Introduction to Cloud Computing
LAB 02a

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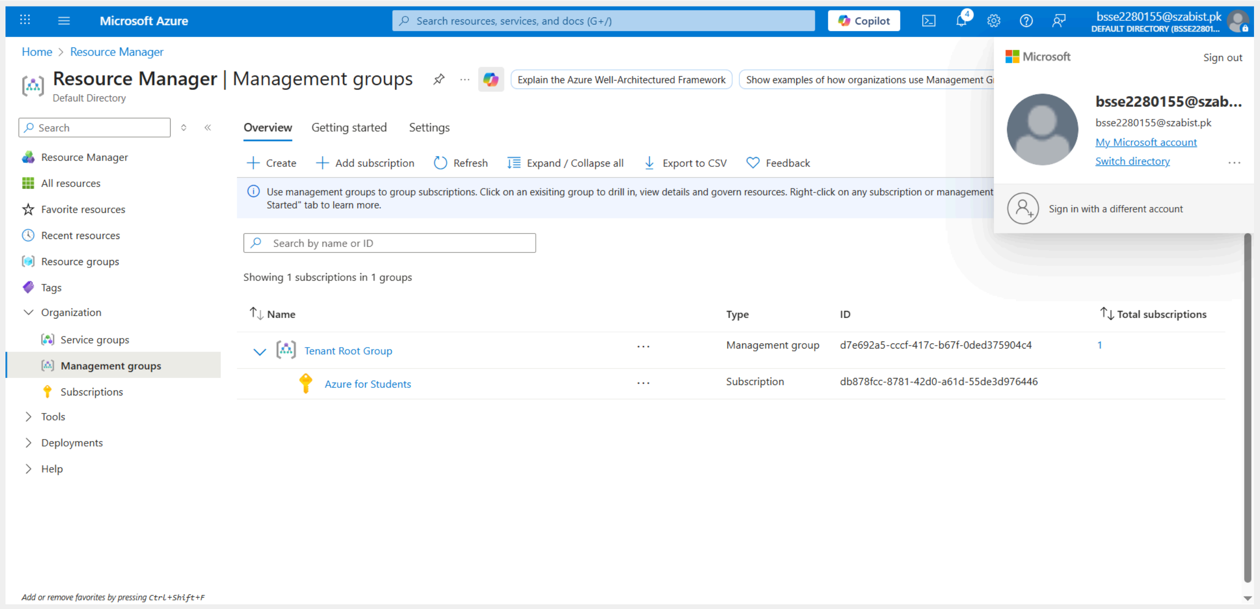
BS-SE 7B

