

Microsoft Azure IAM

User Creation + Provisioning

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Azure IAM Project Complete:

- Created User Account
- Created Role
- Provisioned User with Role
- Created Custom Role
- Provisioned User with Custom Role

Navigate to “microsoft entra id”

The screenshot shows the Microsoft Azure portal interface. At the top, the search bar contains the text "microsoft entra id". Below the search bar, a dropdown menu displays search results categorized into "Services" and "Marketplace".

Azure services

- Create a resource
- Kubernetes services
- Azure Lighthouse
- More services

Resources

Recent Favorite

Name

NetworkWatcherRG

See all

Search Results:

- Services (70)**
 - Microsoft Entra ID
 - Microsoft Entra ID Protection
 - Microsoft Entra ID risk detections
 - Microsoft Entra ID risky sign-ins
- Marketplace**
 - Microsoft Entra ID
 - Microsoft Entra ID Protection
 - Microsoft Entra ID solution for Sentinel
 - Microsoft Entra ID Assets

Documentation

- Continue searching in Microsoft Entra ID

Searching all subscriptions. Give feedback

Other visible elements:

- Microsoft Azure logo
- Copilot button
- Microsoft Sentinel
- Azure Monitor workspaces
- Last Viewed: 5 days ago

Click on “Users” in left column

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Home >

Default Directory | Overview

Overview

Preview features

Diagnose and solve problems

Manage

- Users
- Groups
- External Identities
- Roles and administrators
- Administrative units
- Delegated admin partners
- Enterprise applications
- Devices

Microsoft Entra has a simpler, integrated experience for managing all your Identity and Access Management needs. Try the new Microsoft Entra admin center!

