

# INTRODUCTION TO CLOUD COMPUTING

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

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Section: SE 7-B

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

- Create a Resource Group & Add a Tag:

Microsoft Azure

Search resources, services, and docs (G+/)

Home > Resource Manager | Resource groups >

Create a resource group

Basics Tags Review + create

Automation Link

Basics

Subscription: Azure for Students

Resource group name: az104-rg2

Region: East Asia

Tags

Cost Center: 000

Previous Next Create

✓ **Resource group created**

Creating resource group 'az104-rg2' in subscription 'Azure for Students' succeeded.

[Go to resource group](#) [Pin to dashboard](#)

a minute ago

Microsoft Azure

Search resources, services, and docs (G+/)

Home > Resource Manager | Resource groups > az104-rg2

az104-rg2 | Tags

Tags

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](#)

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.

Name	Value
Cost Center	000

az104-rg2 (Resource group)

Cost Center : 000

No changes

Apply Discard changes

# 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 Microsoft Azure portal interface. At the top, there's a navigation bar with the Microsoft Azure logo, a search bar, and a Copilot button. Below the navigation bar, the breadcrumb trail reads 'Home > Policy | Definitions > Require a tag and its value on resources'. The main heading is 'Require a tag and its value on resources' with a 'Policy definition' subtitle. Below this, there are action buttons: 'Assign policy', 'Edit definition', 'Duplicate definition', 'Select version', and 'Delete definition'. The 'Essentials' section displays key details: Name (Require a tag and its value on resources), Version (1.0.1), Description (Enforces a required tag and its value. Does not apply to resource groups.), Available Effects (Deny), Category (Tags), Definition location (--), Definition ID (/providers/Microsoft.Authorization/policyDefinitions/1e30110a-5ceb-460c...), Type (Built-in), and Mode (Indexed). Below the essentials, there are tabs for 'Definition', 'Assignments (0)', and 'Parameters (2)'. The 'Definition' tab is active, showing a JSON snippet for the policy definition. At the bottom right, there is a 'Give feedback' link.

Microsoft Azure

Search resources, services, and docs (G+J)

Copilot

bsse2280138@szabist.pk  
DEFAULT DIRECTORY (BSSE2280138@szabist.pk)

Home > Policy | Definitions > Require a tag and its value on resources

Require a tag and its value on resources

Policy definition

Assign policy Edit definition Duplicate definition Select version Delete definition

Essentials

Name : Require a tag and its value on resources

Version : 1.0.1

Description : Enforces a required tag and its value. Does not apply to resource groups.

Available Effects : Deny

Category : Tags

Definition location : --

Definition ID : /providers/Microsoft.Authorization/policyDefinitions/1e30110a-5ceb-460c...

Type : Built-in

Mode : Indexed

Definition Assignments (0) Parameters (2)

```
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": {
```

Give feedback

- **Assign Policy & Implement tag in policy:**

The screenshot shows the 'Assign policy' configuration page in the Microsoft Azure portal. The breadcrumb trail is 'Home > Policy | Definitions > Require a tag and its value on resources > Assign policy'. The main heading is 'Assign policy'. Below this, there are tabs: 'Basics', 'Parameters', 'Remediation', 'Managed identity', 'Non-compliance messages', and 'Review + create'. The 'Basics' tab is active. It contains the following information: 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), and Assigned by (Ariha Zainab). The 'Advanced' section shows 'Resource selectors' (No selectors associated with this assignment) and 'Overrides' (No overrides associated with this assignment). The 'Parameters' section shows 'Tag Name' (Cost Center) and 'Tag Value' (000). The 'Remediation' section shows 'Create a remediation task' (No). At the bottom, there are 'Previous', 'Next', and 'Create' buttons. A 'Give feedback' link is at the bottom right.

Microsoft Azure

Search resources, services, and docs (G+J)

Copilot

bsse2280138@szabist.pk  
DEFAULT DIRECTORY (BSSE2280138@szabist.pk)

Home > Policy | Definitions > Require a tag and its value on resources > Assign policy

Assign policy

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

Basics

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 : Ariha Zainab

Advanced

Resource selectors : No selectors associated with this assignment.

Overrides : No overrides associated with this assignment.

Parameters

Tag Name : Cost Center

Tag Value : 000

Remediation

Create a remediation task : No

Previous Next Create

Give feedback

# INTRODUCTION TO CLOUD COMPUTING

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

- **Create a Storage Account:**

Microsoft Azure

Home > Storage center | Blob Storage >

### Create a storage account

Basics Advanced Networking Data protection Encryption Tags Review + create

Azure Storage is a Microsoft-managed service providing cloud storage that is highly available, secure, durable, scalable, and redundant. Azure Storage includes Azure Blobs (objects), Azure Data Lake Storage Gen2, Azure Files, Azure Queues, and Azure Tables. The cost of your storage account depends on the usage and the options you choose below. [Learn more about Azure storage accounts](#)

**Project details**

Select the subscription in which to create the new storage account. Choose a new or existing resource group to organize and manage your storage account together with other resources.

