

## INTRODUCTION TO CLOUD COMPUTING

### Lab Task 02 (B) (Manage Governance via Azure Policy)

Name: Ariha Zainab

ID: 2280138

Section: SE 7-B

### Task 1: Create and assign tags via the Azure portal.

- Create a Resource Group & Add a Tag:

The screenshot shows the Microsoft Azure portal interface. On the left, there's a sidebar with navigation links like Home, Resource Manager, Resource groups, and more. The main area is titled 'Create a resource group'. It has tabs for Basics, Tags, and Review + create. Under Basics, the subscription is set to 'Azure for Students', the resource group name is 'az104-rg2', and the region is 'East Asia'. Under Tags, there's a single tag named 'Cost Center' with the value '000'. At the bottom, there are 'Previous' and 'Next' buttons, and a prominent blue 'Create' button. A success message at the bottom says 'Resource group created' with a checkmark icon. Below the message are two buttons: 'Go to resource group' and 'Pin to dashboard'. The timestamp 'a minute ago' is shown next to the dashboard button.

This screenshot shows the 'az104-rg2 | Tags' page in the Azure portal. The left sidebar has a 'Tags' section selected. The main content area shows a table with one tag entry: 'Cost Center : 000'. There are buttons for 'Apply' and 'Discard changes' at the bottom. A note on the right says '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.' and 'Do not enter names or values that could make your resources less secure or that contain personal/sensitive information because tag data will be replicated globally.'

## INTRODUCTION TO CLOUD COMPUTING

### Lab Task 02 (B) (Manage Governance via Azure Policy)

#### Task 2: Enforce tagging via an Azure Policy.

- Require a tag & its value on resources Policy:

The screenshot shows the 'Policy definition' page in the Microsoft Azure portal. The title is 'Require a tag and its value on resources'. The 'Definition' tab is selected. The JSON code in the editor is as follows:

```
1 {  
2   "properties": {  
3     "displayName": "Require a tag and its value on resources",  
4     "policyType": "Builtin",  
5     "mode": "Indexed",  
6     "description": "Enforces a required tag and its value. Does not apply to resource groups.",  
7     "metadata": {  
8       "category": "Tags",  
9       "availableEffects": ["Deny"],  
10      "description": "Enforces a required tag and its value. Does not apply to resource groups.",  
11      "version": "1.0.1",  
12      "name": "Require a tag and its value on resources"  
13    }  
14  }  
15 }
```

- Assign Policy & Implement tag in policy:

The screenshot shows the 'Assign policy' page in the Microsoft Azure portal. The title is 'Assign policy'. The 'Review + create' tab is selected. The 'Basics' section includes:

- Scope: Azure for Students/az104-rg2
- Exclusions: --
- Policy definition: Require a tag and its value on resources
- Assignment name: Require Cost Center tag and its value on resources
- Version: 1.0.\*
- Description: Require Cost Center tag and its value on all resources in the resource group
- Policy enforcement: Default
- Assigned by: Arifa Zainab

The 'Parameters' section includes:

- Tag Name: Cost Center
- Tag Value: 000

The 'Remediation' section includes:

- Create a remediation task: No

## INTRODUCTION TO CLOUD COMPUTING

### Lab Task 02 (B) (Manage Governance via Azure Policy)

- **Create a Storage Account:**

The screenshot shows the 'Create a storage account' wizard in the Microsoft Azure portal. The 'Basics' tab is selected. Under 'Project details', the subscription is set to 'Azure for Students' and the resource group is 'az104-rg2'. In the 'Instance details' section, the storage account name is 'az0001', the region is 'Asia Pacific (East Asia)', and the preferred storage type is 'Standard'. The performance level is set to 'Standard: Recommended for most scenarios (general-purpose v2 account)'. At the bottom, there are 'Previous' and 'Next' buttons, and a 'Review + create' button.

- **Validation failed due to resource deployment was disallowed by the policy**

The screenshot shows the 'Create a storage account' wizard in the Microsoft Azure portal. A red error bar at the top indicates 'Validation failed. Required information is missing or not valid.' The 'Tags' tab is selected. At the bottom, there are 'Previous' and 'Next' buttons, and a 'Review + create' button.

### Task 3: Apply tagging via an Azure Policy.

- **Remove Existing Tag Policy Assignment:**

The screenshot shows the 'Policy | Assignments' page in the Microsoft Azure portal. The 'Assignments' tab is selected. There are three total assignments: one Initiative assignment and two Policy assignments. The second Policy assignment, titled 'Require Cost Center tag and its value on resources', is selected and a 'Delete assignment' dialog box is open. The dialog asks if the user wants to delete the assignment, with 'Yes' and 'No' buttons. At the bottom right, there are 'Edit columns' and 'Export to CSV' buttons.