Overview Monitoring Properties Recommendations Setup guides

Search your tenant

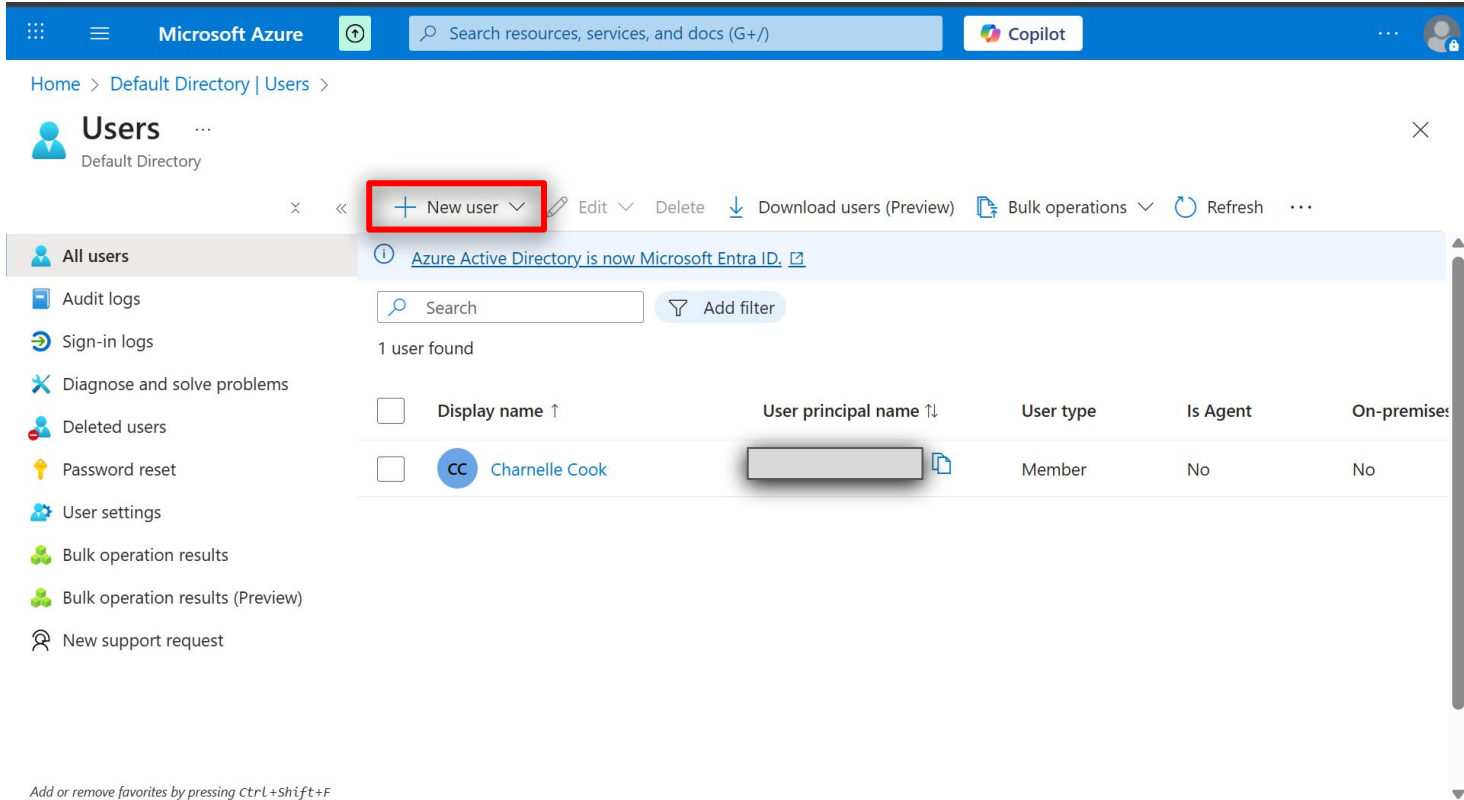
Basic information

| | |
|----------------|--------------------------------------|
| Name | Default Directory |
| Tenant ID | 3218da53-8d75-4ac4-bf20-1d1d2dc0cc6f |
| Primary domain | |
| License | Microsoft Entra ID Free |

Users 1

Add or remove favorites by pressing Ctrl+Shift+F

Click on “+ new user”



The screenshot shows the Microsoft Azure portal interface. At the top, the navigation bar includes the Microsoft Azure logo, a search bar, and the Copilot icon. The breadcrumb trail indicates the path: Home > Default Directory | Users >. The main heading is 'Users' with a subheading 'Default Directory'. A sidebar on the left lists various user management tasks: All users, Audit logs, Sign-in logs, Diagnose and solve problems, Deleted users, Password reset, User settings, Bulk operation results, Bulk operation results (Preview), and New support request. The main content area features a toolbar with a '+ New user' button (highlighted with a red box), an 'Edit' button, a 'Delete' button, a 'Download users (Preview)' button, a 'Bulk operations' dropdown, a 'Refresh' button, and a menu icon. Below the toolbar, a notification banner states 'Azure Active Directory is now Microsoft Entra ID'. A search bar and an 'Add filter' button are present. The text '1 user found' is displayed above a table. The table has columns: 'Display name', 'User principal name', 'User type', 'Is Agent', and 'On-premises'. One user is listed: 'Charnelle Cook' with a 'Member' user type. The 'User principal name' cell is highlighted with a grey box.

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Home > Default Directory | Users >

Users ...

Default Directory

+ New user Edit Delete Download users (Preview) Bulk operations Refresh ...

Azure Active Directory is now Microsoft Entra ID.

Search Add filter




1 user found

| <input type="checkbox"/> | Display name ↑ | User principal name ↓ | User type | Is Agent | On-premises |
|--------------------------|-------------------|-----------------------|-----------|----------|-------------|
| <input type="checkbox"/> | CC Charnelle Cook | | Member | No | No |



Add or remove favorites by pressing Ctrl+Shift+F

Enter user information and create password

Click Review + Create

 Microsoft Azure 

Search resources, services, and docs (G+)


 Copilot 


[Home](#) > [Default Directory](#) | [Users](#) > [Users](#) >

Create new user ...

Create a new internal user in your organization

Identity



User principal name * @ 

Domain not listed? [Learn more](#) 

Mail nickname *

☒ Derive from user principal name

Display name *

Password *  


☐ Auto-generate password

Account enabled ⓘ ☒




Review + create


< Previous




Next: Properties >

 Give feedback

Review inputs. Click “create”

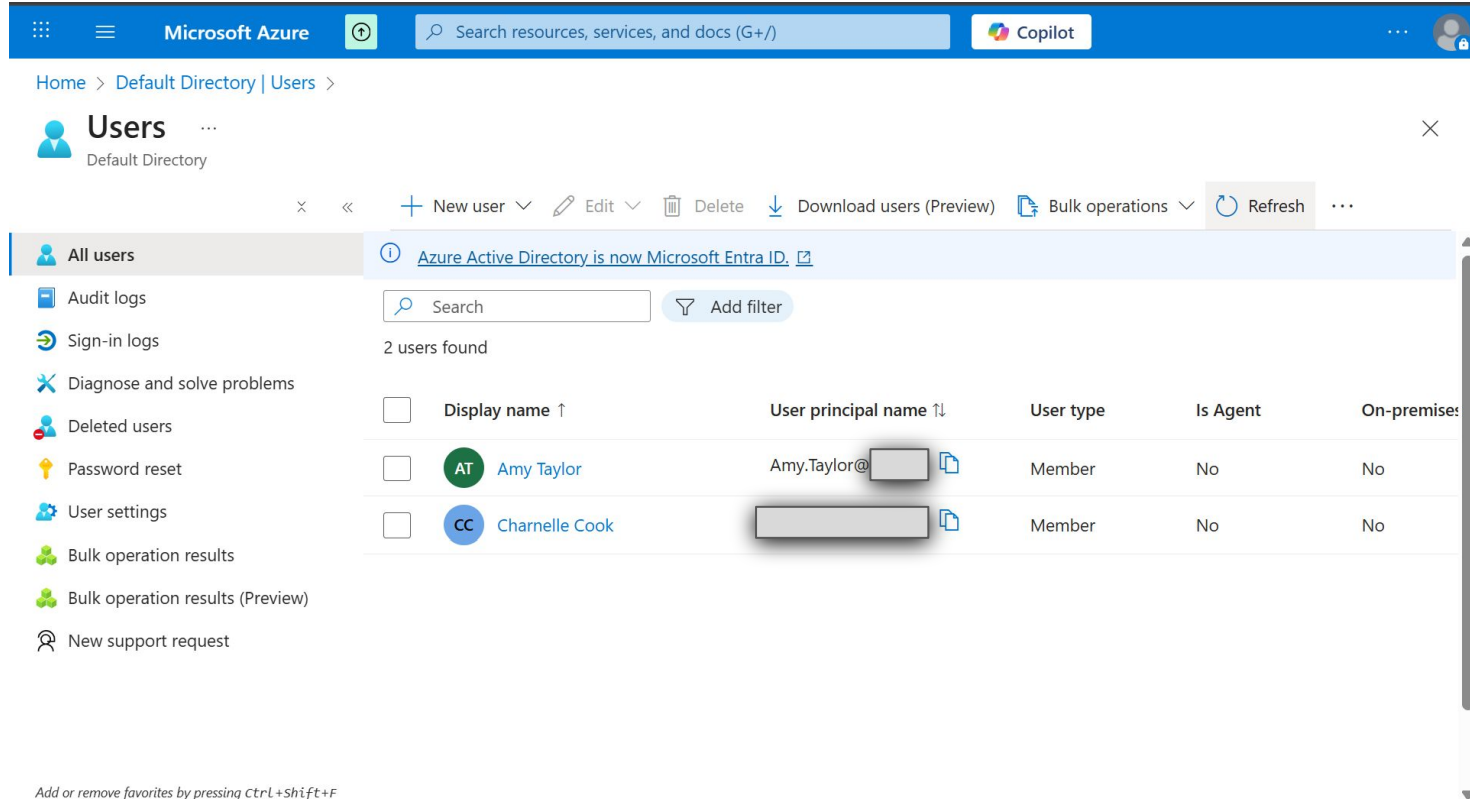
 Microsoft Azure 

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

 Copilot  

[Home](#) > [Default Directory](#) | [Users](#) > [Users](#) >[Basics](#) [Properties](#) [Assignments](#) [Review + create](#)[Create](#) [< Previous](#) [Next >](#) Give feedback

User will be displayed in directory



Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Home > Default Directory | Users >

Users

Default Directory





+ New user Edit Delete Download users (Preview) Bulk operations Refresh

All users

Azure Active Directory is now Microsoft Entra ID.

Search Add filter

2 users found

| | Display name ↑ | User principal name ↑↓ | User type | Is Agent | On-premises |
|--------------------------|--|---|-----------|----------|-------------|
| <input type="checkbox"/> |  Amy Taylor | Amy.Taylor@[redacted]  | Member | No | No |
| <input type="checkbox"/> |  Charnelle Cook | [redacted]  | Member | No | No |

Add or remove favorites by pressing Ctrl+Shift+F

Click on chosen Resource Group

The screenshot displays the Microsoft Azure portal interface. At the top, the header bar includes the Microsoft Azure logo, a search bar with the text "Search resources, services, and docs (G+)", and a Copilot button. Below the header, the breadcrumb "Home >" is visible. The main content area is titled "NetworkWatcherRG" with the subtitle "Resource group". To the right of the title are icons for favorites, a search bar, and a button to "Generate Bicep code to duplicate this resource group." with a "+2" indicator. Below the title bar, there is a search bar and a row of action buttons: "Create", "Manage view", "Delete resource group", "Refresh", "Export to CSV", and "Group by none". A left-hand navigation pane lists various options: "Overview" (selected), "Activity log", "Access control (IAM)", "Tags", "Resource visualizer", "Events", "Settings", "Cost Management", "Monitoring", "Automation", and "Help". The main content area is divided into "Essentials" and "Resources" sections. The "Resources" section is active, showing a table of resources. The table has columns for "Name", "Type", and "Location". One resource is listed: "NetworkWatcher_eastus2" of type "Network Watcher" located in "East US 2". A filter bar at the top of the table allows filtering by field, with current filters set to "Type equals all" and "Location equals all".

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Home >

NetworkWatcherRG
Resource group

Generate Bicep code to duplicate this resource group. +2

Search

+ Create Manage view Delete resource group Refresh Export to CSV Group by none

Overview

- Activity log
- Access control (IAM)
- Tags
- Resource visualizer
- Events
- Settings
- Cost Management
- Monitoring
- Automation
- Help

Essentials JSON View

Resources Recommendations

Filter for any field... Type equals all Location equals all + Add filter

| Name | Type | Location |
|------------------------|-----------------|-----------|
| NetworkWatcher_eastus2 | Network Watcher | East US 2 |

Add or remove favorites by pressing Ctrl+Shift+F

Click on “Access control (IAM)” in left column

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Home > NetworkWatcherRG

NetworkWatcherRG | Access control (IAM) ☆ ...

Resource group

Search

Overview

Activity log

Access control (IAM)

Tags

Resource visualizer

Events

> Settings

> Cost Management

> Monitoring

> Automation

> Help

+ Add ▾ ▾ Download role assignments Edit columns Refresh Delete Feedback

Add role assignment

Add custom role

Role assignments Roles Deny assignments Classic administrators

My access

View my level of access to this resource.

[View my access](#)

Check access

Review the level of access a user, group, service principal, or managed identity has to this resource. [Learn more](#)

[Check access](#)

Grant access to this resource

Grant access to resources by assigning a role. [Learn more](#)

View access to this resource

View the role assignments that grant access to this and other resources. [Learn more](#)

Add or remove favorites by pressing Ctrl+Shift+F

Click on “Privileged administrator roles”

Search for desired role, then click on “Members” at top

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Home > NetworkWatcherRG | Access control (IAM) >

Add role assignment

Role **Members** Conditions Review + assign

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](#)

Copilot can help pick a role

Job function roles **Privileged administrator roles**

Grant privileged administrator access, such as the ability to assign roles to other users.

Can a job function role with less access be used instead?

Type: All Category: All

| Name ↑↓ | Description ↑↓ | Type ↑↓ | Category ↑↓ | Details |
|----------------------------|--|-------------|-------------|----------------------|
| Contributor | Grants full access to manage all resources, but does not allow you to... | BuiltInRole | General | View |
| Azure Resilience Manage... | Contributor Role of Azure Resilience Management Recovery Service | BuiltInRole | None | View |

Showing 1 - 2 of 2 results

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

Feedback

Click “+select members”, click “select” to add user




The screenshot displays the Microsoft Azure portal interface for adding a role assignment. The main page is titled "Add role assignment" and shows the "Members" tab selected. The "Selected role" is "Contributor". Under "Assign access to", the "User, group, or service principal" option is selected. The "Members" section has a red box around the "+ Select members" button. Below this is a table with columns "Name" and "Object ID", currently showing "No members selected". The "Description" field is optional.

The "Select members" modal window is open, showing a search bar and a list of users. The list includes:




- Amy Taylor (User, group, or service principal) with email Amy.Taylor@...onmicrosoft.com
- Charnelle Cook (Guest) with email ...gmail.onmicrosoft.com

The "Selected members:" section shows Amy Taylor (User, group, or service principal) with email Amy.Taylor@...onmicrosoft.com. The "Select" button is highlighted.

Click “review + assign”

 Microsoft Azure 

Search resources, services, and docs (G+)

 Copilot  

Home > NetworkWatcherRG | Access control (IAM) >

Add role assignment

Role

Members

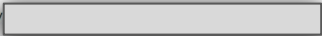
Conditions

Review + assign

Role

Contributor

Scope

/subscriptions/  resourceGroups/NetworkWatcherRG

Members

| Name | Object ID | Type |
|------------|--------------------------------------|------|
| Amy Taylor | 072c48b0-939e-4ee5-bf80-4f69936f812e | User |


Description

No description

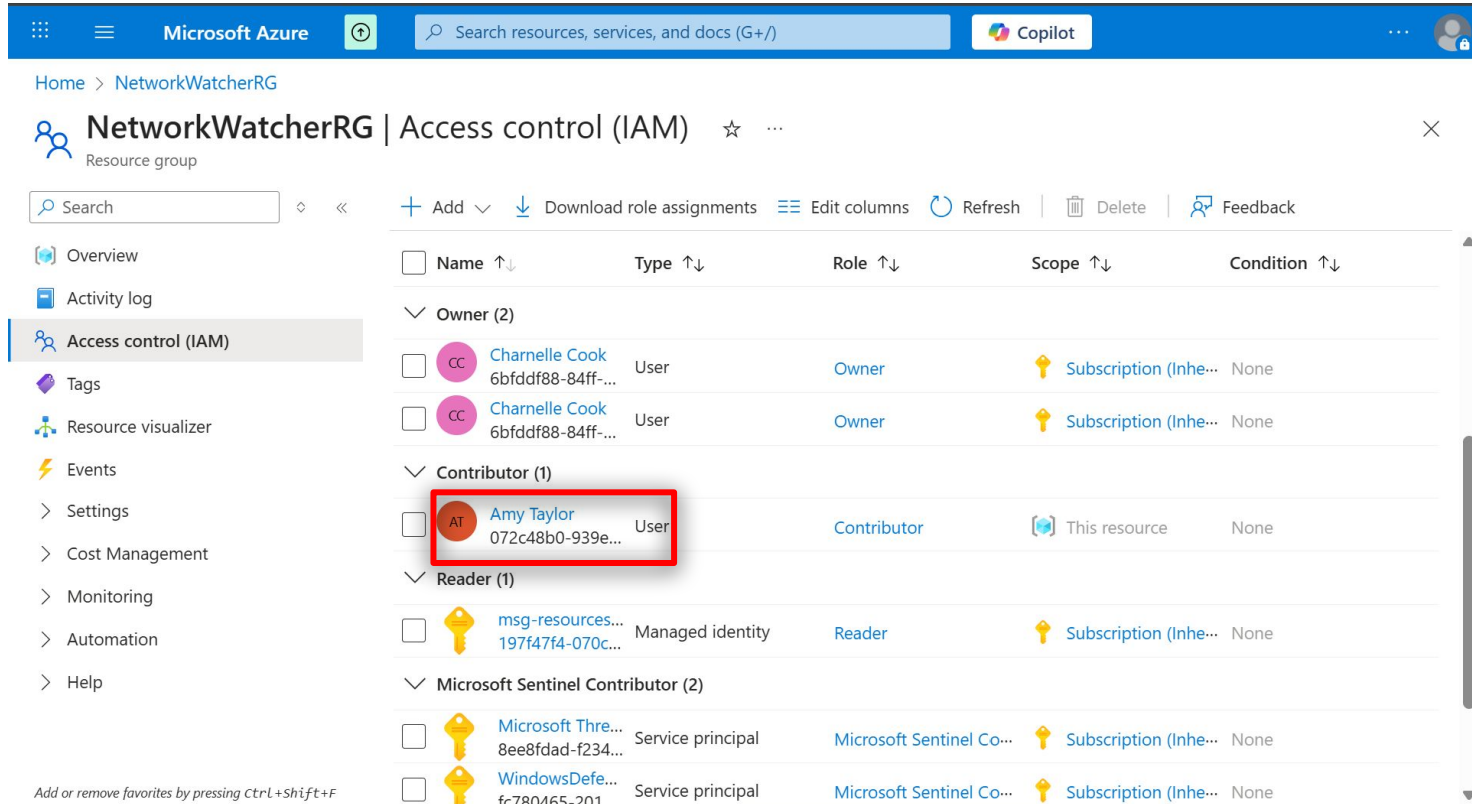
Review + assign

Previous

Next

 Feedback

User will be provisioned with role in resource grp directory



The screenshot displays the Microsoft Azure portal interface. At the top, the navigation bar includes the Microsoft Azure logo, a search bar, and the Copilot icon. The main header shows the path "Home > NetworkWatcherRG" and the title "NetworkWatcherRG | Access control (IAM)".

On the left, a sidebar menu lists various options: Overview, Activity log, Access control (IAM) (which is selected and highlighted), Tags, Resource visualizer, Events, Settings, Cost Management, Monitoring, Automation, and Help.

The main content area shows a table of role assignments. The table has columns for Name, Type, Role, Scope, and Condition. The assignments are grouped into categories: Owner (2), Contributor (1), Reader (1), and Microsoft Sentinel Contributor (2).

The entry for Amy Taylor is highlighted with a red box. She is listed as a User with the role of Contributor, assigned to the scope "This resource".

| Name | Type | Role | Scope | Condition |
|---|-------------------|--------------------------|-----------------------|-----------|
| Owner (2) | | | | |
| Charnelle Cook | User | Owner | Subscription (Inhe... | None |
| Charnelle Cook | User | Owner | Subscription (Inhe... | None |
| Contributor (1) | | | | |
| Amy Taylor | User | Contributor | This resource | None |
| Reader (1) | | | | |
| msg-resources... | Managed identity | Reader | Subscription (Inhe... | None |
| Microsoft Sentinel Contributor (2) | | | | |
| Microsoft Thre... | Service principal | Microsoft Sentinel Co... | Subscription (Inhe... | None |
| WindowsDefe... | Service principal | Microsoft Sentinel Co... | Subscription (Inhe... | None |

Click “+add” and “add custom role”

The screenshot shows the Microsoft Azure portal interface. At the top, there's a blue header with the Microsoft Azure logo, a search bar, and a Copilot button. Below the header, the breadcrumb navigation shows 'Home > NetworkWatcherRG'. The main heading is 'NetworkWatcherRG | Access control (IAM)'. A search bar is present, followed by a dropdown menu with the '+ Add' button highlighted by a red box. The dropdown menu shows 'Add role assignment' and 'Add custom role'. Below the dropdown, there are tabs for 'My access', 'Check access', 'Grant access to this resource', and 'View access to this resource'. The 'My access' tab is currently selected, showing 'View my level of access to this resource.' and a 'View my access' button. The 'Check access' tab shows 'Review the level of access a user, group, service principal, or managed identity has to this resource.' and a 'Check access' button. The 'Grant access to this resource' tab shows 'Grant access to resources by assigning a role.' and a 'Learn more' link. The 'View access to this resource' tab shows 'View the role assignments that grant access to this and other resources.' and a 'Learn more' link. The left sidebar contains a navigation menu with options like Overview, Activity log, Access control (IAM), Tags, Resource visualizer, Events, Settings, Cost Management, Monitoring, Automation, and Help.

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Home > NetworkWatcherRG

NetworkWatcherRG | Access control (IAM)

Resource group

Search

+ Add

Download role assignments

Edit columns

Refresh

Delete

Feedback

Overview

Activity log

Access control (IAM)

Tags

Resource visualizer

Events

Settings

Cost Management

Monitoring

Automation

Help

My access

View my level of access to this resource.

View my access

Check access

Review the level of access a user, group, service principal, or managed identity has to this resource. [Learn more](#)

Check access

Grant access to this resource




Grant access to resources by assigning a role. [Learn more](#)

View access to this resource

View the role assignments that grant access to this and other resources. [Learn more](#)

Add or remove favorites by pressing Ctrl+Shift+F

Input custom role data

**Microsoft Azure**

Home > NetworkWatcherRG | 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 * ⓘ


