

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 portal interface. The top navigation bar includes the Microsoft Azure logo, a search bar, and the user profile 'bsse2280143@szabist.pk'. The left sidebar shows the 'Resource Manager' section with 'Management groups' selected. The main content area displays the 'Management groups' overview, showing a table with one management group, 'Tenant Root Group', which contains one subscription, 'Azure for Students'.

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

The screenshot shows the 'Create management group' dialog box. The dialog prompts the user to create a new management group as a child of the 'Tenant Root Group'. It contains two input fields: 'Management group ID (Cannot be updated after creation) *' with the value 'az104-mg1' and a green checkmark, and 'Management group display name' with the value 'az104-mg1'. At the bottom, there are 'Submit' and 'Cancel' buttons.

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Home > Resource Manager

Resource Manager | Management groups

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Overview Getting started Settings

+ Create + Add subscription Refresh Expand / Collapse all Export to CSV Feedback

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.

Search by name or ID

Showing 1 subscriptions 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:

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Home > Default Directory | Groups > Groups | Overview >

New Group

Got feedback?

Group type *
Security

Group name *
helpdesk

Group description
Help Desk Staff

Membership type
Assigned

Owners
1 owner selected

Members
2 members selected

Create

Assign "Virtual Machine Contributor" Role to helpdesk Group

- Go to IAM

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Home > Resource Manager | Management groups > az104-mg1

az104-mg1 | Access control (IAM)

Search by role name, description, permission, or ID

Type: All Category: All

Name	Description	Type	Category	Details
Owner	Grants full access to manage all resources, including the ability to assign...	BuiltInRole	General	View
Contributor	Grants full access to manage all resources, but does not allow you to as...	BuiltInRole	General	View
Reader	View all resources, but does not allow you to make any changes.	BuiltInRole	General	View
Access Review Operator Se...	Lets you grant Access Review System app permissions to discover and r...	BuiltInRole	None	View
AcrDelete	acr delete	BuiltInRole	Containers	View
AcrImageSigner	Planned DEPRECATION on March 31, 2028. Grant the signing permisio...	BuiltInRole	Containers	View
AcrPull	acr pull	BuiltInRole	Containers	View
AcrPush	acr push	BuiltInRole	Containers	View

- **Add Role Assignment**

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Home > Resource Manager | Management groups > az104-mg1 | Access control (IAM)

Add role assignment

Role Members Conditions Review + assign

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

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

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Home > Resource Manager | Management groups > az104-mg1

az104-mg1 | Access control (IAM)

Search by name or email

Type: All Role: All Scope: All scopes Group by: Role

All (2) Job function roles (1) Privileged administrator roles (1)

Name	Type	Role	Scope	Condition
Owner (1)				
Hamd Naseem 6e992f24-825e-4eda-a99...	User	Owner	This resource	Add
Virtual Machine Contributor (1)				
helpdesk 44fea57c-2c37-4f0d-909d...	Group	Virtual Machine Contributor	This resource	Add

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

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Home > Resource Manager | Management groups > az104-mg1 | Access control (IAM) >

Create a custom role

BasicsPermissionsAssignable scopesJSONReview + create

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

Custom role name * Custom Support Request

Description
A custom contributor role for support requests.

Baseline permissions ☒ Clone a role ☐ Start from scratch ☐ Start from JSON

Role to clone
Support Request Contributor

Review + createPreviousNext

Feedback

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Create a custom role

BasicsPermissionsAssignable scopes

+ Add permissions+ Exclude permissions

Click Add permissions to select the permissions to add to the custom role.
To add a wildcard (*) permission, you must first select a permission.
To exclude specific permissions from a wildcard permission, click Exclude permissions.

Permission
Microsoft.Authorization/*/read
Microsoft.Resources/subscriptions/resourceproviders/read
Microsoft.Support/*

Microsoft.Support permissions

< 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.

support

☒ Not Actions ☐ Not Data Actions

Permission	Description
Microsoft.Support	
<input checked="" type="checkbox"/> Other : Registers Support Resource Provider	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
Microsoft.Support/operationresults	
<input type="checkbox"/> Read : Get Operation Result	Gets the result of the asynchronous operation
Microsoft.Support/operationresults	

AddCancel

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Create a custom role

Basics Permissions **Assignable scopes** JSON Review + create

+ Add assignable scopes

Click Add assignable scopes to select the scopes (management groups, subscriptions, or resource groups) where this role will be available for assignment. Your role must have at least one assignable scope. [Learn more](#)

Assignable scope	Type
/providers/Microsoft.Management/managementGroups/az104-mg1	Management group

Review + create Previous Next Feedback

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az104-mg1 | Access control (IAM)

Search

+ Add Download role assignments Edit columns Refresh Delete Feedback

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

Check access Role assignments **Roles** Deny assignments

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](#)

All Job function roles Privileged administrator roles

Custom Support Request Type: All Category: All

Name	Description	Type	Category	Details
Custom Support Request	A custom contributor role for support requests.	CustomRole	None	View

Task 4: Monitor role assignments with the Activity Log

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

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Home > Resource Manager | Management groups > az104-mg1

az104-mg1 | Activity Log

Search

Activity Edit columns Refresh Export Activity Logs Download as CSV Insights Feedback Pin current filters Reset filters

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Search Quick Insights

Management Group: az104-mg1 Subscription: None Event severity: All Timespan: Last 6 hours Add Filter

4 items.

Operation name	Status	Time	Time stamp	Subscription	Event initiated by
Create or update custom role definition	Succeeded	6 minutes a...	Thu Dec 11 ...		bsse2280143@szabist.pk
Create role assignment	Succeeded	33 minutes ...	Thu Dec 11 ...		bsse2280143@szabist.pk
Create role assignment	Started	33 minutes ...	Thu Dec 11 ...		bsse2280143@szabist.pk
Create or Update	Succeeded	2 hours ago	Thu Dec 11 ...		bsse2280143@szabist.pk

- Review the activities for role assignments:

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Home > Resource Manager | Management groups > az104-mg1

az104-mg1 | Activity Log

Management group

Search

Activity Edit columns Refresh

Looking for Log Analytics? In Log Analytics

Search

Management Group : az104-mg1

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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Home > Resource Manager | Management groups > az104-mg1

az104-mg1 | Activity Log

Management group

Search

Activity Edit columns Refresh

Looking for Log Analytics? In Log Analytics

Search

Management Group : az104-mg1

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