

Introduction to Cloud Computing

LAB 09

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BS-SE 7B

Task 1: Create a Policy assignment

- From the **All services** blade, search for and select **Policy**.

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes the Microsoft Azure logo, a search bar, and the Copilot icon. The user's profile is visible on the right, showing the email address bsse2280155@szabist.pk. The main content area is titled "Policy Overview" and includes a sidebar with navigation options: Overview, Compliance, Remediation, Events, and Authoring. The Overview section displays four key metrics: Policy Compliance (212 - Compliant, 15 - Non-compliant), Initiative Compliance (0 - Compliant, 1 - Non-compliant), Overall resource compliance (0% with a progress bar), and Pending Remediation (0). A list of policy assignments is shown at the bottom, including "Require tag on Resource Group", "Not allowed resource types", "Audit Windows VMs for security", and "Enable Azure Monitor for VMs".

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

bsse2280155@szabist.pk
DEFAULT DIRECTORY (BSSE2280155@szabist.pk)

Sign out

Microsoft

bsse2280155@szabist.pk
My Microsoft account
Switch directory

Sign in with a different account

Require tag on Resource Group
Enforce existence of a tag on Resource Group.

Not allowed resource types
Block the creation of specified resource types.

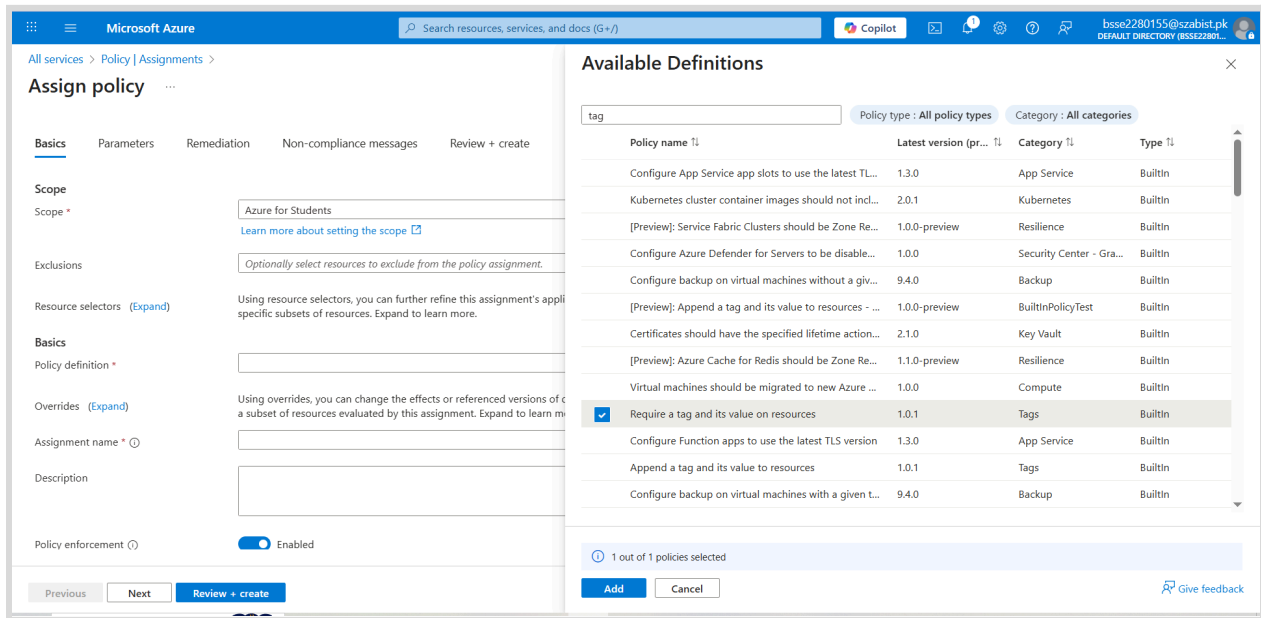
Audit Windows VMs for security
Deploy security baselines for Windows VMs.

