meshIQ Secure

User's Guide

Version 11.2

Document Number: MS-UG 11.002

Title: meshIQ Secure User's Guide
Document Release Date: October 2024
Document Number: MS-UG 11.002

Published by:

Research & Development
meshIQ
88 Sunnyside Blvd, Suite 101
Plainview, NY 11803

Table of Contents

Tables

Chapter 1: Introduction

Welcome to the *meshIQ Secure User's Guide*. This guide explains how to maintain meshIQ Manage for user authorizations via meshIQ Secure. User authentication is managed as part of your user configuration for the meshIQ platform.

1.1 How this Guide is Organized

- *Chapter 1:* Introductory information about this document.
- *Chapter 2:* Explains how to access and use the user interface.
- *Appendix A:* Reference information required for the operation of the meshIQ Secure.
- *Appendix B:* A list of IBM MQ PCF Codes.
- *Appendix C:* A list of the Role Management rights and their explanations.

1.2 History of this Document

Table 1-1. Document History			
Release Date	**Document Number**	**Version**	**Summary**
November 2021	NAV-SM 10.007	10	Added new Dashboard, Attribute Filter, Message Criteria, and Environment Level rights for Navigator v10.3.
January 2023	NAV-SM 10.008	10	Improved definitions based on customer feedback. Added Solace, Kafka KSQL, and other new rights for Navigator v10.4 and v10.5. Updated supported platforms chart.
December 2023	MS-UG 11.000	11	Improved more definitions and updated rights for version 11. Updated chapter 2 to reflect new user interface.
October 2024	MS-UG 11.002	11.2	Improved more definitions and updated rights for version 11.2. Updated chapter 2 to reflect new user interface.

1.2.1 User Feedback

meshIQ encourages all users of the meshIQ platform to submit comments, suggestions, corrections, and recommendations for improvement for all documentation. Please send your comments to *support@meshiq.com.* You will receive a written response, along with status of any proposed change, update, or correction.

1.3 Related Documents

Complete listings of documents related to meshIQ Manage can be found in *Appendix A*.

1.4 Release Notes

See the *meshIQ Platform online release notes page* in our resource center.

1.5 Intended Audience

This document is intended for personnel installing and using meshIQ Manage. The installer should be familiar with:

- meshIQ Manage

- Target operating system environment

- The installer may need administrative privileges for the target platform

- Apache-Tomcat

- The middleware system you utilize: Kafka, Solace, RabbitMQ, IBM MQ, TIBCO EMS, and so on

1.6 Technical Support

For technical support, visit the *meshIQ Resource Center*. You can also contact meshIQ support by:

- Phone: within the United States dial 800-963-9822 ext. 1, for outside the United States dial 001-516-801-2100

- E-mail: *mysupport@meshiq.com.*

- Support website: *http://mysupport.meshiq.com/*
  Contact your meshIQ Manage Administrator for access information.

1.7 meshIQ Installation Support (32-bit/64-bit)

See *Figure 1-1* for meshIQ Manage Installation Support. This platform is for the workgroup server and databases supported. Agents may be available for other versions of operating systems and middleware versions.   You should contact your support representatives if your platform is not listed.
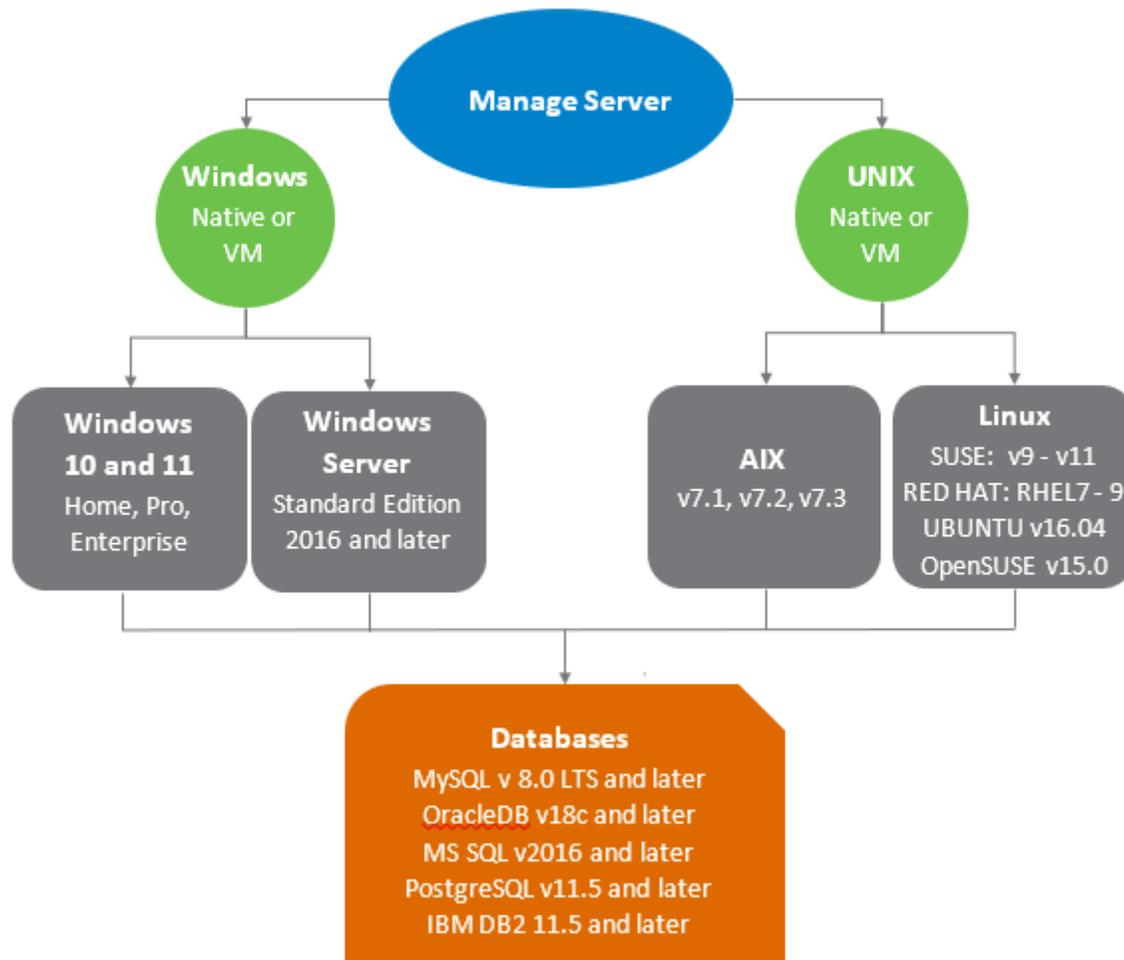
Figure 1-1. meshIQ Manage Installation Support

Chapter 2:   User Access and Control

meshIQ Secure is the user interface for creating permissions for meshIQ Manage. It allows you to manage authority definitions and preserve them in the SQL database. Once authority records are created in the database, meshIQ Manage and the workgroup server use these definitions to determine the rights and privileges for accessing.

The key attributes of the security model are described below:

- **Users/Groups** – Users and Groups of Users as logged into meshIQ Manage, utilities, etc.
- **Roles** – The specific rights and permissions; that is what a user can "do".
- **Server Group** – A set of queue managers to which a set of security definitions applies.
- **Object Group** – A set of queue channels to which a set of security definitions applies.
- **Audit** – Defines audit rules and when Audit entries are created
- **Trust profile** – Defines valid access points.
- **Export and Import Data** – Learn how to export and import security data.

With this implementation, the attributes defined above, while interrelated, are defined separately, allowing the tasks of managing them to be done separately as well. For example, a security manager that needs to add new users only needs to be concerned with the users and the groups they belong to and not the details of the privileges associated with that user. Similarly, if a new queue manager is added, and is part of the testing group, a single definition in the server group is required. If a new application project is needed, the objects associated with that object can be defined.

When installed, the default definitions provide a number of sample configurations including a full access group (Administrators) and limited access (Operators and Viewers). For initial familiarization, these groups can be used by adding specific users to match your configuration.

One of the key concepts in meshIQ Secure is the relationship between the key attributes defined above.

A user is associated with groups, which are assigned a set of roles, these roles apply to a set of queue managers and a specific set of objects. For example, Admin is in the default Administrators Group, which is assigned an Administrator role (all capabilities) to All Queue Managers and All Objects. In this way, Admin is given full control. As another example, User may be defined in relationship to the same Server Groups and Object groups, but may have limited capabilities to view only queues details.

If you have an existing `permits.ini` file, it can be used to create starter entries for use with meshIQ Secure. *(Refer to section [2.12.1.1](#), [Import Permissions](#).)*

When beginning to use meshIQ Secure, you should:

1. Review **Roles** – This defines what each user can do; that is, the features each role has access to. Default roles in versions 11 and later are Administrators, MESH Admin, Platform Admin, Message Admin, Message Browser, Operator, and View only. The available features are listed on the **Role Management** tab, where they can be assigned to each role.
2. Define the **Groups** – Create the groups (of users) that are going to use the product. Default Groups are Administrators, etc., but you can create custom groups.
3. Create **Users** and assign them to the existing or newly created Groups.
4. Create **Server Groups** – Create specific groups for your managers or brokers.
5. Create **Object Group** – Create specific object groups that map to your applications.

6.   Define the relationships between Groups, Servers, and Objects.

Regular Expressions

meshIQ Secure uses regular expressions instead of simple masks for entries. This is a much more powerful method that allows greater flexibility in setting up the security options. Regular expressions (regex) are verified before they are added to the database.

For example, using a mask for any name beginning with Prod would be:

   Prod*

But using a regex, this would be defined as:

   ^Prod.*

The **^** symbol indicates that the name must start with Prod and "**.***" indicates that it can end with anything.   A regex of Prod would match Prod anywhere in the name.

Another example, matching **Prod** or **prod** could be done as **(p|P)rod** or **(Prod|prod)**.

Regular expressions are dependent on the database in use. Refer to the appropriate documentation to determine which options are supported.

2.1 Accessing meshIQ Secure

To access meshIQ Secure, do the following:

1. Open the link: http://[*Workgroup Server IP address*]:[*port*]/secure/login.

    (example: *http://127.0.0.1:8080/secure/login*)

    The login screen is displayed

> **NOTE** Access to meshIQ Secure is controlled by the underlying application server security. See the corresponding *administration guide* for the application server on how to enable user permissions and groups.

2. Enter the following:

    - **Login ID**
    - **Password**

Figure 2-1. meshIQ Secure Login

3. Click **Login.** The Security Manager menu provides access to the following functions:

    - User Management *(section 2.4)*
    - User Groups Management *(section 2.5)*
    - Role Management *(section 2.7)*

- Server Group Management *(section 2.8)*

- Object Group Management *(section 2.9)*

- Audit Management *(section 2.10)*

- Trust Management *(section 2.11)*.

2.2 Quick Start

2.2.1 How Do I Add a New User?

1. Go to **Security Manager > User Management** and create a user. *(Refer to section 2.4.)*
2. Go to **Security Manager > User Group Management** and assign the user to the appropriate group. *(Refer to section 2.5.)*

2.2.2 A User Left the Company. What Do I Do?

You can either delete or disable the user. Select **Security Manager > User Management**. *(Refer to section 2.4.)* Select the checkbox for the user record and choose **Delete** to delete the user, or **Edit** to disable the user. From User Properties, you can disable the user by turning on the **Disabled** slider on the General tab. Disable will prevent the user from accessing the system, but the user record will remain in the database. This option is useful if the user is reactivated in the future.

2.2.3 How Do I Create a New Group?

1. Click the **User Group Management** tab and create a group. *(Refer to section 2.5.1.)*
2. Assign the respective roles to the group.
3. Assign users to the group (optional).

2.2.4 How Do I Define a New Application and Add it to a User?

1. Go to **Security Manager > Object Group Management** and create an object group. *(Refer to section 2.9.1.)* The object will now be added to the list of (shows up under edit user group roles).
2. Go to **Security Manager > User Group Management**. Edit the group to which you want to add the new object. Click the **Roles** tab and select the new object.

2.3 Working with Tables

This section contains important information about how to work with tables in meshIQ Secure. Refer back to this section as you work with meshIQ Secure; this information applies to many of the following sections of this guide.

2.3.1 Refresh table data

Click the **Refresh** icon at the top of the table to refresh data at any time.

The **Last Refresh Time** is displayed in the upper-right corner of the window:

Refreshed: 2:08:47 pm

2.3.2 Navigate pages

By default, records are displayed in pages of 20. You can change this number using the **Records Limit Per Page** list in the lower-middle of the window:

Results 1-14 of 14	Records Limit Per Page	20 ∨	K < Page 1	of 1 > >|

An indicator in the lower-left corner tells you which records you are viewing:

Results 1-14 of 14

.

Changing the number of records per page will affect the number of pages of records:

Results 1-10 of 14	Records Limit Per Page	10 ∨	K < Page 1	of 2 > >|
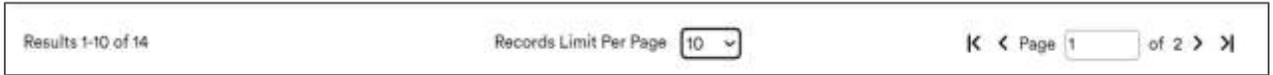
Use the **<<First**, **<Prev**, **Next>**, and **Last>>** links to navigate through the pages.

2.3.3 Filter columns

There are three ways to filter table data:

2.3.3.1 Filter by all columns ▼ All

To filter by the data in all columns, make sure that the filter label reads **All**, as shown above.

Then enter part or all of the term you want to filter by in the space provided.
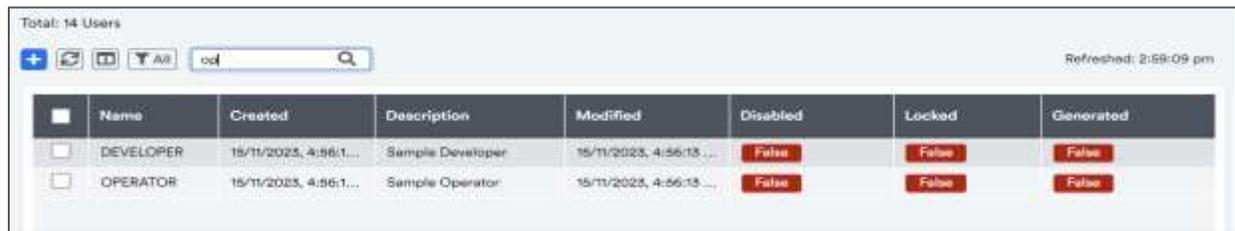
Figure 2-2. Filter by all columns

2.3.3.2 Filter by Chosen columns ▼ Chosen

To filter by the data in certain selected columns, make sure that the filter label reads **Chosen**, as shown above.

Click the filter icon for each column whose data you want to consider as you filter. Each selected icon turns blue: **Description ▼** .

Then enter part or all of the term you want to filter by in the space provided.

Figure 2-3. Filter by chosen columns

You can turn off filtering for an individual column by clicking its icon again. The icon becomes white again: Description ▼ .

2.3.3.3 Filter by Separate columns ▼ Separate

To filter by the data in all columns, make sure that the filter label reads **Separate**, as shown above. Each column includes its own filter field.
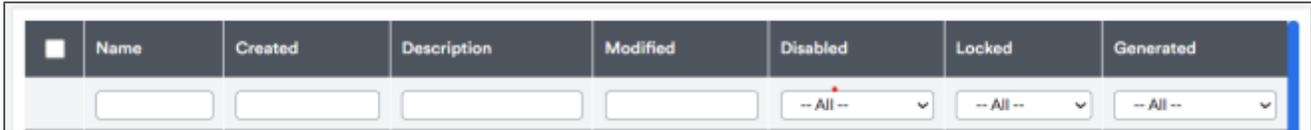
Figure 2-4. Filter by separate columns

Choose the column whose data you want to filter and enter part or all of the term you want to filter by in the space provided for that column. Depending on the data displayed in a column, your entries may include these values:

- text
- numbers
- list selections (for example, for TRUE and FALSE values)
- date and time selections

For date and time columns, the *Date Filter Select* dialog is displayed. In this dialog, you can set a "from" date and time and a "to" date and time.

> **TIP** Use the up ⌃ and down ⌄ arrows provided to quickly adjust the settings forward or backward by one year, month, day, hour, or minute. Click **Now** at any time to reset the "from" or "to" value back to the current date and time.

2.3.3.4 Date Filter
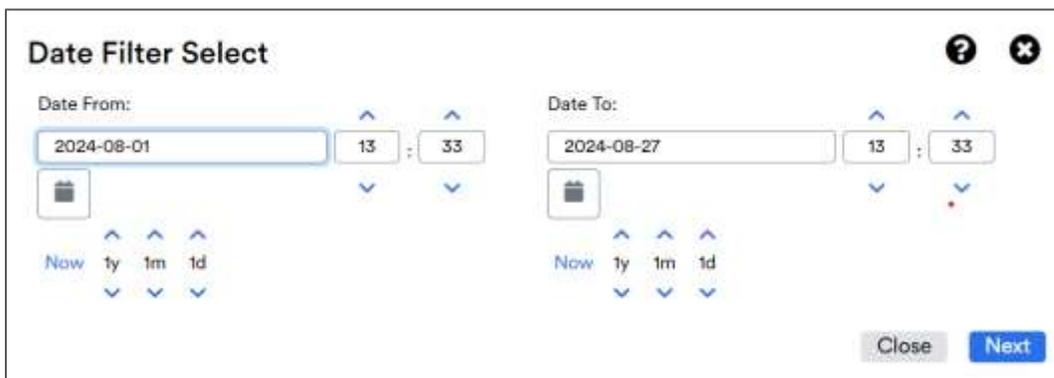
Figure 2-5. Date filter

2.3.3.5 Results of Date Filter

You can remove a date filter by clicking the ✕ in the filter field.

2.3.4 Sort columns

Column headers act as a three-way toggle switch for sorting:

- Click a column header once to sort the column in ascending order .

- Click the column a second time to sort it in descending order .

- Click the column a third time to remove sorting .

2.3.5 Remove, Show, Find, and Rearrange table columns

To manage columns, click . The User Displayed Columns dialog opens. The columns that are currently displayed in the table are listed on the right under **Selected Columns**. Any columns that are not currently displayed are listed on the left under **Available Columns**.

2.3.5.1 Remove columns

To remove a column that is currently being displayed, do one of the following:

- Click its check box in the **Selected Columns** and click the **< Move Selected to left** button.
- Use the column's move icon ✛ to click and drag the column from the Selected Columns table to the Available Columns table. If there are no available columns yet, aim toward the top of the table.

2.3.5.2 Show columns

To add a column that is not currently being displayed, do one of the following:

- Click its check box under **Available Columns** and click the **Move Selected To Right >** button. (To add all columns listed under **Available Columns**, click **Move All To Right >>**.)

- Use the column's move icon ✛ to click and drag the column from the Available Columns table to the Selected Columns table. Place the new column according to the order in which you want columns to be arranged in the table (before, after, or between other columns).

2.3.5.3 Find a column (Search By)

To find a column in the list, use the **Search for columns** field. Enter some or all of the term you want to filter by. Both the **Available Columns** and the **Selected Columns** lists are immediately filtered by the term that you have entered.

2.3.5.4 Rearrange columns

To rearrange (reorder) columns, use the move icons ✛ under **Selected Columns**. Click and drag these icons up and down to move the records in the list, changing their order. Click **OK**.
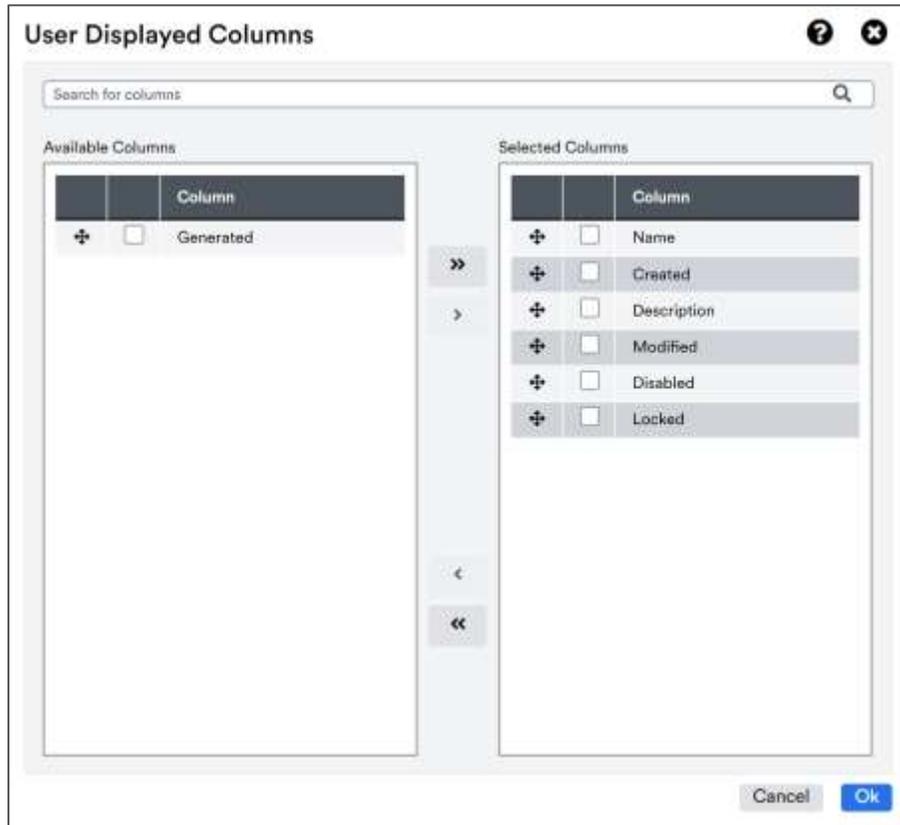
Figure 2-6. Rearrange columns

2.3.5.5 Change the column width

You can change a column's width by hovering over the right edge of the column header. Your mouse pointer changes to a double-headed arrow: ⇷⇸ . Click and drag your mouse left or right to resize the column.
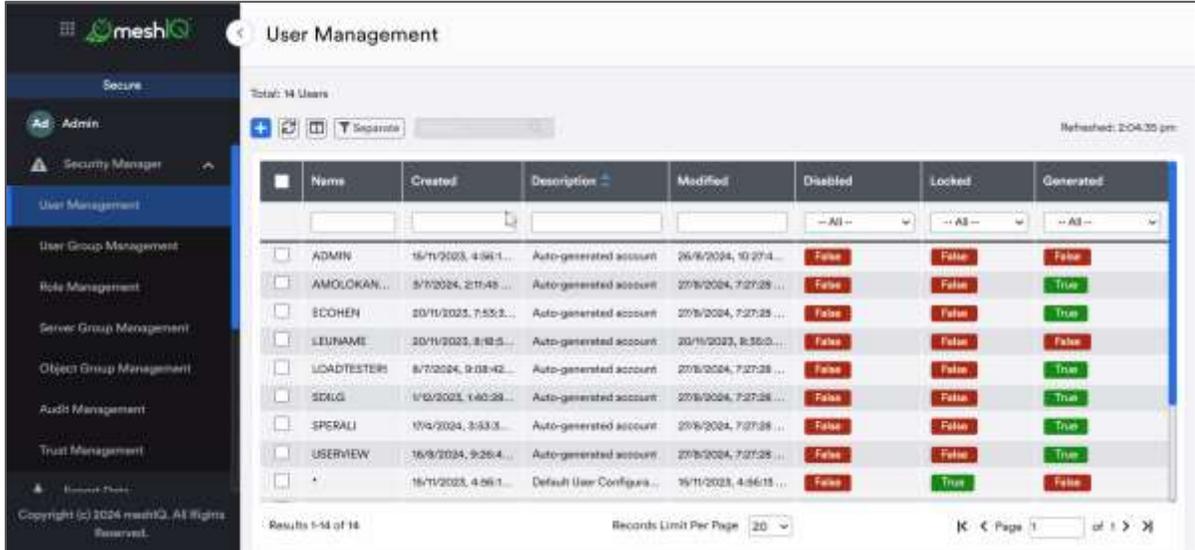
Figure 2-7. Change the column width

2.4 User Management

The term *User* refers to the users of meshIQ Manage, whose privileges are managed using meshIQ Secure. This screen lists the current users as well as sample entries for:

- Default User

- Admin

- Administrator

- Developer

From here you can add new users and edit existing users.

Figure 2-8. User Management

2.4.1 Add a New User

> **NOTE** User names that are longer than 12 characters can be managed by meshIQ Secure, but when the user tries to connect, login will be unsuccessful.

1. On the left toolbar, select **Security Manager** ⚠ > **User Management**.
2. Click the add icon ➕.
3. On the General tab, enter the user's **Name** (required) and a **Description** of this user record (optional).

   - To prevent others from working on this record, select the **Locked** option and click **Save**. Default records are locked to indicate they should not be changed.
   - To set up users ahead of time, you can enter their records but select the **Disabled** option. This prevents them from logging on before the system is set up and ready to use. You can also use this option to disable a user rather than deleting them.
   - The **System-generated** option is automatically selected if the user was created through import of a list of users from LDAP or some other system resource/application, rather than being manually entered in the security application. These users are read-only. They cannot be changed or deleted.

4. To add a user to a group, select the **User Groups** tab. To find a group in the list, enter some or all of the term you want to filter by in the **Search for users** field. Both columns are immediately filtered by the term that you have entered.

In the **Non-assigned User Groups** column, select the check boxes for the groups to which this user belongs. Click the single right arrow [>] to add the user to selected groups by moving the groups to the **Assigned Groups** column. Click the double right arrow [>>] to add the user to all groups.

If you've assigned a group by mistake, select it and click the single left arrow [<] to remove it from the Assigned Groups column. To remove all groups, click the double left arrow [<<].

5. To assign one or more roles to a user, click the **Roles** tab. Select the checkbox for the roles that carry the permissions that you want the user to have.

6. For each role, define the specific areas that you are granting this user access to. Click the expand button [v] to choose the server group that you want to provide access to; select the checkbox then click the expand button for the server group to provide access to an object group.

> **TIP**
>
> For a quick, read-only view of only the roles that are assigned to this user, you can hide other roles: click the View Mode slider. The slider turns blue to indicate that View Mode is on. In this mode, you can only view roles, server groups, and object groups; you cannot add or remove them.

Click **Save**.
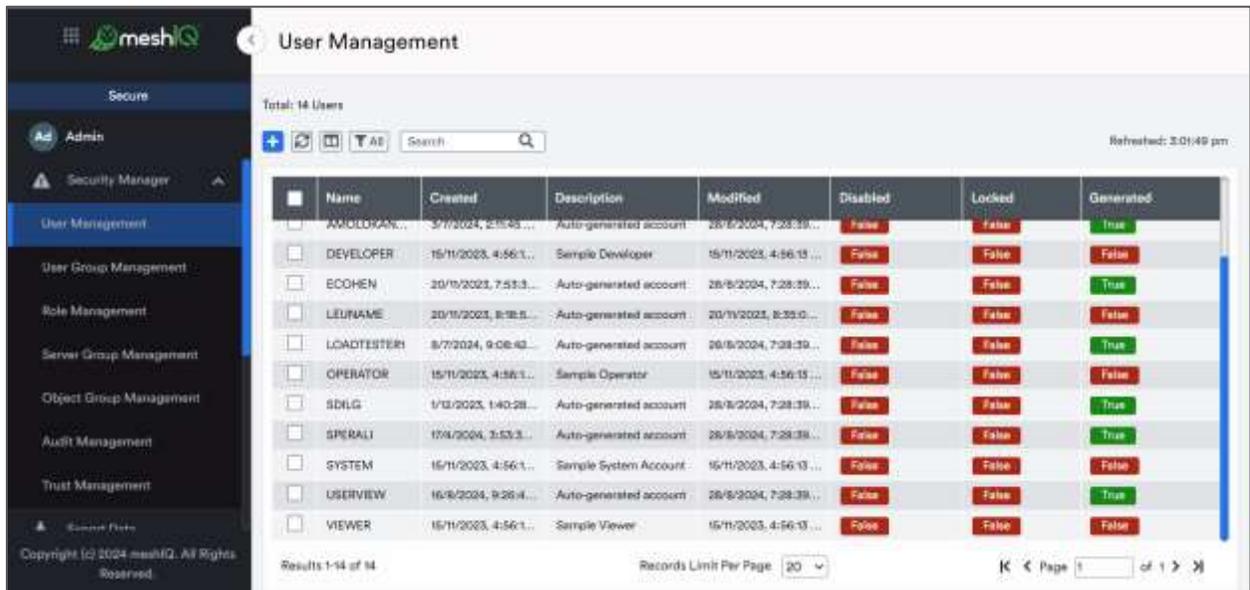
Figure 2-9. Add a New User

2.4.2 Preview, Delete, Edit or Copy an Existing User

To preview a user without the ability to modify any, select the checkbox for the user's record and click Preview in the Selected menu.
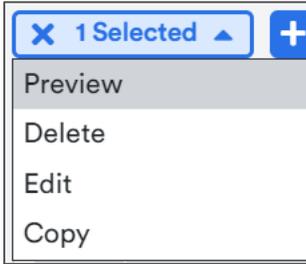
To delete a user. select the check box for a user's record. On the **Selected** menu, click **Delete**. On the *Delete Confirmation* dialog, click **Yes** to delete the user, or **No** to cancel the delete action.
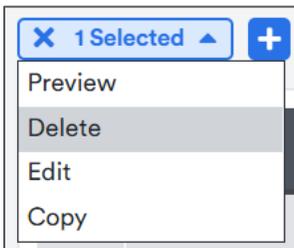
To edit a user, select the check box for a user's record. On the **Selected** menu, click **Edit**. Use the instructions above for adding a new user to make changes to the user's record.
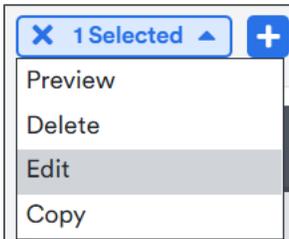
To copy a user, select the checkbox for the user's record and click **Copy** in the **Selected** menu.
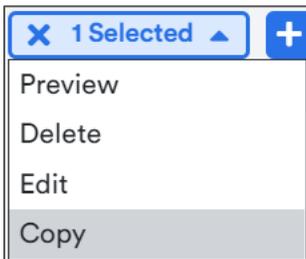
2.5 User Group Management

By combining similar users into groups, you can save time when assigning permissions to new users. For example, if all testers are in a group called "QA Testing," you can assign the necessary permissions to the group all at once, by assigning one or more roles to the group. Then when a new tester is hired, the administrator only needs to know to add the new hire to the "QA Testing" group, rather than having to know the individual permissions that a tester needs.

> **NOTE**
> You cannot create a User and Group with the same name. Names are not case sensitive.

Figure 2-10. User Group Management

2.5.1 Add a New User Group

1. On the left toolbar, select **Security Manager** ⚠ **> User Group Management**.
2. Click the add icon ➕.
3. On the General tab, enter the user's **Name** (required), **Effective Name**, **Description**, and **Principal Name** (required).

   - The **Effective Name** is the user passed to the IBM MQ agent/connection manager when processing message requests or performing actions, such as changing properties or starting channels. When the agent/CM is running with alternate user checks active (+u), this user will be one against which IBM MQ security definitions apply. If "=" is entered, it will use whatever the user logged in with as the effective name.

   - For user groups that are assigned a role with the right to Access All Projects (such as the Administrator role), the **Principal Name** can be used to limit the selections in the meshIQ Manage Projects list, so that these high-level users can replicate the meshIQ Manage experience of other users who can't see all projects. (This Projects list is described in the _Adding a viewlet to your dashboard_ article; see the Select a project section.)
   The default regular expression (.*) allows all projects to be listed. You can leave the default, or enter a different regular expression to identify the _names of the user groups_ whose meshIQ Manage experience you would like members of this higher-level user group to able to replicate. The meshIQ Manage Project list for this user group will then include _all unique descriptions_ for these other user groups, whose purview is more limited.
   To simplify the Projects list in meshIQ Manage, modify the user group descriptions in the security application so that groups that can see the same data share the same definition, even if they have different rights. This way, the Projects list functions as a list of the categories of users according to what they are allowed to see.

4. Review this information about the options at the bottom of this dialog:

   - To prevent others from working on this record, select the **Locked** option and click **Save**. Default records are locked to indicate they should not be changed.

   - To set up user groups ahead of time, you can enter them in the security application but select the **Disabled** option. This prevents the group from being available for use before the system is set up and ready to use. You can also use this option to disable a user group rather than deleting it.

5. To add or remove users to or from the group, select the **Users** tab. To find a user in the list, enter some or all of the term you want to filter by in the **Search for users** field. Both columns are immediately filtered by the term that you have entered.
   In the **Non-assigned Users** column, select the check boxes for the users that you want to add to this group. Click the single right arrow ⟩ to add the user to this group. The user moves to the **Assigned Users** column. Click the double right arrow ⟫ to add all users to this group.
   If you've assigned a user by mistake, select it and click the single left arrow ⟨ to remove it from the **Assigned Users** column. To remove all users, click the double left arrow ⟪.

6. To assign one or more roles to a user group, click the **Roles** tab. Select the check box for the roles that carry the permissions that you want the user group to have.

7. For each role, define the specific areas that you are granting this user group access to. Click the expand button to choose the server group that you want to provide access to; then click the expand button for the server group to provide access to an object group.

> 💡 **TIP**
>
> For a quick, read-only view of only the roles that are assigned to this user group, you can hide other roles: click the View Mode slider. The slider turns blue to indicate that View Mode is on. In this mode, you can only view roles, server groups, and object groups; you cannot add or remove them.

8. Click **Save**.
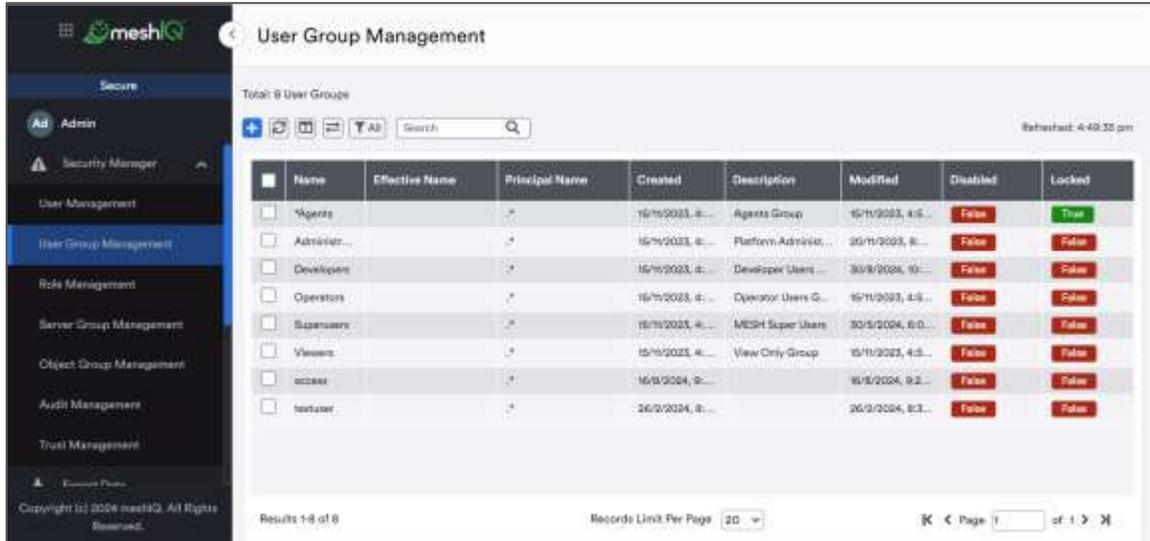
Figure 2-11. Add a New User Group

2.5.2 Preview, Delete, Edit or Copy an Existing User Group

To preview a user group without the ability to modify any, select the checkbox for the user group's record and click **Preview** in the **Selected** menu.
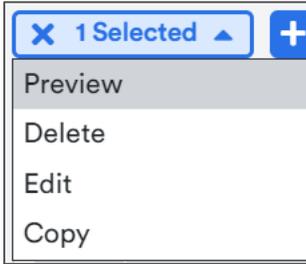
To delete an existing user group, select the check box for the user group's record. On the **Selected** menu, click **Delete**. On the Delete Confirmation dialog, click **Yes** to delete the user group, or **No** to cancel the delete action.
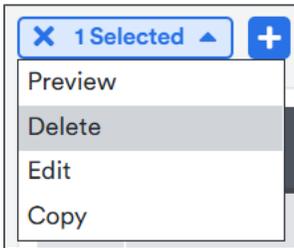
To edit an existing user group, select the check box for the user group's record. On the **Selected** menu, click **Edit**. Use the instructions above for adding a user group to make changes to the user group's record.
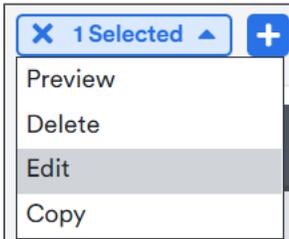
To copy a user group, select the checkbox for the user group's record and click **Copy** in the **Selected** menu.
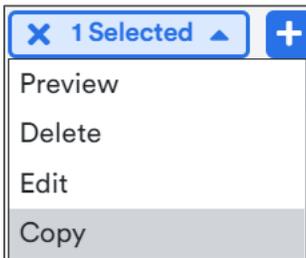
2.6 meshIQ Secure & Domain User Group Compare

User Group Management can be a powerful tool for an organization that has a lot of groups on the domain server. From the User Group Management page, click the **Compare Secure & Domain User Groups** ⇄ button to view all your user groups from both the security application and the domain server. Then compare one set of groups to the other and synchronize the two environments, if needed.

2.6.1 About the meshIQ Secure & Domain User Group Compare dialog

In the meshIQ Secure & Domain User Group Compare dialog, **Secure Descriptions**, if available, are listed on the middle, and **Domain Descriptions**, if available, are listed on the right. The left column represents the **Name** of the group. This Name could be from Secure or from the Domain server.

To assist with environment synchronization, the system will display user groups that you have not yet added. If you have not added a user group to the Secure server, the system will highlight the option "**+Add user group to Secure**" in blue. If you have not added a user group to the Domain server, the system will highlight the option "**+Add user group to Domain**" in blue. If a row does not include any option, then the system has already added the user group to both the Secure and Domain servers.

2.6.2 Copy user groups to or from Secure

1. On the left toolbar, select **Security Manager** ⚠ **> User Group Management**.
2. Click ⇄ to open the meshIQ Secure & Domain User Group Compare dialog.
3. Choose one of the following:

    - To copy items from the security application to the domain server:

        1. Select either the **Only different** or the **Exists only in Secure** from the **Display User Groups** options to focus on user groups that may not exist on the domain server.
        2. To copy one group, click **+Add user group to Domain.** To copy more than one group, select the checkboxes of the user groups and click **AddSelectedTo Domain**.

Figure 2-12. Domain User Group Create Window

- To copy user groups from the domain server to the security application:

  1. Select either the **Only different** or the **Exists only in Domain** from the **Display User Groups** options to focus in on user groups that may not exist in the security application.

  2. To copy one group, click **+Add user group to Secure**. The User Group Create Window opens. Follow the instructions in the User Group Management article _2.5.1_ to add the group to the security application.
  To copy more than one group, select the checkboxes of the user groups and click **AddSelectedTo Secure**.

2.6.3 Examples

The four examples below show the User Group Compare dialog with different criteria selected.

2.6.3.1 Only different

The example below shows the list when the **Only different** option is selected.
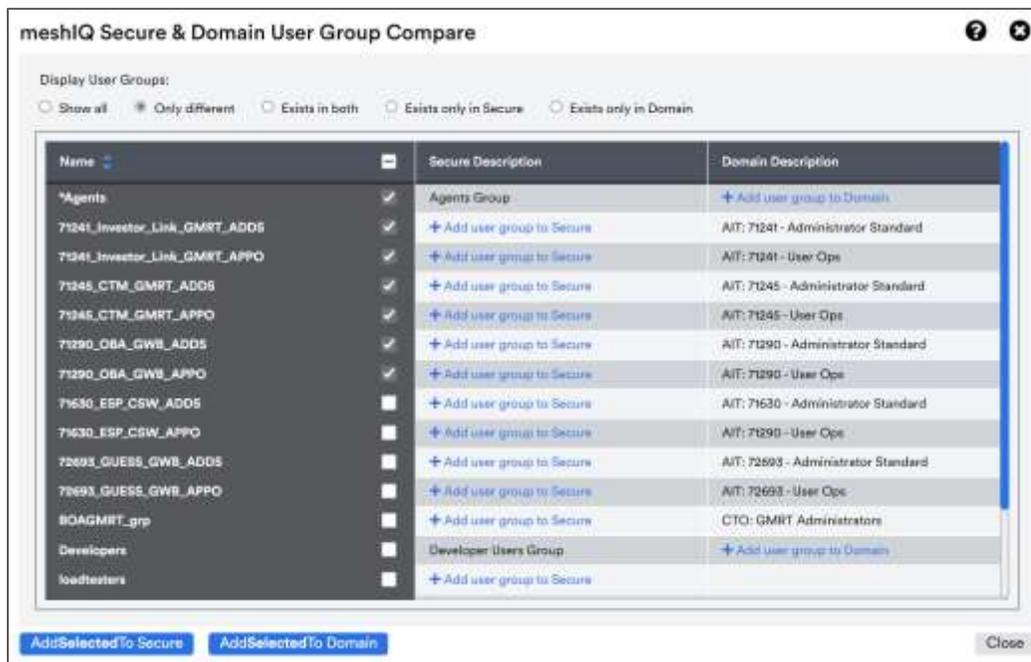
Figure 2-13. meshIQ Secure & Domain User Group Compare: Only different

2.6.3.2 Exists in both

The example below shows the list when the **Exists in both** option is selected.
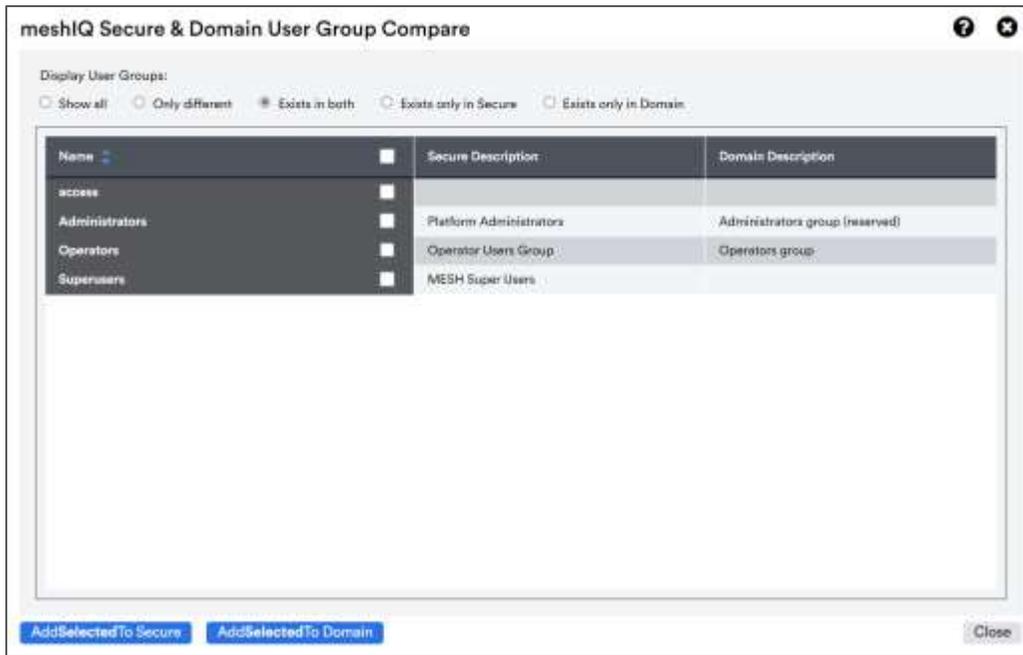
Figure 2-14. meshIQ Secure & Domain User Group Compare: Exists in both

2.6.3.3 Exists only in Secure

The example below shows the list when the **Exists only in Secure** option is selected.
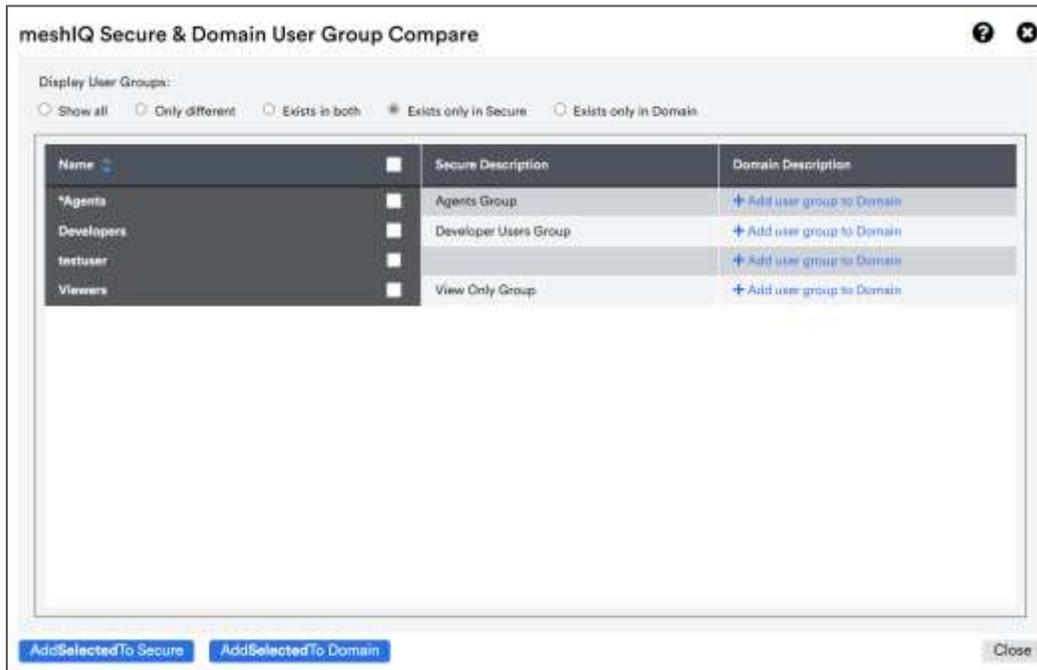
Figure 2-15. meshIQ Secure & Domain User Group Compare: Exists only in Secure

2.6.3.4 Exists only in Domain

The example below shows the list when the **Exists only in Domain** option is selected.
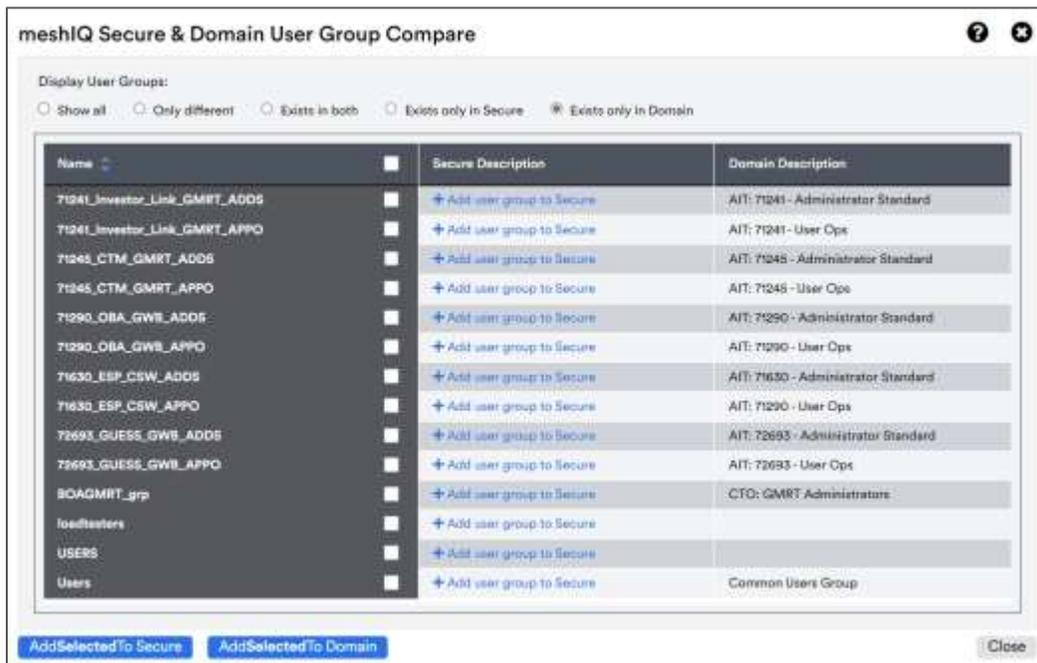
Figure 2-16. meshIQ Secure & Domain User Group Compare: Exists only in Domain

2.7 Role Management

Roles facilitate new user onboarding and user setup in general by allowing you to define sets of permissions for various jobs in your organization. The Role Management page is used to assign features to a built-in role or create a new role and assign features to it.

Built-in roles are listed below:

- Administrator
- Agent
- EMS Admin
- Message Admin
- Message Browser
- Operator
- View Only

After you have associated a role with permissions, you can assign that role to a user group or, if needed, to an individual user. See *Appendix C: Role Management Rights* for an explanation of the role permissions.

> 💡 You can see *Remove, Show, Find, and Rearrange table columns* in the *Working with Tables* section
> **TIP** (*2.3*) for more information about managing columns.

2.7.1 Working with the Role Management table

When you first access the Role Management table, standard roles are represented by columns, and products are represented by rows.

2.7.1.1 Understanding indicators

Color indicators quickly show you a quick snapshot of each role's permissions per product and object type, as well as for individual features.

View Mode	Edit Mode	Description
All	✔	All permissions are turned on (for a product or object type)
ON	✔	An individual feature is turned on
Partial	▬	Some permissions are turned on and some are turned off (for a product or object type)
OFF	☐	An individual feature is turned off
None	☐	No permissions are turned on (for a product or object type)

2.7.1.2 Expanding and collapsing products and objects

Expand a product to view its objects. Expand an object to view individual features.

- To expand or collapse a product and object, click the **Expand/Collapse** icon located next to the **All** column.
- Click **Expand Just Products** to enable **Expand Just Visible Object Groups**.
- When you start expanding Products and Objects, the Collapse options will be enabled.

2.7.1.3 Filtering products and objects

A Filter text field is now available to search for specific text on the Role Management page. Rows are filtered as you type.

Figure 2-17. Filter text on Role Management page

Expand products to view the relevant objects:

Figure 2-18. Expand filtered products

Expand objects to view the individual rights:
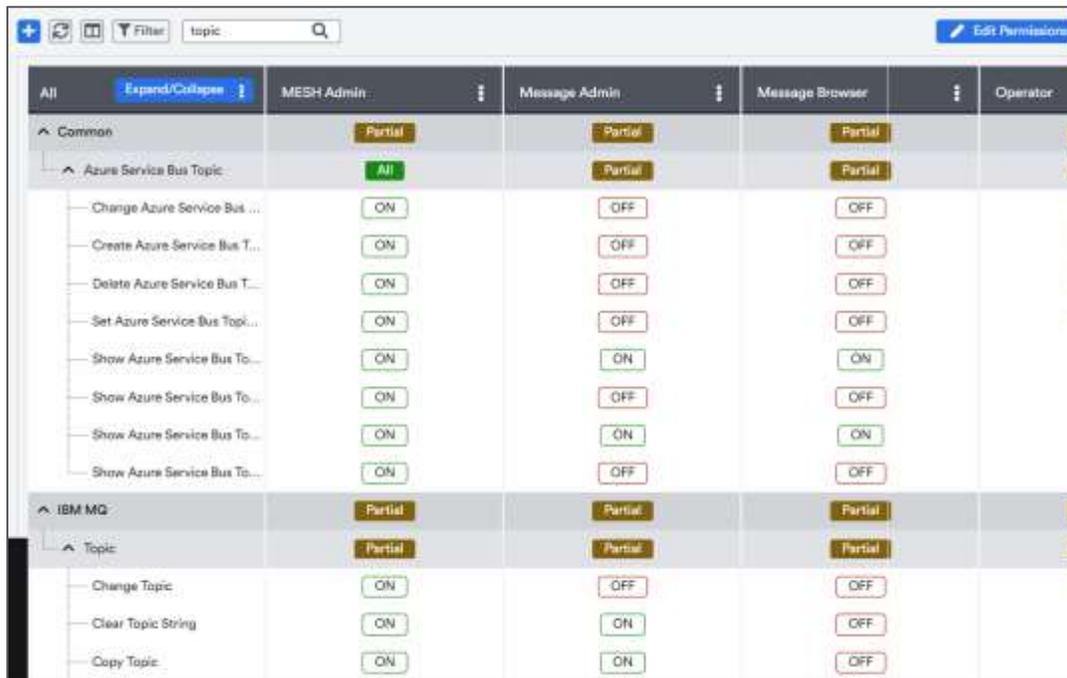
Figure 2-19. Expand filtered rights

2.7.1.4 Find Objects and Navigate Search Results

You can also use the Filter field as a search field.

1. Click the Filter icon once. The label for the icon will change from "Filter" to "Navigate": [Navigate] .
2. Enter a search term in the field provided. Results are found as you type. Search results are highlighted in mustard yellow. The current item is displayed in orange.
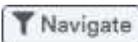
3. You can browse search results. Navigate through results using the right [>] and left [<] arrows. As you navigate to each result, product and object groups automatically expand as needed.
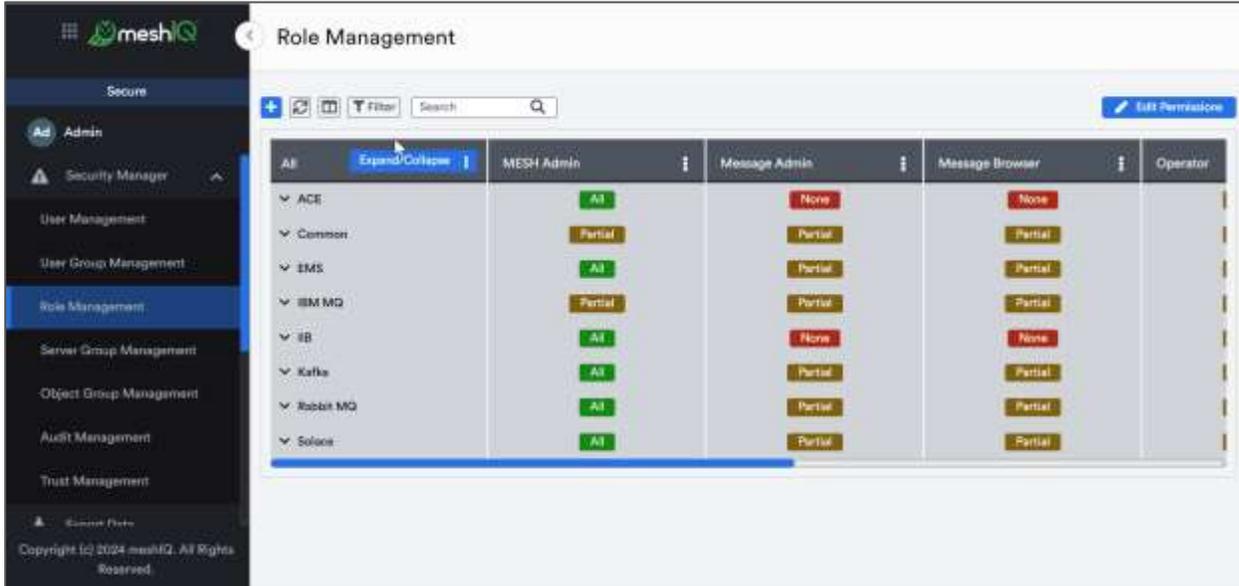
Figure 2-20. Find objects

2.7.1.5 Edit permissions

To edit permissions for any role, product, or object, directly from the Role Management grid, follow these steps:

Refer to *Appendix C: Role Management Rights* for an explanation of the role permissions.

1. Click **Edit Permissions**: [Edit Permissions]. You are now in Edit Mode. In Edit Mode, special icons are displayed to allow you to edit permission. Refer to the table above in section *2.7.1.1.*
2. Use the **Expand/Collapse** icon to view products and objects.
3. Click a check box [ ] to grant permission for a feature. A green check mark [✓] is displayed in the check box. To remove permission, click the green check mark. The check mark is removed. Clicking a partial indicator [−] once will assign all permissions, by default, and change the indicator to a green check mark.

⚠️ **IMPORTANT!**	Clicking a check box at the product level assigns all permissions for all the product's objects to the role. Similarly, clicking a check box at the object level assigns permissions for all the objects. Removing a check mark at the product or object level removes all of the underlying permissions from the role.

4. After updating permissions, click [Save].

2.7.2 Create a new role

To create a new role:

1. On the left toolbar, select **Security Manager** ⚠ **> Role Management**.
2. Click the add button ➕. The **Role Create Window** dialog opens.
3. Enter the **Role Name** in the space provided.
4. Define permissions for the new role within the dialog, following the instructions above for editing permissions.
5. Click **Save**.
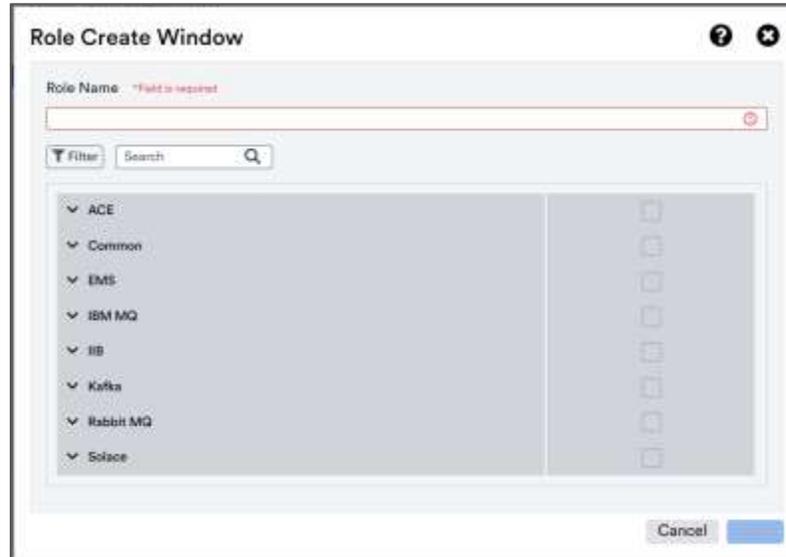
Figure 2-21. Create a new role

2.7.3 Edit a role

To edit a role's name or permissions:

1. Click the role's menu icon (after its name) ⋮ and select **Edit Role**. The *Role Properties* dialog opens. It is identical in functionality to the *Role Create Window* dialog.
2. To edit the name of the role, enter a new name in the Role name field.
3. To edit permissions for the role within the ***Role Properties*** dialog, following the instructions above for editing permissions.
4. Click **Save**.

2.7.4 Duplicate a role

To save time when setting up a new role, you can base it on the permissions of an existing role. Use the Duplicate option to do this.

To duplicate a role:

1. Click the role's menu icon (after its name) ⋮ and select **Duplicate Role**. The ***Role Clone Window*** opens. The *Role Clone Window* is identical in functionality to the *Role Create Window* dialog.

2. Enter the name of the new role in the **Role name** field.

3. To edit permissions for the new role within the *Role Clone Window*, follow the instructions above
    for editing permissions.

4. Click **Save**. The new role is added as a new column at the end of the table.

2.7.5 Delete a role

To delete a role:

1. Click the role's menu icon (after its name) ⋮ and select **Delete Role**. A confirmation message is
    displayed.

2. Click **Yes** to delete the role, or **No** to cancel.

2.7.6 Export a role's data

To export a role's data:

1. Click the role's menu icon (after its name) ⋮ and select **Export Role's Data (CSV)** or **Export Role's
    Data (JSON)**.

2. A file in the chosen format (CSV or JSON) will automatically be downloaded. It will contain all
    permissions for the role. The file can be saved or opened.

2.8 Server Group Management

A server group is a collection of middleware servers—such as queue managers, EMS or Kafka brokers—that are managed together (for example, PROD vs. TEST or EMEA vs. US). In the security application, servers are managed separately from objects so that it is easy to change the scope of security requests as the environment changes.

Properly configured server groups are required when creating and editing roles and objects. The default record for all queue managers includes an asterisk to allow access to all servers.

To configure, create, edit, or remove servers/agents, on the left toolbar, select **Security Manager** ⚠ > **Server Group Management**. A sample entry for All Queue Managers is listed.

Figure 2-22. Server Group Management

2.8.1 Add a Server Group

1. On the left toolbar, select **Security Manager** ⚠ > **Server Group Management**.
2. Click the add icon ➕.
3. On the General tab, enter the server group's **Name** (required) and a **Description** of this server group record (optional).

   - To prevent others from working on this record, select the **Locked** option and click **Save**.
   - To set up server groups ahead of time, you can enter their records but select the **Disabled** option. This prevents them from being accessed before the system is set up and ready to use.
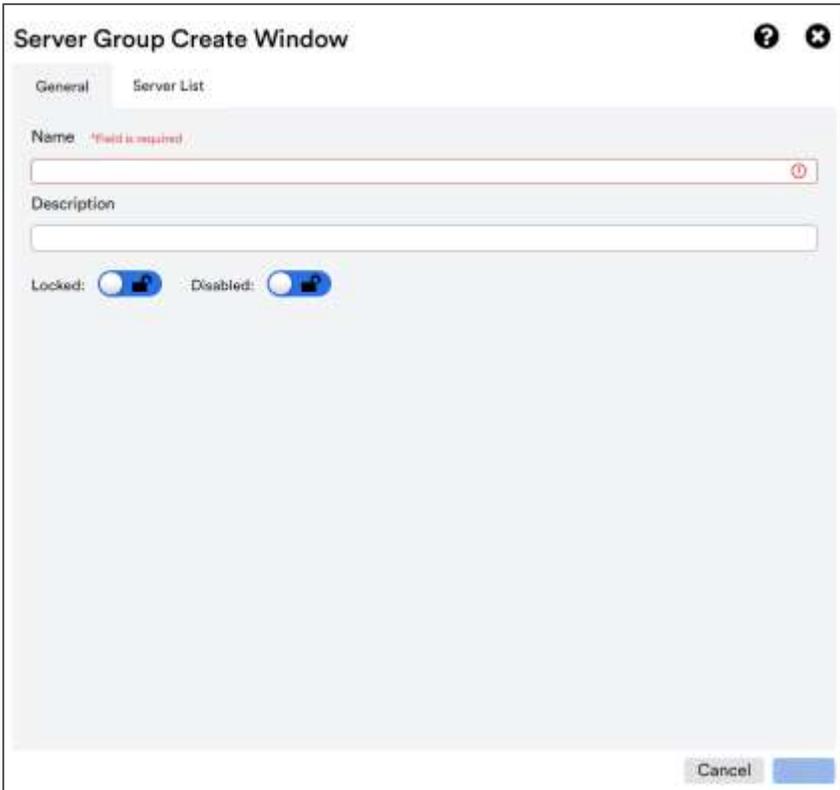
Figure 2-23. Add Server Group

4. To specify the parameters of this server group, select the **Server List** tab. Enter values for the **WGS Name**, **Node Name**, and **Manager Name**. A regex can be used to represent "All" (for example, an regex under **Manager Name** indicates "all managers."
5. Click **+Add**.
6. Repeat steps 4 and 5 as needed.
7. Click **Save**.
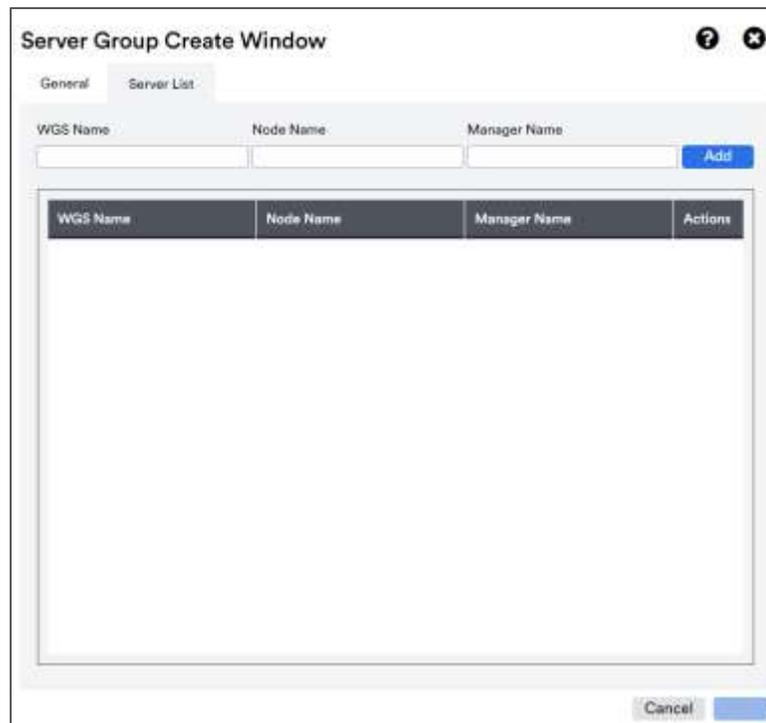
Figure 2-24. Add Parameters to Server Group

2.8.2 Edit an Existing Server

Select the check box for a server group's record. On the **Selected** menu, click **Edit**. Use the instructions above for adding a server group to make changes to the record.

On the Server List tab, you can modify or delete records in the list:

• To edit a record, you can make changes directly in the fields on the dialog. To view longer names more easily, you can also click to open the Server Group Entry Properties dialog, make your changes there, and click **Save**.

• To delete a record, click .

Click **Save** on the dialog after making your changes.
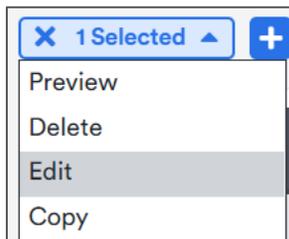
2.8.3 Copy a Server Group

To copy a server group, select the checkbox for the server group's record and click **Copy** in the **Selected** menu.
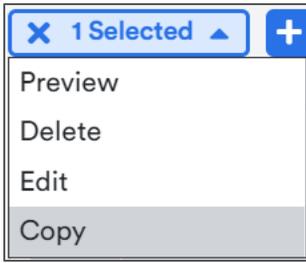
2.8.4 Preview of Server Group

To preview a server group without the ability to modify any, select the checkbox for a server group's record and click **Preview** in the **Selected** menu.
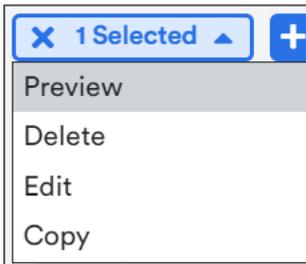
2.8.5 Delete an Existing Server

Select the check box for a server group's record. On the **Selected** menu, click **Delete**. On the *Delete Confirmation* dialog, click **Yes** to delete the user, or **No** to cancel the delete action.
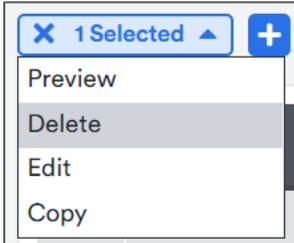
2.9 Object Group Management

In the security application, "objects" can be ACE, IIB, IBM MQ, TIBCO EMS, Kafka, Solace, or RabbitMQ objects. To generate security configurations using permits statements, a fully qualified object specification is required. To add, edit, or delete object groups, select Object Group Management from the Security Manager menu.

A sample entry for All Objects and meshIQ Manage queues (queues starting with NASTEL) is listed. You can create specific object groups that map to your applications. As you will notice when setting up object groups, an object group can be defined by what it *includes* or by what it *excludes*.

Figure 2-25. Object Group Management

2.9.1 Add a New Object Group

1. On the left toolbar, select **Security Manager** ⚠ **> Object Group Management**.
2. Click the add icon ➕.
3. In the General tab, enter the object group's **Name** (required) and a **Description** of this object group record (optional).

   - To prevent others from working on this record, select the **Locked** option and click **Save**.

   - To set up object groups ahead of time, you can enter their records but select the **Disabled** option. This prevents them from being accessed before the system is set up and ready to use. You can also use it to disable an object rather than deleting it.

4. To specify the parameters of this object group, select the List tab. Enter a value for the **Name** and select the **Type** of object that this object group is for. An asterisk can be used to represent "All" (for example, an asterisk under **Name** indicates "all names.")
5. Use the **Filter Type** to indicate how you are treating the specified names and types: do you want to **INCLUDE** them or **EXCLUDE** them from this group?
6. Click **Add**.
7. Repeat steps 4 through 6 as needed.
8. Click **Save**.
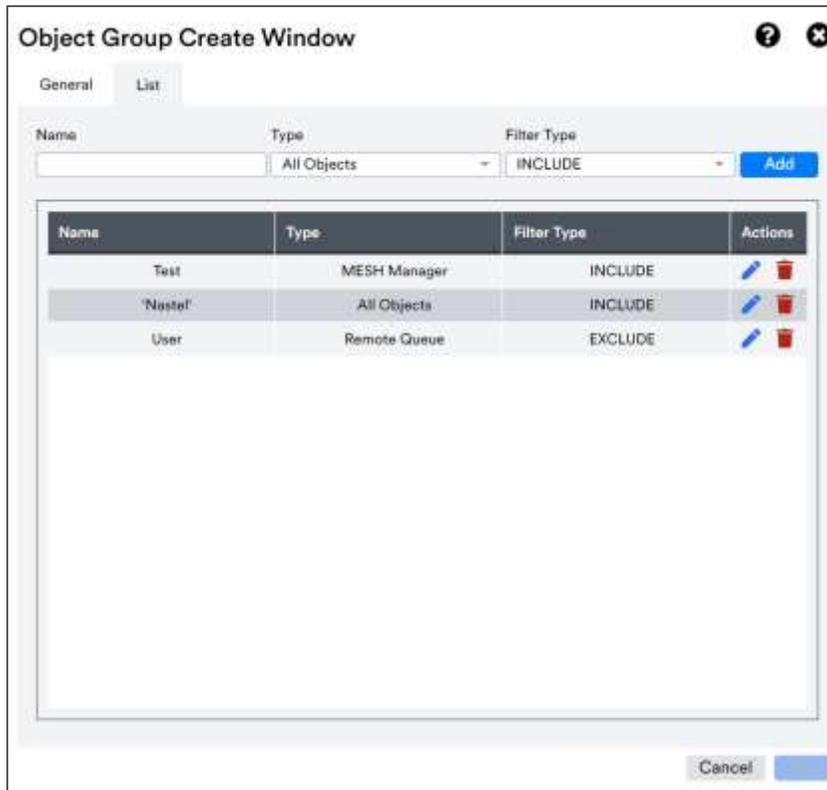
Figure 2-26. Add Object Group

2.9.2 Edit an Existing Object Group

Select the check box for an object group's record. On the **Selected** menu, click **Edit** to open the Object Group Properties dialog. Use the instructions above for adding an object group to make changes to the record.

On the List tab, you can modify or delete records in the list:

- To edit a record, you can make changes directly in the fields on the dialog. To view longer names more easily, you can also click to open the Object Group Entry Properties dialog, make your changes there, and click **Save**.

- To delete a record, click .

Click **Save** on the dialog after making your changes.
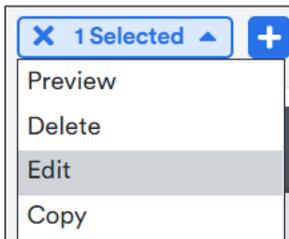
2.9.3 Copy an Object Group

To copy an object group, select the checkbox for the object group's record and click **Copy** in the **Selected** menu.
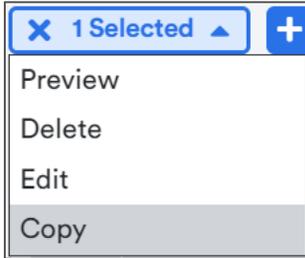
2.9.4 Preview of Object Group

To preview an object group without the ability to modify any, select the checkbox for the object group's record and click **Preview** in the **Selected** menu.
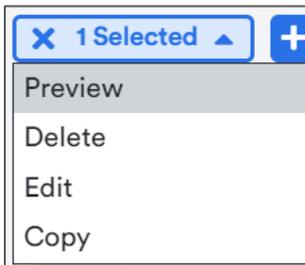
2.9.5 Delete an Object Group

Select the check box for an object group's record. On the **Selected** menu, click **Delete**. On the *Delete Confirmation* dialog, click **Yes** to delete the user, or **No** to cancel the delete action.
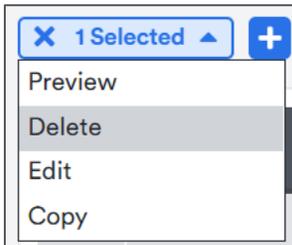
2.10 Audit Management

Audit Management is used to trace the granting or denial of rights. To access it, select **Audit Management** from the **Security Manager** ⚠ menu.

> 📝 **NOTE**
>
> You must set up server groups, user groups, and objects before you establish audit statements.

	Order	User Group	MQ Server Group	Object Group	Action Mask	Audit Level	Workgroup Server
☐	10	*	*	*	^(MQ|EX)CMD_.....	none	.*
☐	20	*	.*	*	^(MQ|EX)CMD_(...	none	.*
☐	30	*	.*	*	^EXCMD_MG.*	none	.*
☐	40	*	.*	*	.*	all	.*

Figure 2-27. Audit Management

2.10.1   Create an Audit Statement

1. On the left toolbar, select **Security Manager** ⚠ **> Audit Management**.
2. Click the add icon ➕.
3. In the **Order** field, indicate the priority level of this statement, which will determine the order in which the audit records are read. Lower values take precedence over higher ones. For example, a statement with an order of 10 is read before a statement with an order of 50; likewise, one with an order of 50 is read before one with an order of 100.
4. Select the **User Group** that will be the subject of this audit statement. You can select an existing user group from the list, or select the first entry (*) to include all groups.
5. Select the **MQ Server Group** that is being audited by this statement. You can select an existing server group from the list, or select the first entry (*) to include all groups.
6. Select the **Object Group** that will be the subject of this audit statement. You can select an existing object group from the list, or select the first entry (*) to include all groups.
7. In the **Action Mask** field, enter a command mask to indicate the command you want to audit.
8. Set the **Audit Level**: All (both granted and denied), **Denied**, **Granted**, or **None** (no auditing).
9. Enter the **Workgroup Server** that is being audited.
10. Click **Save**.

Figure 2-28. Create an Audit Statement

2.10.2   Edit an Audit Statement

Select the check box for an audit statement's record. On the **Selected** menu, click **Edit**. Follow the instructions above for creating audit statements to edit the record.

2.10.3   Copy an Audit Statement

To copy an audit statement, select the checkbox for the audit statement's record and click **Copy** in the **Selected** menu.

2.10.4   Preview of Audit Statement

To preview an audit statement without the ability to modify any, select the checkbox for the audit statement's record and click **Preview** in the **Selected** menu.

2.10.5   Delete an Audit Statement

Select the check box for an audit statement's record. On the **Selected** menu, click **Delete**. On the *Delete Confirmation* dialog, click **Yes** to delete the user, or **No** to cancel the delete action.

2.11 Trust Management

The Trust statement is used to enhance security by limiting the connections that can be made to the Workgroup server. Trusts are applied to specify which sources should be trusted.

2.11.1   Create a Trust Statement

1. On the left toolbar, select **Security Manager** ⚠ **> Trust Management**.

2. Click the add icon ➕ .

   - Identify a specific **WGS Name** to trust, or use a regex for all.
   - Identify a specific **IP Address** to trust, or use a regex for all.
   - Identify the specific **Application Name** to trust, or use a regex for all.
   - Identify the **User Mask** to indicate which users to trust, or use a regex for all.

3. Click **Save**.

Figure 2-29. Create a Trust Statement

2.11.2   Edit an Trust Statements

Select the check box for a trust statement's record. On the **Selected** menu, click **Edit**. Follow the instructions above for creating trust statements to edit the record.

2.11.3   Copy an Trust Statements

To copy a trust statement, select the checkbox for the trust 's record and click **Copy** in the **Selected** menu.

2.11.4   Preview of Trust Statements

To preview a trust statement without the ability to modify any, select the checkbox for the trust statement record and click **Preview** in the **Selected** menu.

2.11.5   Delete an Trust Statements

Select the check box for a trust statement's record. On the **Selected** menu, click **Delete**. On the Delete
Confirmation dialog, click **Yes** to delete the user, or **No** to cancel the delete action.

2.12 Administration

The importing and exporting data functions allow administrators to back up and restore permissions and other security data.

2.12.1 Import Data

Using the Import Data menu option, you can import features and permits, import Secure data, or restore data from a backup.
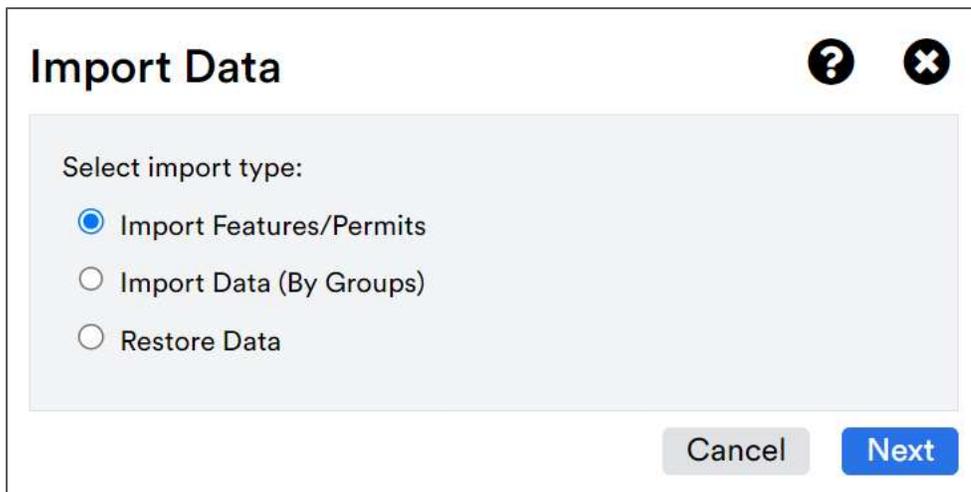
Figure 2-30. Import Data

2.12.1.1 Import Permissions

1. On the left toolbar, select **Import Data** .
2. Select the first option (**Import Features/Permits**) and click **Next**.
3. If you are using the imported permissions to add a new role, enter its name in the **New Role Name** field. If you are using the imported permissions to change an existing user role, select the existing role from the **Role** list, and choose whether you want to add the new permissions onto the existing role (**Append To Role**) or completely replace the permissions of the existing role (**Overwrite Role's Data**).
4. Click **Import**.

   If the import is successful, a Success message is displayed in the lower right area of the application window.
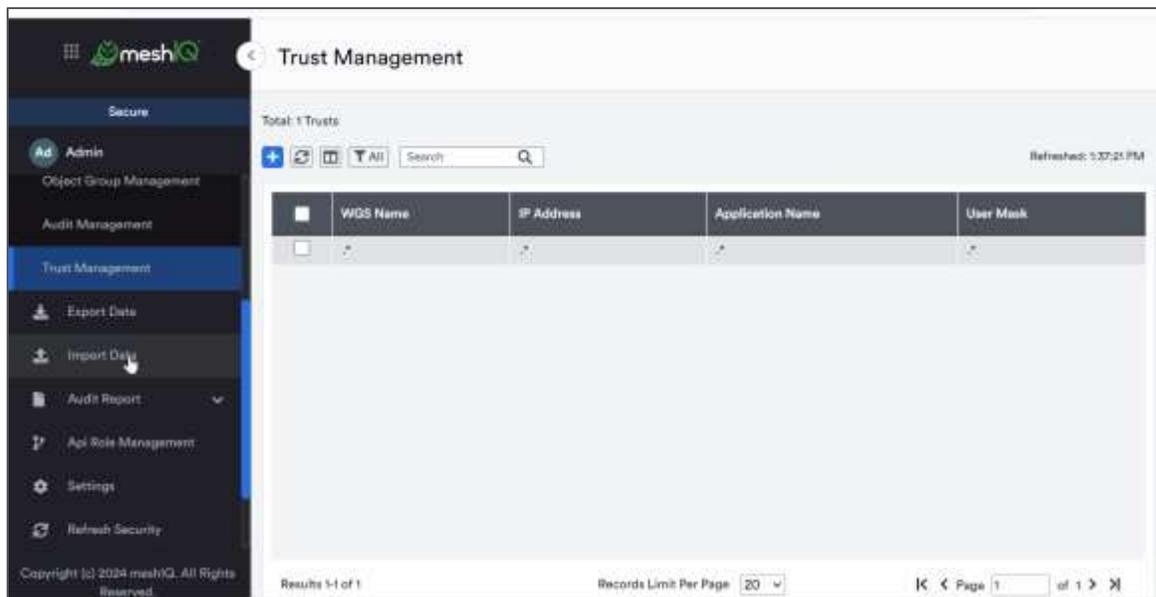
Figure 2-31. Import features/ Permits

2.12.1.2 Import meshIQ Secure Group Data

If you have previously exported users, user groups, roles, server groups, object groups, or trusts through the Export Data By Groups method, you can use the Import Data By Groups option to import it back in.

1. On the left toolbar, select **Import Data** .
2. Select the second option (**Import Data By Groups**) and click **Next**.
3. Click **Choose File** and navigate to the file that contains your exported data.
4. Double-click the file. The *Import meshIQ Secure Data* dialog opens. It displays a count of the number of records that exist in the import file for each type of data.
5. (Optional.) You can click to expand each type of data and preview the data for individual items. Click **Preview** for an item (for example, the Developers and User groups) to preview the details in the file:
6. Click **Import**.

    If the import is successful, a Success message is displayed in the lower right area of the application window.
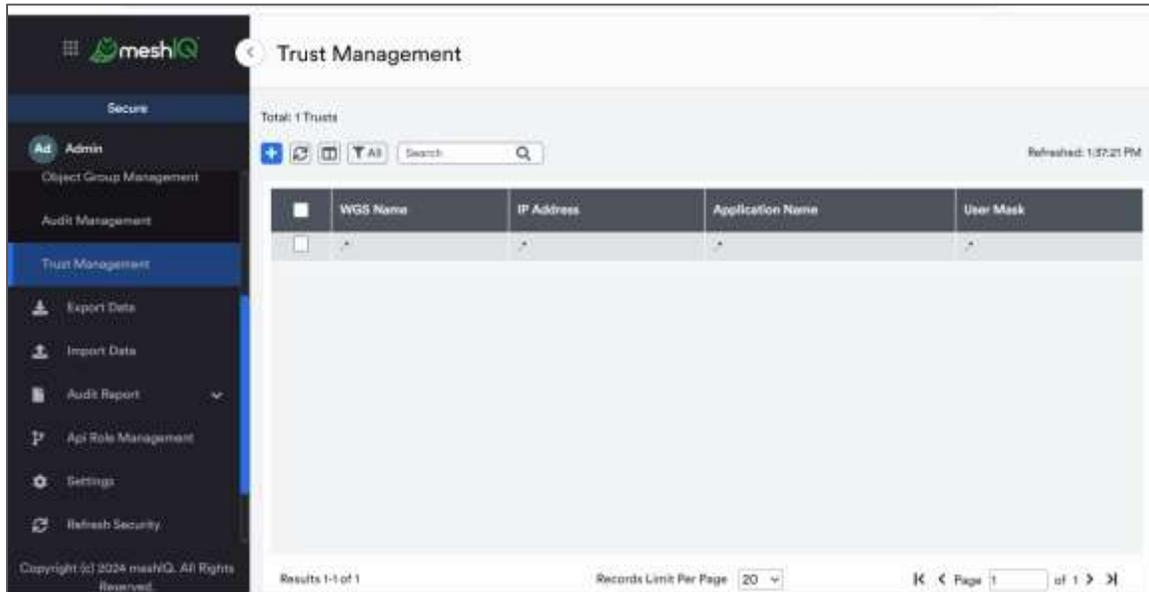
Figure 2-32. Import Data (By Groups)

2.12.1.3 Restore Data from A Backup

If you have previously exported security data through the Data Backup method, you can use the Restore Data option to import it back in.

1. On the left toolbar, select **Import Data** 📤.
2. Select the third option (**Restore Data**) and click **Next.** The **Restore meshIQ Secure Data** dialog will then open.
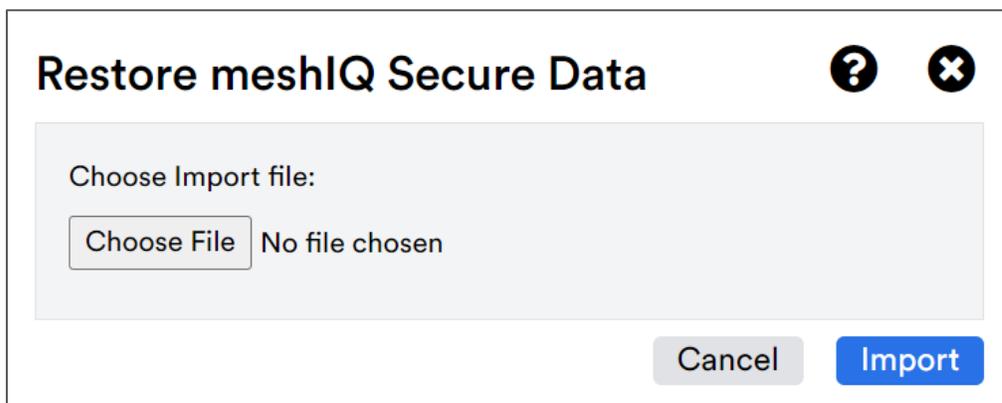
3. Click **Choose File** and navigate to the file that contains your exported data.
4. Double-click the file.
5. Click **Import**.

If the import is successful, a Success message is displayed in the lower right area of the application window.

2.12.2   Export Data

From the Export Data option, you can create a data backup of your entire security configuration or export security definitions for selected objects in JSON or CSV format.

2.12.2.1 Create a Data Backup

1. On the left toolbar, select **Export Data** 📥 > *Export meshIQ Secure* dialog opens.
2. Select **Data Backup**.
3. Click **OK**. A .json file is downloaded to your browser. The file name begins with secure_backup_ followed by a numerical value.

Recent download history ⊗

secure_backup_172535639⛁ 📁 📤
178 KB • 1 minute ago   Open
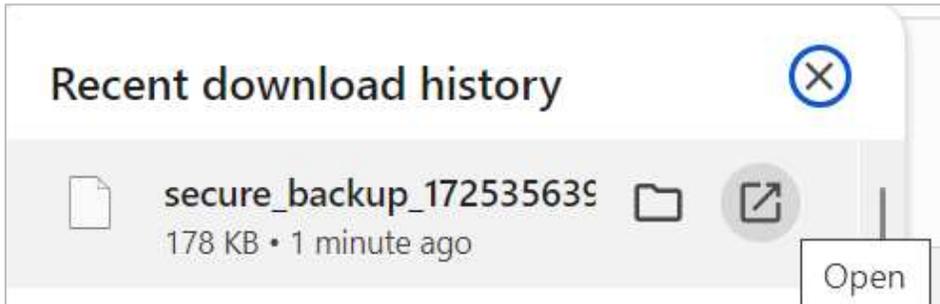
4. Choose the open file option (varies by browser). This file contains a backup of all data.
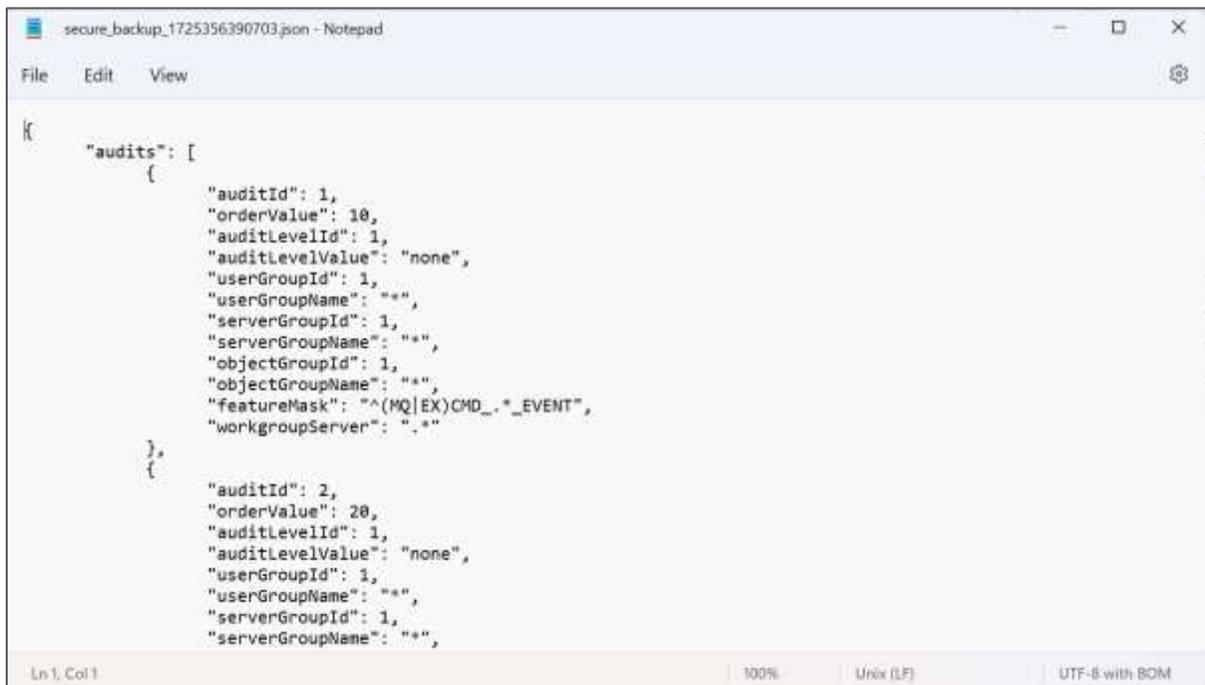
```
secure_backup_1725356390703.json - Notepad                              —   □   ×

File   Edit   View                                                           ⚙

{
    "audits": [
        {
            "auditId": 1,
            "orderValue": 10,
            "auditLevelId": 1,
            "auditLevelValue": "none",
            "userGroupId": 1,
            "userGroupName": "*",
            "serverGroupId": 1,
            "serverGroupName": "*",
            "objectGroupId": 1,
            "objectGroupName": "*",
            "featureMask": "^(MQ|EX)CMD_.*_EVENT",
            "workgroupServer": ".*"
        },
        {
            "auditId": 2,
            "orderValue": 20,
            "auditLevelId": 1,
            "auditLevelValue": "none",
            "userGroupId": 1,
            "userGroupName": "*",
            "serverGroupId": 1,
            "serverGroupName": "*",

Ln 1, Col 1                                           100%    Unix (LF)    UTF-8 with BOM
```

2.12.2.2 Export Data by Groups

1. On the left toolbar, select **Export Data** ⬇ > *Export meshIQ Secure* dialog opens.
2. Select **Export Data (By Groups)**.
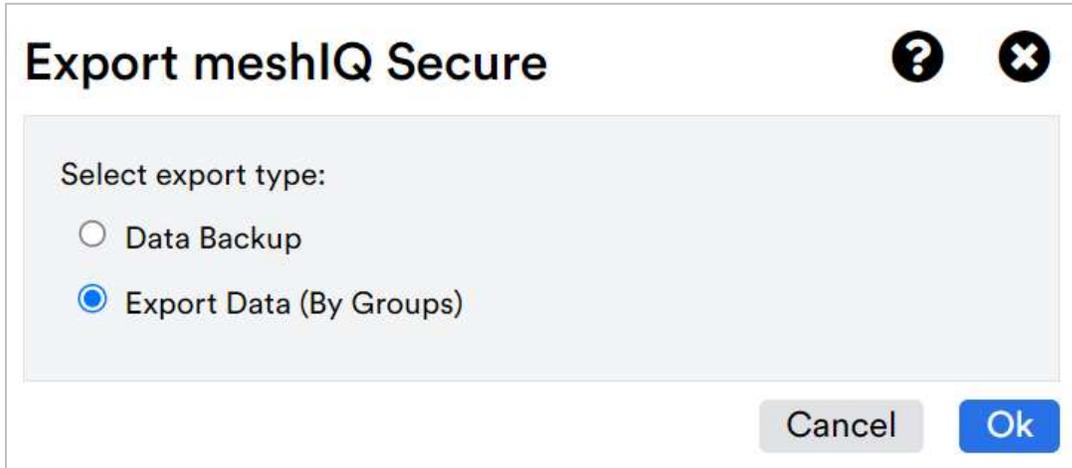
3. Click **OK**. The Export meshIQ Secure Data dialog opens.

4. Select the file type that you want to store exported data in: JSON or CSV.
5. Select the checkboxes of the items you want to export. The items that can be reimported are marked with "true" in the Can Be Imported column.

6. Click **Export**. A JSON or CSV file will be downloaded automatically. It will contain all data from the selected items.

2.12.3 API Role Management

You can assign rights to restrict users' actions in the security application with the API Role Management option. With it, you can create roles for users that control which features are available to them.

> ⚠️ **IMPORTANT!** A user must have the Manage User Settings/Info right to be able to log into the security application. API management roles determine what rights they have, such as change or view only.

Examples of API Roles would be users that could only view settings but not make changes, or auditors that can only view the audit reports.

As with all usage of the management applications, the assignment is based on group(s) that the user belongs to. As an example, let's take a user, Bob, who belongs to the Auditors group (in LDAP) and should be only able to view the meshIQ Secure audit reports.

The first step would be to define an Auditors group in meshIQ Secure, as described in User Group Management. If Bob does not require any functions in the management application, it is not necessary to add any User Groups to this group; just follow the details below. If Bob can use both the security and the management applications, then you would add both User Groups and add API Role Management rights as outlined below. This group must not be specified on the WGS REST API tab of WGS Properties in Enterprise Manager for granting access rights to meshIQ Secure, which will override any rights defined here.

2.12.3.1 Add a new Api role

1. On the left toolbar, select **Api Role Management** .
2. Click ➕ to add a new Api Role. The **Api Role Create Window** opens.

3. Select the required entry for **Manage User Settings/Info**, which provides access to security application online functions.

4. Select any specific security application features from the list:

   - Data Import - Import into the security application
   - Data Export - Export from the security application
   - Show Management Audit - View the Management Audit log
   - Show Security Management Audit - View the Security Management Audit log
   - Refresh Security - Request Refresh Security
   - Show API Roles - View API Role Management

5. Assign Read/Write/Delete rights for security features.

   - By default, when you select the parent check box for a feature, its child check boxes are also selected.
   - Depending on your selection, other necessary check boxes may also be selected automatically. For example, the Audit Management feature Show right requires Server Groups and Object Groups to be shown. Therefore, when you select the Show right for Audit Management, the Server Groups and Object Groups Show check boxes are selected for you.

6. On the Groups tab, specify the User Group to which you will assign this API Role. Select the User Group's name from the **Group Name** drop-down menu, or enter a new group name if it is not available in the list, and click Add. After entering the new group name, check the box that says "**Add Specified Group(s) If Not Already Created**. (You can also remove groups by clicking the 🗑 next to the group record.) This group must be a defined User Group, although it can be added after you add it here.

7. Click **Save**.
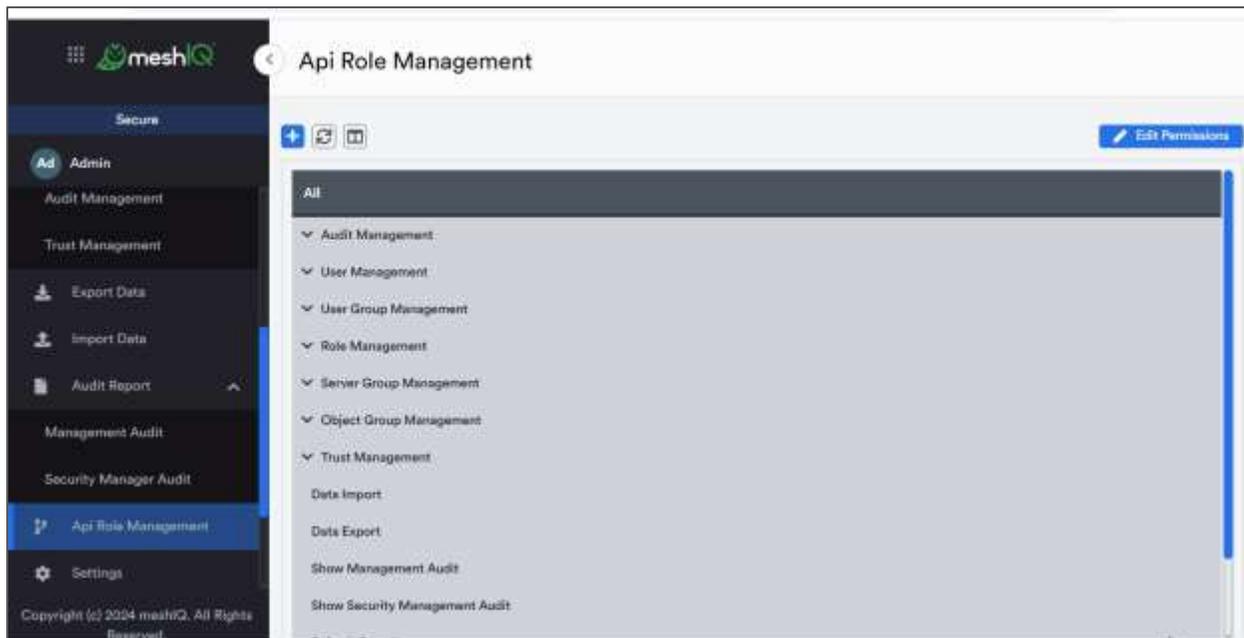
Figure 2-33. Add a New Api Role and Groups

2.12.3.2 Edit an Api role

1. On the Api Role Management page, click the Api Role Options icon ⋮ next to the Api Role that you want to edit.
2. Select **Edit Api Role**. The Api Role Properties window opens. The Api Role Properties dialog contains the same fields as the Api Role Create window.
3. Make your changes to the role. Refer to the instructions above for adding an Api role for more details.
4. Click **Save**.

Figure 2-34. Edit, Duplicate, or Delete Api Role

2.12.3.3 Edit Permissions for an Api Role

You can edit permissions for an Api Role in the same way that you edit them for other roles. See section *2.7.1.5*, *Edit permissions*, under Role Management.

2.12.3.4 Duplicate an Api role

If you would like to create a new Api Role that has similar rights to an existing role, you can duplicate the existing role so that all the rights of the original role are already selected. As a result, it is easier to complete the task of creating the new role.

1. On the API Role Management page, click the Api Role Options icon ⋮ next to the API Role that you want to make a copy of (or "Duplicate").
2. Select **Duplicate API Role**. The API Role Clone Window opens. Give the new role a descriptive name.
3. Make your changes to the role. Refer to the instructions above for adding an API role for more details.
4. Click **Save**.

The new role is displayed, with similar characteristics to the original role, as in the second example shown below.

Figure 2-35. Duplicated API Role

2.12.3.5 Delete an API role

1. On the API Role Management page, click the Api Role Options icon ⋮ next to the API Role that you want to delete.
2. Select **Delete API Role**. The Delete Confirmation dialog opens.
3. Click **Yes** to delete the role, or **No** to cancel the delete action.

2.12.3.6 Display the Groups for an API Role

To view the groups that are associated with an API role without opening the API Role Properties window, click the **Display Groups** button in the role's column header.
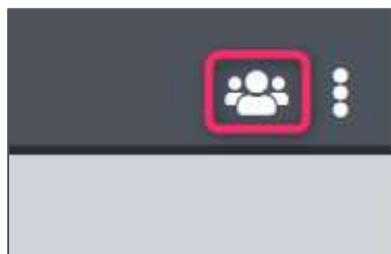
Figure 2-36. Display Groups button

The name or names of the associated group or groups are displayed under the column header, as shown below.

Figure 2-37. API Role Groups

2.12.3.7 Edit API Role Groups

You can quickly edit the groups that are assigned this API Role by clicking the name of the group that is displayed under the **Display Groups** button (see the instructions above for displaying the groups for an API role). Clicking the name of the group opens the API Role Groups dialog. Groups that are currently assigned to the API Role are listed at the bottom of the dialog.

- To assign a new group to the API Role, enter the group name in the API Role Groups dialog and click Add. The dialog will list the name of the group at the bottom.
- To remove a group from the API Role, find the group name in the list at the bottom of the API Role Groups dialog and click the delete button to remove the group assignment.

2.12.4   Audit Reports

The Management Audit Report and the Security Management Audit report show user activity for auditing purposes.

2.12.4.1 Management Audit Report

The *Audit Report* screen displays audit records for actions performed in the management application (meshIQ Manage or Navigator). By default, the audit history is displayed in reverse chronological order (starting with the newest record). But you can customize the way in which records are displayed. See the *Working with Tables* section (*2.3*) for information about navigating and customizing tables, including filtering options.

 NOTE	The database administrator will need to maintain the audit history.

On the left toolbar, select **Audit Report** **> Management Audit** to run this report.

2.12.4.1.1 Save report results

To save results, click the download button ![download icon]. You can choose the format for your file: .csv or.json.

Figure 2-38. Save report results as *.csv or *.json

A .csv or .json file with a unique file name will automatically download. Example: exported_data_1696952627733.csv or exported_data_1696952695407.json.

The file will contain all data from the report based on any filters that you have applied. By default, results are limited to 25,000 records.

Figure 2-39. Management Audit Report

Table 2-1. Management Audit Report Columns	
Name	**Description**
Object Name	Name of the object that the user action was concerned with.
Object Type	Type of the object named in previous column.
Command	Command that was executed on the object.
User Name	User who performed the command in the previous column.
Wgs Node Name	Name of agent or connection manager for the object named in the first column.

<div align="center">**Table 2-1. Management Audit Report Columns**</div>

Name	Description
Manager Name	Name of manager (for example, IBM Queue Manager, EMS broker, Solace broker, Kafka cluster) associated with the object.
Date Time	Date and time the Command was executed (Locale Format).
Wgs Name	Workgroup Name
Access	Indicates whether the user had the right (or access) to perform the action (command). If the user did, this column shows GRANTED in green. If not, this column shows DENIED in red.
Time Stamp	Unix timestamp of the action in seconds
Time Stamp Long	Unix timestamp of the action in milliseconds.
Type	Always "AUTHORITY".
Effective User Name	Effective User Name is taken from the Group (to which the user belongs) that had permission for the action in workgroup server.
Trust IP Address	Trusted IP Address, as set up in Trust Management in the security application.
Trust Application Name	Trusted Application Name that corresponds to the IP Address from the previous column.
Group Name	Shows the group that a user belongs to (versions 10.5 and later only).
Command Text (Extra Text)	Shows the commands executed by the user when using command console features, such as MQSC console. For example: `Define QL (ABC)`

2.12.4.2 Security Manager Audit Report

The Security Manager Audit report shows the audit history for all database interactions. See the *Working with Tables* section (*2.3*) for information about navigating and customizing tables, including filtering options.

> 📝 The database administrator will need to maintain the audit history.
> **NOTE**

On the left toolbar, select **Audit Report** 🗔 **> Security Manager Audit** to run this report.

2.12.4.2.1 Save report results

To save results, click the download button ⤓. You can choose the format for your file: .csv or .json.

Figure 2-40. Save report results as *.csv or *.json

A .csv or .json file with a unique file name will automatically download. Example: exported_data_1696952627733.csv or exported_data_1696952695407.json.

The file will contain all data from the report based on any filters that you have applied. By default, results are limited to 25,000 records.

Figure 2-41. Security Management Audit Report

Table 2-2: Security Manager Audit Report Columns	
Name	**Description**
User Name	User who performed the action in the security application.
Command	Specific command executed by the user. Refer to the Command and Description Details table below for details.
Description	General description of the command executed by the user (for example, Add role feature, Delete role feature). Refer to the Command and Description Details table below for details.
Data	Data values that were updated as a result of the user's action. For example, if a role was updated, the name of the role and the role ID. The Feature Code and Feature ID of the right that was updated are also included.

<p align="center">**Table 2-2: Security Manager Audit Report Columns**</p>

Name	Description
Timestamp	Unix timestamp of the action.
Date Time	Date and time the Command was executed (Locale Format).

<p align="center">**Table 2-3: Security Manager Audit Report Commands**</p>

Action	Command	Description
Refresh Security	REFRESH_SECURITY_FLAG	Refresh Security Flag Cache
User Settings	*Not subject to audit.*	*Not subject to audit.*
User Management		
• Add	INSERT_USER_UGROUP_RET	Inserts user with user group
• Edit	UPDATE_USER	Updates user
• Delete	DEL_USR	Delete user
• Assign Groups	ADD_USER_TO_UGROUP UPDATE_USER	Insert user to user group Updates user
• Remove from group	DEL_USER_FROM_UGROUP UPDATE_USER	Delete user from user group Updates user
User Group Management		
• Add	INSERT_USER_GROUP_RET	Adds user group
• Add role to user group	ADD_ROLE_TO_UGROUP	Insert role to user group
• Add server group to user group	ADD_MQGROUP_TO_UGROUPROLE	Insert server group to user group
• Add object group to user group	ADD_OBJGROUP_TO_GROUPS	Insert object group to user group
• Edit	UPDATE_USER_GROUP	Updates user group
• Delete	DEL_ALL_FROM_UGROUP DEL_UGROUP	Deletes all users from user group Deletes user group

Table 2-3: Security Manager Audit Report Commands		
Action	**Command**	**Description**
• Remove role from user group	DEL_ROLE_FROM_UGROUP	Delete role from user group
• Remove server group from user group	DEL_MQGROUP_FROM_UGROUPROLE	Deletes server group from user group
• Remove object group from user group	DEL_OBJGROUP_FROM_GROUPS	Deletes object group from user groups
meshIQ Secure & Domain User Group Compare	Copy from Domain to Secure: INSERT_USER_GROUP_RET	Adds user group
	Copy from Secure to Domain: *Not subject to audit.*	
Role Management		
• Add	INSERT_ROLE_RET	Inserts role
• Add feature to role	UPDATE_ROLE_ADD_FEATURE	Adds role feature
• Remove feature from role	UPDATE_ROLE_DEL_FEATURE	Delete role feature
• Edit	UPDATE_ROLE	Updates role
• Delete	DEL_ROLE	Deletes role
• Duplicate	INSERT_ROLE_RET	Inserts role
• Add feature to clone	UPDATE_ROLE_ADD_FEATURE	Adds role feature
Server Group Management		
• Add Server Group	ADD_MQGROUP_RET	Adds server group

Table 2-3: Security Manager Audit Report Commands

Action	Command	Description
• Add Server Group entry	ADD_MQGROUP_ENTRY_RET	Adds server group entry
• Update Server Group entry	UPDATE_MQGROUP_ENTRY	Updates server group entry
• Delete Server Group entry	DEL_MQGROUP_ENTRY	Deletes server group entry
• Edit	UPDATE_MQGROUP	Updates server group
• Delete	DEL_MQGROUP	Deletes server group
Object Group Management		
• Add Object Group	INSERT_OBJ_GROUP_RET	Adds object group
• Add Object Group Entry	ADD_OBJGROUP_ENTRY_EX_RET UPDATE_OBJ_GROUP	Adds object group entry Update object group
• Edit Object Group Entry	UPDATE_OBJGROUP_ENTRY_EX UPDATE_OBJ_GROUP	Updates object group entry Update object group
• Delete Object Group Entry	DEL_OBJGROUP_ENTRY UPDATE_OBJ_GROUP	Deletes object group entry Update object group
• Edit	UPDATE_OBJ_GROUP	Update object group
• Delete	DEL_OBJGROUP	Delete object group
Audit Management		
• Add	INSERT_AUDIT_RET	Inserts server audit
• Edit	UPDATE_AUDIT	Updates server audit
• Delete	DEL_AUDIT	Deletes audit
Trust Management		
• Add	INSERT_TRUST_RET	Inserts trust
• Edit	UPDATE_TRUST	Updates trust

Table 2-3: Security Manager Audit Report Commands		
Action	**Command**	**Description**
• Delete	DEL_TRUST	Deletes trust
Export Data (Data Backup)	Upon successful backup: WSM_DATA_BACKUP	Upon successful backup: WSM Data backup
Export Data (By Groups)	*Not subject to audit.*	*Not subject to audit.*
Import Features/Permits	*Features added through import are audited in the same way as features added manually. Refer to the Role Management section earlier in this table.*	
Import Data (By Groups)	*Objects added through import are audited in the same way as objects added manually. Refer to the Object Group Management section later in this table.*	
Restore Data	**Before restore:** Object groups, roles, server groups, users, user groups, trust statements, and audit statements are all deleted. • DEL_OBJGROUP_ALL • DEL_ROLE_ALL • DEL_MQGROUP_ALL • DEL_USR_ALL • DEL_USER_GROUP_ALL • DEL_TRUST_ALL • DEL_AUDIT_ALL	
	During restore: • RESTORE_TRUST_DATA • RESTORE_OBJECT_GROUP_DATA • RESTORE_SERVER_GROUP_DATA • RESTORE_ROLE_GROUP_DATA • RESTORE_USER_GROUP_DATA • RESTORE_USER_DATA • RESTORE_AUDIT_DATA	**During restore:** • Restores trust data • Restores object group data • Restore server group data • Restores role data

Table 2-3: Security Manager Audit Report Commands		
Action	**Command**	**Description**
		• Restores user group data • Restores user data • Restores audit data
	Upon successful restore: WSM_DATA_RESTORE	**Upon successful restore:** WSM Data restore
API Role Management		
• Add	INSERT_ROLE_RET	Inserts API Role
• Add feature to API role Some features incorporate more than one feature record. For example, Show API Roles incorporates feature IDs 956, 957, and 964. Manage User Settings/Info incorporates feature IDs 961, 962, and 965.	UPDATE_API_ROLE_ADD_FEATURE	Adds API role feature
• Edit	UPDATE_ROLE	Updates API Role
• Delete feature from API role	UPDATE_API_ROLE_DEL_FEATURE	Delete API role feature
• Delete	DEL_ROLE	Deletes API Role
• Duplicate	INSERT_ROLE_RET	Inserts API Role
• Add feature to clone	UPDATE_API_ROLE_ADD_FEATURE	Adds API role feature

Table 2-3: Security Manager Audit Report Commands		
Action	**Command**	**Description**
• Assign a new group to the API Role	UPDATE_ROLE UPDATE_API_ROLE_ADD_GROUP	Updates API Role Adds API role group
• Remove a group from the API Role	UPDATE_ROLE UPDATE_API_ROLE_DEL_GROUP	Updates API Role Delete API role group

2.12.5   Settings

On the left toolbar, select **Settings** ⚙ **> User Settings** dialog.

In this dialog box, there is a '**Themes**' setting where you can choose from three options: Dark, Light, or Auto.

1. If the '**Dark Theme**' is selected, dark theme colors will be applied.

2. If the '**Light Theme**' is selected, light theme colors will be applied.

3. If the '**Auto Theme**' is selected, the theme colors will adjust based on the browser or operating system settings.

   • Chrome: In its settings, Chrome has a "Mode" option with values Light, Dark, and Device. However, these settings do not affect the Track webpage when the "Auto" theme is set. The operating system theme/colors do affect the Track webpage when the "Auto" theme is used.
   • Safari: This behaves the same way as Chrome.
   • Firefox: Firefox has a "Website Appearance" setting with values Light, Dark, and Automatic. These settings do affect the Track webpage when the "Auto" theme is set. If "Automatic" is selected, Firefox will use the theme/color preference from the operating system settings.
   • MS Edge: This behaves the same way as Firefox.
   • Opera: This behaves the same way as Firefox.
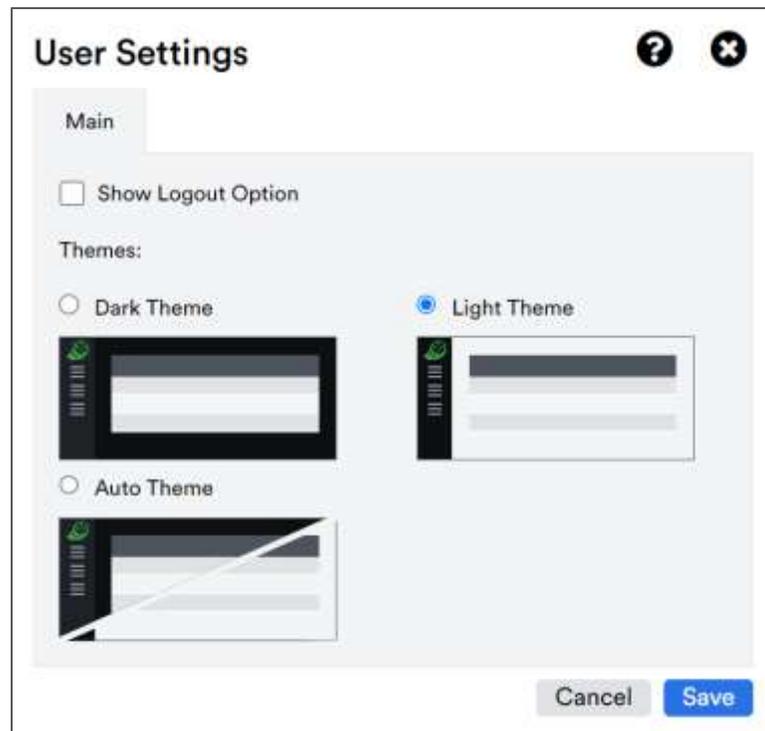
Figure 2-40. User Settings

2.12.6   Refresh Security

When user permissions are changed, the change does not take effect until after the normal refresh interval in Workgroup Server. However, you can update the security state using the Refresh Security button. Doing so forces the workgroup server to refresh the cache from the database.

1.   On the left toolbar, select **Refresh Security** .
2.   At the Refresh Security confirmation dialog, click **Yes** to continue or **No** to cancel.

Figure 2-40. Refresh Security

2.12.7   App Switcher

1. The app switcher icon allows you to switch between applications with one click. To use this feature, you need to configure it in the system. To learn how to configure it, click here for the *App Switcher Configuration Steps.*

2. After completing the configuration, log into the Secure application to see the app switcher icon in the top left corner of the window.

3. Click on the app switcher icon to see the options:

   - If you log in from **Secure**, you will see **Manage**, **Track**, and **meshIQ Support**.

4. Click on an app to switch to it. Depending on your system configuration, the app will open either in the same tab or in a different tab. If it opens in the same window, pressing the back button on your browser will return you to the previous login page.
   If SSO is enabled on your system, you may not need to log in.

> **NOTE** Your app switcher options may differ from those shown in the image below.
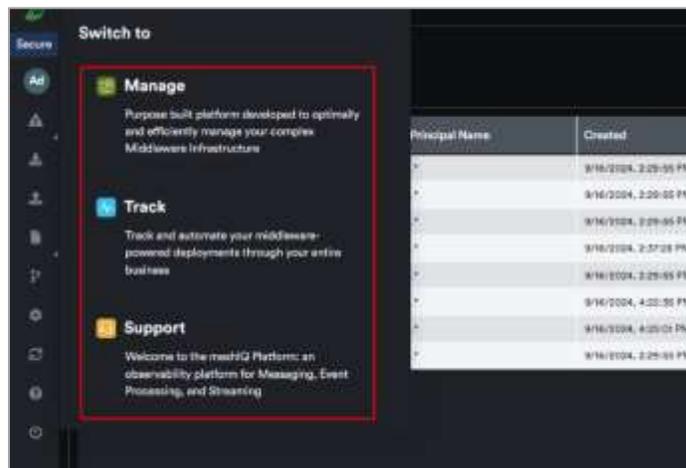
Figure 2-41. App Switcher

2.12.7.1 App Switcher Configuration Steps

To access the App switcher feature, follow the configuration steps mentioned below.

Configuration Steps:

1. First, stop the Tomcat server.
2. Take the `app-switcher.xml.sample` file from the package and rename it to `app-switcher.xml`. You can have an `app-switcher.xml` file for each of your environments (for example, `prod-app-switcher.xml` or `test-app-switcher.xml`).
3. Update the URLs in the file with your own (the default URLs are set to localhost).
   a. For each default app, choose whether you want to open in new browser tab or same tab by updating <blank>. **True** means the app will open in a new tab, while **False** means it will open in the same tab.

     b. If you want to add your own app, create a new <config> element using your own values, including a unique ID, the name and description you want to display in your menu, the URL of your app, and the icon, Refer to the instructions on *Adding Icons to App Configuration*.

4. Copy the file to a designated location (the default location is
   `[AUTOPILOT_HOME]/apache-tomcat/conf`)

5. Add the following property in the context.xml file located at
   `[AUTOPILOT_HOME]/apache-tomcat/conf`):

   ```
   <Parameter name="appswitcher.manager.config"
   value="/opt/meshiq/platform/apache-tomcat/conf/app-
   switcher.xml"/>
   ```

   If your XML file has a different name, make sure to update the same name in the parameter above.

6. Restart the Tomcat server.

7. After configuring, log into the application (Secure), and you will see the app switcher icon in the top left corner of the window.

8. Click on the app switcher icon to see the options:
   - If you log in from **Secure**, you will see **Manage**, **Track**, and **meshIQ Support**.

9. Click an app to switch to it. Depending on your system configuration, the app will open either in the same tab or in a different tab. Read this to find out more about the ***Error! Reference source not found.***.

2.12.7.2 Adding Icons to App Configuration

To add icons to the app configuration, follow the instructions below.

1. Use an online converter or shell command to convert your image file (e.g. SVG) into a Base64 string. For instance, if you have an SVG file, you can use the shell command to perform this conversion. For example, on Linux or macOS:
   `base64 image.svg > image_base64.txt`.

> **NOTE**
> You can find various online tools to convert images to Base64.

2. Once you have the Base64 string, format it correctly. For an SVG, it should look like this:

   `data:image/svg+xml;base64,<Base64-encoded-data>`

3. The `<Base64-encoded-data>` part will be the actual string generated in step 1 from your image.

4. Include the formatted string within the `<icon></icon>` tags in your XML configuration file. For example:

   `<icon>data:image/svg+xml;base64,<Base64-encoded-data></icon>`

5. After embedding the Base64 string, test your application in the relevant environment to ensure that it can render the icon correctly.

Appendix A: References

This appendix contains a list of reference material and documents relevant to meshIQ Secure.

A.1   meshIQ Documentation

Table A-1. meshIQ Platform Documentation	
Document Number (or higher)	**Title**
NAV/WGS 101.035	*Nastel Navigator Workgroup Server Expert V10 – Installation Guide*
MM11.000	*meshIQ Manage User's Guide*
NAV/COMP 101.017	*Nastel Navigator Components Installation Guide*
M6/MQ 10.002	*AutoPilot M6 Plug-in for IBM MQ*

A.2   Tomcat

http://tomcat.apache.org

Appendix B: IBM MQ PCF Codes

Table B-1. IBM MQ PCF Codes				
Command Category	Command Code Name	Value	Command Code Name	Value
QMGRs	MQCMD_CHANGE_Q_MGR	1	MQCMD_INQUIRE_Q_MGR	2
	MQCMD_REFRESH_Q_MGR	16	MQCMD_RESET_Q_MGR	92
	MQCMD_PING_Q_MGR	40	MQCMD_Q_MGR_EVENT	44
	MQCMD_RESUME_Q_MGR	132	MQCMD_START_Q_MGR	139
	MQCMD_STOP_Q_MGR	144	MQCMD_SUSPEND_Q_MGR	146
	MQCMD_INQUIRE_Q_MGR_STATUS	161	MQCMD_INQUIRE_CMD_SERVER	117
	MQCMD_INQUIRE_QSG	119	MQCMD_START_CMD_SERVER	138
	MQCMD_STOP_CMD_SERVER	143		
Processes	MQCMD_CHANGE_PROCESS	3	MQCMD_COPY_PROCESS	4
	MQCMD_CREATE_PROCESS	5	MQCMD_DELETE_PROCESS	6
	MQCMD_INQUIRE_PROCESS	7	MQCMD_INQUIRE_PROCESS_NAMES	19
Queues	MQCMD_CHANGE_Q	8	MQCMD_CLEAR_Q	9
	MQCMD_COPY_Q	10	MQCMD_CREATE_Q	11
	MQCMD_DELETE_Q	12	MQCMD_INQUIRE_Q	13
	MQCMD_RESET_Q_STATS	17	MQCMD_INQUIRE_Q_STATUS	41
	MQCMD_INQUIRE_Q_NAMES	18	MQCMD_STATISTICS_Q	165
	MQCMD_ACCOUNTING_Q	168	MQCMD_MOVE_Q	127
	MQCMD_STATISTICS_MQI	164	MQCMD_ACCOUNTING_MQI	167
Channels	MQCMD_INQUIRE_CHANNEL_NAMES	20	MQCMD_CHANGE_CHANNEL	21
	MQCMD_COPY_CHANNEL	22	MQCMD_CREATE_CHANNEL	23
	MQCMD_DELETE_CHANNEL	24	MQCMD_INQUIRE_CHANNEL	25
	MQCMD_PING_CHANNEL	26	MQCMD_RESET_CHANNEL	27
	MQCMD_START_CHANNEL	28	MQCMD_STOP_CHANNEL	29
	MQCMD_RESOLVE_CHANNEL	39	MQCMD_INQUIRE_CHANNEL_STATUS	42
	MQCMD_START_CHANNEL_INIT	30	MQCMD_INQUIRE_CHANNEL_INIT	118
	MQCMD_STOP_CHANNEL_INIT	141	MQCMD_STATISTICS_CHANNEL	166
Topics	MQCMD_CHANGE_TOPIC	170	MQCMD_COPY_TOPIC	171
	MQCMD_CREATE_TOPIC	172	MQCMD_DELETE_TOPIC	173
	MQCMD_INQUIRE_TOPIC	174	MQCMD_INQUIRE_TOPIC_NAMES	175
	MQCMD_INQUIRE_TOPIC_STATUS	183	MQCMD_CLEAR_TOPIC_STRING	184
Subscriptions	MQCMD_INQUIRE_SUBSCRIPTION	176	MQCMD_CREATE_SUBSCRIPTION	177
	MQCMD_CHANGE_SUBSCRIPTION	178	MQCMD_DELETE_SUBSCRIPTION	179
	MQCMD_COPY_SUBSCRIPTION	181	MQCMD_INQUIRE_SUB_STATUS	182
	MQCMD_INQUIRE_PUBSUB_STATUS	185		
Namelists	MQCMD_CHANGE_NAMELIST	32	MQCMD_COPY_NAMELIST	33
	MQCMD_CREATE_NAMELIST	34	MQCMD_DELETE_NAMELIST	35
	MQCMD_INQUIRE_NAMELIST	36	MQCMD_INQUIRE_NAMELIST_NAMES	37

Table B-1. IBM MQ PCF Codes				
Command Category	**Command Code Name**	**Value**	**Command Code Name**	**Value**
Events	MQCMD_CONFIG_EVENT	43	MQCMD_PERFM_EVENT	45
	MQCMD_CHANNEL_EVENT	46	MQCMD_COMMAND_EVENT	99
Publish/ Subscribe	MQCMD_DELETE_PUBLICATION	60	MQCMD_DEREGISTER_PUBLISHER	61
	MQCMD_DEREGISTER_SUBSCRIBER	62	MQCMD_PUBLISH	63
	MQCMD_REGISTER_PUBLISHER	64	MQCMD_REGISTER_SUBSCRIBER	65
Clusters	MQCMD_INQUIRE_CLUSTER_Q_MGR	70	MQCMD_RESUME_Q_MGR_CLUSTER	71
	MQCMD_SUSPEND_Q_MGR_CLUSTER	72	MQCMD_REFRESH_CLUSTER	73
	MQCMD_RESET_CLUSTER	74		
Services	MQCMD_CHANGE_SERVICE	149	MQCMD_COPY_SERVICE	150
	MQCMD_CREATE_SERVICE	151	MQCMD_DELETE_SERVICE	152
	MQCMD_INQUIRE_SERVICE	153	MQCMD_START_SERVICE	155
	MQCMD_INQUIRE_SERVICE_STATUS	154		
	MQCMD_STOP_SERVICE	156		
Channel Listeners	MQCMD_CHANGE LISTENER	93	MQCMD_COPY_LISTENER	94
	MQCMD_CREATE_LISTENER	95	MQCMD_DELETE_LISTENER	96
	MQCMD_INQUIRE_LISTENER	97	MQCMD_START_CHANNEL_LISTENER	31
	MQCMD_INQUIRE_LISTENER_STATUS	98	MQCMD_STOP_CHANNEL_LISTENER	142
Security/ Authentication	MQCMD_REFRESH_SECURITY	78	MQCMD_CHANGE_AUTH_INFO	79
	MQCMD_COPY_AUTH_INFO	80	MQCMD_CREATE_AUTH_INFO	81
	MQCMD_DELETE_AUTH_INFO	82	MQCMD_INQUIRE_AUTH_INFO	83
	MQCMD_INQUIRE_AUTH_INFO_NAMES	84	MQCMD_CHANGE_SECURITY	100
	MQCMD_INQUIRE_SECURITY	121	MQCMD_REVERIFY_SECURITY	133
Miscellaneous	MQCMD_ESCAPE	38	MQCMD_REQUEST_UPDATE	66
	MQCMD_BROKER_INTERNAL	67	MQCMD_ACITIVITY_MSG	69
	MQCMD_TRACE_ROUTE	75	MQCMD_INQUIRE_CONNECTION	85
	MQCMD_STOP_CONNECTION	86	MQCMD_INQUIRE_AUTH_RECS	87
	MQCMD_INQUIRE_ENTITY_AUTH	88	MQCMD_DELETE_AUTH_REC	89
	MQCMD_SET_AUTH_REC	90	MQCMD_LOGGER_EVENT	91
	MQCMD_CHANGE_TRACE	103	MQCMD_ARCHIVE_LOG	104
	MQCMD_INQUIRE_ARCHIVE	114	MQCMD_INQUIRE_LOG	120
	MQCMD_INQUIRE_SYSTEM	123	MQCMD_INQUIRE_THREAD	124
	MQCMD_INQUIRE_TRACE	125	MQCMD_INQUIRE_USAGE	126
	MQCMD_RECOVER_BSDS	128	MQCMD_RESET_TPIPE	130
	MQCMD_RESOLVE_INDOUBT	131	MQCMD_SET_ARCHIVE	134
	MQCMD_SET_LOG	136	MQCMD_SET_SYSTEM	137
	MQCMD_START_TRACE	140	MQCMD_STOP_TRACE	145
	MQCMD_CREATE_LOG	162	MQCMD_INQUIRE_AUTH_SERVICE	169
CF Structs	MQCMD_CHANGE_CF_STRUCT	101	MQCMD_BACKUP_CF_STRUCT	105
	MQCMD_CREATE_CF_STRUCT	108	MQCMD_COPY_CF_STRUCT	110
	MQCMD_DELETE_CF_STRUCT	112	MQCMD_INQUIRE_CF_STRUCT	115

Table B-1. IBM MQ PCF Codes				
Command Category	**Command Code Name**	**Value**	**Command Code Name**	**Value**
	MQCMD_INQUIRE_CF_STRUCT_STATUS	116	MQCMD_RECOVER_CF_STRUCT	129
	MQCMD_INQUIRE_CF_STRUCT_NAMES	147		
Storage Classes	MQCMD_CHANGE_STG_CLASS	102	MQCMD_INQUIRE_ STG_CLASS_NAMES	148
	MQCMD_CREATE_ STG_CLASS	109	MQCMD_COPY_ STG_CLASS	111
	MQCMD_DELETE_ STG_CLASS	113	MQCMD_INQUIRE_ STG_CLASS	122
Buffer Pools	MQCMD_CREATE_BUFFER_POOL	106	MQCMD_DELETE_BUFFER_POOL	157
	MQCMD_CHANGE_BUFFER_POOL	159		
Page Sets	MQCMD_CREATE_PAGE_SET	107	MQCMD_DELETE_PAGE_SET	158
	MQCMD_CHANGE_PAGE_SET	160		

Appendix C: Role Management Rights

See the table below for descriptions of the role management rights which appear on the **Role Management** tab in meshIQ Secure.

Table C-1. Common Rights		
Right	**Feature Code**	**Explanation**
MESH MANAGER (can apply to all manager types)		
Change EMS ACL Entry	EXCMD_CHANGE_EMS_ACL_ENTRY	Gives users the ability to change EMS ACL entries.
Change EMS Group	EXCMD_CHANGE_EMS_GROUP	Gives users the ability to change EMS groups.
Change EMS User	EXCMD_CHANGE_EMS_USER	Allows users to change EMS users.
Change Queue Manager	MQCMD_CHANGE_Q_MGR	Allows users to change managers.
Change Queue Manager Stats	EXCMD_CHANGE_Q_MGR_STAT	Not applicable.
Change Solace Broker	EXCMD_CHANGE_SOLACE_BROKER	Allows users to change Solace brokers.
Compare managers	EXCMD_COMPARE_MANAGER	Allows user to use the "Compare" action from a Queue Manager viewlet when multiple queue ~~managers are selected.~~
Create EMS Group	EXCMD_CREATE_EMS_GROUP	Allows users to create EMS groups.
Create EMS User	EXCMD_CREATE_EMS_USER	Allows users to create EMS users.
Create Kafka ACL Entry	EXCMD_CREATE_KAFKA_ACL	Allows users to create Kafka ACL entries.
Create Queue Manager	EXCMD_CREATE_Q_MGR	Allows users to create queue managers.
Create Text File	EXCMD_CREATE_TEXT_FILE	Allows users to create text files (deprecated).
Delete Authentication Records	MQCMD_DELETE_AUTH_REC	Gives users the ability to delete MQ authentication records.
Delete EMS Group	EXCMD_DELETE_EMS_GROUP	Gives users the ability to remove EMS groups.
Delete EMS User	EXCMD_DELETE_EMS_USER	Gives users the ability to remove EMS users.
Delete Kafka ACL Entry	EXCMD_DELETE_KAFKA_ACL	Gives users the ability to remove Kafka ACL entries.

Delete Queue Manager	EXCMD_DELETE_Q_MGR	Gives users the ability to remove queue managers.
Execute MQSC command	MQCMD_ESCAPE	Allows users to execute all MQSC commands.
Execute non-Msg MQSC command	EXCMD_ESCAPE_NOMSG	Allows users to execute all MQSC commands except those involving message manipulation (that is, DEL, DELETE,
Execute Read-Only MQSC command	EXCMD_ESCAPE_VIEW	Allows users to execute read-only (display) commands using the MQSC console (MQSC > Console). For MQ queue managers and EMS
Inquire Connection	MQCMD_INQUIRE_CONNECTION	Allows users to inquire MQ connections.
Join Cluster	JOIN_CLUSTER	Allows users to join a queue manager with a cluster.
Leave Cluster	LEAVE_CLUSTER	Allows users to remove a queue manager from a cluster.
Ping Queue Manager	MQCMD_PING_Q_MGR	Allows users to ping managers.
Refresh Security	MQCMD_REFRESH_SECURITY	Allows users to update the cached data in the workgroup server.
Set Authentication Records	MQCMD_SET_AUTH_REC	Gives users the ability to set authentication records.
Show Authentication Entity	MQCMD_INQUIRE_ENTITY_AUTH	Not applicable.
Show Authentication Records	MQCMD_INQUIRE_AUTH_RECS	Allows users to view authentication records.
Show EMS ACL Destination	EXCMD_INQUIRE_EMS_ACL_DESTINATION	Allows users to view EMS ACL destinations.
Show EMS ACL Entries	EXCMD_INQUIRE_EMS_ACL_ENTRIES	Allows users to view EMS ACL entries.
Show EMS ACL Principal	EXCMD_INQUIRE_EMS_ACL_PRINCIPAL	Allows users to view EMS ACL principals.
Show EMS Group	EXCMD_INQUIRE_EMS_GROUP	Allows users to view the details of a specific EMS group.

Show EMS Groups	EXCMD_INQUIRE_EMS_GROUP_NAMES	Allows users to view a list of the EMS groups that exist.
Show EMS Server Info	EXCMD_INQUIRE_EMS_SERVER	Allows users to view EMS server information.
Show EMS Server Info names	EXCMD_INQUIRE_EMS_SERVER_NAMES	Allows users to view EMS server information names.
Show EMS User	EXCMD_INQUIRE_EMS_USER	Allows users to view the details of a specific EMS user.
Show EMS Users	EXCMD_INQUIRE_EMS_USER_NAMES	Allows users to view a list of the EMS users that exist.
Show IIB Node	EXCMD_INQUIRE_IIB_NODE	Allows users to view the details of a specific IIB node.
Show IIB Node Admin Log	EXCMD_INQUIRE_IIB_NODE_ADMIN_LOG	Allows users to access the IIB/ACE Admin log API.
Show IIB Nodes	EXCMD_INQUIRE_IIB_NODE_NAMES	Allows users to view a list of the IIB node that exist.
Show Kafka ACL Entries	EXCMD_INQUIRE_KAFKA_ACL_ALL	Allows users to view Kafka ACL entries.
Show Kafka Cluster	EXCMD_INQUIRE_KAFKA_CLUSTER	Allows users to view the details of a specific Kafka cluster.
Show Kafka Clusters	EXCMD_INQUIRE_KAFKA_CLUSTER_NAMES	Allows users to view a list of the Kafka clusters that exist.
Show Log File	EXCMD_INQUIRE_TEXT_FILE	Allows users to view log files.
Show Log File Names	EXCMD_INQUIRE_LOG_NAMES	Allows users to view log file names.
Show PubSub Status	MQCMD_INQUIRE_PUBSUB_STATUS	Allows users to view the status of PubSubs.
Show Queue Manager Attributes	MQCMD_INQUIRE_Q_MGR	Allows users to view the attributes of managers.
Show Queue Manager Status	MQCMD_INQUIRE_Q_MGR_STATUS	Allows users to view the status of queue managers.
Show Managers (Required)	EXCMD_INQUIRE_Q_MGR_NAMES	Allows users to view managers.
Show Solace Broker	EXCMD_INQUIRE_SOLACE_BROKER	Allows users to view Solace brokers.

Show Solace Broker Advanced	EXCMD_INQUIRE_SOLACE_BROKER_ADVANCED	Allows users to view advanced properties for Solace brokers by turning on the Advanced slider in
Show Solace Broker Statistics	EXCMD_INQUIRE_SOLACE_BROKER_STATISTICS	Allows users to clear the statistics of Solace brokers.
Show Solace Broker Status	EXCMD_INQUIRE_SOLACE_BROKER_STATUS	Allows users to view the status of Solace brokers.
Show Solace Brokers	EXCMD_INQUIRE_SOLACE_BROKER_NAMES	Allows users to view the details of a specific Solace broker.
Start Queue Manager	EXCMD_START_Q_MGR	Allows users to start managers.
Stop Connection	MQCMD_STOP_CONNECTION	Gives users the ability to stop connections.
Stop Queue Manager	EXCMD_STOP_Q_MGR	Gives users the ability to stop queue managers.
Submit MQSC Script	EXCMD_MQSC_SCRIPT	Allows users to submit MQSC scripts.
Submit Non-msg MQSC Script	EXCMD_MQSC_SCRIPT_NOMSG	Allows users to submit MQSC scripts except those involving message manipulation (that is, DEL, DELETE, CLEAR,
Submit Read-Only MQSC Script	EXCMD_MQSC_SCRIPT_VIEW	Allows users to execute read-only (display) commands using MQSC script (MQSC > Apply Script). For MQ queue managers and EMS
Test Queue Manager	EXCMD_TEST_Q_MGR	Gives users the ability to test queue managers (deprecated).
MESSAGES		
Change Folder	EXCMD_MG_CH_DIR	Allows users to change folders (deprecated)
Copy Messages	EXCMD_MG_COPY	Allows users to copy messages.
Create Messages	EXCMD_MG_NEW	Allows users to create messages.
Delete Messages	EXCMD_MG_DELETE	Allows users to remove messages.
Edit Messages	EXCMD_MG_MODIFY	Allows users to update messages.

Find Messages	EXCMD_MG_FIND	Allows users to find messages.
Load Messages	EXCMD_MG_LOAD	Allows users to load messages from a file.
Message Folder	EXCMD_MG_DIR	Deprecated
Move Messages	EXCMD_MG_MOVE	Allows users to move messages.
Requeue Messages	EXCMD_MG_REQUEUE	Not applicable.
Reroute Messages	EXCMD_MG_REROUTE	Allows users to reroute messages.
Save Messages	EXCMD_MG_SAVE	Allows users to save messages to a file.
Show Message Headers	EXCMD_MG_BROWSE_HDR	Allows users to view message headers only.
Show Messages	EXCMD_MG_BROWSE	Allows users to view messages including content.
Unload Messages	EXCMD_MG_UNLOAD	Not applicable.
NAVIGATOR GUI FEATURES (Under Common > Navigator GUI Features)		
Add/Update/Delete favorite objects (Recommended)	MANAGE_FAVORITES	Gives users the ability to add, update, or delete favorite objects in the viewlets.
Allow Force Attributes Refresh Option	FORCE_ATTRIBUTES_REFRESH	Allows users to turn on the turn on Force Refresh mode for viewlets.
Allow Create Connection On Import	ALLOW_CONNECTION_CREATION_ON_IMPORT	When importing data, a user who has this permission can allow a new workgroup server connection to be added automatically at import, if needed. At dashboard import, the user can select the **Add if not found** option from the *Map Connections* dialog **User Connection** list. As a result, if none of the values for the user's existing connections (specifically, port and connection list) match the importing connections.

Allow Data Export To File	ALLOW_DATA_EXPORT	Allows users to export dashboard and viewlets to a file.
Allow Data Import From File	ALLOW_DATA_IMPORT	Allows users to import dashboards and viewlets from a file.
Configure Connections	CONFIGURE_CONNECTIONS	Allows a user to define a named mapping to the workgroup server (WGS) and make it available for usage. Users can then choose a descriptive connection name from a list without needing to understand the WGS
Copy All Messages	COPY_ALL_MESSAGES	Allows users to copy **all** messages.
Copy Extended MQ Object Attributes	EXTENDED_COPY	Allows users to copy extended IBM MQ object attributes (deprecated).
Create Queue Managers Cluster	CREATE_QM_CLUSTER	Allows users to create queue managers clusters.
Create Favorite Folders	CREATE_SHARED_FAVORITES	Allows users to create favorite folders for viewlets.
Create Shared Searches	CREATE_SHARED_SEARCHES	Allows users to create shared dashboards.
Customize Browse Options	CUSTOMIZE_BROWSE_OPTIONS	Allows users to customize the Browse options in Settings (Message Commands tab)
Customize Channel Status Columns	CUSTOMIZE_CHANNEL_STATUS_COLUMNS	Not applicable.
Customize Load Messages Options	CUSTOMIZE_LOAD_MESSAGES_OPTIONS	Allows users to customize the Load Message options in Settings.
Customize Message Columns	CUSTOMIZE_MESSAGE_COLUMNS	Allows users to create custom schemas for messages.
Customize Queue Status Columns	CUSTOMIZE_QUEUE_STATUS_COLUMNS	Not applicable.
Customize Save Messages Options	CUSTOMIZE_SAVE_MESSAGES_OPTIONS	Allows users to customize the Save Message options in Settings.

Customize Status Filters	CUSTOMIZE_STATUS_FILTERS	Deprecated
Delete All Messages	DELETE_ALL_MESSAGES	Allows users to remove **all** messages.
Delete Searches (Recommended)	DELETE_SEARCHES	Allows users to delete viewlets (all meshIQ Manage GUI users must have this enabled)
Display Security Authorizations	DISPLAY_AUTHORIZATIONS	Displays the security manager icon on the meshIQ Manage toolbar. The icon opens the meshIQ Secure login
Edit Search Parameters (Recommended)	EDIT_SEARCHES	Allows users to change viewlets (all meshIQ Manage GUI users must have this enabled)
Make New Searches (Recommended)	PERFORM_SEARCHES	Allows users to create new viewlets (all meshIQ Manage GUI users must have this enabled)
Manage Administration	MANAGE_ADMINISTRATION	Allows users to edit Global settings.
Manage Custom Attributes	EXCMD_SET_CUSTOMPROPS	Allow users to add, modify, delete custom attribute filters.
Manage Dashboard Tags Data	MANAGE_DASH_TAGS_DATA	Allow users to add, edit, and delete dashboard tags.
Manage Environment Level	MANAGE_ENVIRONMENT_LEVEL	Allow users to create, edit, and delete custom formats for a label that indicates the current environment, and to turn the label on and off.
Manage Global Attribute Filters	MANAGE_GLOBAL_ATTR_FILTERS	Allow users to add, edit, and delete global attribute filters.
Manage Global Display Schemas	MANAGE_GLOBAL_DISPLAY_SCHEMA	Allow users to add, edit, and delete global display and statistics schemas (click the **Edit global settings** button located at the bottom of *User Settings*).
Manage Global Message Criteria	MANAGE_GLOBAL_MSG_CRITERIA	Allow users to add, edit, and delete global message criteria records.

Manage Private Attribute Filters	MANAGE_PRIVATE_ATTR_FILTERS	Allow users to add, edit, and delete their own attribute filters.
Manage Private Display Schemas	MANAGE_PRIVATE_DISPLAY_SCHEMA	Allow users to add, edit, and delete their own display and statistics schemas from *User Settings* or *Manage Schemas*.
Manage Private Message Criteria	MANAGE_PRIVATE_MSG_CRITERIA	Allow users to add, edit, and delete their own message criteria records.
Manage Shared Attribute Filters	MANAGE_SHARED_ATTR_FILTERS	Allow users to share the attribute filters they create with groups.
Manage Shared Display Schemas	manage_shared_display_schema	Allow users to share the display schemas they create with one or more groups. Users can accomplish this from *User Settings* or *Manage Schemas*.
Manage Shared Message Criteria	MANAGE_SHARED_MSG_CRITERIA	Allow users to share the message criteria sets they create with groups.
Manage Tag Assignment To Dashboards	MANAGE_DASH_TO_TAGS	Allow users to assign tags to dashboards.
Move All Messages	MOVE_ALL_MESSAGES	Allows users to move **all** messages.
Save Searches (Recommended)	SAVE_SEARCHES	Allows users to save viewlets from session to session (all meshIQ Manage GUI users must have this enabled)
Set Security Authorizations	SET_AUTHORIZATIONS	Allows users to access the security authorization dialogues.
Show Actions	SHOW_ACTIONS	Deprecated.
Show All Groups For Shared Dashboards	MQPERMS_SHOW_ALL_GROUPS_FOR_SHARED_DASH	Allows users to share a dashboard with any defined group.
Show Attributes	SHOW_ATTRIBUTES	Allows users to view the attributes dialogues. To view attributes, you must have this right enabled, as well as the rights for the

Show Client Connections	SHOW_CLNTCONNS	Deprecated
Show Custom Attributes	EXCMD_INQUIRE_CUSTOMPROPS_NAMES	Allows users to view custom attributes.
Show Events	SHOW_EVENTS	Allows users to see events generated.
Show Favorites (Recommended)	SHOW_FAVORITES	Allows users to see their Favorites folders.
Show SAML SSO configuration	SHOW_SAMLSSO_CONFIGS	Allows users to view the Global Settings SSO tab.
Show Search Folder (Recommended)	SHOW_SEARCHES	Allows users to see viewlets (all meshIQ Manage GUI users must have this enabled)
Show Status	SHOW_STATUS	Allows users to view status dialogues. To view status, you must have this right enabled, as well as the rights for the specific object
Show Telemetry Connections	SHOW_MQTT	Deprecated
Show Topology	SHOW_TOPOLOGY	Allows users to see topology diagrams.
Show meshIQ Manage Statistics	SHOW_STATISTICS	Allows users to click the Statistics button on the toolbar to access the Statistics report.
Use Dashboard As Template	MQPERMS_USE_DASHBOARD_AS_TEMPLATE	Allows users to create dashboard templates.
Use Shared Favorites Folders (Recommended)	INCLUDE_SHARED_FAVORITES	Allows users to change favorites folders.
Use Shared Searches (Recommended)	INCLUDE_SHARED_SEARCHES	Allows users to use shared viewlets.
NODE (agent or connection manager)		
Change Node	EXCMD_CHANGE_MQNODE	Allows users to change nodes.
Change Node Stats	EXCMD_CHANGE_MQNODE_STAT	Allows users to change node stats.
Create Node	EXCMD_CREATE_MQNODE	Allows users to create nodes.

Delete Node	EXCMD_DELETE_MQNODE	Allows users to remove nodes
Manage Node	EXCMD_MANAGE_MQNODE	Allows users to manage nodes.
Show Node Attributes	EXCMD_INQUIRE_MQNODE	Allows users to view node attributes.
Show Nodes (Required)	EXCMD_INQUIRE_MQNODE_NAMES	Allows users to view nodes.
Start All Node Objects	EXCMD_START_MQNODE	Allows users to start node objects.
Stop All Node Objects	EXCMD_STOP_MQNODE	Allows users to stop node objects.
UnManage Node	EXCMD_UNMANAGE_MQNODE	Allows users to unmanage nodes.
WORKGROUP SERVER		
Access All Projects	PROJECTS_ACCESS_ALL	Allows users to select All from the Project list on the main screen of meshIQ Manage. When All is selected, users can view data from all User Groups
Add/Remove Default Connection	ADD_REMOVE_DEFAULT_CONNECTION	Gives users the ability to add or remove default connections.
Approve Scheduled Job	EXCMD_APPROVE_JOB	Gives users the ability to approve scheduled jobs.
Cancel Scheduled Job	EXCMD_CANCEL_JOB	Allows users to cancel scheduled jobs.
Change RabbitMQ Remote Manager	EXCMD_CHANGE_RABBITMQ_RMT	Allows users to change remote Rabbit MQ managers.
Change Remote ACE(IIB) Manager	EXCMD_CHANGE_ACE_RMT	Allows users to change remote ACE/IIB managers.
Change Remote EMS Manager	EXCMD_CHANGE_RMTEMS	Allows users to change remote EMS managers.
Change Remote Kafka Manager	EXCMD_CHANGE_KAFKA_RMT	Allows users to change remote Kafka managers.
Change Remote Queue Manager	EXCMD_CHANGE_RMTQMGR	Allows users to change remote queue managers.

Change Remote Solace Manager	EXCMD_CHANGE_SOLACE_RMT	Allows users to change remote Solace managers.
Change Workgroup Server	EXCMD_CHANGE_MANAGER	Allows users to change workgroup servers.
Change Workgroup Server Stats	EXCMD_CHANGE_MANAGER_STAT	Not applicable.
Connect (required)	EXCMD_OPEN_EVENT	Allows users to connect to the workgroup server.
Create RabbitMQ Remote Manager	EXCMD_CREATE_RABBITMQ_RMT	Allows users to create remote RabbitMQ managers.
Create Remote ACE(IIB) Manager	EXCMD_CREATE_ACE_RMT	Allows users to create remote ACE/IIB managers.
Create Remote EMS Manager	EXCMD_CREATE_RMTEMS	Allows users to create remote EMS managers.
Create Remote Kafka Manager	EXCMD_CREATE_KAFKA_RMT	Allows users to create remote Kafka managers.
Create Remote Queue Manager	EXCMD_CREATE_RMTQMGR	Allows users to create remote IBM MQ queue managers.
Create Remote Solace Manager	EXCMD_CREATE_SOLACE_RMT	Allows users to create remote Solace managers.
Delete Channel Statistics	EXCMD_DELETE_STAT_CHANNEL	Allows users to remove MQ channel statistics from the workgroup server.
Delete Communication Session	EXCMD_DELETE_SESSION	Allows users to remove communication sessions.
Delete MQI Accounting	EXCMD_DELETE_ACCT_MQI	Allows users to remove MQI accounting from the workgroup server.
Delete MQI Statistics	EXCMD_INQUIRE_STAT_MQI	Allows users to remove MQI statistics from the workgroup server.
Delete Queue Accounting	EXCMD_DELETE_ACCT_Q	Allows users to remove MQ Queue Accounting from the workgroup server.
Delete Queue Statistics	EXCMD_DELETE_STAT_Q	Allows users to remove MQ Queue Statistics from the workgroup server.

Delete RabbitMQ Remote Manager	EXCMD_DELETE_RABBITMQ_RMT	Allows users to remove remote RabbitMQ managers.
Delete Remote ACE(IIB) Manager	EXCMD_DELETE_ACE_RMT	Allows users to remove remote ACE/IIB managers.
Delete Remote EMS Manager	EXCMD_DELETE_RMTEMS	Allows users to remove remote EMS managers.
Delete Remote Kafka Managers	EXCMD_DELETE_KAFKA_RMT	Allows users to remove remote Kafka managers.
Delete Remote Queue Manager	EXCMD_DELETE_RMTQMGR	Allows users to remove remote queue managers.
Delete Remote Solace Manager	EXCMD_DELETE_SOLACE_RMT	Allows users to remove remote Solace managers.
Disconnect (required)	EXCMD_CLOSE_EVENT	Allows users to disconnect from the workgroup server.
Display Channel Statistics	EXCMD_INQUIRE_STAT_CHANNEL	Allows users to view the statistics of channels.
Display MQI Accounting	EXCMD_INQUIRE_ACCT_MQI	Allows users to view MQI Accounting data stored in the workgroup server.
Display MQI Statistics	EXCMD_INQUIRE_STAT_MQI	Allows users to view MQI Statistics data stored in the workgroup server.
Display Queue Accounting	EXCMD_INQUIRE_ACCT_Q	Allows users to view MQ queue accounting.
Display Queue Statistics	EXCMD_INQUIRE_STAT_Q	Allows users to view the statistics of MQ queues.
Execute MQSC Command Shell (or Execute Command Shell)	EXCMD_EXECUTE_SHELL_CMD	Allows users to execute the command shell. Command shell is specific to running commands via the REST interface.
Find Object (Required)	EXCMD_LOCATE_OBJECT	Allows users to see objects.
Inquire Active Workgroup (required)	EXCMD_INQUIRE_ACTIVE_MANAGER	Allows users to see connection details for the workgroup server.
Inquire Communication Session Information	EXCMD_INQUIRE_SESSION	Allows the user to view a list of active workgroup server connections.

Inquire Job ServiceNow	EXCMD_INQUIRE_JOB_SERVICE_NOW_DATA	Allows users to inquire ServiceNow for job details.
Inquire List of Scheduled Job	EXCMD_INQUIRE_JOB_LIST	Allows users to get a list of scheduled jobs.
Inquire Metrics	EXCMD_INQUIRE_METRICS	Allows users to see the workgroup server metrics, located on the Performance tab of WGS Properties. Only Administrators should
Inquire Remote EMS Manager	EXCMD_INQUIRE_RMTEMS	Allows users to view a remote ACE/IIB manager.
Inquire Remote EMS Manager Names	EXCMD_INQUIRE_RMTEMS_NAMES	Allows users to view a remote EMS manager.
Inquire Remote Queue Manager	EXCMD_INQUIRE_RMTQMGR	Allows users to view a remote manager.
Inquire Remote Queue Manager Names	EXCMD_INQUIRE_RMTQMGR_NAMES	Allows users to view a remote queue manager.
Inquire Scheduled Job	EXCMD_INQUIRE_JOB	Allows users to see the details for a specific scheduled job.
Node Registration	EXCMD_REGISTER_MQNODE	Allows the agent (user with the agent role) to register itself with the workgroup server at startup.
Reload Permits	EXCMD_RELOAD_PERMITS	Not applicable.
Schedule Job	EXCMD_SCHEDULE_JOB	Allows users to schedule jobs.
Show RabbitMQ Remote Manager	EXCMD_INQUIRE_RABBITMQ_RMT	Allows users to view the details of a specific remote Rabbit MQ manager.
Show RabbitMQ Remote Manager Names	EXCMD_INQUIRE_RABBITMQ_RMT_NAMES	Allows users to view a list of the remote Rabbit MQ managers that exist.
Show Remote ACE(IIB) Manager	EXCMD_INQUIRE_ACE_RMT	Allows users to view remote ACE/IIB managers.
Show Remote ACE(IIB) Managers	EXCMD_INQUIRE_ACE_RMT_NAMES	Allows users to view remote ACE/IIB managers.

Show Remote Kafka Manager	EXCMD_INQUIRE_KAFKA_RMT	Allows users to view remote EMS managers.
Show Remote Kafka Managers	EXCMD_INQUIRE_KAFKA_RMT_NAMES	Allows users to view remote Kafka managers.
Show Remote Solace Manager	EXCMD_INQUIRE_SOLACE_RMT	Allows users to view the details of a specific remote Solace manager.
Show Remote Solace Managers	EXCMD_INQUIRE_SOLACE_RMT_NAMES	Allows users to view a list of the remote Solace managers that exist.
Show Workgroup Server Attributes	EXCMD_INQUIRE_MANAGER	Allows users to view workgroup server attributes. This is required for all users.
Shutdown Workgroup Server or Node	EXCMD_SHUTDOWN_MANAGER	Gives users the ability to shutdown workgroup servers or nodes.
Start All Workgroup Server Objects	EXCMD_START_MANAGER	Gives users the ability to start workgroup server objects.
Start Discovery	EXCMD_MQ_DISCOVER	Allows users to start a discovery cycle.
Stop All Workgroup Server Objects	EXCMD_STOP_MANAGER	Gives users the ability to stop workgroup server objects.
Subscribe to Channel Stats	MQCMD_STATISTICS_CHANNEL	Allows users to subscribe to channel status events.
Subscribe to MQI Accounting	MQCMD_ACCOUNTING_MQI	Allows user to turn on MQI under Accounting Data Collection on the queue manager properties Monitoring tab. If an agent is running as a user without this permission, then the workgroup server will not store the MQI accounting
Subscribe to MQI Stats	MQCMD_STATISTICS_MQI	Allows user to turn on MQI under Statistical Data Collection on the queue manager properties Monitoring tab. If an agent is running as a user without this permission, then the workgroup server will not store the MQI statistical

Subscribe to Queue Accounting	MQCMD_ACCOUNTING_Q	Allows users to subscribe to Queue Accounting events.
Subscribe to Queue Stats	MQCMD_STATISTICS_Q	Allows users to subscribe to Queue Stats events.
Validate RestAPI Access for user	EXCMD_VALIDATE_REST_API_ACCESS	Allows one user to find out whether another user has the right to perform a given action through the REST API (yes or no).
WORKGROUP SERVER EVENTS		
Delete Alter Events	EXCMD_DELETE_ALTER_EVENT	Allows users to remove alter events.
Delete Bridge Events	EXCMD_DELETE_BRIDGE_EVENT	Allows users to remove bridge events.
Delete Channel Events	EXCMD_DELETE_CHANNEL_EVENT	Allows users to remove channel events.
Delete Command Events	EXCMD_DELETE_COMMAND_EVENT	Allows users to delete command events.
Delete Configure Events	EXCMD_DELETE_CONFIG_EVENT	Allows users to delete configure events.
Delete Logger Events	EXCMD_DELETE_LOGGER_EVENT	Not applicable.
Delete Manager Events	EXCMD_DELETE_MANAGER_EVENT	Allows users to delete manager events.
Delete Performance Events	EXCMD_DELETE_PERFM_EVENT	Not applicable.
Delete Queue Manager Events	EXCMD_DELETE_Q_MGR_EVENT	Allows users to delete queue manager events.
Delete Scheduler Events	EXCMD_DELETE_SCHEDULER_EVENT	Allows users to delete scheduler events.
Record Alter Events	EXCMD_ALTER_EVENT	Not applicable.
Record Channel Events	MQCMD_CHANNEL_EVENT	Event right deprecated.
Record Configure Events	MQCMD_CONFIG_EVENT	Event right deprecated.
Record Perform Events	MQCMD_PERFM_EVENT	Event right deprecated.

Record Queue Manager Events	MQCMD_Q_MGR_EVENT	Event right deprecated.
Record State Events	EXCMD_STATE_EVENT	Allows the workgroup server to store the state event. A state event indicates a change to the state of an object (such as a queue manager, node, listener, channel, or service). For example, the state of a queue manager might change from *Active* to *Stopped*, or from *Stopped* to
Record Workgroup Server Events	EXCMD_MANAGER_EVENT	Not applicable.
Show Alter Events	EXCMD_INQUIRE_ALTER_EVENT	Allows users to view stored alter events.
Show Bridge Events	EXCMD_INQUIRE_BRIDGE_EVENT	Allows users to view bridge events.
Show Channel Events	EXCMD_INQUIRE_CHANNEL_EVENT	Allows users to view channel events.
Show Command Events	EXCMD_INQUIRE_COMMAND_EVENT	Allows users to view command events.
Show Configure Events	EXCMD_INQUIRE_CONFIG_EVENT	Allows users to view configure events.
Show Logger Events	EXCMD_INQUIRE_LOGGER_EVENT	Allows users to view stored logger events.
Show Manager Events	EXCMD_INQUIRE_MANAGER_EVENT	Allows users to view manager events.
Show Performance Events	EXCMD_INQUIRE_PERFM_EVENT	Allows users to view stored performance events.
Show Queue Manager Events	EXCMD_INQUIRE_Q_MGR_EVENT	Allows users to view queue manager events.
Show Scheduler Events	EXCMD_INQUIRE_SCHEDULER_EVENT	Allows users to view scheduler events.

<p align="center">Table C-2. ACE Rights</p>

Right	Feature Code	Explanation

ACE APPLICATION

Delete ACE Application	EXCMD_DELETE_ACE_APPLICATION	Allows users to remove ACE applications.
Setup ACE Application	EXCMD_SETUP_ACE_APPLICATION	Gives user the ability to configure ACE applications.
Show ACE Application	EXCMD_INQUIRE_ACE_APPLICATION	Allows users to view the details of a specific application.
Show ACE Application Status	EXCMD_INQUIRE_ACE_APPLICATION_STATUS	Users can view the status of ACE applications.
Show ACE Applications	EXCMD_INQUIRE_ACE_APPLICATION_NAMES	Allows users to view a list of the applications that exist.
Start ACE Application	EXCMD_START_ACE_APPLICATION	Gives users the ability to start ACE applications.
Stop ACE Application	EXCMD_STOP_ACE_APPLICATION	Gives users the ability to stop ACE applications.
Teardown ACE Application	EXCMD_TEARDOWN_ACE_APPLICATION	Allows users to access the Teardown option on the ACE Application viewlet action menu.
Validate ACE Application	EXCMD_VALIDATE_ACE_APPLICATION	Allows users to validate ACE applications.

ACE LIBRARY

Setup ACE Library	EXCMD_SETUP_ACE_LIBRARY	Allows users to configure ACE libraries.
Show ACE Libraries	EXCMD_INQUIRE_ACE_LIBRARY_NAMES	Allows users to view a list of the libraries that exist.
Show ACE Library	EXCMD_INQUIRE_ACE_LIBRARY	Allows users to view the details of a specific library.
Show ACE Library Status	EXCMD_INQUIRE_ACE_LIBRARY_STATUS	Users can view the status of ACE libraries.
Teardown ACE Library	EXCMD_TEARDOWN_ACE_LIBRARY	Allows users to teardown ACE libraries.
Validate ACE Library	EXCMD_VALIDATE_ACE_LIBRARY	Allows users to validate ACE libraries.

ACE LINK

Show ACE Link	EXCMD_INQUIRE_ACE_LINK	Allows users to view the details of a specific ACE link.
Show ACE Links	EXCMD_INQUIRE_ACE_LINK_NAMES	Allows users to view a list of the ACE links that exist.

ACE MESSAGE FLOW

Setup ACE Message Flow	EXCMD_SETUP_ACE_MESSAGE_FLOW	Allows users to configure ACE message flows.
Show ACE Message Flow	EXCMD_INQUIRE_ACE_MESSAGE_FLOW	Allows users to view the details of a specific ACE message flow.
Show ACE Message Flow Activity Log	EXCMD_INQUIRE_ACE_MESSAGE_FLOW_ACTIVIT Y_LOG	Allow users to view ACE message flow activity logs.
Show ACE Message Flow Status	EXCMD_INQUIRE_ACE_MESSAGE_FLOW_STATUS	Users can view the status of ACE message flows.
Show ACE Message Flows	EXCMD_INQUIRE_ACE_MESSAGE_FLOW_NAMES	Allows users to view a list of the ACE message flows that exist.
Start ACE Message Flow	EXCMD_START_ACE_MESSAGE_FLOW	Gives users the ability to start ACE message flows.
Stop ACE Message Flow	EXCMD_STOP_ACE_MESSAGE_FLOW	Gives users the ability to stop ACE message flows.
Teardown ACE Message Flow	EXCMD_TEARDOWN_ACE_MESSAGE_FLOW	Allows users to teardown ACE message flows.
Validate ACE Message Flow	EXCMD_VALIDATE_ACE_MESSAGE_FLOW	Allows users to validate ACE message flows.
ACE NODE		
Show ACE Node	EXCMD_INQUIRE_ACE_NODE	Allows users to view the details of a specific ACE node.
Show ACE Node Admin Log	EXCMD_INQUIRE_ACE_NODE_ADMIN_LOG	Allows you to view ACE node admin logs.
Show ACE Nodes	EXCMD_INQUIRE_ACE_NODE_NAMES	Allows users to view a list of the ACE nodes that exist.
ACE RESOURCE		
Show ACE Resource	EXCMD_INQUIRE_ACE_RESOURCE	Allows users to view the details of a specific ACE resource.
Show ACE Resources	EXCMD_INQUIRE_ACE_RESOURCE_NAMES	Allows users to view a list of the ACE resources that exist.
ACE REST API		
Delete ACE Rest API	EXCMD_DELETE_ACE_REST_API	Gives users the ability to remove ACE Rest APIs.
Setup ACE Rest API	EXCMD_SETUP_ACE_REST_API	Gives users the ability to configure ACE REST APIs.

Show ACE Rest API	EXCMD_INQUIRE_ACE_REST_API	Allows users to view the details of a specific ACE REST API.
Show ACE Rest API Status	EXCMD_INQUIRE_ACE_REST_API_STATUS	Allows users to view the status of ACE Rest APIs.
Show ACE Rest APIs	EXCMD_INQUIRE_ACE_REST_API_NAMES	Allows users to view a list of the ACE REST APIs that exist.
Start ACE Rest API	EXCMD_START_ACE_REST_API	Gives users the ability to start ACE Rest APIs.
Stop ACE Rest API	EXCMD_STOP_ACE_REST_API	Gives users the ability to stop ACE REST APIs.
Teardown ACE Rest API	EXCMD_TEARDOWN_ACE_REST_API	Allows users to teardown ACE Rest APIs.
Validate ACE Rest API	EXCMD_VALIDATE_ACE_REST_API	Allows users to validate ACE REST APIs.
ACE SERVER		
Create ACE Server	EXCMD_CREATE_ACE_SERVER	Allows users to create ACE servers.
Delete ACE Server	EXCMD_DELETE_ACE_SERVER	Gives users the ability to remove ACE servers.
Delete All Content On ACE Server	EXCMD_DELETE_ALL_CONTENT_ACE_SERVER	Gives users the ability to remove all deployed content on ACE servers.
Delete Content On ACE Server	EXCMD_DELETE_CONTENT_ACE_SERVER	Allows you to delete specific deployed content on ACE servers.
Deploy Content On ACE Server	EXCMD_DEPLOY_CONTENT_ACE_SERVER	Allows users to deploy content on ACE servers.
Reset Service Trace On ACE Server	EXCMD_RESET_SERVICE_TRACE_ACE_SERVER	Allows users to reset the service trace on ACE servers.
Reset User Trace On ACE Server	EXCMD_RESET_USER_TRACE_ACE_SERVER	Gives users the ability to reset users traces on ACE servers.
Show ACE Server	EXCMD_INQUIRE_ACE_SERVER	Allows users to view the details of a specific ACE server.
Show ACE Server Admin Log	EXCMD_INQUIRE_ACE_SERVER_ADMIN_LOG	Allows users to view ACE server admin logs.
Show ACE Server Status	EXCMD_INQUIRE_ACE_SERVER_STATUS	Allows users to view ACE server statuses.
Show ACE Servers	EXCMD_INQUIRE_ACE_SERVER_NAMES	Allows users to view a list of the ACE servers that exist.

