

# 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 Azure Policy Overview page. The top navigation bar includes 'Microsoft Azure', a search bar, and user information ('bsse2280155@szabist.pk'). The left sidebar has links for 'Overview', 'Compliance', 'Remediation', 'Events', and 'Authoring'. The main area displays four key metrics:

- Policy Compliance:** 227 total, 212 Compliant, 15 Non-compliant.
- Initiative Compliance:** 1 total, 0 Compliant, 1 Non-compliant.
- Overall resource compliance:** 0% (0 out of 1).
- Pending Remediation:** 0 remediable assignments with non-compliant resources.

Below these metrics is a chart titled 'Assignments by compliance (Last 7 days)'. A sidebar on the right lists several policy cards:

- Automate tags from Resource Group
- Require tag on Resource Group
- Not allowed resource types
- Audit Windows VMs for security
- Enable Azure Monitor for VMs

At the bottom of the page is a note: '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.

The screenshot shows the 'Assign policy' dialog in the Microsoft Azure portal. On the left, there are tabs for 'Basics', 'Parameters', 'Remediation', 'Non-compliance messages', and 'Review + create'. Under 'Scope', 'Scope \*' is set to 'Azure for Students'. Under 'Resource selectors', there is an expandable section. Under 'Basics', 'Policy definition \*' is selected. Under 'Overrides', there is an expandable section. Under 'Assignment name \*', there is a text input field. Under 'Description', there is a text input field. A 'Policy enforcement' toggle switch is set to 'Enabled'. At the bottom, there are 'Previous', 'Next', and 'Review + create' buttons. On the right, a modal window titled 'Available Definitions' lists various policy definitions. One definition, 'Require a tag and its value on resources', is selected and highlighted. The modal also shows a message '1 out of 1 policies selected' and buttons for 'Add' and 'Cancel'.

The screenshot shows the 'Policy | Assignments' dashboard in the Microsoft Azure portal. The left sidebar has sections for Overview, Compliance, Remediation, Events, Authoring, Definitions, **Assignments** (which is selected), Machine Configuration, and Exemptions. The main area shows statistics: Total Assignments (3), Initiative Assignments (1), and Policy Assignments (2). Below these are three rows of assignment details:

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

At the bottom, there are buttons for 'Edit columns' and 'Export to CSV', and a 'Give feedback' link.

## 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, indicated by a red circle with a minus sign. A validation error message at the top states: 'Validation failed. Required information is missing or not valid.' Below the tabs, there are two sections: 'Basics' and 'Advanced'. Under 'Basics', the following details are listed:

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)

Under 'Advanced', the following settings are shown:

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

At the bottom of the screen, there are 'Previous', 'Next', and 'Create' buttons, along with a 'Give feedback' link.

- 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 on the 'Tags' tab. Two tags are defined:

Name	Value	Resource
Company	Contoso	All resources selected
		All resources selected

**storageaccount497** Storage account

**Overview**

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 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
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JSON View

## Task 3: View all resources with a specific tag

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

**Resource Manager | Tags**

Default Directory

Search Refresh Feedback

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

Unsecure resources Recommendations Changed resources No grouping

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.

The screenshot shows the Microsoft Azure Resource Manager blade titled "All resources". On the left, there's a navigation menu with "All resources" selected. The main area displays a table with one row for a storage account named "storageaccount497". The filters applied are "Company equals Contoso".

Name ↑	Type	Resource Group	Location	Subscription
storageaccount497	Storage account	rg3	Central India	Azure for Students

## 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**.

The screenshot shows the Microsoft Azure Policy blade titled "Assignments". It lists a single assignment named "Require a tag and its value on resources". A modal dialog box titled "Delete assignment" is open in the foreground, asking "Do you want to delete the policy assignment 'Require a tag and its value on resources?'".

Microsoft Azure

All services > Policy

## Policy | Assignments

Search  Assign policy Assign initiative Refresh

Overview Compliance Remediation Events Authoring Definitions Assignments Machine Configuration Exemptions

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
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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.

Edit columns

The screenshot shows the Microsoft Azure Policy Assignments page. On the left, there's a sidebar with navigation links: Overview, Compliance, Remediation, Events, Authoring, Definitions, Assignments (which is selected), Machine Configuration, and Exemptions. The main area displays three counts: Total Assignments (0), Initiative Assignments (0), and Policy Assignments (0). Below these counts is a table with columns for Assignment name, Scope, and Type. A success message in the top right corner states: "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."