Enable Azure Monitor for VMs
Install monitoring and dependency agents on VMs.

Give feedback

Add or remove favorites by pressing Ctrl+Shift+F

- Scroll down to the **Authoring** section, click **Assignments**, and then click **Assign Policy** from the top of the page.



Assign policy

Basics | Parameters | Remediation | Non-compliance messages | Review + create

Scope

Scope * Azure for Students
[Learn more about setting the scope](#)

Exclusions

Optionally select resources to exclude from the policy assignment.

Resource selectors (Expand)

Using resource selectors, you can further refine this assignment's application to specific subsets of resources. Expand to learn more.

Basics

Policy definition *

Overrides (Expand)

Using overrides, you can change the effects or referenced versions of a subset of resources evaluated by this assignment. Expand to learn more.

Assignment name *

Description

Policy enforcement ☒ Enabled

[Previous](#) [Next](#) [Review + create](#)

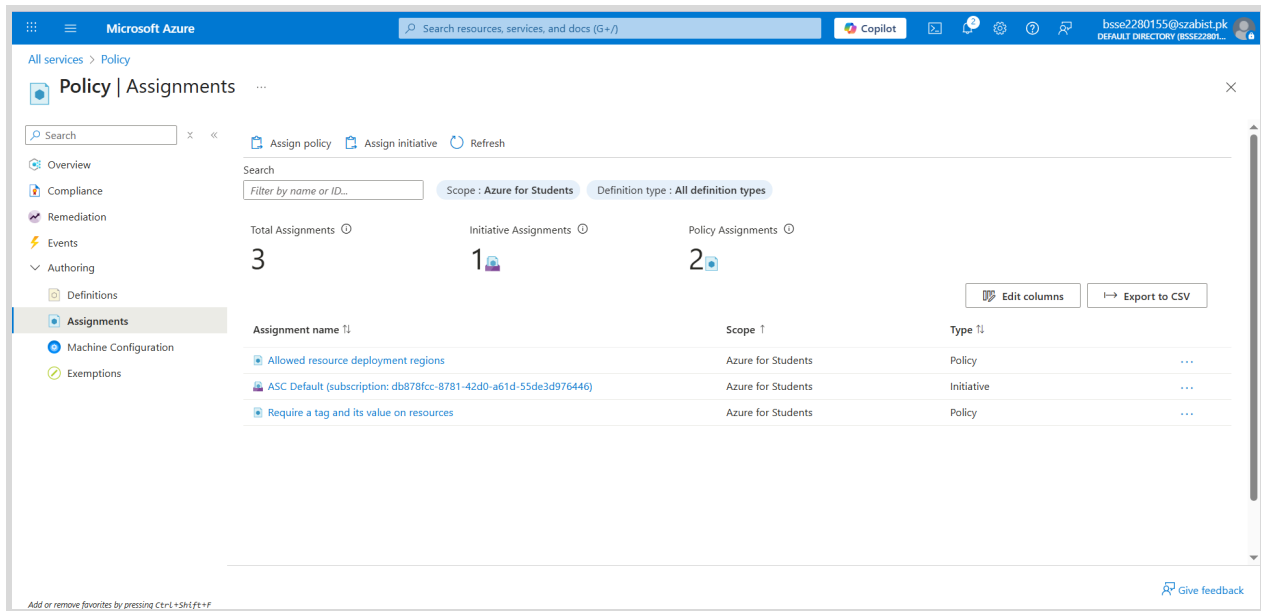
Available Definitions

tag Policy type: All policy types Category: All categories

| Policy name | Latest version (pr...) | Category | Type |
|--|------------------------|--------------------------|---------|
| Configure App Service app slots to use the latest TL... | 1.3.0 | App Service | BuiltIn |
| Kubernetes cluster container images should not incl... | 2.0.1 | Kubernetes | BuiltIn |
| [Preview]: Service Fabric Clusters should be Zone Re... | 1.0.0-preview | Resilience | BuiltIn |
| Configure Azure Defender for Servers to be disable... | 1.0.0 | Security Center - Gra... | BuiltIn |
| Configure backup on virtual machines without a giv... | 9.4.0 | Backup | BuiltIn |
| [Preview]: Append a tag and its value to resources - ... | 1.0.0-preview | BuiltInPolicyTest | BuiltIn |
| Certificates should have the specified lifetime action... | 2.1.0 | Key Vault | BuiltIn |
| [Preview]: Azure Cache for Redis should be Zone Re... | 1.1.0-preview | Resilience | BuiltIn |
| Virtual machines should be migrated to new Azure ... | 1.0.0 | Compute | BuiltIn |
| <input checked="" type="checkbox"/> Require a tag and its value on resources | 1.0.1 | Tags | BuiltIn |
| Configure Function apps to use the latest TLS version | 1.3.0 | App Service | BuiltIn |
| Append a tag and its value to resources | 1.0.1 | Tags | BuiltIn |
| Configure backup on virtual machines with a given t... | 9.4.0 | Backup | BuiltIn |

1 out of 1 policies selected

[Add](#) [Cancel](#) [Give feedback](#)



Policy | Assignments

[Assign policy](#) [Assign initiative](#) [Refresh](#)

Search

Filter by name or ID... Scope: Azure for Students Definition type: All definition types

Total Assignments 3 Initiative Assignments 1 Policy Assignments 2

[Edit columns](#) [Export to CSV](#)

| Assignment name | Scope | Type |
|--|--------------------|------------|
| Allowed resource deployment regions | Azure for Students | Policy |
| ASC Default (subscription: db878fcc-8781-42d0-a61d-55de3d976446) | Azure for Students | Initiative |
| Require a tag and its value on resources | Azure for Students | Policy |

[Give feedback](#)

Task 2: Create a storage account to test the required tagging

- From the **All services** blade, search for and select **Storage accounts**, and then click + Create
- You will receive a Validation failed message..

The screenshot shows the 'Create a storage account' wizard in the Microsoft Azure portal. The 'Tags' tab is selected, and a validation error message is displayed at the top: 'Validation failed. Required information is missing or not valid.' The wizard is divided into sections: 'Basics' and 'Advanced'. The 'Basics' section includes fields for Subscription (Azure for Students), Resource group (rg3), Location (Central India), Storage account name (storageaccount497), Preferred storage type, Performance (Standard), and Replication (Read-access geo-redundant storage (RA-GRS)). The 'Advanced' section includes fields for Enable hierarchical namespace (Disabled), Enable SFTP (Disabled), Enable network file system v3 (Disabled), Allow cross-tenant replication (Disabled), and Access tier (Hot). At the bottom, there are buttons for 'Previous', 'Next', and 'Create', along with a 'Give feedback' link.

| Basics | |
|------------------------|--|
| Subscription | Azure for Students |
| Resource group | rg3 |
| Location | Central India |
| Storage account name | storageaccount497 |
| Preferred storage type | |
| Performance | Standard |
| Replication | Read-access geo-redundant storage (RA-GRS) |

| Advanced | |
|--------------------------------|----------|
| Enable hierarchical namespace | Disabled |
| Enable SFTP | Disabled |
| Enable network file system v3 | Disabled |
| Allow cross-tenant replication | Disabled |
| Access tier | Hot |

- Click Previous, in the **Tag** tab, Provide the tagging information.

The screenshot shows the 'Create a storage account' wizard in the Microsoft Azure portal, specifically the 'Tags' tab. The 'Previous' button is highlighted, indicating the user has navigated back to the tagging step. The 'Tags' tab contains a table for defining tags. The table has three columns: 'Name', 'Value', and 'Resource'. There are two rows of tag information entered.

| Name | Value | Resource |
|---------|---------|------------------------|
| Company | Contoso | All resources selected |
| | | All resources selected |

Microsoft Azure

Home > storageaccount497_1762421596598 | Overview

storageaccount497
Storage account

Search resources, services, and docs (G+)

Copilot

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DEFAULT DIRECTORY (BSSE22801...

Help me write an LCM rule for this storage account | Improve storage account data protection | Prevent unauthorized access to this storage account

Upload | Open in Explorer | Delete | Move | Refresh | Open in mobile | CLI / PS | Feedback

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)

Essentials

JSON View

Resource group (move) : rg3

Location : centralindia

Primary/Secondary Loca... : Primary: Loading..., Secondary: Loading...

Subscription (move) : Azure for Students

Subscription ID : db878fcc-8781-42d0-a61d-55de3d976446

Disk state : Primary: Available, Secondary: Available

Performance : Standard

Replication : Read-access geo-redundant storage (RA-GRS)

Account kind : StorageV2 (general purpose v2)

Provisioning state : Succeeded

Created : 06/11/2025, 14:33:35

Tags (edit) : Company : Contoso

Properties | Monitoring | Capabilities (0) | 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)

Versioning : Disabled

Change feed : Disabled

NFS v3 : Disabled

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 : Enabled

Task 3: View all resources with a specific tag

- From the **All services** blade, search for and select **Tags**.

Microsoft Azure

All services > Resource Manager | Tags

Resource Manager | Tags

Default Directory

Search resources, services, and docs (G+)

Copilot

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DEFAULT DIRECTORY (BSSE22801...

Tags are name/value pairs that enable you to categorize resources and view consolidated billing by applying the same tag to multiple resources and resource groups. Tag names are case insensitive, but tag values are case sensitive. [Learn more about tags](#)

Filter items...

Tags

Company : Contoso

Resources with tag Company : Contoso

Default Directory (bsse2280155@szabist.onmicrosoft.com)

Manage view | Refresh | Export to CSV | Open query | Assign tags

Filter for any field... | Subscription equals all | Type equals all | Add filter

0 Unsecure resources | 0 Recommendations | 1 Changed resources | No grouping

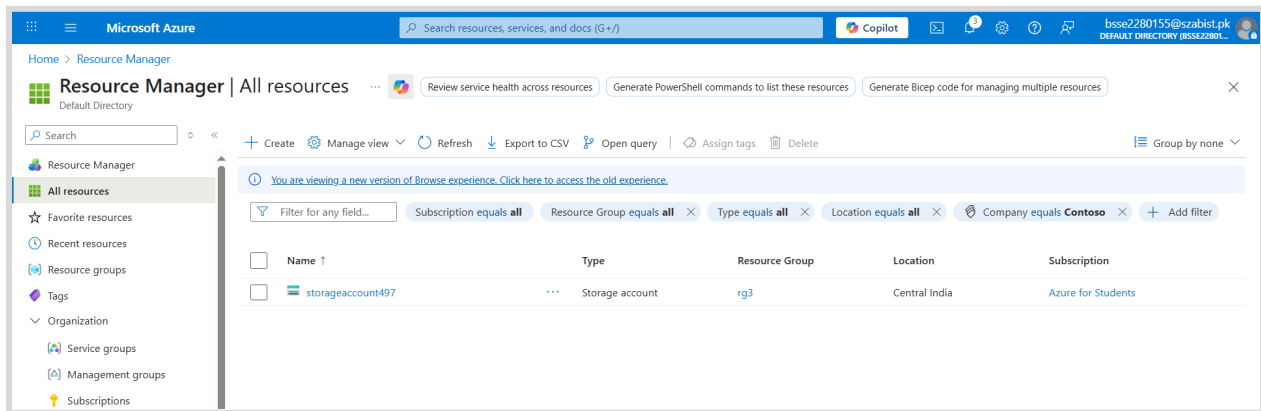
List view

| Name | Type | Resource group | Location | Subscription |
|-------------------|-----------------|----------------|---------------|--------------------|
| storageaccount497 | Storage account | rg3 | Central India | Azure for Students |

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

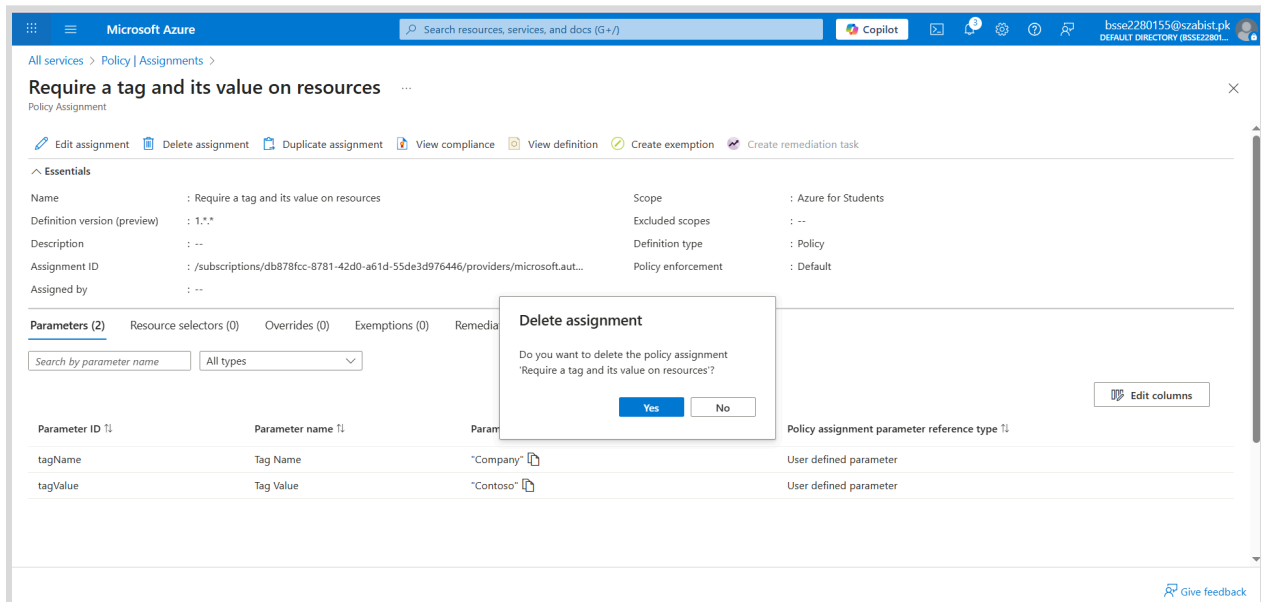
Give feedback

- In the Portal, display the **All resources** blade.
- Click **Add filter** and add the **Company** tag key as the filter category. With the filter applied, only your storage account will be listed.



Task 4: Delete the policy assignment

- from the **All services** blade, search for and select **Policy**.
- Click the **Require a tag on resources** policy entry.
- Click **Delete Assignment** in the top menu.
- Confirm you wish to delete the policy assignment in the **Delete assignment** dialogue by clicking **Yes**.



Microsoft Azure

Search resources, services, and docs (G+)

Copilot

bsse2280155@szabist.pk
DEFAULT DIRECTORY (BSSE22801...

All services > Policy

Policy | Assignments

Search

Assign policyAssign initiativeRefresh

Overview

Compliance

Remediation

Events

Authoring

Definitions

Assignments

Machine Configuration

Exemptions

Search

Filter by name or ID...

Scope : Azure for Students

Definition type : All definition types

Total Assignments

0

Initiative Assignments

0

Policy Assignments

0

Assignment name

Scope

Type

Edit columns

Successfully deleted assignment

Successfully deleted 'Require a tag and its value on resources' from 'Azure for Students'. Please note that the change takes around 30 minutes to take effect.