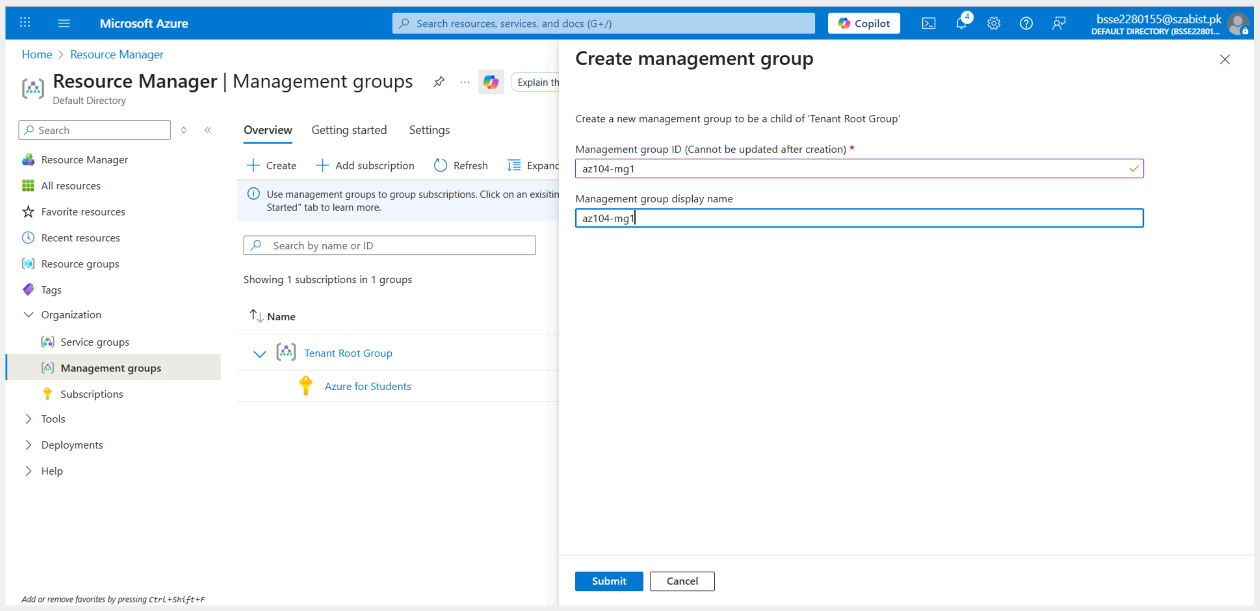
Task 1: Implement Management Groups



Use management groups to group subscriptions. Click on an exisiting group to drill in, view details and govern resources. Right-click on any subscription or management Started" tab to learn more.

Showing 1 subscriptions in 1 groups

Name	Type	ID	Total subscriptions
Tenant Root Group	Management group	d7e692a5-cccf-417c-b67f-0ded375904c4	1
Azure for Students	Subscription	db878fcc-8781-42d0-a61d-55de3d976446	



Use management groups to group subscriptions. Click on an exisitin Started" tab to learn more.

Showing 1 subscriptions in 1 groups

Create management group

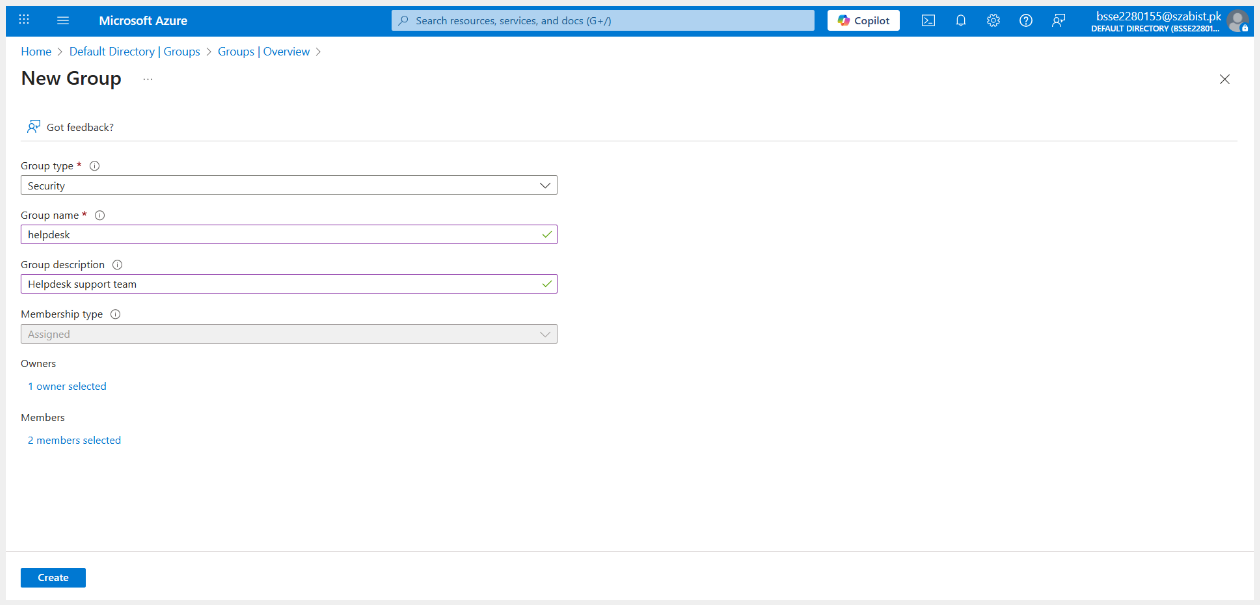
Create a new management group to be a child of 'Tenant Root Group'

Management group ID (Cannot be updated after creation) *: az104-mg1

Management group display name: az104-mg1

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

- **Note:** In the following steps, you will assign the role to the **helpdesk** group. If you do not have a Help Desk group, take a minute to create it.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DEFAULT DIRECTORY (BSSE22801...
Got feedback?
Create

Home > Default Directory | Groups > Groups | Overview >

New Group

Group type * : Security

Group name * : helpdesk

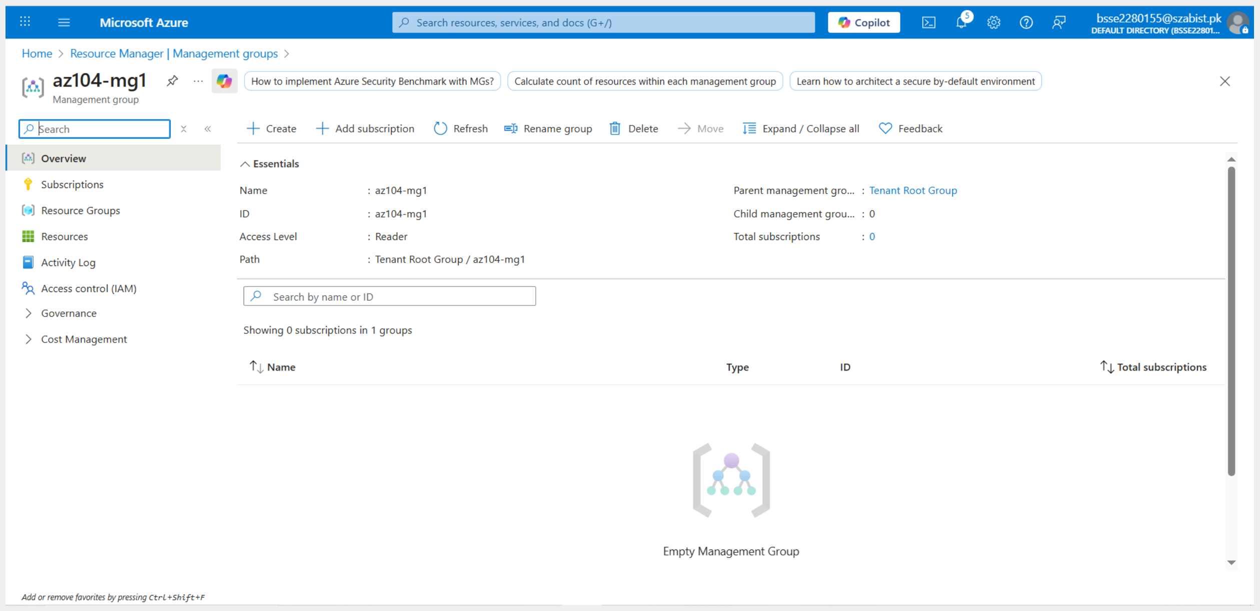
Group description : Helpdesk support team

Membership type : Assigned

Owners : 1 owner selected

Members : 2 members selected

- Select the **az104-mg1** management group.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How to implement Azure Security Benchmark with MGs?
Calculate count of resources within each management group
Learn how to architect a secure by-default environment
Search
Overview
Subscriptions
Resource Groups
Resources
Activity Log
Access control (IAM)
Governance
Cost Management
Create
Add subscription
Refresh
Rename group
Delete
Move
Expand / Collapse all
Feedback
Search by name or ID
Empty Management Group
Add or remove favorites by pressing Ctrl+Shift+F

