Azure Identity, Access, and Storage Management

Project Overview

This document summarizes hands-on experience managing Azure identity and access controls, subscription governance, and secure storage services using the Azure Portal.

- Implemented governance, access control, and secure storage best practices

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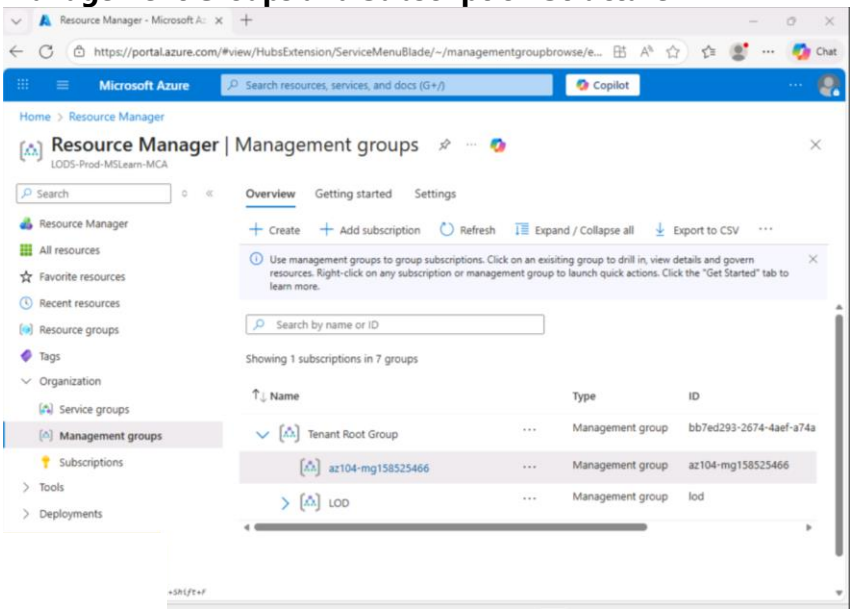
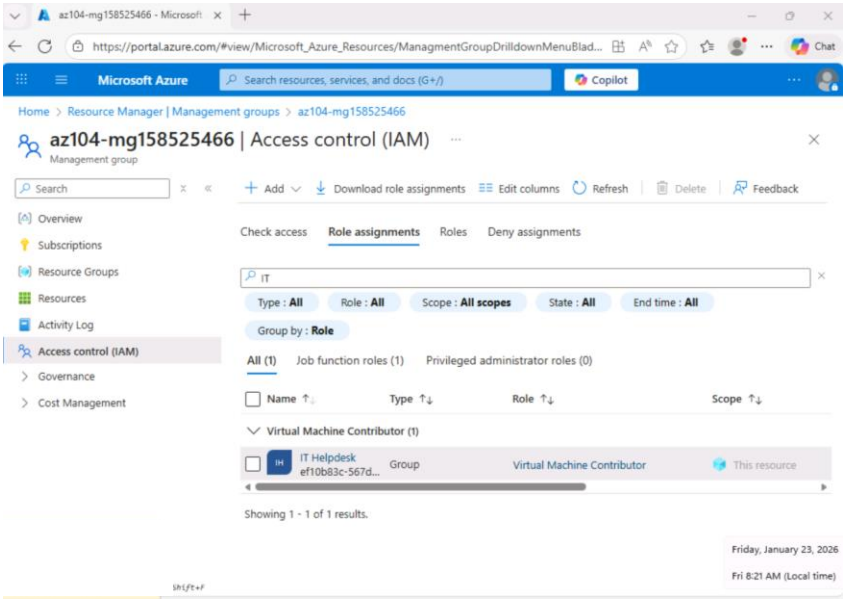
Subscription Governance and Role-Based Access Control (RBAC)

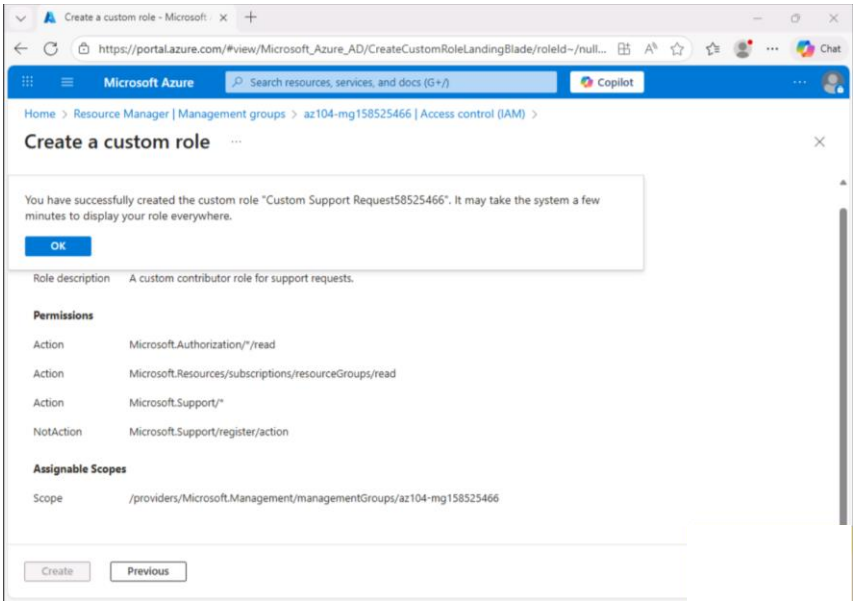
This section documents the management of Azure subscriptions and access control using management groups and role-based access control (RBAC), including role assignment, custom role creation, and monitoring access changes through audit logs.

Management Groups and Subscription Structure

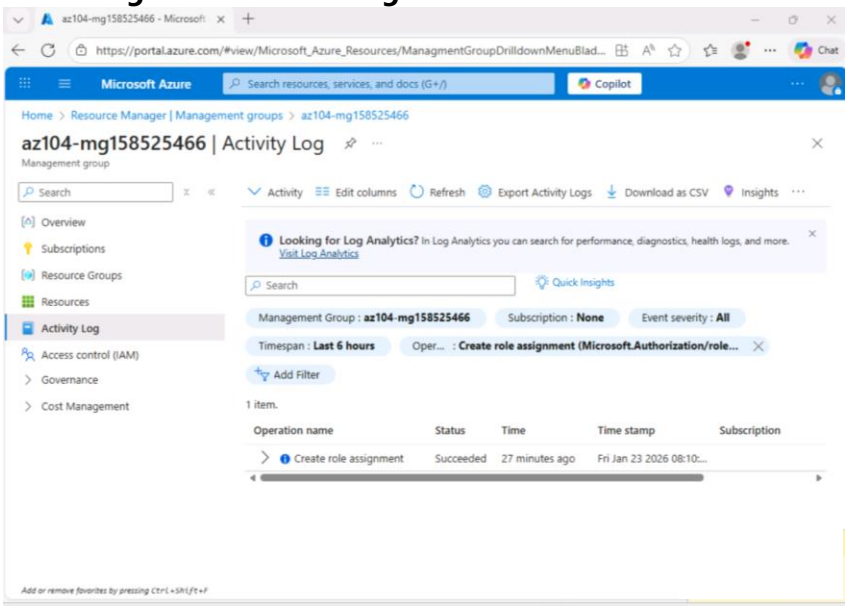


Built-in and Custom RBAC Roles





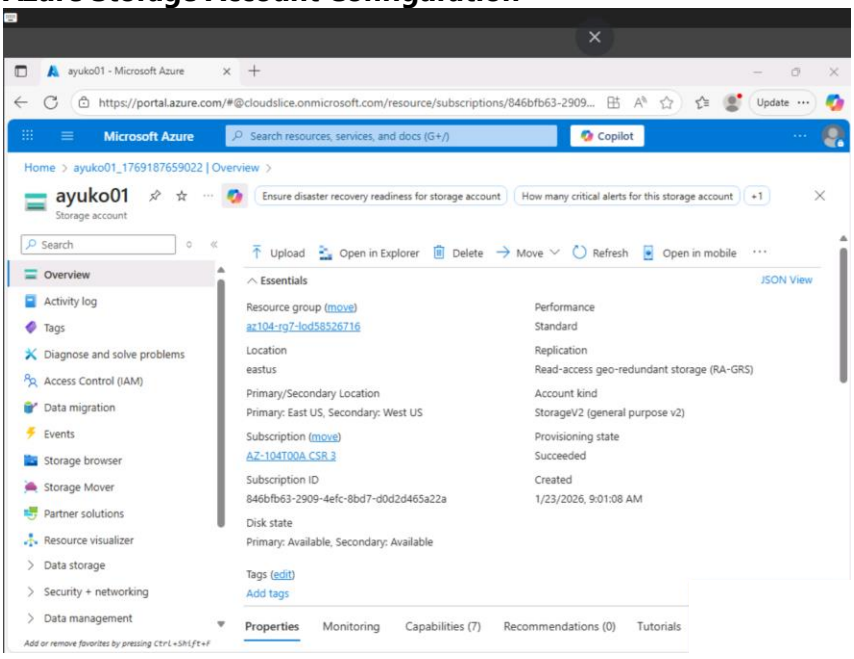
Role Assignment Monitoring

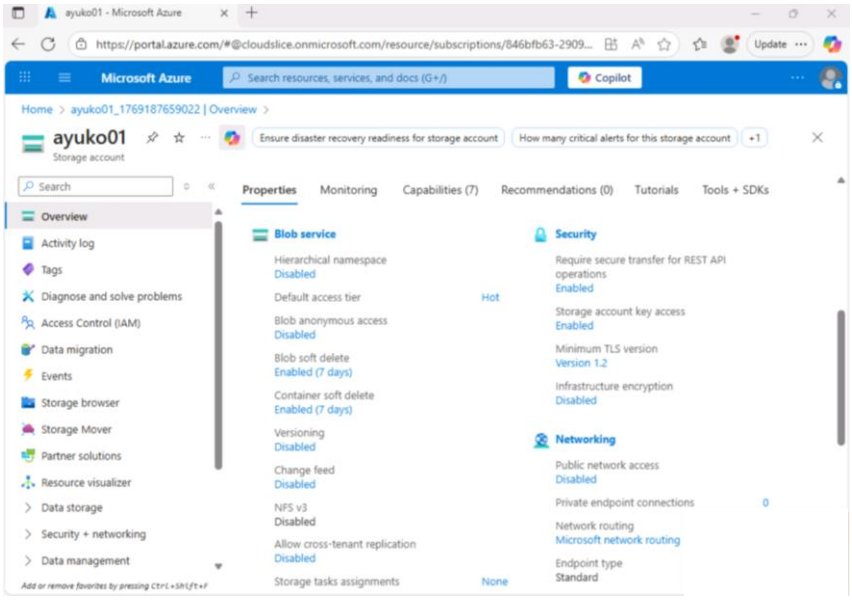


Secure Azure Storage Configuration

This section documents the configuration of Azure Storage services with a focus on security, access control, and network restrictions, including Blob and File storage setup and data access management.

Azure Storage Account Configuration

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Storage account
Ensure disaster recovery readiness for storage account
How many critical alerts for this storage account
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Add or remove favorites by pressing Ctrl+Shift+F
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)
Versioning
Disabled
Change feed
Disabled
NFS v3
Disabled
Allow cross-tenant replication
Disabled
Storage tasks assignments
None
Security
Require secure transfer for REST API operations
Enabled
Storage account key access
Enabled
Minimum TLS version
Version 1.2
Infrastructure encryption
Disabled
Networking
Public network access
Disabled
Private endpoint connections
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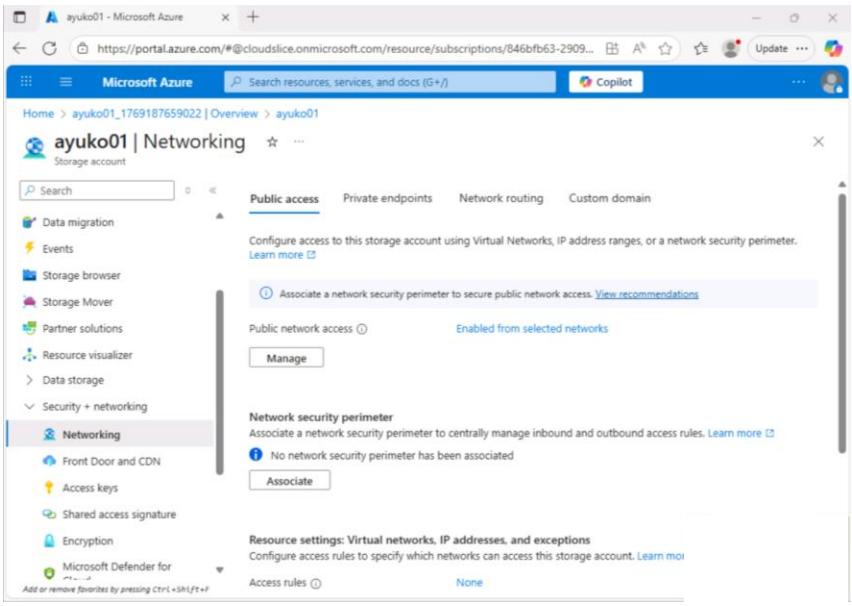
Network routing
Microsoft network routing
Endpoint type
Standard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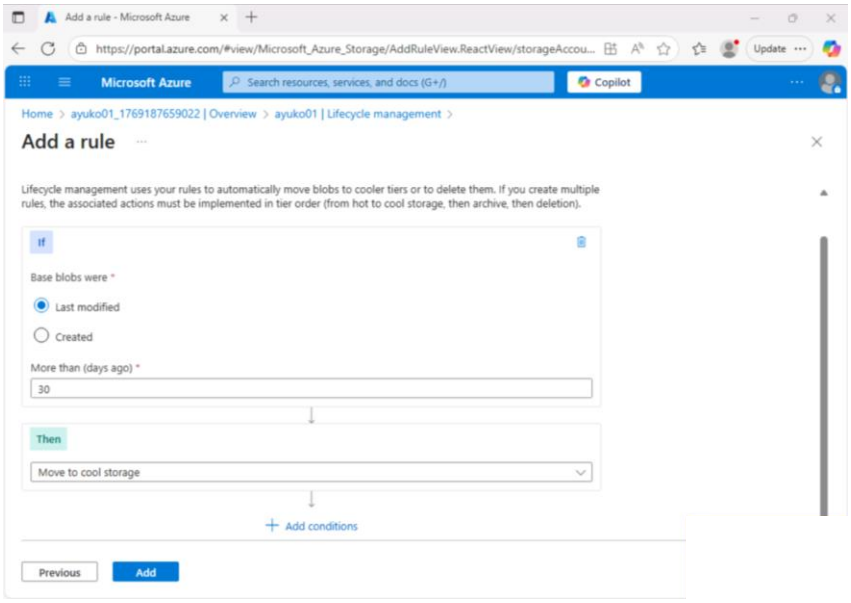
Networking
Front Door and CDN
Access keys
Shared access signature
Encryption
Microsoft Defender for
Add or remove favorites by pressing Ctrl+Shift+F
Configure access to this storage account using Virtual Networks, IP address ranges, or a network security perimeter.
Learn more
Associate a network security perimeter to secure public network access. View recommendations
Public network access
Enabled from selected networks
Manage
Network security perimeter
Associate a network security perimeter to centrally manage inbound and outbound access rules. Learn more
No network security perimeter has been associated
Associate
Resource settings: Virtual networks, IP addresses, and exceptions
Configure access rules to specify which networks can access this storage account. Learn mor
Access rules
None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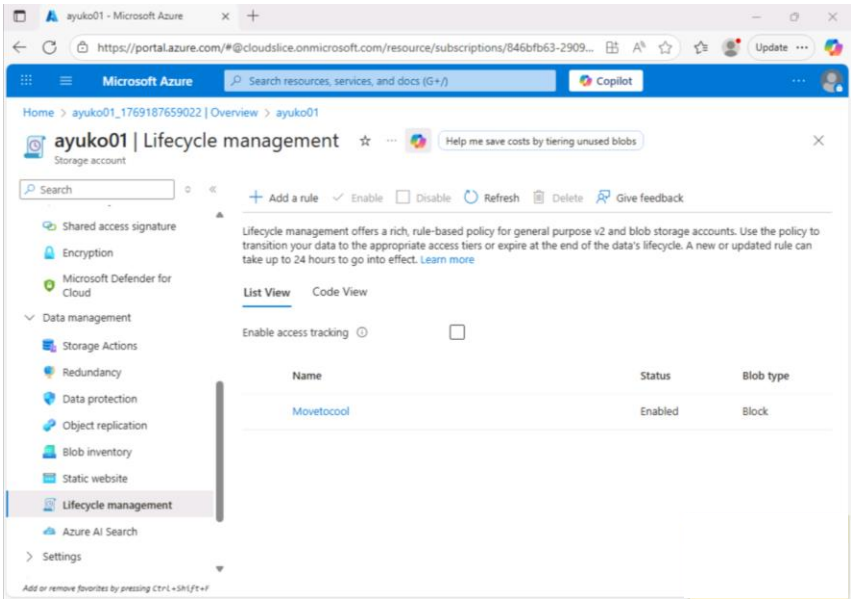
Add a rule
Lifecycle management uses your rules to automatically move blobs to cooler tiers or to delete them. If you create multiple rules, the associated actions must be implemented in tier order (from hot to cool storage, then archive, then deletion).
If
Base blobs were *
Last modified
Created
More than (days ago) *
30
Then
Move to cool storage
Add conditions
Previous
Add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Storage Actions
Redundancy
Data protection
Object replication
Blob inventory
Static website
Lifecycle management
Azure AI Search
Settings
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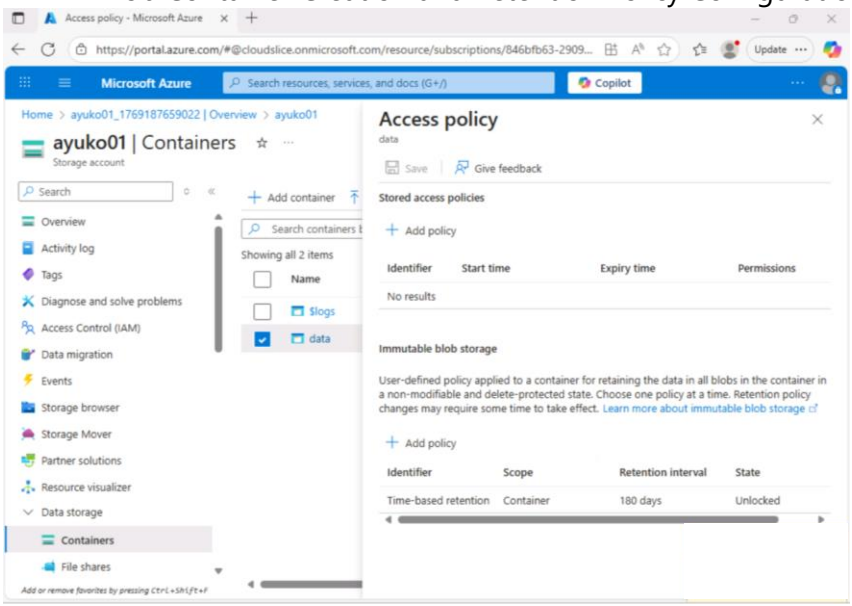
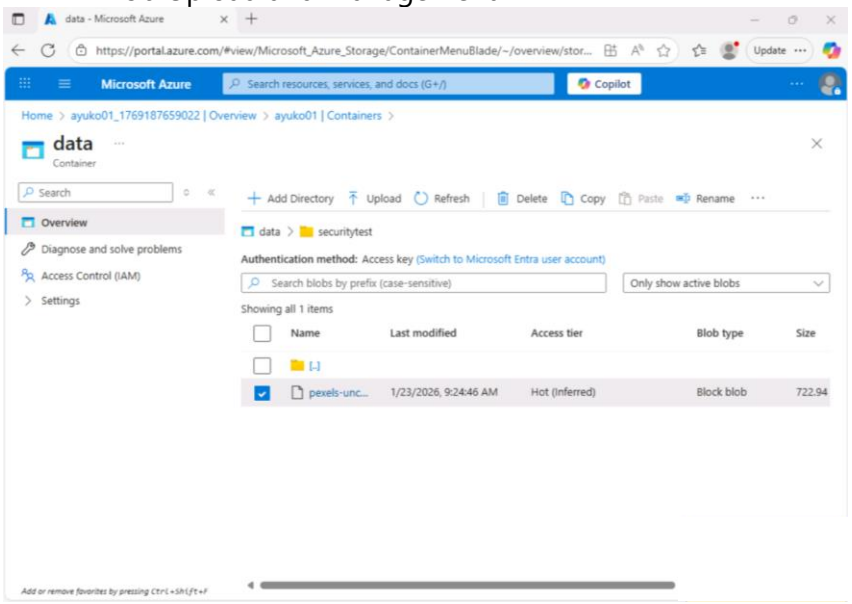
Add a rule
Enable
Disable
Refresh
Delete
Give feedback
Lifecycle management offers a rich, rule-based policy for general purpose v2 and blob storage accounts. Use the policy to transition your data to the appropriate access tiers or expire at the end of the data's lifecycle. A new or updated rule can take up to 24 hours to go into effect. Learn more
List View
Code View
Enable access tracking
Name
Status
Blob type
Movetocool
Enabled
Block

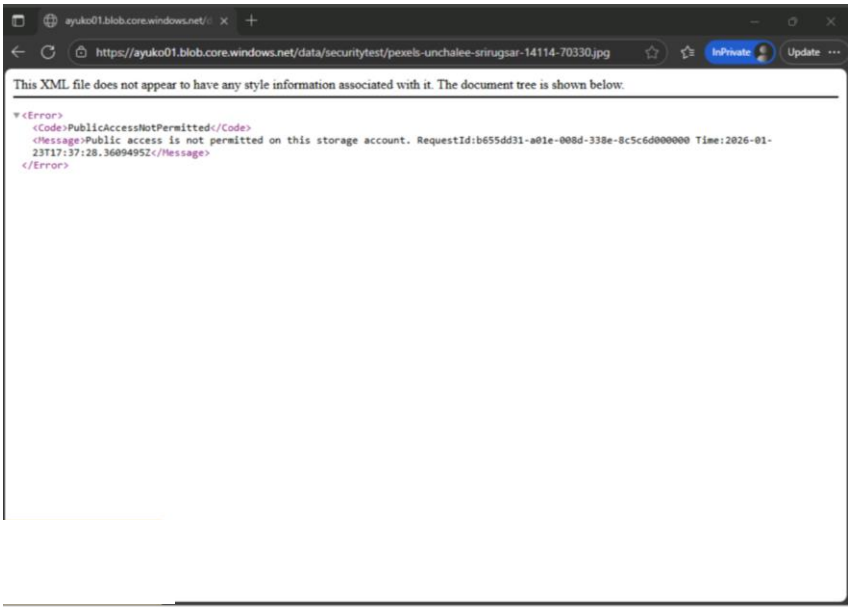
Secure Blob Storage and Retention Policies

- Blob Container Creation and Retention Policy Configuration

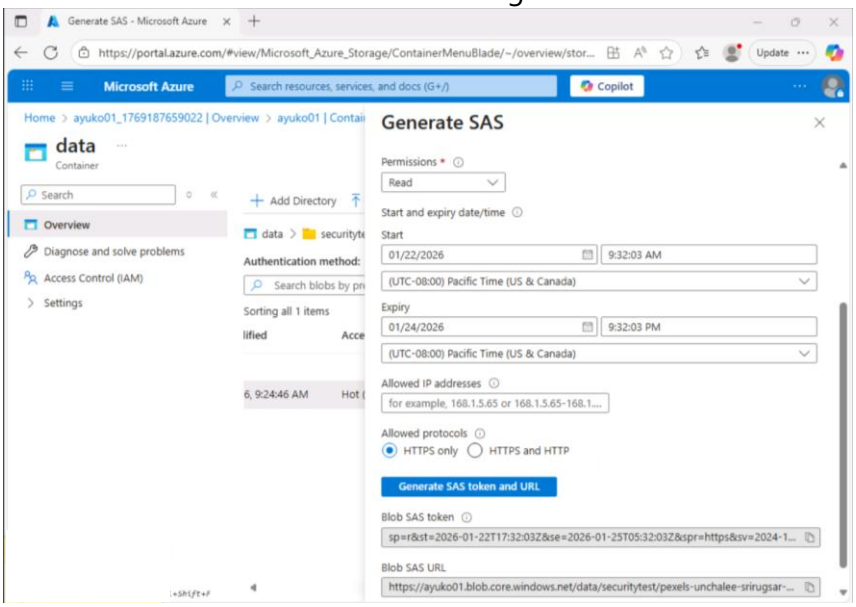


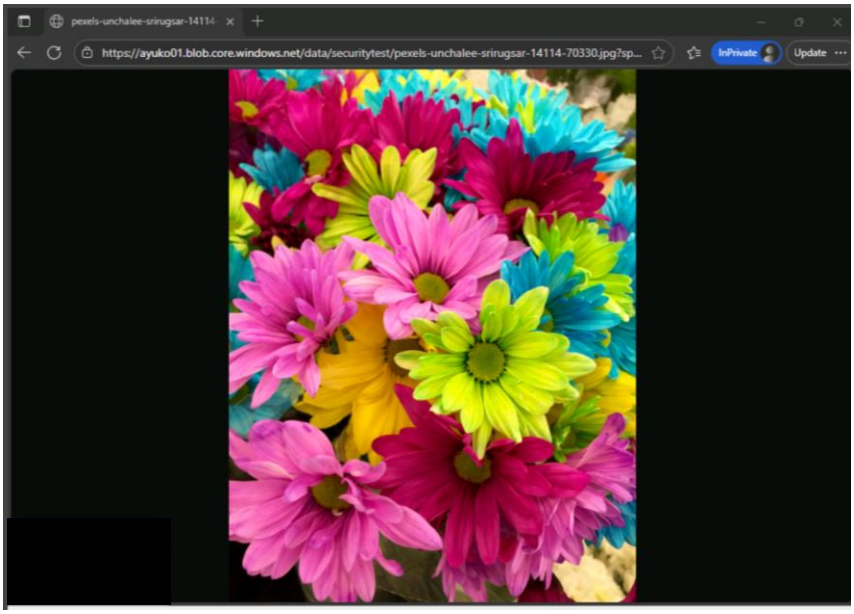
- Blob Upload and Management



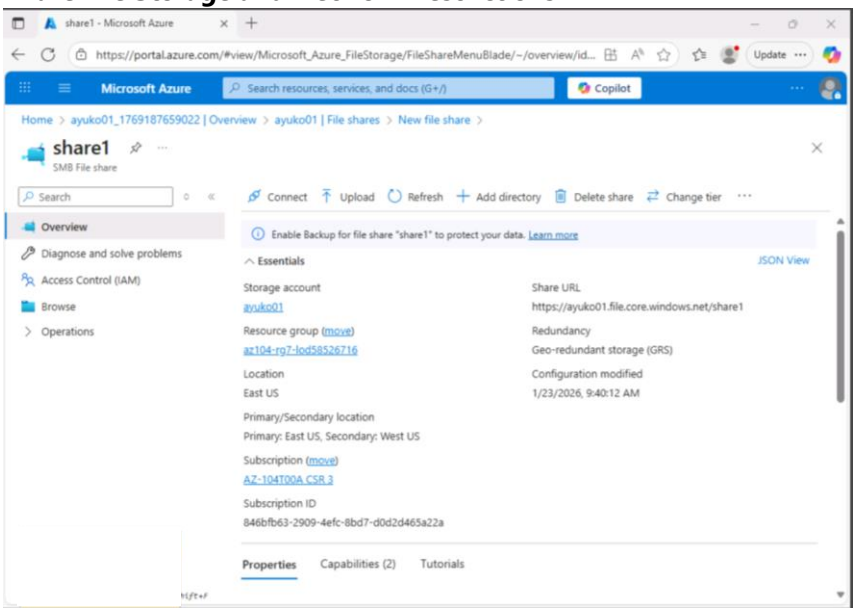


- Controlled Access to Blob Storage

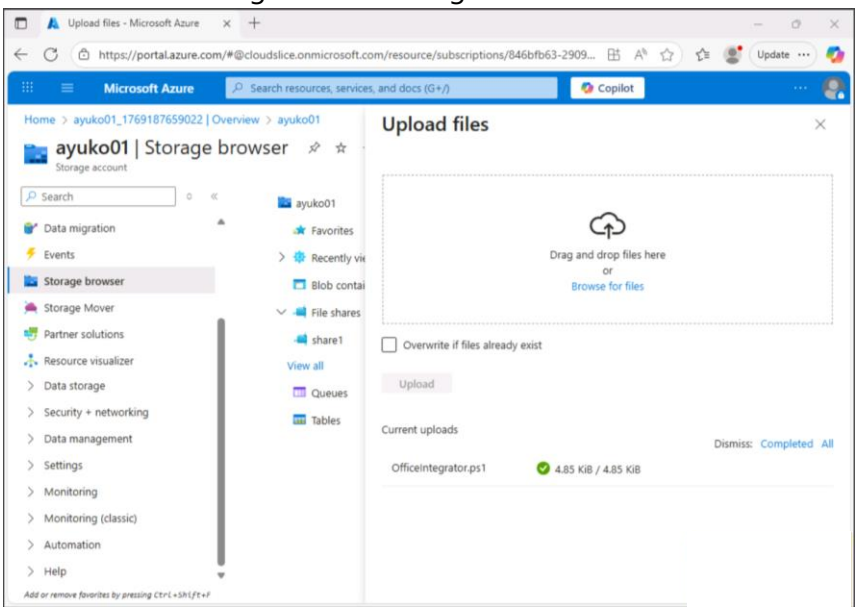




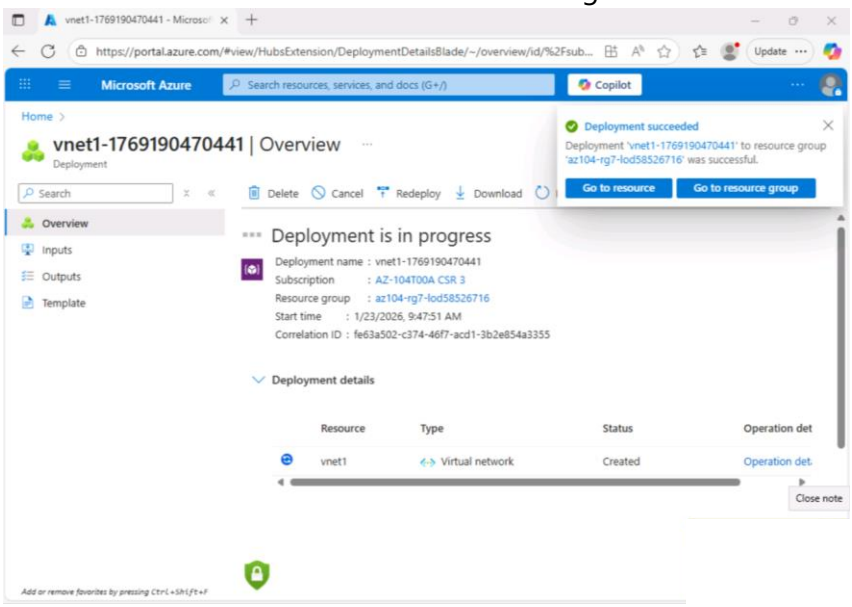
Azure File Storage and Network Restrictions

