Lab 8

CST8912_011

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Lab Report

Title
Implementing Cloud Resource Tagging and Governance in Azure

Introduction or Purpose
The purpose of this lab is to explore and implement cloud resource tagging and governance
principles using Microsoft Azure. The primary objective is to ensure compliance with
organizational policies by applying and enforcing tags on cloud resources, leveraging Azure
Policy to automate tagging, and using resource locks to prevent accidental deletion. This lab
demonstrates how tagging facilitates resource management, cost allocation, and compliance in a
cloud environment, aligning with the shared responsibility model and industry standards for data
handling. Through hands-on tasks, I aim to understand how to create, enforce, and inherit tags, as
well as secure resources, ensuring a safe and organized cloud deployment.

Steps Covered in the Lab
The lab consists of five tasks, each building on the previous one to demonstrate resource tagging
and governance in Azure. Below are the detailed steps completed during the investigation:

1. Task 1: Assign Tags via the Azure Portal
    1. Logged into the Azure portal at https://portal.azure.com.
    2. Searched for Resource groups and clicked + Create.
    3. Created a resource group named CST8912 in the Canada Central location under
       my subscription.
    4. Added a tag with Name: Cost Center and Value: 000 in the Tags section.
    5. Reviewed and clicked Create to finalize the resource group.
2. Task 2: Enforce Tagging via an Azure Policy

    1. Navigated to Policy in the Azure portal and selected Definitions under Authoring.
    2. Searched for require a tag and selected Require a tag and its value on resources.

3. Assigned the policy with scope set to CST8912 resource group, naming it Require Cost Center tag with Default value, and set parameters: Tag Name: Cost Center, Tag Value: 000.
4. Tested the policy by attempting to create a storage account without the required tag, confirming validation failed due to policy enforcement.

3. Task 3: Apply Tagging via an Azure Policy

1. Deleted the previous policy assignment from Policy > Assignments.
2. Assigned a new policy, Inherit a tag from the resource group if missing, with scope CST8912, named Inherit the Cost Center tag and its value 000 from the resource group if missing.
3. Configured remediation to apply the Cost Center: 000 tag automatically.
4. Created a storage account in CST8912 without manually adding tags, verifying the tag was inherited automatically.

Errors

Summary   Raw Error

ERROR DETAILS

The specified resource does not exist.
RequestId:688b98c0-601e-0016-519e-97770a000000
Time:2025-03-18T00:43:38.5338636Z

(Code: ContainerOperationFailure)

WAS THIS HELPFUL? 👍 👎

Explain with Copilot

Troubleshooting Options

Common Azure deployment errors ⧉
Check Usage + Quota ⧉
New Support Request ⧉

Give feedback

⚐ Tell us about your experience with the ARM Errors page

tails

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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
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
	:	

cst81212 (Storage account)
Cost Center : 000
No changes

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4. Task 4: Configure and Test Resource Locks

1. Accessed the CST8912 resource group, navigated to Locks under Settings, and
    added a lock named rg-lock with type Delete.

2. Attempted to delete the resource group from the Overview page, confirming the operation was denied due to the lock.

5. Task 5: Clean Up the Resources

   1. Removed the policy assignment from Policy > Assignments.
   2. Deleted the Cost Center tag from the storage account and then deleted the storage account itself.
   3. Removed the rg-lock from the resource group and optionally deleted CST8912.

References

- Microsoft Azure Documentation: [Azure Policy Overview](#)
- CST8912 Lab Activity #8 Handout (Provided by Prof. Tanishq Bansal)