Description

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

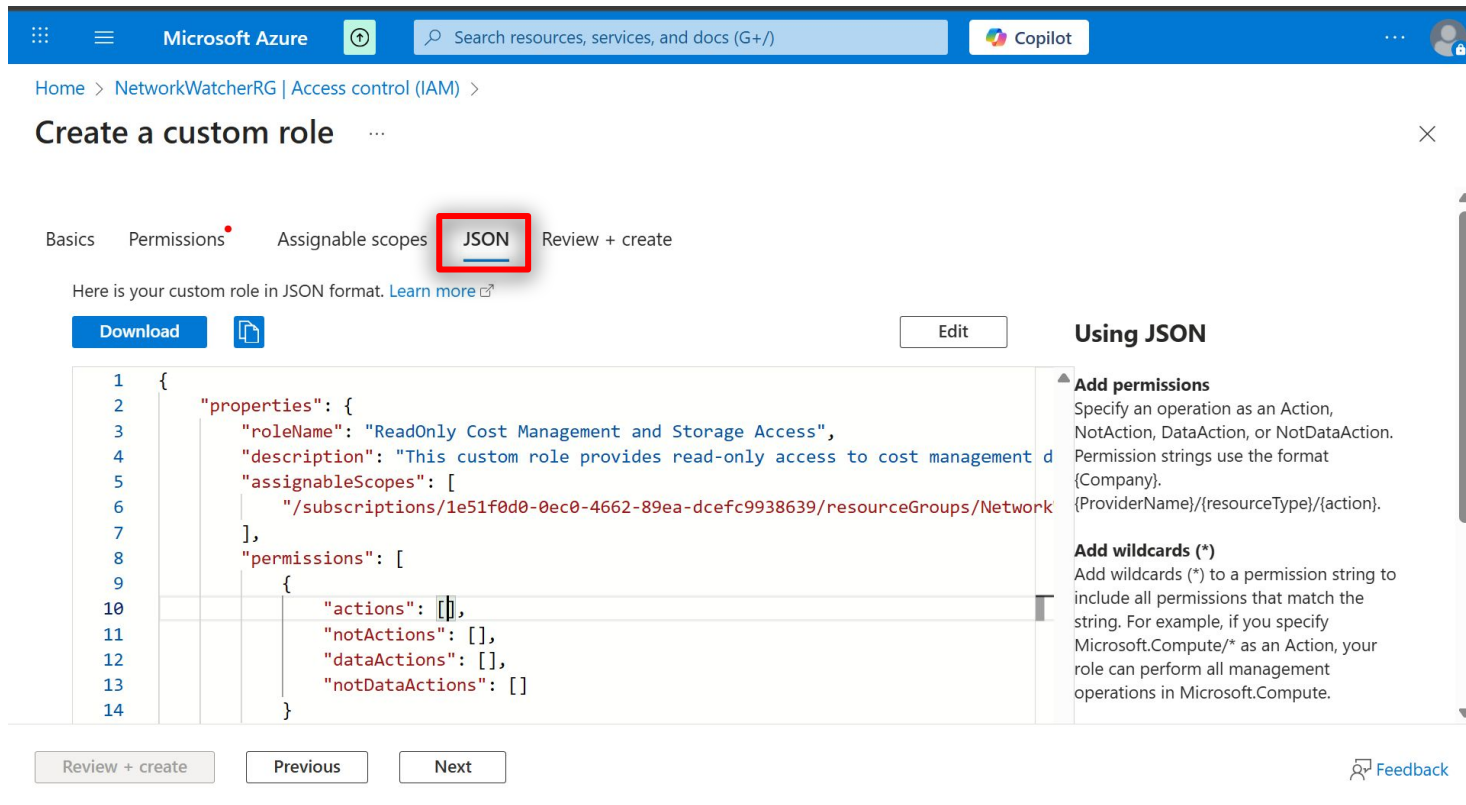
Review + create

Previous

Next

 [Feedback](#)

Click “JSON”, use JSON format to add “actions”



The screenshot shows the Microsoft Azure portal interface for creating a custom role. The breadcrumb navigation at the top indicates the path: Home > NetworkWatcherRG | Access control (IAM) > Create a custom role. The 'JSON' tab is selected and highlighted with a red box. Below the tabs, a message states: 'Here is your custom role in JSON format. [Learn more](#)'. To the left of the JSON editor are buttons for 'Download' and a document icon. To the right is an 'Edit' button. The JSON editor contains the following code:

```
1 {
2   "properties": {
3     "roleName": "ReadOnly Cost Management and Storage Access",
4     "description": "This custom role provides read-only access to cost management d
5     "assignableScopes": [
6       "/subscriptions/1e51f0d0-0ec0-4662-89ea-dcefc9938639/resourceGroups/Network
7     ],
8     "permissions": [
9       {
10        "actions": [],
11        "notActions": [],
12        "dataActions": [],
13        "notDataActions": []
14      }
15    ]
16  }
17 }
```

On the right side, under the heading 'Using JSON', there are two sections:

- Add permissions**
Specify an operation as an Action, NotAction, DataAction, or NotDataAction. Permission strings use the format {Company}. {ProviderName}/{resourceType}/{action}.
- Add wildcards (*)**
Add wildcards (*) to a permission string to include all permissions that match the string. For example, if you specify Microsoft.Compute/* as an Action, your role can perform all management operations in Microsoft.Compute.

At the bottom of the page, there are three buttons: 'Review + create', 'Previous', and 'Next'. A 'Feedback' link is located in the bottom right corner.

Input desired actions, click “review + create”

Microsoft Azure Search resources, services, and docs (G+)

Home > NetworkWatcherRG | Access control (IAM) >

Create a custom role

```
7 ],
8   "permissions": [
9     {
10      "actions": [
11        "Microsoft.Storage/storageAccounts/listkeys/action",
12        "Microsoft.Storage/storageAccounts/read",
13        "Microsoft.Storage/storageAccounts/blobServices/containers/read",
14        "Microsoft.CostManagement/exports/read",
15        "Microsoft.CostManagement/query/action",
16        "Microsoft.CostManagement/forecast/action",
17        "Microsoft.Consumption/reservationRecommendations/read",
18        "Microsoft.Consumption/reservationRecommendationDetails/read",
19        "Microsoft.CostManagement/reports/action"
20      ],
21      "notActions": [],
22      "dataActions": [],
23      "notDataActions": []
24    }
  ]
```




(ProviderName)/{resourceType}/{action}.

Add wildcards (*)
Add wildcards (*) to a permission string to include all permissions that match the string. For example, if you specify Microsoft.Compute/* as an Action, your role can perform all management operations in Microsoft.Compute.




Add assignable scopes
Management group scope has the format /providers/Microsoft.Management/managementGroups/{managementGroupName}. Subscription scope has the format /subscriptions/{subscriptionId}. Resource group scope has the format /subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}.

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

Review and click “create”

 Microsoft Azure 

Search resources, services, and docs (G+)

 Copilot 

Home > NetworkWatcherRG | Access control (IAM) >

Create a custom role ...


Role description This custom role provides read-only access to cost management data and storage account information, including list keys and container reads.