Home > Resource Manager | Management groups >

az104-mg1
Management group

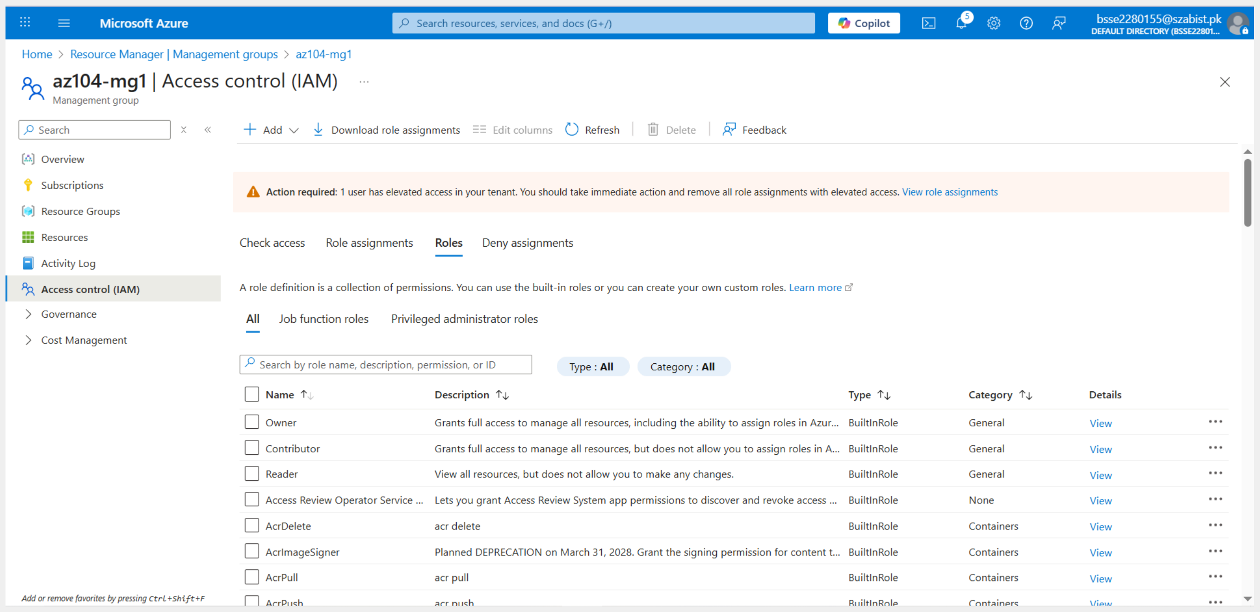
Essentials

Name	: az104-mg1	Parent management gro...	: Tenant Root Group
ID	: az104-mg1	Child management grou...	: 0
Access Level	: Reader	Total subscriptions	: 0
Path	: Tenant Root Group / az104-mg1		

Showing 0 subscriptions in 1 groups

Name	Type	ID	Total subscriptions

- Select the **Access control (IAM)** blade, and then the **Roles** tab.



Home > Resource Manager | Management groups > az104-mg1

az104-mg1 | Access control (IAM)

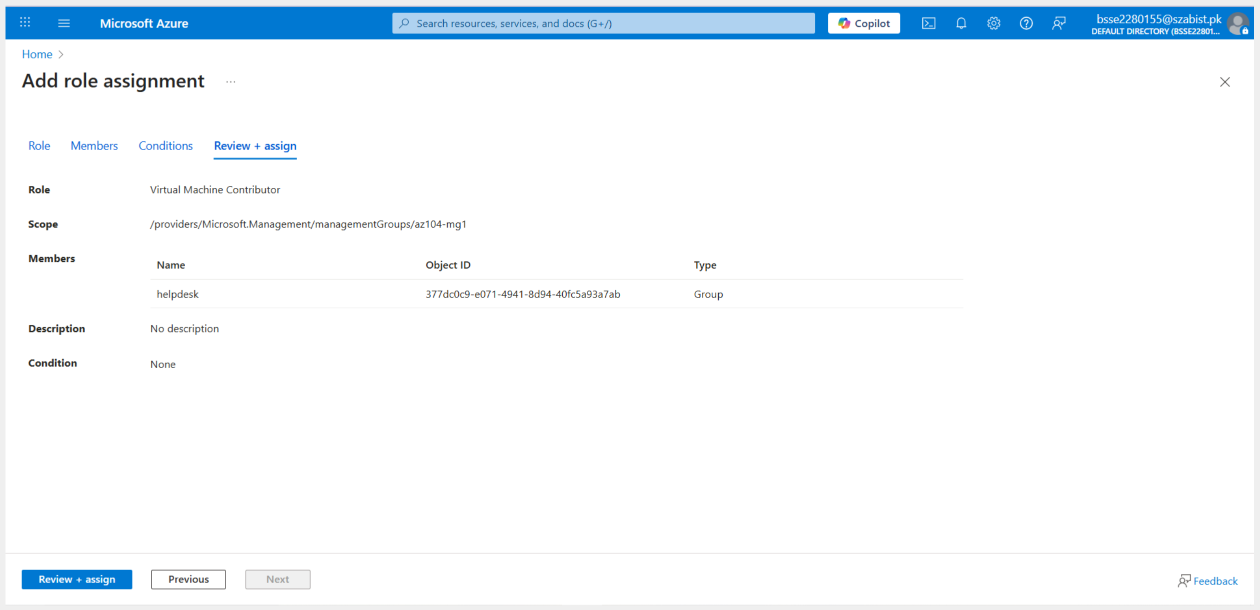
Management group

Action required: 1 user has elevated access in your tenant. You should take immediate action and remove all role assignments with elevated access. View role 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

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

- Select **Add**, from the drop-down menu, select **Add role assignment**.