Subscription \* Azure for Students

Resource group \* az104-rg2 [Create new](#)

**Instance details**

Storage account name \* az0001

Region \* (Asia Pacific) East Asia [Deploy to an Azure Extended Zone](#)

Preferred storage type Choose preferred storage type

Performance \* Standard: Recommended for most scenarios (general-purpose v2 account)

Previous Next Review + create

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

Microsoft Azure

Home > Storage center | Blob Storage >

### Create a storage account

Validation failed. Required information is missing or not valid.

Basics Advanced Networking Data protection Encryption Tags Review + create

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

- **Remove Existing Tag Policy Assignment:**

Microsoft Azure

Home > Policy

### Policy | Assignments

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

Overview Compliance Remediation Events Authoring Definitions Assignments Machine Configuration Exemptions

Total Assignments 3 Initiative Assignments 1 Policy Assignments 2

Assignment name	Scope	Type
Allowed resource deployment regions	Azure for Students	Policy
ASC Default (subscription: 57a1b5a5-89cd-44d7-aaf-c05e)	Azure for Students	Initiative
Require Cost Center tag and its value on resources	Azure for Students/az104...	Policy

Edit columns Export to CSV

**Delete assignment**

Do you want to delete the policy assignment 'Require Cost Center tag and its value on resources'?

Yes No

- **Successfully deleted assignment**

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+/I)

Copilot

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.**
Description	Inherit the Cost Center tag and its value 000 from the resource group if missing
Policy enforcement	Default
Assigned by	Ariha 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+/I)

Copilot

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+/I)

Copilot

Home > Policy

### 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
Allowed resource deployment regions	Azure for Students
ASC Default (subscription: 57a8b5a5-89cd-44d7-aaaf-c65ebdf15a43)	Azure for Students
Inherit the Cost Center tag and its value 000 from the resource group if missing	Azure for Students/az104-rg2

### Notifications

More events in the activity log → Dismiss all

- Remediation task creation succeeded  
Creating remediation task '42537c27f82b4fcca18f7075' 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

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

- **Create Storage Account for Validation:**

Microsoft Azure

Home > Storage center > Blob Storage >

Create a storage account

Basics Advanced Networking Data protection Encryption Tags Review + create

View automation template

**Basics**

Subscription	Azure for Students
Resource group	az104-rg2
Location	East Asia
Storage account name	ariha098
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
Enable large file shares	Enabled

Previous Next Create

Give feedback

- **Verify Tag Inheritance on Resource:**

Microsoft Azure

Home > ariha098\_1765539172225 | Overview > ariha098

ariha098 | Tags

Search

Delete all 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?

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.

Name	Value
Cost Center	000

ariha098 (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::**

Microsoft Azure

Home > Resource groups > az104-rg2

az104-rg2 | Locks

Can a resource locked for 'ReadOnly' be modified? What are the best practices for locking resources in Azure? Can multiple users in my tenant manage my locks?

Search

Add Refresh Feedback

**Add lock**

Lock name \* rg-lock Lock type \* Delete

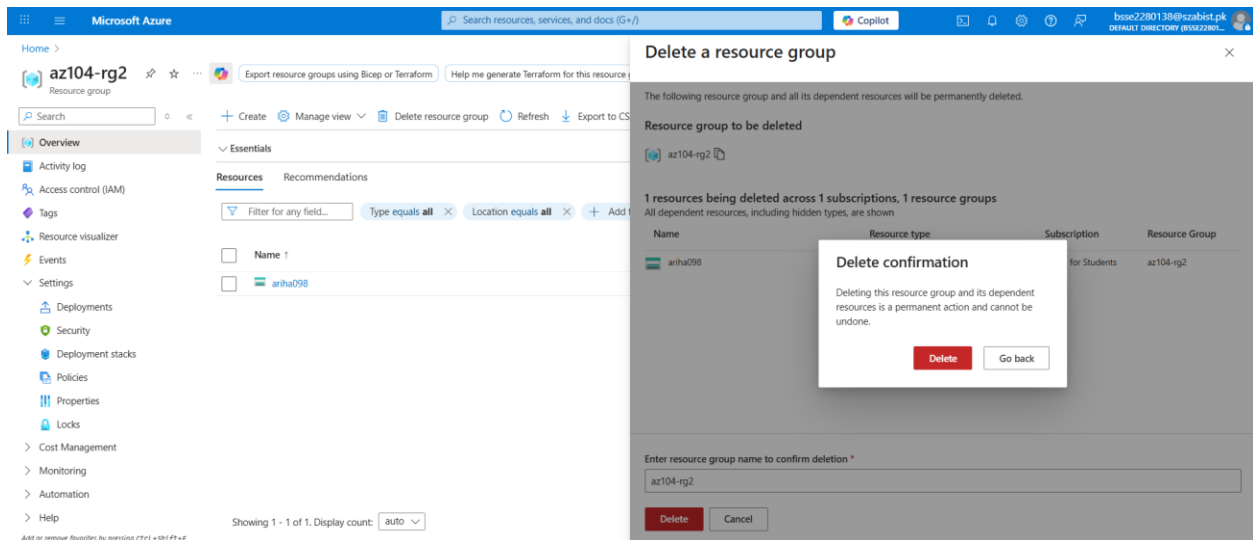
Notes

OK Cancel

## INTRODUCTION TO CLOUD COMPUTING

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

- **Attempt to Delete Resource Group:**



- **Deletion Denied Notification:**