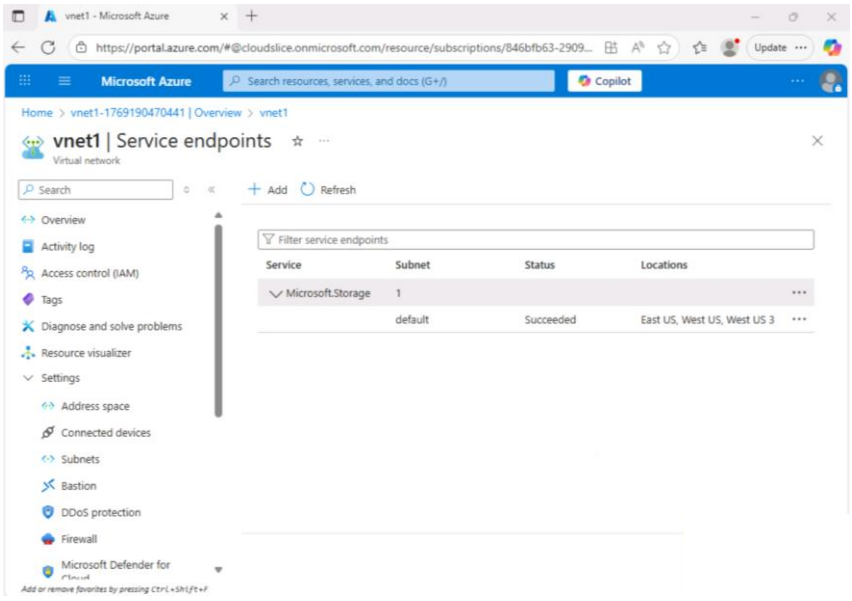


- Azure Storage Browser Usage



- Network Access Restrictions for Storage Accounts

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Subnets
Bastion
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Firewall
Microsoft Defender for
Add or remove favorites by pressing Ctrl+Shift+F
Filter service endpoints
Service
Subnet
Status
Locations
Microsoft.Storage
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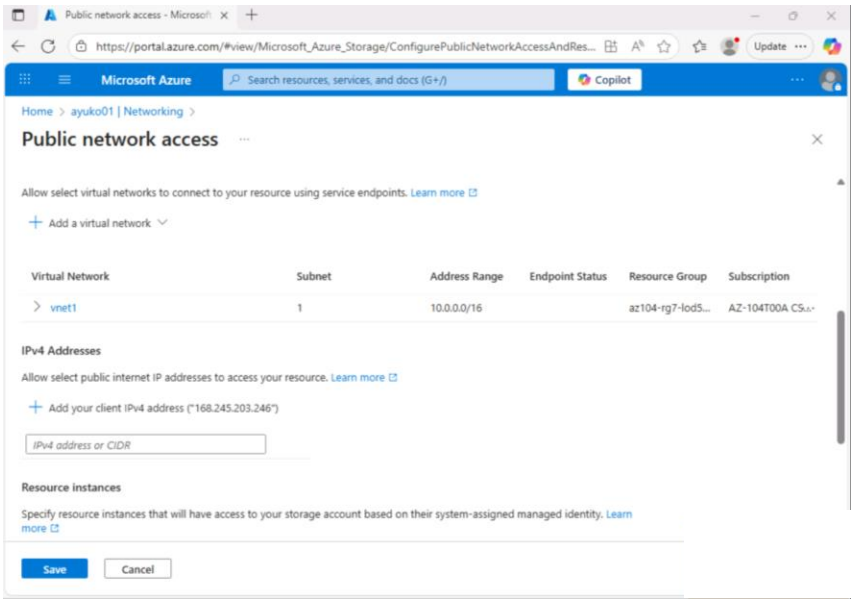
default
Succeeded
East US, West US, West US 3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Public network access
Allow select virtual networks to connect to your resource using service endpoints. Learn more
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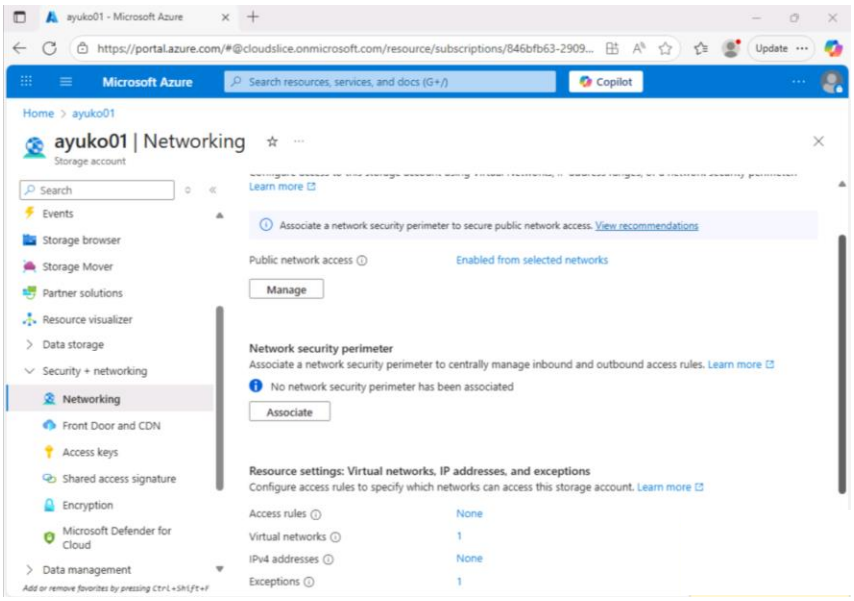
Subnet
Address Range
Endpoint Status
Resource Group
Subscription
vnet1
1
10.0.0.0/16
az104-rg7-lod5...
AZ-104T00A CS...
IPv4 Addresses
Allow select public internet IP addresses to access your resource. Learn more
Add your client IPv4 address ("168.245.203.246")
IPv4 address or CIDR
Resource instances
Specify resource instances that will have access to your storage account based on their system-assigned managed identity. Learn more
Save
Cancel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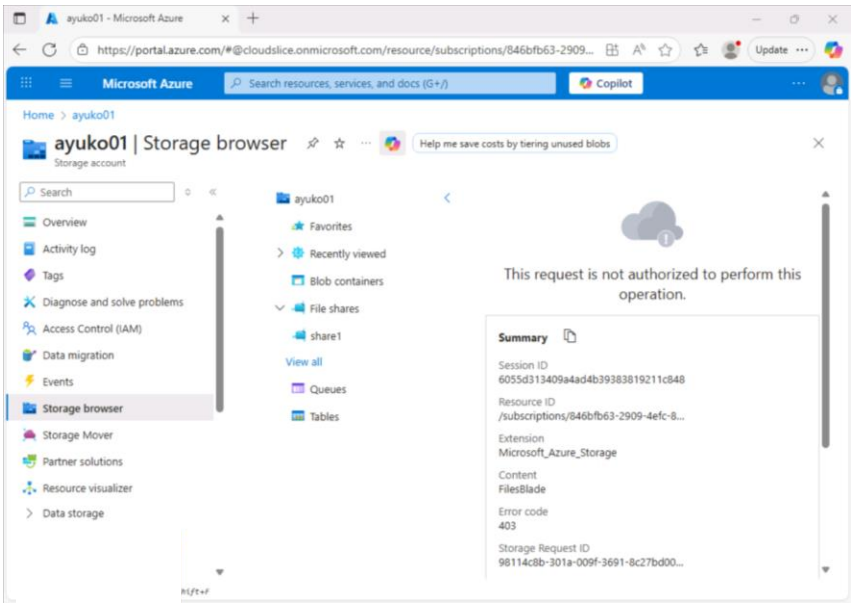
Resource settings: Virtual networks, IP addresses, and exceptions
Configure access rules to specify which networks can access this storage account. Learn more
Access rules
None
Virtual networks
1
IPv4 addresses
None
Exceptions
1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Queues
Tables
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Summary
Session ID
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Resource ID
/subscriptions/846bfb63-2909-4efc-8...
Extension
Microsoft_Azure_Storage
Content
FilesBlade
Error code
403
Storage Request ID
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