Cloud Platform 2021

User Access Configuration Guide for Role-based Access Control (RBAC)

Last Updated: 2021-02-08

Cloud Platform 2021 User Access Configuration Guide for Role-based Access Control (RBAC)

Legal Notice

Abstract

This guide is for Red Hat account users who want to use the User Access feature to configure role-based access control (RBAC) for services hosted at cloud.redhat.com. Providing Feedback: If you have a suggestion to improve this documentation, or find an error, submit a Bugzilla report at http://bugzilla.redhat.com. Select the Cloud Software Services (cloud.redhat.com) product and use the Documentation component.

Table of Contents

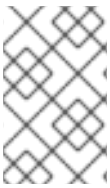
CHAPTER 1. USER ACCESS CONFIGURATION GUIDE FOR ROLE-BASED ACCESS CONTROL (RBAC)

1.1. WHAT IS USER ACCESS

The User Access feature is an implementation of role-based access control (RBAC) that controls user access to various services hosted at cloud.redhat.com. You configure the User Access feature to grant or deny user access to services hosted on cloud.redhat.com.

1.1.1. User Access and the Software as a Service (SaaS) access model

Red Hat customer accounts might have hundreds of authenticated users, yet not all users need the same level of access to the SaaS services available on cloud.redhat.com. With the User Access features, an org admin can manage user access to services hosted on cloud.redhat.com.



NOTE

User Access does not manage OpenShift Cluster Manager permissions. For OpenShift Cluster Manager, all users in the organization can view information, but only an Organization Administrator and cluster owners can perform actions on clusters.

1.1.2. Who can use User Access

To view and manage User Access on cloud.redhat.com, you must be an Organization Administrator (org admin). This is because User Access requires user management capabilities that are designated from the Red Hat Customer Portal at access.redhat.com. Those capabilities belong solely to the org admin.

1.1.3. How to use User Access

The User Access feature is based on managing roles rather than by assigning permissions individually to specific users. In User Access, each role has a specific set of permissions. For example, a role might allow read permission for an application. Another role might allow write permission for an application.

You create groups that contain roles and, by extension, the permissions assigned to each role. You assign users to groups. This means each user in a group is assigned the permissions of the roles in that group.

By creating different groups and adding or removing roles for that group, you control the permissions allowed for that group. When you add one or more users to a group, those users can perform all actions that are allowed for that group.

Red Hat provides a **Default access** group for User Access. The **Default access** group contains all authenticated users in your organization. These users automatically inherit a selection of predefined roles.

Red Hat provides a set of predefined roles. Depending on the application, the predefined roles for each supported application might have different permissions that are tailored to the application.

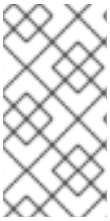
1.1.3.1. The Default access group

The **Default access** group is provided by Red Hat on cloud.redhat.com. It contains a set of roles that are predefined in cloud.redhat.com. The **Default access** group also includes all authenticated users in your organization. One advantage of the **Default access** group is that it is automatically updated when new

or modified predefined roles become available from cloud.redhat.com.

As an org admin, you can add roles to and remove roles from the **Default access** group. Changes you make to the **Default access** group affect all authenticated users in your organization.

When you manually modify the **Default access** group, its name changes to **Custom default access**, which indicates it was modified. Moreover, it is no longer automatically updated from cloud.redhat.com.



NOTE

If you change and save the **Default access** group, its name changes to **Custom default access**. You cannot revert or undo the name change. From that point forward, an org admin is responsible for all updates and changes to the group. The **Custom default access** group is no longer managed or updated by cloud.redhat.com.

The **Default access** group or **Custom default access** group cannot be deleted. You can create new access groups that use predefined roles, custom roles, or a combination of both.

1.1.3.2. The User Access groups, roles, and permissions

User Access uses the following categories to determine the level of user access that an org admin can grant to the supported cloud.redhat.com services. The access provided to any authorized user depends on the group that the user belongs to and the roles assigned to that group.

- **Group**: A collection of users belonging to an account which provides the mapping of roles to users. An org admin can use groups to assign one or more roles to a group and to include one or more users in a group. You can create a group with no roles and no users.
- **Roles**: A set of permissions that provide access to a given service, such as Insights. The permissions to perform certain operations are assigned to specific roles. Roles are assigned to groups. For example, you might have a **read** role and a **write** role for a service. Adding both roles to a group grants all members of that group read and write permissions to that service.
- **Permissions**: A discrete action that can be requested of a service. Permissions are assigned to roles.

An org admin adds or deletes roles and users to groups. The group can be a new group created by an org admin or the group can be an existing group. By creating a group that has one or more specific roles and then adding users to that group, you control how that group and its members interact with the cloud.redhat.com services.

When you add users to a group, they become members of that group. A group member inherits the roles of all other groups they belong to. The user interface lists users in the **Members** tab.

1.1.3.3. Additive access

User access on cloud.redhat.com uses an additive model, which means that there are no **deny** roles. In other words, actions are only permitted. You control access by assigning the appropriate roles with the desired permissions to groups then adding users to those groups. The access permitted to any individual user is a sum of all roles assigned to all groups to which that user belongs.

1.1.3.4. Access structure

The following points are a summary of the user access structure for User Access:

- **Group**: A user can be a member of one or many groups.
- **Role**: A role can be added to one or many groups.
- **Permissions**: One or more permissions can be assigned to a role.

In its initial default configuration, all User Access account users inherit the roles that are provided in the **Default access** group.

NOTE

Any user added to a group must be an authenticated user for the organization account on cloud.redhat.com.

CHAPTER 2. PROCEDURES FOR CONFIGURING USER ACCESS

2.1. PROCEDURES FOR CONFIGURING USER ACCESS

As an Organization Administrator (org admin), you can click (**Settings**) to view, configure, and modify the User Access groups, roles, and permissions.

2.1.1. Viewing roles and permissions

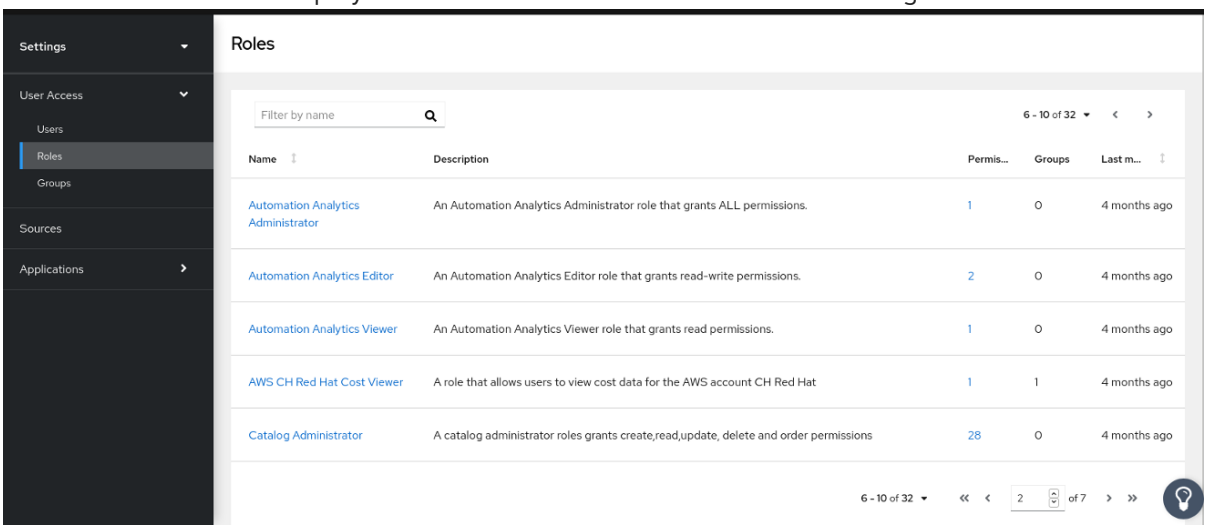
You can view the roles and permissions for User Access at cloud.redhat.com.

Prerequisites

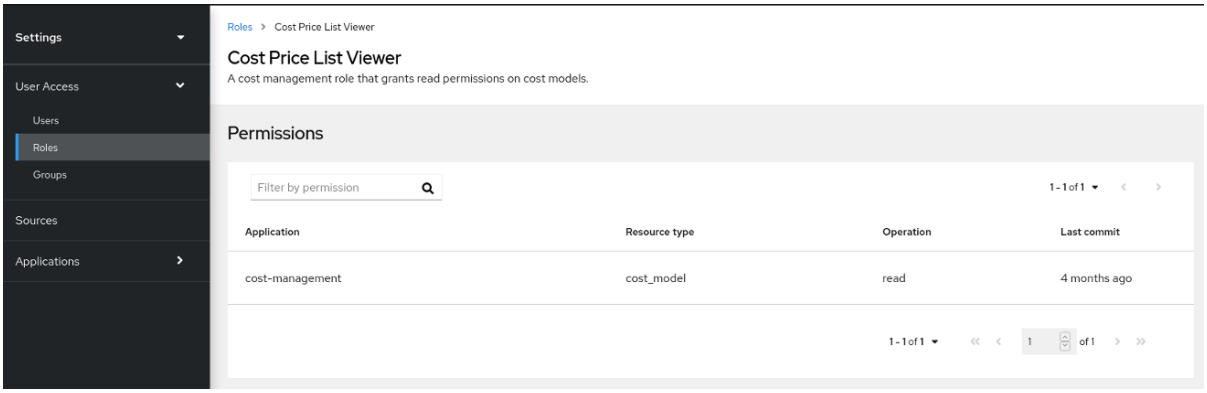
- You must be an Organization Administrator (org admin).

Procedure

1. Log in to your Red Hat organization account at cloud.redhat.com.
2. Click the Settings icon (gear) to open the **Settings** page.
3. On the **Settings** page, click on the **User access** tab to expand it.
4. Click the **Roles** tab to display the User Access roles. You can scroll through the list of all Roles.



5. In the table, click either the role **Name** or the role **Permissions** to see details about the permissions assigned to the role. For example, if you click on the **Cost Price List Viewer**role, you see the following information.



An asterisk * indicates a wildcard permission. A wildcard permission grants access to all resource types and allows all operations for the applications in a role.

2.1.2. Managing group access with roles and members

You can manage group access by creating a User Access group and adding roles and users to the group. The roles and their permissions determine the type of access granted to all members of the group.

The **Member** tab shows all users that you can add to the group. When you add users to a group, they become members of that group. A group member inherits the roles of all other groups they belong to.

Prerequisite

- You must be an Organization Administrator (org admin).

Procedure

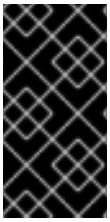
1. Log in to your Red Hat organization account at cloud.redhat.com.
2. Click the Settings icon (gear) to open the **Settings** page.
3. On the **Settings** page, click the **User access** tab to expand it.
4. Click the **Groups** tab to display the **Groups** page.
5. Click **Create group**
6. Follow the guided actions provided by the wizard to add users and roles.
7. To grant additional group access, edit the group and add additional roles.

2.1.3. Restricting service access to a single user

You can create a new group that contains a single user and add a role to that group. The role you add provides the service access permissions you want that single user to have. If you add other users to the group, the added users will have the same group permissions.

The roles you add to the group can be from the predefined list of roles provided with User Access, from custom roles created by an Organization Administrator, or a combination of both.

When you add a user to a new group, the user acquires the permissions of the new group and also inherits the permissions of all other groups they belong to. The permissions of the new group are added to their existing permissions.



IMPORTANT

In this procedure you modify the **Default access** group. Once modified, you cannot restore the **Default access** group. When you modify the **Default access** group its name changes to **Custom default access**. The **Custom default access** group is no longer updated with changes pushed out by Red Hat from cloud.redhat.com.

Prerequisites

- You must be an Organization Administrator (org admin).

Procedure

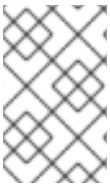
1. Log in to your Red Hat organization account at cloud.redhat.com.
2. Click the Settings icon (gear) to open the **Settings** page.
3. On the **Settings** page, click the **User access** tab to expand it.
4. Click the **Groups** tab to display the **Groups** page.
5. Remove all roles from the **Default access** group.
   Because all users in your organization belong to the **Default access** group, you cannot add or remove single users in **Default access** to create access control. By removing all roles, users do not inherit role permissions from **Default access**.
6. Save the changes to **Default access** group. The name changes to **Custom default access**.
7. Create a new group that contains the users and roles for the allowed access permissions.
   For example, create a group **Security Admin** that contains the users who will have full access to Vulnerability services.
   a. Create a group **Security Admin**.
   b. Add one or several users to the group from the **Members** list.
   c. Add the **Vulnerability administrator** role.
      Each user you add to this group has full access to the Vulnerability service.

NOTE

If you want an org admin to have access, add the org admin user to the group.

2.1.4. Including an Org Admin in a group

You can include an Organization Administrator (org admin) in a group. You add an org admin user to a group if you want an org admin to have the roles assigned to that group. An org admin does not inherit all available roles for all cloud.redhat.com applications. Any roles not inherited by means of the **Default access** group must be assigned through group membership.



NOTE

This procedure assumes that you want to modify an existing group and add an org admin to the group. Alternatively, you can add an org admin to a group when you create a new group.

Prerequisites

- You must be an Organization Administrator (org admin).
- Create a group if one does not exist.
  Section 2.1.2, “Managing group access with roles and members”

Procedure

1. Log in to your Red Hat organization account at cloud.redhat.com.
2. Click the Settings icon (gear) to open the **Settings** page.
3. On the **Settings** page, click the **User access** tab to expand it.
4. Click the **Groups** tab to display the **Groups** page.
5. Click the group **Name** to display details about the group.
6. On the group details page, click the **Members** tab to display a list of authorized users who are a member of the group.
7. Click the **Add member** tab.
8. On the **Add members to the group** page that appears, find the org admin user name and click the check box next to the name.
   For example, if the org admin user name is **smith-jones**, find that name and click the check box next to **smith-jones**. You can add additional names.
9. Verify the name list is complete and click the **Add to group** action.

Notification pop-ups appear when the action successfully completes.

2.1.5. Disabling group access

You can disable group access by removing roles from a User Access group. Because the roles and their permissions determine the type of access granted to the group, removing roles disables group access for that role.

Prerequisite

- You must be an Organization Administrator (org admin).

Procedure

1. Log in to your Red Hat organization account at cloud.redhat.com.
2. Click the Settings icon (gear) to open the **Settings** page.
3. On the **Settings** page, click the **User access** tab to expand it.
4. Click the **Groups** tab to display the **Groups** page.
5. Click the Group **Name** that you want to modify.
6. Click the **Roles** tab.

7. Click the check box next to roles **Name** that you want to remove.
   You can click the check box at the top of the **Name** column to select all roles.

8. Click the more action menu (three stacked dots) that is next to the **Add role** tab and click **Remove from group**.

9. In the confirmation window that appears, click either **Remove role** or **Cancel** to complete the action.

Groups can contain no roles and no members and still be a valid group.

2.1.6. Granular permissions for User Access

Granular permissions allow an Organization Admin (org admin) to define role permissions for one or more applications. Many of the predefined roles provide wildcard permissions, which is equivalent to a super user role with full access to all actions.

By defining granular permissions, you can create (or modify) roles with limited permissions, such as read-only, or read and update but not delete.

As an example, compare the predefined roles of Cost Administrator and Cost Price List Viewer.

Role	Application	Resource	Operation
Cost Administrator	cost-management	* (all)	* (all)
Cost Price List Viewer	cost-management	cost_model	read

By creating a new role, you can define the applications, resources, and operations that are specific to that role.

2.1.6.1. Adding custom User Access roles

User Access provides a number of predefined roles that you can add to groups. In addition to using the predefined roles, you can create and manage custom User Access roles with granular permissions for one or more applications.

Prerequisites

- You must be an Organization Administrator (org admin).

Procedure

A guided wizard leads you through the steps for adding a role. The following steps describe how to use the **Create role** wizard.

1. Log in to cloud.redhat.com as a user who has org admin privileges.

2. From the home page after you log in, click  (**Settings**) to open the Settings window.

3. Click the **User Access** tab to expand the drop-down choices.

4. Click the **Roles** tab. The **Roles** window appears.

5. Click the **Create role** button. This starts the **Create role** wizard.

At this point in the wizard, you can create a role from scratch or copy an existing role.

2.1.6.2. Creating a role from scratch

Create a role from scratch when you want to create a role with specific granular permissions. For example, you can create a single role for your organization that provides read-only permissions across all resources for all available applications. By adding and managing this role in your default access group, you can change default access to read-only.

Prerequisites

- You must be an Organization Administrator (org admin).
- You started the **Create role** wizard.

Procedure

1. In the **Create role** wizard, click the **Create a role from scratch**button.
2. Enter a **Role name**, which is required.
3. Optionally, enter a **Role description**.
4. Click the **Next** button. If the role name already exists, you must provide a different name before you can proceed.
5. Use the **Add permissions** window to select the application permissions to include in your role. By default, permissions are listed by application.
6. Optionally use the filter drop-down to to filter by Applications, Resources, or Operations.

   TIP

   Use the list at the top of the wizard page to view all the permissions added to the role. You can click a permission to delete it.

7. Click the **Next** button to review details. You can click the **Submit** button to submit the role, the **Back** button to go back and make changes, or the **Cancel** button to cancel the action.

The role you created is available to add to a User Access group.

2.1.6.3. Copying an existing role

Copy an existing role when that role already contains many of the permissions you want to use and you need to change, add, or remove some permissions.

Prerequisites

- You must be an Organization Administrator (org admin).
- You started the **Create role** wizard.

Procedure

1. In the **Create role** wizard, click the **Copy an existing role** button.
2. Click the button next to the role you want to copy.
3. Click the **Next** button.
4. The **Name and description** window shows a copy of the **Role name** and the existing **Role description** filled in. Make changes as needed.
5. Click the **Next** button. If the role name already exists, you must provide a different name before you can proceed.
6. Use the **Add permissions** window to select the application permissions to include in your role. By default, permissions are listed by application.

   TIP

   Custom roles only support granular permissions. Wildcard permissions, such as **approval:*:*** are not copied into a custom role.

7. Optionally use the filter drop-down to to filter by Applications, Resources, or Operations.

   TIP

   Use the list at the top of the wizard page to view all the permissions added to the role. You can click a permission to delete it.

8. Click the **Next** button to review details. You can click the **Submit** button to submit the role, the **Back** button to go back and make changes, or the **Cancel** button to cancel the action.

The role you created is available to add to a User Access group.

2.1.6.4. Creating an application-specific role

Use the filters provided by the **Create role** wizard to create a role for a specific application. When you create a role for a specific application, the filters display the allowed **Resource type** and **Operation** for the selected application.

You can create application-specific roles that include more than one application.

Prerequisites

- You must be an Organization Administrator (org admin).
- You started the **Create role** wizard.
- You are at the **Add permissions** step in the wizard.

Procedure

1. In the **Add permissions** window, click in the **Filter by application** field.

2. Choose the application by typing the first few letters of application name. The wizard shows the matching permissions for that application.

3. Optionally, use the navigation tools to scroll through the list of available applications and permissions.

4. Click the check box next to the permissions that you want in the application-specific role.

5. Click the **Next** button to review details. You can click the **Submit** button to submit the role, the **Back** button to go back and make changes, or the **Cancel** button to cancel the action.

2.1.6.5. Creating cost management application roles

You can create a role that is specific to the cost management application. When you create a cost management role, you define cost management resource definitions for that role. Other application roles do not provide that choice.

For additional information, see *Getting started with cost management* .

Prerequisites

- Cost management operator is installed and configured.
- You must be an Organization Administrator (org admin).
- A minimum of one source is configured for cost management.
- You started the **Create role** wizard.

Procedure

This procedure describes how to create roles with cost management permissions from scratch.

1. In the **Create role** window, click on the radio button **Create a role from scratch**

2. Enter a **Role name** (required) and a **Role description** (optional).

3. Click the **Next** button to display the **Add permissions** window.

4. Enter **cost** in the **Filter by application** field to display the cost management application and click on the **cost-management** check box.

5. When the **Add permissions** window appears, click on the check box for each cost management permission to include in this role.

6. Click on the **Next** button to display the **Define Cost Management resources**window.

7. You will see a drop-down list of available **Resource definitions** for each application permission you added to the role. You must click on the check box for at least one resource in each cost management permission.

8. Click the **Next** button to review details. You can click the **Submit** button to submit the role, the **Back** button to go back and make changes, or the **Cancel** button to cancel the action.

2.1.6.5.1. Cost management example for creating a role from scratch

Prerequisites

- You must be an Organization Administrator (org admin).
- A minimum of one source is configured for cost management.
- You started the **Create role** wizard.

Procedure

1. Start the **Create role** wizard and click on **Create a role from scratch**
2. Enter **AWS Org Unit Cost Viewer** for **Role name** and then click the **Submit** button. A description is not required.
3. Enter **cost** in the **Filter by application** field to display the cost management application and click on the **cost-management** check box.
4. Click the check box on the line that contains **aws.organizational_unit** and then click the **Next** button to display a drop-down list of available **Resource definitions** for the permission.
5. Click on the check box for at least one resource listed in the **Resource definitions** list and then click the **Next** button to review details.
6. After you review the details for this role, which show the **Permissions** and **Resource definitions**, click the **Submit** button to submit the role.

2.1.6.6. Editing custom role names

You can change the name of a custom role from the main roles page or from the **Permissions** page.

Prerequisites

- You must be an Organization Administrator (org admin).
- One or more custom role must exist.

Procedure

1. From the home page after you log in, click  (**Settings**) to open the Settings window.
2. Click the **User Access** tab to expand the drop-down choices.
3. Click the **Roles** tab. The **Roles** window appears. In the **Roles** window, a custom role has  (**more options**) to the right of its name.
4. Click  (**more options**).
5. Click on **Edit** to change the role name or description.
6. Click on **Delete** to remove the custom role.

TIP

You can also click on the role name to open the **Permissions** window and then click on the (**more options**) to the right of the role name to access the Edit and Delete actions.

7. A confirmation window appears. After you confirm that this action cannot be undone, the custom role is deleted.

2.1.6.7. Removing permissions from a custom role

You can remove permissions from a custom role.

Prerequisites

- You must be an Organization Administrator (org admin).
- One or more custom role must exist.

Procedure

1. From the home page after you log in, click (**Settings**) to open the Settings window.
2. Click the **User Access** tab to expand the drop-down choices.
3. Click the **Roles** tab. The **Roles** window appears. In the **Roles** window, a custom role has (**more options**) to the right of its name.
4. Click on a custom role name to open the **Permissions** window.
5. In the **Permissions** list, click the (**more options**) to the right of an application permission name and click **Remove**.
6. A confirmation window appears. Click **Remove permission**.

CHAPTER 3. PREDEFINED USER ACCESS ROLES

3.1. PREDEFINED USER ACCESS ROLES

The following table lists the predefined roles provided with User Access.

NOTE

Predefined roles are updated and modified by Red Hat. The table might not contain all currently available predefined roles.

Table 3.1. Predefined roles provided with Insights

Role name	Description
Advisor administrator	Perform any available operation against any advisor resource.
Approval Administrator	An approval administrator role that grants permissions to manage workflows, requests, actions, and templates.
Approval Approver	An approval approver role that grants permissions to read and approve requests.
Approval User	An approval user role which grants permissions to create/read/cancel a request, and read workflows.
Automation Analytics Administrator	An Automation Analytics Administrator role that grants ALL permissions.
Automation Analytics Editor	An Automation Analytics Editor role that grants read-write permissions.
Automation Analytics Viewer	An Automation Analytics Viewer role that grants read permissions.
Catalog Administrator	A catalog administrator roles grants create,read,update, delete and order permissions.
Catalog User	A catalog user roles grants read and order permissions.
Compliance administrator	Perform any available operation against any Compliance resource.
Cost Administrator	A cost management administrator role that grants read and write permissions.
Cost Cloud Viewer	A cost management role that grants read permissions on cost reports related to cloud sources.

Role name	Description
Cost Management AWS Restricted	Restrict AWS to a specific account.
Cost OpenShift Viewer	A cost management role that grants read permissions on cost reports related to OpenShift sources.
Cost Price List Administrator	A cost management role that grants read and write permissions on cost models.
Cost Price List Viewer	A cost management role that grants read permissions on cost models.
Drift analysis administrator	Perform any available operation against any Drift Analysis resource.
Integrations administrator	Perform any available operation against any Integrations resource.
Inventory administrator	Perform any available operation against any Inventory resource.
Migration Analytics administrator	Perform any available operation against any Migration Analytics resource.
Notifications administrator	Perform any available operation against any Notifications resource.
Patch administrator	Perform any available operation against any Patch resource.
Policies administrator	Perform any available operation against any Policies resource.
Remediations administrator	Perform any available operation against any Remediations resource.
Remediations user	Perform create, view, update, delete operations against any Remediations resource.
Sources administrator	Perform any available operation against any Source.
Subscription Watch administrator	Perform any available operation against any Subscription Watch resource.
Vulnerability administrator	Perform any available operation against any Vulnerability resource.