Enabled
Identity-based access
Directory service
Not configured
Domain
-
SMB protocol settings
Security profile
Maximum compatibility


Upload files - Mi
lab007unique.bl
10.60.2.4
10.60.2.4
https://sp=r&st=
New Tab
portal.azure.com/?l=en.en-gb#view/Microsoft_Azure_FileStorage/FileShareMenuBlade/~/overview/storageAccountId/%2Fsubscri...
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
vladkeeks@gmail.com
DEFAULT DIRECTORY (VLADKEEK...
Home > Storage center | Blob Storage > lab007unique | File shares >
share1
SMB File share
Search
Overview
Diagnose and solve problems
Access Control (IAM)
Browse
Operations
Connect
Upload
Refresh
Add direct
Enable Backup for file share "share1" to protect your data.
Essentials
Storage account
lab007unique
Resource group (move)
az104-rg7
Location
East US
Primary/Secondary location
Primary: East US, Secondary: West US
Subscription (move)
Azure subscription 1
Subscription ID
9889ebc0-ca1f-4e0d-8116-0764f6dbd196
Properties
Capabilities (2)
Tutorials
Size
Maximum storage (GiB)
102400
Used storage capacity (GiB)
0
Access tier
Transaction
Performance
IOPS
Varies by region. Learn more
Throughput (MiB/sec)
Varies by region. Learn more
Add or remove favorites by pressing Ctrl+Shift+F
Upload files
Drag and drop files here
or
Browse for files
Overwrite if files already exist
Upload
Current uploads
Dismiss: Completed All
lab1.pdf
188.58 KiB / 188.58 KiB


vnet1 - Microsof
lab007unique.bl
10.60.2.4
10.60.2.4
https://sp=r&st=
New Tab
portal.azure.com/?l=en.en-gb#@vladkeeksgmail.onmicrosoft.com/resource/subscriptions/9889ebc0-ca1f-4e0d-8116-0764f6dbd...
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
vladkeeks@gmail.com
DEFAULT DIRECTORY (VLADKEEK...
Home > vnet1-1765560626803 | Overview > vnet1
vnet1 | Service endpoints
Virtual network
Updated virtual network
Successfully saved service endpoint 'Microsoft.Storage' for virtual network 'vnet1'
Search
Add
Refresh
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Resource visualizer
Settings
Address space
Connected devices
Subnets
Bastion
DDoS protection
Firewall
Microsoft Defender for Cloud
Network manager
DNS
Peerings
Service endpoints
Private endpoints
Properties
Locks
Monitoring
Automation
Add or remove favorites by pressing Ctrl+Shift+F
Filter service endpoints
Service
Subnet
Status
Locations
Microsoft.Storage
1
default
Succeeded
East US, West US, West US 3
Give feedback


Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
vladkeeks@gmail.com
DEFAULT DIRECTORY (VLADKEEK...
7unique
7unique | Storage browser
Help me save costs by tiering unused blobs
count
lab007unique
Favorites
Recently viewed
Blob containers
$logs
data
View all
File shares
Queues
Tables
This request is not authorized to perform this operation.
Summary
Session ID
cc951b2da4994236b7671aac04f6964f
Resource ID
/subscriptions/9889ebc0-ca1f-4e0d-8116-0764...
Extension
Microsoft_Azure_Storage
Content
BlobsBlade
Error code
403
Storage Request ID
18eab8af-001e-001a-778d-6b2ad8000000
Details
This request is not authorized to perform this operation. RequestId:18eab8af-001e-001a-778d-6b2ad8000000 Time:2025-12-12T17:35:18.3432644Z
This storage account's 'Firewalls and virtual networks' settings may be blocking access to storage services. Try adding your client IP address ('93.170.116.23') to the firewall exceptions, or by allowing access from 'all networks' instead of 'selected networks'. Learn more