Permissions

| | |
|--------|--|
| Action | Microsoft.Storage/storageAccounts/listkeys/action |
| Action | Microsoft.Storage/storageAccounts/read |
| Action | Microsoft.Storage/storageAccounts/blobServices/containers/read |
| Action | Microsoft.CostManagement/exports/read |
| Action | Microsoft.CostManagement/query/action |
| Action | Microsoft.CostManagement/forecast/action |
| Action | Microsoft.Consumption/reservationRecommendations/read |
| Action | Microsoft.Consumption/reservationRecommendationDetails/read |
| Action | Microsoft.CostManagement/reports/action |

Create

Previous

 Feedback

Return to “Access control (IAM), click “+add”

Click “add role assignment”

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Home > NetworkWatcherRG

NetworkWatcherRG | Access control (IAM) ☆ ...

Resource group

Search

+ Add ▾ Download role assignments Edit columns Refresh Delete Feedback

Overview

Activity log

Access control (IAM)

Tags

Resource visualizer

Events

Settings

Cost Management

Monitoring

Automation

Help

My access

View my level of access to this resource.

[View my access](#)

Check access

Review the level of access a user, group, service principal, or managed identity has to this resource. [Learn more](#)

[Check access](#)

Grant access to this resource

Grant access to resources by assigning a role. [Learn more](#)

View access to this resource

View the role assignments that grant access to this and other resources. [Learn more](#)

Add or remove favorites by pressing Ctrl+Shift+F

Click “job function roles”, search desired role

Click “Members”

Microsoft Azure

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

Copilot

Home > NetworkWatcherRG | Access control (IAM) >

Add role assignment

Role **Members** Conditions Review + assign

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](#)

Copilot can help pick a role

Job function roles Privileged administrator roles

Grant access to Azure resources based on job function, such as the ability to create virtual machines.

× Type : All Category : All

| Name ↑↓ | Description ↑↓ | Type ↑↓ | Category ↑↓ | Details |
|--------------------------|--|------------|-------------|----------------------|
| ReadOnly Cost Managem... | This custom role provides read-only access to cost management dat... | CustomRole | None | View |

Showing 1 - 1 of 1 results.

Review + assign Previous Next

Feedback

Click “+select members” and click “select” to add user

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Home > NetworkWatcherRG | Access control (IAM) >

Add role assignment

Role **Members** Conditions Review + assign

Selected role ReadOnly Cost Management and Storage Access

Assign access to ☒ User, group, or service principal ☐ Managed identity

Members + Select members

| Name | Object ID |
|---------------------|-----------|
| No members selected | |

Description Optional

Review + assign Previous Next

Select members

Search by name or email address

- Amy Taylor Amy.Taylor@[redacted]onmicrosoft.com
- Charnelle Cook (Guest) [redacted]onmicrosoft.com

Selected members:

- Amy Taylor Amy.Taylor@[redacted]onmicrosoft.com

Select Close

<https://portal.azure.com/?l=en-en-us#@nelcook11gmail.onmicro...>

Click “review + assign”

[Home](#) > [NetworkWatcherRG](#) | [Access control \(IAM\)](#) >

Add role assignment

✕

RoleMembersConditionsReview + assign

Role

ReadOnly Cost Management and Storage Access

Scope

/subscriptions/[redacted]/resourceGroups/NetworkWatcherRG

Members

| Name | Object ID | Type |
|------------|--------------------------------------|------|
| Amy Taylor | 072c48b0-939e-4ee5-bf80-4f69936f812e | User |

Description

No description

Review + assignPreviousNext

Feedback

User will be provisioned with custom role in resource grp directory

The screenshot displays the Microsoft Azure portal interface. At the top, the navigation bar shows 'Microsoft Azure' and a search bar. Below the navigation bar, the breadcrumb path is 'Home > NetworkWatcherRG'. The main heading is 'NetworkWatcherRG | Access control (IAM)'. The left sidebar contains a list of navigation options: Overview, Activity log, Access control (IAM) (selected), Tags, Resource visualizer, Events, Settings, Cost Management, Monitoring, Automation, and Help. The main content area shows a table of role assignments. The table has columns for 'Add', 'Download role assignments', 'Edit columns', 'Refresh', 'Delete', and 'Feedback'. The table lists the following role assignments:

| Role | Principal | Role | Scope | Permissions |
|---|---------------------------------------|--------------------------|------------------------|-------------|
| Contributor | Amy Taylor (User) | Contributor | This resource | None |
| Reader (1) | msg-resources... (Managed identity) | Reader | Subscription (Inhe...) | None |
| Microsoft Sentinel Contributor (2) | Microsoft Thre... (Service principal) | Microsoft Sentinel Co... | Subscription (Inhe...) | None |
| | WindowsDefe... (Service principal) | Microsoft Sentinel Co... | Subscription (Inhe...) | None |
| ReadOnly Cost Management and Storage Access (1) | Amy Taylor (User) | ReadOnly Cost Manag... | This resource | None |

Showing 1 - 7 of 7 results.

Add or remove favorites by pressing Ctrl+Shift+F