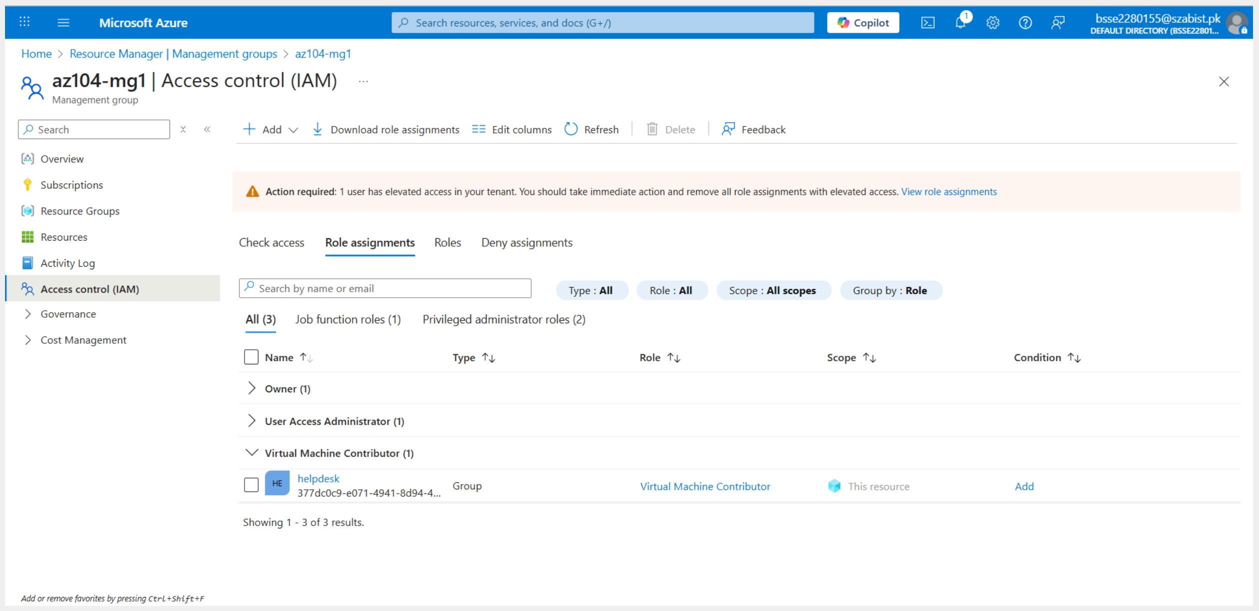
Home >

Add role assignment

Role	Virtual Machine Contributor
Scope	/providers/Microsoft.Management/managementGroups/az104-mg1
Members	
Description	No description
Condition	None

Name	Object ID	Type
helpdesk	377dc0c9-e071-4941-8d94-40fc5a93a7ab	Group

- 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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az104-mg1 | Access control (IAM)

Management group

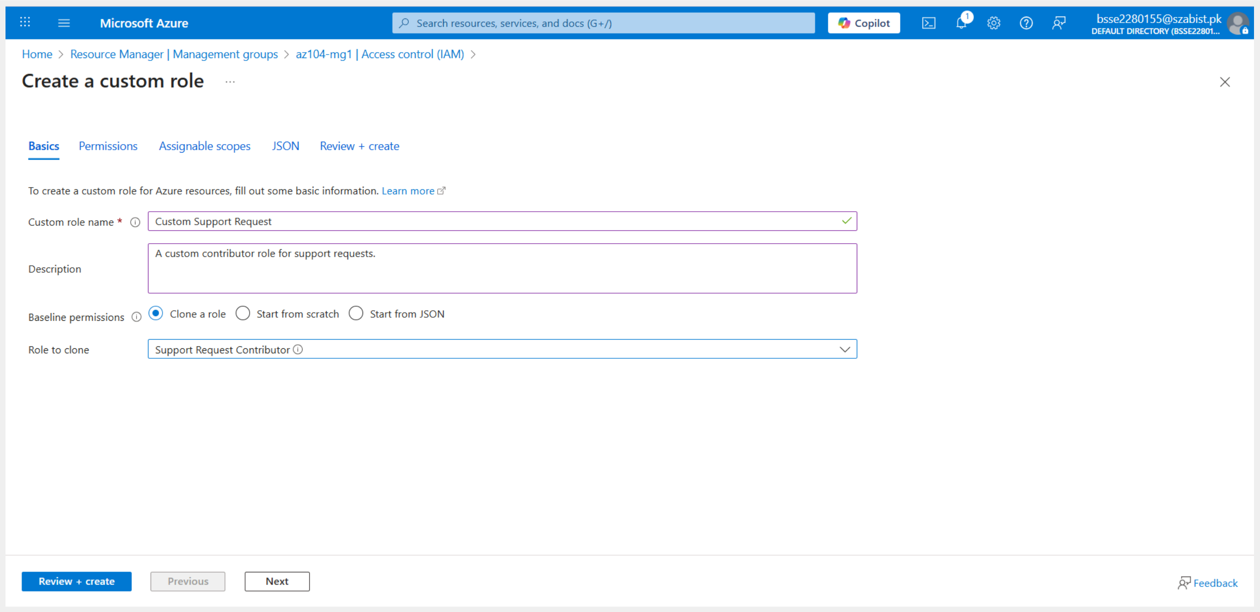
Action required: 1 user has elevated access in your tenant. You should take immediate action and remove all role assignments with elevated access. View role assignments