✓ Successfully deleted assignment X

Successfully deleted 'Require Cost Center tag and its value on resources' from 'Azure for Students/az104-rg2'. Please note that the change takes around 30 minutes to take effect.

## INTRODUCTION TO CLOUD COMPUTING

### Lab Task 02 (B) (Manage Governance via Azure Policy)

- Assign “Inherit a tag from the resource group if missing” Policy:

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Issue2280138@szabot.pk  
DEFAULT DIRECTORY (ISSUE2280138)

Home > Policy | Assignments > Assign policy ...

Basics Parameters Remediation Managed identity Non-compliance messages Review + create

**Basics**

Scope: Azure for Students/az104-rg2  
Exclusions: --  
Policy definition: Inherit a tag from the resource group if missing  
Assignment name: Inherit the Cost Center tag and its value 000 from the resource group if missing  
Version: 1.1\*  
Description: Inherit the Cost Center tag and its value 000 from the resource group if missing  
Policy enforcement: Default  
Assigned by: Arifa Zainab

**Advanced**

Resource selectors: No selectors associated with this assignment.  
Overrides: No overrides associated with this assignment.

**Parameters**

Previous Next Create Give feedback

- Configure Policy Basics, Set Tag Parameters & Enable Remediation Task:

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Issue2280138@szabot.pk  
DEFAULT DIRECTORY (ISSUE2280138)

Home > Policy | Assignments > Assign policy ...

Basics Parameters Remediation Managed identity Non-compliance messages Review + create

**Advanced**

Resource selectors: No selectors associated with this assignment.  
Overrides: No overrides associated with this assignment.

**Parameters**

Tag Name: Cost Center

**Remediation**

Create a remediation task: Yes

**Managed identity**

Create a Managed Identity: Yes  
Type of Managed Identity: System assigned managed identity  
System assigned identity location: eastasia

**Non-compliance messages**

Non-compliance messages: No non-compliance messages associated with this assignment.

Previous Next Create Give feedback

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Issue2280138@szabot.pk  
DEFAULT DIRECTORY (ISSUE2280138)

Home > 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

Assignment name: Allowed resource deployment regions  
ASC Default (subscription: 57a0b5a5-89cd-44d7-aaaf-c65ebdf15a43)  
Inherit the Cost Center tag and its value 000 from the resource group if missing

Edit columns Export to CSV

**Notifications**

More events in the activity log → Dismiss all ▾

Remediation task creation succeeded  
Creating remediation task '42537c27f82b4fcfa18f7075' was successful.  
a few seconds ago

Role Assignments creation succeeded  
All role assignments were created successfully.  
a few seconds ago

Creating policy assignment succeeded  
Creating policy assignment 'Inherit the Cost Center tag and its value 000 from the resource group if missing' in 'Azure for Students/az104-rg2' was successful. Please note that the assignment takes around 5-15 minutes to take effect.  
a few seconds ago

## INTRODUCTION TO CLOUD COMPUTING

### Lab Task 02 (B) (Manage Governance via Azure Policy)

- Create Storage Account for Validation:

Subscription: Azure for Students  
Resource group: az104-rg2  
Location: East Asia  
Storage account name: ariba098  
Preferred storage type: Standard  
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  
Enable large file shares: Enabled

Previous Next Create

- Verify Tag Inheritance on Resource:

Tags

Name: Cost Center Value: 000

ariba098 (Storage account)  
Cost Center : 000  
No changes

Apply Discard changes

## Task 4: Configure and test resource locks.

- Access Resource Group Locks & Add a Delete Lock::

Add lock

Lock name: rg-lock  
Lock type: Delete  
Notes

OK Cancel

## INTRODUCTION TO CLOUD COMPUTING

### Lab Task 02 (B) (Manage Governance via Azure Policy)

- Attempt to Delete Resource Group:

The screenshot shows the Microsoft Azure portal interface. On the left, the 'az104-rg2' resource group is selected in the navigation pane. In the center, there is a search bar and a 'Delete resource group' button. A modal dialog box titled 'Delete a resource group' is open, asking for confirmation to delete the 'az104-rg2' resource group. The dialog box contains a table showing one resource being deleted across one subscription, with the resource group name 'az104-rg2'. At the bottom of the dialog is a 'Delete confirmation' section with a 'Delete' button and a 'Go back' button. Below the dialog, there is a text input field for confirming the deletion with the value 'az104-rg2' and a 'Delete' button.

- Deletion Denied Notification:

