

## INTRODUCTION TO CLOUD COMPUTING

### Lab Task 02-A (Manage Subscriptions and RBAC)

#### Module: Administer Governance and Compliance

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BS SE 7-B

#### Task 1: Implement management groups

The screenshot shows the Microsoft Azure Resource Manager - Management groups overview page. The left sidebar is collapsed. The main area displays the following information:

- Overview** tab selected.
- Create**, **Add subscription**, **Refresh**, **Expand / Collapse all**, **Export to CSV**, and **Feedback** buttons.
- A help message: "Use management groups to group subscriptions. Click on an existing group to drill in, view details and govern resources. Right-click on any subscription to see more actions. Click the 'Get Started' tab to learn more."
- Search by name or ID** input field.
- Showing 1 subscriptions in 1 groups**:

Name	Type	ID	Total subscriptions
Tenant Root Group	Management group	325d9070-2465-40ee-be80-4120f284ad8b	1
Azure for Students	Subscription	08961442-0f0c-42c9-828a-eb31cd3c44ff	

The screenshot shows the Microsoft Azure Resource Manager - Create management group dialog. The left sidebar is collapsed. The main area displays the following information:

- Create management group** title.
- Subtext: "Create a new management group to be a child of 'Tenant Root Group'".
- Management group ID** (Cannot be updated after creation) \*:  (highlighted with a green checkmark).
- Management group display name**: .
- Submit** and **Cancel** buttons at the bottom.

The screenshot shows the Microsoft Azure Resource Manager | Management groups page. The left sidebar includes links for Resource Manager, All resources, Favorite resources, Recent resources, Resource groups, Tags, Organization, Service groups, Management groups (which is selected), Subscriptions, Tools (Resource graph explorer, Resource graph queries, Resource visualizer), and Documentation. The main content area has tabs for Overview, Getting started, and Settings, with Overview selected. It features a search bar, a button to Create a new subscription, and options to Refresh, Expand / Collapse all, Export to CSV, and provide Feedback. A note at the top says: "Use management groups to group subscriptions. Click on an existing group to drill in, view details and govern resources. Right-click on any subscription or management group to launch quick actions. Click the 'Get Started' tab to learn more." Below this is a search bar labeled "Search by name or ID". The table lists 1 subscription in 2 groups:

Name	Type	ID	Total subscriptions
Tenant Root Group	Management group	325d9070-2465-40ee-be80-4120f284ad8b	1
Azure for Students	Subscription	08961442-0f0c-42c9-828a-eb31cd3c44ff	
az104-mg1	Management group	az104-mg1	0

## Task 2: Review and assign a built-in Azure role

- **Create a helpdesk group:**

The screenshot shows the Microsoft Azure New Group page. The top navigation bar includes Microsoft Azure, Search resources, services, and docs (G+), Copilot, and a user profile. The URL is Home > Default Directory | Groups | Groups | Overview > New Group. The page title is "New Group". It contains fields for Group type (Security), Group name (helpdesk), Group description (Help Desk Staff), and Membership type (Assigned). Below these are sections for Owners (1 owner selected) and Members (2 members selected). At the bottom is a "Create" button.

### Assign "Virtual Machine Contributor" Role to helpdesk Group

- **Go to IAM**

A role definition is a collection of permissions. You can use the built-in roles or you can create your own custom roles. [Learn more](#)

Name	Description	Type	Category	Details
Owner	Grants full access to manage all resources, including the ability to assign roles.	BuiltInRole	General	<a href="#">View</a> <a href="#">...<span style="font-size: small;">More details</span></a>
Contributor	Grants full access to manage all resources, but does not allow you to assign roles.	BuiltInRole	General	<a href="#">View</a> <a href="#">...<span style="font-size: small;">More details</span></a>
Reader	View all resources, but does not allow you to make any changes.	BuiltInRole	General	<a href="#">View</a> <a href="#">...<span style="font-size: small;">More details</span></a>
Access Review Operator	Allows you to grant Access Review System app permissions to discover and review resources.	BuiltInRole	None	<a href="#">View</a> <a href="#">...<span style="font-size: small;">More details</span></a>
acrDelete	acr delete	BuiltInRole	Containers	<a href="#">View</a> <a href="#">...<span style="font-size: small;">More details</span></a>
acrImageSigner	Planned DEPRECATION on March 31, 2028. Grant the signing permission to sign blobs.	BuiltInRole	Containers	<a href="#">View</a> <a href="#">...<span style="font-size: small;">More details</span></a>
acrPull	acr pull	BuiltInRole	Containers	<a href="#">View</a> <a href="#">...<span style="font-size: small;">More details</span></a>
acrPush	acr push	BuiltInRole	Containers	<a href="#">View</a> <a href="#">...<span style="font-size: small;">More details</span></a>

- **Add Role Assignment**

Role: Virtual Machine Contributor

Scope: /providers/Microsoft.Management/managementGroups/az104-mg1

Members	Name	Object ID	Type
helpdesk	44fea57c-2c37-4f0d-909d-e51cfa8f2d47	Group	

Description: No description

Condition: None

[Review + assign](#) [Previous](#) [Next](#) [Feedback](#)

- **Continue on the Access control (IAM) blade. On the Role assignments tab, confirm the helpdesk group has the Virtual Machine Contributor role.**

Role assignments

Name	Type	Role	Scope	Condition
Owner (1)	User	Owner	This resource	<a href="#">Add</a>
Virtual Machine Contributor (1)	Group	Virtual Machine Contributor	This resource	<a href="#">Add</a>

Showing 1 - 2 of 2 results.

## Task 3: Create a custom RBAC role

- **Navigate to the Access control (IAM) blade**
- **Select + Add, from the drop-down menu, select Add custom role**

To create a custom role for Azure resources, fill out some basic information. [Learn more](#)

Custom role name \*  ✓

Description

Baseline permissions  Clone a role  Start from scratch  Start from JSON

Role to clone

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

All resource providers

Exclude permissions enable you to subtract specific permissions from a wildcard (\*) permission. If your custom role has a permission with a wildcard (\*) and you don't want to include all the permissions under the wildcard, search for permissions to subtract from the wildcard. For example, search for "virtual machines" to find permissions related to virtual machines.

+ Add permissions + Exclude permissions

Click Add permissions to select the permissions. To add a wildcard (\*) permission, you must include it. To exclude specific permissions from a wildcard, click Exclude permissions.

Not Actions  Not Data Actions

Permission	Description
<input checked="" type="checkbox"/> Microsoft.Support	Registers Support Resource Provider
<input type="checkbox"/> Other : Look Up Resource Id	Looks up resource Id for resource type
<input type="checkbox"/> Other : Check Name Availability	Checks that name is valid and not in use for resource type
<input type="checkbox"/> Other : List Classify Services	Lists one or all classified services

[Review + create](#) [Previous](#) [Add](#) [Cancel](#)

## Task 4: Monitor role assignments with the Activity Log

- In the portal locate the az104-mg1 resource and select Activity log:

- Review the activities for role assignments:

**Microsoft Azure** Search resources, services, and docs (G+) Copilot bsse2280143@szabist.pk DEFAULT DIRECTORY (BSSE22801...

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## az104-mg1 | Activity Log

Management group

Activity Log

Overview Subscriptions Resource Groups Resources Access control (IAM) Governance Cost Management

Looking for Log Analytics? In Log Analytics Search

Management Group : az104-mg1 Sub

5 items.

Operation name

- >Create or update custom role definition
- Create or update custom role definition
- >Create role assignment
- Create role assignment
- Create or Update

**Create role assignment** Thu Dec 11 2025 18:47:38 GMT+0500 (Pakistan Standard Time)

+ New alert rule

**Summary** JSON Change history (Change history is not applicable to this type of activity log)

Resource /providers/Microsoft.Management/managementGroups/az104-mg1/providers/Microsoft.Authorization/roleAssignments/b3592a8f-d261-43f7-a457-ee42ddc46328

Operation name Create role assignment

Time stamp Thu Dec 11 2025 18:47:38 GMT+0500 (Pakistan Standard Time)

Event initiated by bsse2280143@szabist.pk

Message -

Role Virtual Machine Contributor

Scope -

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Add or remove favorites by selecting or

**Microsoft Azure** Search resources, services, and docs (G+) Copilot bsse2280143@szabist.pk DEFAULT DIRECTORY (BSSE22801...

[Home](#) > [Resource Manager | Management groups](#) > [az104-mg1](#)

## az104-mg1 | Activity Log

Management group

Activity Log

Overview Subscriptions Resource Groups Resources Access control (IAM) Governance Cost Management

Looking for Log Analytics? In Log Analytics Search

Management Group : az104-mg1 Sub

5 items.

Operation name

- Create or update custom role definition
- Create or update custom role definition
- Create role assignment
- Create role assignment
- Create or Update

**Create or update custom role definition** Thu Dec 11 2025 19:14:54 GMT+0500 (Pakistan Standard Time)

+ New alert rule

**Summary** JSON Change history (Change history is not applicable to this type of activity log)

Resource /providers/Microsoft.Management/managementGroups/az104-mg1/providers/Microsoft.Authorization/roleDefinitions/1fb82466-0323-429b-825d-f90a1fd8a1d6

Operation name Create or update custom role definition

Time stamp Thu Dec 11 2025 19:14:54 GMT+0500 (Pakistan Standard Time)

Event initiated by bsse2280143@szabist.pk