□ Name	Type	Role	Scope	Condition
Owner (1)				
User Access Administrator (1)				
Virtual Machine Contributor (1)				
□ HE helpdesk 377dc0c9-e071-4941-8d94-4...	Group	Virtual Machine Contributor	This resource	Add

Showing 1 - 3 of 3 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**.



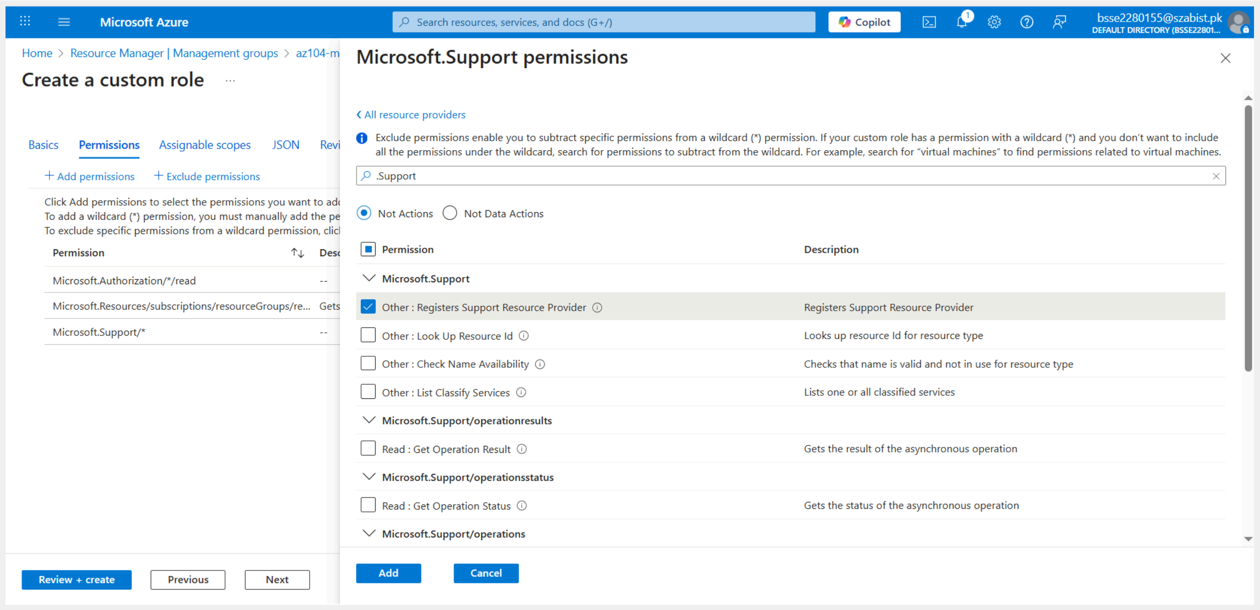
Home > Resource Manager | Management groups > az104-mg1 | Access control (IAM) >

Create a custom role ...

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

- Select **Add**, from the drop-down menu, select **Add custom role**.



Home > Resource Manager | Management groups > az104-m

Create a custom role ...

Click Add permissions to select the permissions you want to ad
To add a wildcard (*) permission, you must manually add the pe
To exclude specific permissions from a wildcard permission, clic

Permission	Desc
Microsoft.Authorization/*/read	--
Microsoft.Resources/subscriptions/resourceGroups/re...	Gets
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

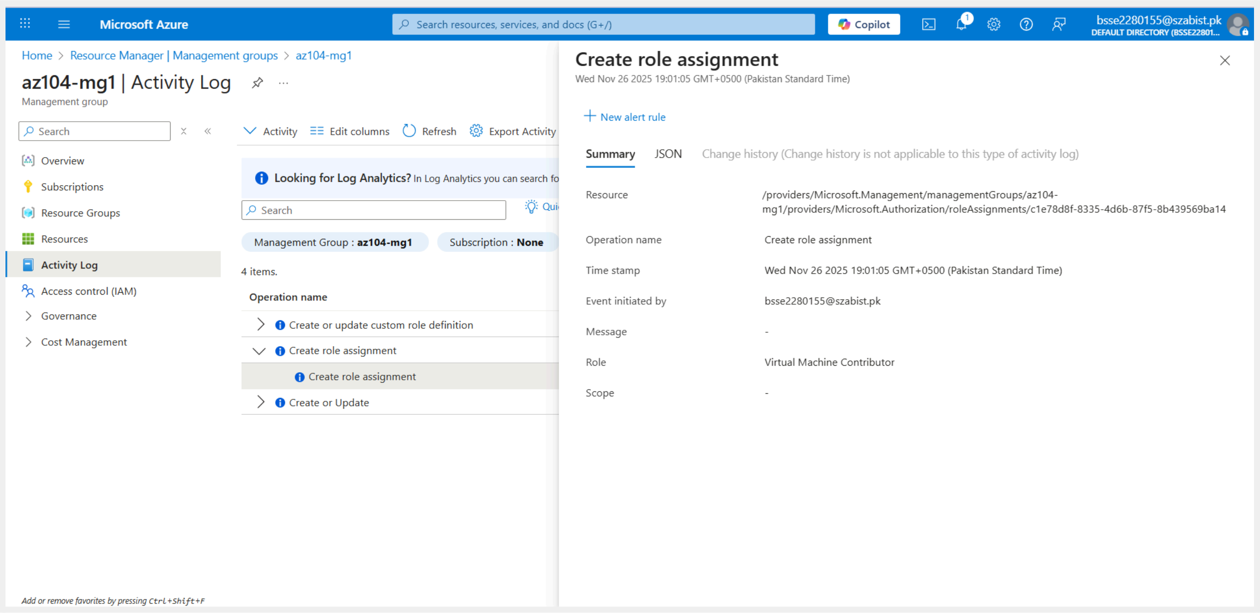
● Not Actions ○ Not Data Actions

Permission	Description
Microsoft.Support	
☑ Other : Registers Support Resource Provider	Registers Support Resource Provider
□ Other : Look Up Resource Id	Looks up resource Id for resource type
□ Other : Check Name Availability	Checks that name is valid and not in use for resource type
□ Other : List Classify Services	Lists one or all classified services
Microsoft.Support/operationresults	
□ Read : Get Operation Result	Gets the result of the asynchronous operation
Microsoft.Support/operationsstatus	
□ Read : Get Operation Status	Gets the status of the asynchronous operation
Microsoft.Support/operations	

- Select **Review + Create**, and then select **Create**.

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.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Home > Resource Manager | Management groups > az104-mg1
az104-mg1 | Activity Log
Management group
Search
Overview
Subscriptions
Resource Groups
Resources
Activity Log
Access control (IAM)
Governance
Cost Management
Activity
Edit columns
Refresh
Export Activity
Looking for Log Analytics? In Log Analytics you can search fo
Search
Qui
Management Group : az104-mg1
Subscription : None
Add or remove favorites by pressing Ctrl+Shift+F

4 items.

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

Create role assignment

Wed Nov 26 2025 19:01:05 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/c1e78d8f-8335-4d6b-87f5-8b439569ba14
Operation name	Create role assignment
Time stamp	Wed Nov 26 2025 19:01:05 GMT+0500 (Pakistan Standard Time)
Event initiated by	bsse2280155@szabist.pk
Message	-
Role	Virtual Machine Contributor
Scope	-