Shutdown ACE Server	EXCMD_SHUTDOWN_ACE_SERVER	Gives users the ability to shutdown ACE servers.
Start ACE Server	EXCMD_START_ACE_SERVER	Gives users the ability to start ACE servers.
Start Flow Monitoring On ACE Server	EXCMD_START_FLOW_MON_ACE_SERVER	Gives users the ability to enable flow monitoring on ACE servers.
Start Flow Statistic On ACE Server	EXCMD_START_FLOW_STAT_ACE_SERVER	Gives users the ability to enable flow statistics on ACE servers.
Start Resource Statistic On ACE Server	EXCMD_START_RESOURCE_STAT_ACE_SERVER	Gives users the ability to enable resource statistics on ACE servers.
Start Service Trace On ACE Server	EXCMD_START_SERVICE_TRACE_ACE_SERVER	Gives users the ability to enable service tracing on ACE servers.
Start User Trace On ACE Server	EXCMD_START_USER_TRACE_ACE_SERVER	Gives users the ability to enable user tracing on ACE servers.
Stop ACE Server	EXCMD_STOP_ACE_SERVER	Allows users to stop ACE servers.
Stop Flow Monitoring On ACE Server	EXCMD_STOP_FLOW_MON_ACE_SERVER	Allows users to stop ACE server flow monitoring.
Stop Flow Statistic On ACE Server	EXCMD_STOP_FLOW_STAT_ACE_SERVER	Allows users to stop flow statistics on ACE servers.
Stop Resource Statistic On ACE Server	EXCMD_STOP_RESOURCE_STAT_ACE_SERVER	Allows users to stop resource statistics on ACE servers.
Stop Service Trace On ACE Server	EXCMD_STOP_SERVICE_TRACE_ACE_SERVER	Gives users the ability to stop ACE server service tracing.
Stop User Trace On ACE Server	EXCMD_STOP_USER_TRACE_ACE_SERVER	Gives users the ability to stop user tracing on ACE servers.
ACE SERVICE		
Delete ACE Service	EXCMD_DELETE_ACE_SERVICE	Allows users to remove ACE services.
Setup ACE Service	EXCMD_SETUP_ACE_SERVICE	Allows users to configure ACE services.
Show ACE Service	EXCMD_INQUIRE_ACE_SERVICE	Allows users to view the details of a specific ACE service.
Show ACE Service Status	EXCMD_INQUIRE_ACE_SERVICE_STATUS	Allows users to view ACE Service statuses.

Show ACE Services	EXCMD_INQUIRE_ACE_SERVICE_NAMES	Allows users to view a list of the ACE services that exist.
Start ACE Service	EXCMD_START_ACE_SERVICE	Gives users the ability to start ACE services.
Stop ACE Service	EXCMD_STOP_ACE_SERVICE	Gives users the ability to disable ACE services.
Teardown ACE Service	EXCMD_TEARDOWN_ACE_SERVICE	Gives users the ability to tear down ACE services.
Validate ACE Service	EXCMD_VALIDATE_ACE_SERVICE	Gives users the ability to validate ACE services.
ACE SHARED LIBRARY		
Delete ACE Shared Library	EXCMD_DELETE_ACE_SHARED_LIBRARY	Allows users to remove ACE shared libraries.
Setup ACE Shared Library	EXCMD_SETUP_ACE_SHARED_LIBRARY	Allows users to configure ACE shared libraries.
Show ACE Shared Libraries	EXCMD_INQUIRE_ACE_SHARED_LIBRARY_NAMES	Allows users to view a list of the ACE shared libraries that exist.
Show ACE Shared Library	EXCMD_INQUIRE_ACE_SHARED_LIBRARY	Allows users to view the details of a specific ACE shared library.
Show ACE Shared Library Status	EXCMD_INQUIRE_ACE_SHARED_LIBRARY_STATUS	Allows users to view the status of ACE shared libraries.
Teardown ACE Shared Library	EXCMD_TEARDOWN_ACE_SHARED_LIBRARY	Gives users the ability to teardown ACE shared libraries.
Validate ACE Shared Library	EXCMD_VALIDATE_ACE_SHARED_LIBRARY	Allow users to validate ACE shared libraries.
ACE SUB FLOW		
Show ACE Sub Flow	EXCMD_INQUIRE_ACE_SUB_FLOW	Allows users to view the details of a specific ACE sub flow.
Show ACE Sub Flows	EXCMD_INQUIRE_ACE_SUB_FLOW_NAMES	Allows users to view a list of the ACE sub flows that exist.

Table C-3. EMS Rights		
Right	**Feature Code**	**Explanation**
EMS Bridge		
Change Bridge Info	EXCMD_CHANGE_BRIDGE	Allows users to update bridge info.
Create Bridge Info	EXCMD_CREATE_BRIDGE	Allows users to create new bridge info.

Delete Bridge Info	EXCMD_DELETE_BRIDGE	Gives users the ability to delete bridge info.
Show Bridge Info	EXCMD_INQUIRE_BRIDGE	Allows users to view bridge info.
Show Bridge Info names	EXCMD_INQUIRE_BRIDGE_NAMES	Allows users to view the names of bridge info.
EMS Connection		
Destroy EMS Connection	EXCMD_DESTROY_EMS_CONNECTION	Allows users to destroy EMS connections.
Show EMS Connection Info	EXCMD_INQUIRE_EMS_CONNECTION	Allows users to view EMS connection info.
Show EMS Connection Info IDs	EXCMD_INQUIRE_EMS_CONNECTION_IDS	Allows users to view IDs of EMS connection info.
EMS CONSUMER		
Show EMS Consumer Info	EXCMD_INQUIRE_EMS_CONSUMER	Allows users to view EMS consumer info.
EMS DURABLES		
Copy Durable	EXCMD_COPY_DURABLE	Allows users to create a new durable from an existing one by selecting Commands > Copy As on the actions pop-up menu.
Create Durable Info	EXCMD_CREATE_DURABLE	Allows users to add new durable info.
Delete Durable Info	EXCMD_DELETE_DURABLE	Gives users the ability to remove durable info.
Purge Durable Info	EXCMD_PURGE_DURABLE	Gives users the ability to remove durable info content.
Show Durable Info	EXCMD_INQUIRE_DURABLE	Allows users to view durable info.
Show Durable Info names	EXCMD_INQUIRE_DURABLE_NAMES	Allows users to view the names of durable info.
EMS JNDI Connection Factory		
Change EMS JNDI Connection Factory	EXCMD_CHANGE_EMS_JCF	Allows users to change EMS JNDI Connection Factories.
Create EMS JNDI Connection Factory	EXCMD_CREATE_EMS_JCF	Allows users to create EMS JNDI Connection Factories.

Delete EMS JNDI Connection Factory	EXCMD_DELETE_EMS_JCF	Allows users to remove EMS JNDI Connection Factories
Show EMS JNDI Connection Factories	EXCMD_INQUIRE_EMS_JCF_NAMES	Allows users to view a list of the EMS JNDI Connection Factories that exist
Show EMS JNDI Connection Factory	EXCMD_INQUIRE_EMS_JCF	Allows users to view the details of a specific EMS JNDI Connection Factory.
EMS PRODUCER		
Show EMS Producer ids	EXCMD_INQUIRE_EMS_PRODUCER_IDS	Allows users to view IDs of EMS producers.
Show EMS Producer stats	EXCMD_INQUIRE_EMS_PRODUCER_STATS	Allows users to view EMS Producer statistics.
EMS ROUTE		
Change Route Info	EXCMD_CHANGE_ROUTE	Gives users the ability to update route info.
Create Route Info	EXCMD_CREATE_ROUTE	Gives users the ability to add new route info.
Delete Route Info	EXCMD_DELETE_ROUTE	Gives users the ability to remove route info.
Show Route Info	EXCMD_INQUIRE_ROUTE	Allows users to view route info.
Show Route Info names	EXCMD_INQUIRE_ROUTE_NAMES	Allows users to view route info names.
Show Route Info statistics	EXCMD_INQUIRE_ROUTE_STATS	Allows users to view the statistics of route info.
EMS TRANSPORT		
Show Transport Info	EXCMD_INQUIRE_TRANSPORT	Displays the transport info for users.
Show Transport Info names	EXCMD_INQUIRE_TRANSPORT_NAMES	Allows users to view the names of transport info.

<table>
<tr><th colspan="3" style="text-align:center">Table C-4. IBM MQ Rights</th></tr>
<tr><th>Right</th><th>Feature Code</th><th>Explanation</th></tr>
<tr><td colspan="3">AUTHENTICATION INFORMATION</td></tr>
<tr><td>Change Authentication Information</td><td>MQCMD_CHANGE_AUTH_INFO</td><td>Gives users the ability to change authentication information.</td></tr>
</table>

Copy Authentication Information	MQCMD_COPY_AUTH_INFO	Allows users to copy authentication information.
Create Authentication Information	MQCMD_CREATE_AUTH_INFO	Allows users to create authentication information.
Delete Authentication Information	MQCMD_DELETE_AUTH_INFO	Allows users to remove authentication information.
Rename Authentication Information	EXCMD_RENAME_OBJECT	Allows users to rename authentication information.
Show Authentication Information	MQCMD_INQUIRE_AUTH_INFO_NAMES	Allows users to view authentication information.
Show Authentication Information Attributes	MQCMD_INQUIRE_AUTH_INFO	Allows users to view attributes of authentication information.
BUFFER POOL		
Change Buffer Pool	MQCMD_CHANGE_BUFFER_POOL	Allows users to update buffer pools.
Create Buffer Pool	MQCMD_CREATE_BUFFER_POOL	Allows users to create new buffer pools.
Delete Buffer Pool	MQCMD_DELETE_BUFFER_POOL	Gives users the ability to remove buffer pools.
CHANNEL (Where applicable, EMS and IBM channels use the same right)		
Change Channel	MQCMD_CHANGE_CHANNEL	Allows users to alter channels.
Copy Channel	MQCMD_COPY_CHANNEL	Gives users the ability to copy channels.
Create Channel	MQCMD_CREATE_CHANNEL	Gives users the ability to create channels.
Rename Channel	EXCMD_RENAME_OBJECT	Gives users the ability to rename channels.
Delete Channel	MQCMD_DELETE_CHANNEL	Gives users the ability to delete channels.
Ping Channel	MQCMD_PING_CHANNEL	Allows users to ping channels.
Reset Channel	MQCMD_RESET_CHANNEL	Allows users to reset channels.
Resolve Channel	MQCMD_RESOLVE_CHANNEL	Allows users to resolve channels.
Set Channel Authentication Records	MQCMD_SET_CHLAUTH_REC	Gives users the ability to set channel authentication records.
Show Channel Attributes	MQCMD_INQUIRE_CHANNEL	Allows users to view channel attributes.

Show Channel Authentication Records	MQCMD_INQUIRE_CHLAUTH_RECS	Allows users to view channel authentication records.
Show Channel Status	MQCMD_INQUIRE_CHANNEL_STATUS	Allows users to view the status of channels.
Show Channels	MQCMD_INQUIRE_CHANNEL_NAMES	Allows users to view channels.
Start Channel	MQCMD_START_CHANNEL	Gives users the ability to start channels.
Start Channel Initiator	MQCMD_START_CHANNEL_INIT	Gives users the ability to start channel initiators.
Stop Channel	MQCMD_STOP_CHANNEL	Allows users to stop channels.
View Channel Authentication Profiles	EXCMD_INQUIRE_CHLAUTH_RECS_PROFILES	Allows Channel Authentication Profiles to be retrieved as part of the MQSC Snapshot feature.
CLUSTER QUEUE MANAGER		
Refresh Cluster	MQCMD_REFRESH_CLUSTER	Gives users the ability to refresh clusters.
Reset Cluster	MQCMD_RESET_CLUSTER	Gives users the ability to reset clusters.
Resume Cluster	MQCMD_RESUME_Q_MGR_CLUSTER	Gives users the ability to resume clusters.
Show Cluster Queue Manager Attributes	MQCMD_INQUIRE_CLUSTER_Q_MGR	Allows users to view cluster queue manager attributes.
Show Cluster Queue Managers	EXCMD_INQUIRE_CLUSQMGR_NAMES	Allow users to view cluster queue managers.
Suspend Cluster	MQCMD_SUSPEND_Q_MGR_CLUSTER	Gives users the ability to suspend clusters.
COMMUNICATION INFO		
Copy Communication Info	MQCMD_COPY_COMM_INFO	Allows users to copy communication info.
Create Communication Info	MQCMD_CREATE_COMM_INFO	Allows users to create communication info.
Delete Communication Info	MQCMD_DELETE_COMM_INFO	Gives users the ability to delete communication info.
Edit Communication Info	MQCMD_CHANGE_COMM_INFO	Gives users the ability to update communication info.
Show Communication Info	EXCMD_INQUIRE_COMM_INFO_NAMES	Allows users to view communication info.

Show Communication Info Attributes	MQCMD_INQUIRE_COMM_INFO	Allows users to view communication info attributes.
LISTENER		
Change Listeners	MQCMD_CHANGE_LISTENER	Allows users to change listeners.
Copy Listeners	MQCMD_COPY_LISTENER	Allows users to copy listeners.
Create Listeners	MQCMD_CREATE_LISTENER	Allows users to create listeners.
Delete Listeners	MQCMD_DELETE_LISTENER	Allows users to remove listeners.
Rename Listeners	EXCMD_RENAME_OBJECT	Allows users to rename listeners.
Show Listener Attributes	MQCMD_INQUIRE_LISTENER	Allows users to view attributes of listeners.
Show Listeners	EXCMD_INQUIRE_LISTENER_NAMES	Allows users to view listeners.
Show Listeners Status	MQCMD_INQUIRE_LISTENER_STATUS	Allows users to view the status of listeners.
Start Listeners	MQCMD_START_CHANNEL_LISTENER	Allows users to start listeners.
Stop Listener	MQCMD_STOP_CHANNEL_LISTENER	Allows users to stop listeners.
NAMELIST		
Change Namelist	MQCMD_CHANGE_NAMELIST	Allows users to change namelists.
Copy Namelist	MQCMD_COPY_NAMELIST	Allows users to copy namelists.
Create Namelist	MQCMD_CREATE_NAMELIST	Allows users to create namelists.
Delete Namelist	MQCMD_DELETE_NAMELIST	Allows users to delete namelists.
Rename Namelist	EXCMD_RENAME_OBJECT	Allow users to rename namelists
Show Namelist Attributes	MQCMD_INQUIRE_NAMELIST	Allows users to view namelist attributes.
Show Namelists	MQCMD_INQUIRE_NAMELIST_NAMES	Allows users to view namelists.
PAGE SET		
Change PageSet	MQCMD_CHANGE_PAGE_SET	Allows users to change PageSets.
Create PageSet	MQCMD_CREATE_PAGE_SET	Not applicable.
Delete PageSet	MQCMD_DELETE_PAGE_SET	Allows users to remove PageSets.
PROCESS		

Change Process	MQCMD_CHANGE_PROCESS	Allows users to change processes.
Copy Process	MQCMD_COPY_PROCESS	Allows users to copy processes.
Create Process	MQCMD_CREATE_PROCESS	Allows users to create processes.
Delete Process	MQCMD_DELETE_PROCESS	Allows users to remove processes.
Rename Process	EXCMD_RENAME_OBJECT	Allow users to rename processes.
Show Process Attributes	MQCMD_INQUIRE_PROCESS	Allows users to view the attributes of processes.
Show Processes	MQCMD_INQUIRE_PROCESS_NAMES	Allows users to view processes.
Start Process	EXCMD_START_PROCESS	Allows users to start processes.
QUEUE (Where applicable, EMS and IBM queues use the same right)		
Change Queue	MQCMD_CHANGE_Q	Allows users to change queues. See also **Change Queue Extended** below.
Change Queue Extended	EXCMD_CHANGE_Q_EX	Allows users to enable or inhibit an MQ queue for Get or Put.
Clear Messages from Queue	MQCMD_CLEAR_Q	Allows users to clear MQ queue messages.
Copy Queue	MQCMD_COPY_Q	Allows users to copy queues.
Create Queue	MQCMD_CREATE_Q	Allows users to create queues.
Delete Queue	MQCMD_DELETE_Q	Allows users to remove queues.
Purge Queue	EXCMD_PURGE_Q	Not applicable.
Refresh Queue Runtime	EXCMD_INQUIRE_Q_RUNTIME	Allows users to create a new reroute template.
Rename Queue	EXCMD_RENAME_OBJECT	Allow users to rename queues.
Reset Queue Statistics	MQCMD_RESET_Q_STATS	Not applicable.
Show EMS Queue Stats	MQCMD_INQUIRE_Q_STATUS	Allows users to view EMS queue statistics.
Show Queue Attributes	MQCMD_INQUIRE_Q	Allows users to view queue attributes.
Show Queue Status	MQCMD_INQUIRE_Q_STATUS	Allows users to view the status of queues.
Show Queues	MQCMD_INQUIRE_Q_NAMES	Allows users to view queues.
SERVICE		

Change Service	MQCMD_CHANGE_SERVICE	Allow users to change services.
Copy Service	MQCMD_COPY_SERVICE	Allow users to copy services.
Create Service	MQCMD_CREATE_SERVICE	Allow users to create services.
Delete Service	MQCMD_DELETE_SERVICE	Allow users to remove services.
Rename Service	EXCMD_RENAME_OBJECT	Allow users to rename services.
Show Service Attributes	MQCMD_INQUIRE_SERVICE	Allows users to view the attributes of services.
Show Service Status	MQCMD_INQUIRE_SERVICE_STATUS	Allows users to view the status of services.
Show Services	EXCMD_INQUIRE_SERVICE_NAMES	Allows users to view services.
Start Service	MQCMD_START_SERVICE	Allows users to start services.
Stop Service	MQCMD_STOP_SERVICE	Allows users to stop services.
STORAGE CLASS		
Change Storage Class	MQCMD_CHANGE_STG_CLASS	Not applicable.
Copy Storage Class	MQCMD_COPY_STG_CLASS	Allows users to copy storage classes.
Create Storage Class	MQCMD_CREATE_STG_CLASS	Allows users to create storage classes.
Delete Storage Class	MQCMD_DELETE_STG_CLASS	Allows users to remove storage classes.
Show Storage Class Attributes	MQCMD_INQUIRE_STG_CLASS	Allows users to view the attributes of storage classes.
Show Storage Classes	MQCMD_INQUIRE_STG_CLASS_NAMES	Allows users to view storage classes.
SUBSCRIPTION		
Change Subscription	MQCMD_CHANGE_SUBSCRIPTION	Gives users the ability to change subscriptions.
Copy Subscription	MQCMD_COPY_SUBSCRIPTION	Allows users to copy subscriptions.
Create Subscription	MQCMD_CREATE_SUBSCRIPTION	Gives users the ability to create subscriptions.
Delete Subscription	MQCMD_DELETE_SUBSCRIPTION	Allows users to remove subscriptions.
Rename Subscription	EXCMD_RENAME_OBJECT	Allow users to rename subscriptions.
Show Subscription Attributes	MQCMD_INQUIRE_SUBSCRIPTION	Allows users to view the attributes of subscriptions.

Show Subscription SubStatus	MQCMD_INQUIRE_SUB_STATUS	Allows users to view subscription SubStatuses.
Show Subscriptions	EXCMD_INQUIRE_SUBSCRIPTION_NAMES	Allows users to view subscriptions.
TOPIC (Where applicable, EMS and IBM topics use the same right)		
Change Topic	MQCMD_CHANGE_TOPIC	Allows users to change topics.
Clear Topic String	MQCMD_CLEAR_TOPIC_STRING	Not applicable.
Copy Topic	MQCMD_COPY_TOPIC	Gives users the ability to copy topics.
Create Topic	MQCMD_CREATE_TOPIC	Allows users to create topics.
Delete Topic	MQCMD_DELETE_TOPIC	Gives users the ability to delete topics.
Publish to the Topic	EXCMD_PUBLISH_TOPIC	Allows users to publish to topics.
Purge Topic	EXCMD_PURGE_TOPIC	Allows user to purge all messages for all subscribers on the named topic.
Show Topic Attributes	MQCMD_INQUIRE_TOPIC	Allows users to view attributes of topics.
Show Topic Statistics	EXCMD_INQUIRE_TOPIC_STATS	Allows users to view the statistics of topics.
Show Topic Status	MQCMD_INQUIRE_TOPIC_STATUS	Allows users to view the status of topics.
Show Topics	MQCMD_INQUIRE_TOPIC_NAMES	Allows users to view topics.

Table C-5. IIB Rights		
Right	**Feature Code**	**Explanation**
IIB APPLICATION		
Delete IIB Application	EXCMD_DELETE_IIB_APPLICATION	Gives users the ability to remove IIB applications.
Show IIB Application	EXCMD_INQUIRE_IIB_APPLICATION	Allows users to view the details of a specific IIB application.
Show IIB Application Status	EXCMD_INQUIRE_IIB_APPLICATION_STATUS	Allows users to view the status of IIB applications.
Show IIB Applications	EXCMD_INQUIRE_IIB_APPLICATION_NAMES	Allows users to view a list of the IIB applications that exist.
Start Flow Monitoring On IIB Application	EXCMD_START_FLOW_MONITORING_IIB_APPLICATION	Gives users the ability to start flow monitoring on IIB applications.

Start IIB Application	EXCMD_START_IIB_APPLICATION	Gives users the ability to start IIB applications.
Start Statistic On IIB Application	EXCMD_START_STATISTIC_IIB_APPLICATION	Gives users the ability to start statistics on IIB applications.
Stop Flow Monitoring On IIB Application	Stop Flow Monitoring On IIB Application	Gives users the ability to stop flow monitoring on IIB applications.
Stop IIB Application	EXCMD_STOP_IIB_APPLICATION	Allows users to stop IIB applications.
Stop Statistic On IIB Application	EXCMD_STOP_STATISTIC_IIB_APPLICATION	Allows users to stop statistics on IIB applications.
IIB LIBRARY		
Delete IIB Library	EXCMD_DELETE_IIB_LIBRARY	Allows users to remove IIB libraries.
Show IIB Libraries	EXCMD_INQUIRE_IIB_LIBRARY_NAMES	Allows users to view a list of the IIB libraries that exist.
Show IIB Library	EXCMD_INQUIRE_IIB_LIBRARY	Allows users to view the details of a specific IIB library.
Show IIB Library Status	EXCMD_INQUIRE_IIB_LIBRARY_STATUS	Allows users to view the statues of IIB libraries.
Start Statistic On IIB Library	EXCMD_START_STATISTIC_IIB_LIBRARY	Allows users to start statistics on IIB libraries.
Stop Statistic On IIB Library	EXCMD_STOP_STATISTIC_IIB_LIBRARY	Allows users to stop statistics on IIB libraries.
IIB MESSAGE FLOW		
Delete IIB Message Flow	EXCMD_DELETE_IIB_MESSAGE_FLOW	Allows users to delete IIB message flows.
Show IIB Message Flow	EXCMD_INQUIRE_IIB_MESSAGE_FLOW	Allows users to view the details of a specific message flow.
Show IIB Message Flow Activity Log	EXCMD_INQUIRE_IIB_MESSAGE_FLOW_ACTIVITY_LOG	Allows users to view the activity logs of IIB message flows.
Show IIB Message Flow Status	EXCMD_INQUIRE_IIB_MESSAGE_FLOW_STATUS	Allow users to view the status of IIB message flows.
Show IIB Message Flows	EXCMD_INQUIRE_IIB_MESSAGE_FLOW_NAMES	Allows users to view a list of the IIB message flows that exist.
Start Flow Monitoring On IIB Message Flow	EXCMD_START_FLOW_MONITORING_IIB_MESSAGE_FLOW	Gives users the ability to start flow monitoring on IIB message flows.

Start IIB Message Flow	EXCMD_START_IIB_MESSAGE_FLOW	Allows users to start IIB message flows.
Start Statistic On IIB Message Flow	EXCMD_START_STATISTIC_IIB_MESSAGE_FLOW	Allows users to start statistics for IIB message flows.
Stop Flow Monitoring On IIB Message Flow	EXCMD_STOP_FLOW_MONITORING_IIB_MESSAGE _FLOW	Gives users the ability to stop flow monitoring on IIB message flows.
Stop IIB Message Flow	EXCMD_STOP_IIB_MESSAGE_FLOW	Gives users the ability to stop IIB message flows.
Stop Recording On IIB Message Flow	Stop Recording On IIB Message Flow	Gives users the ability to stop recording IIB message flows.
Stop Statistic On IIB Message Flow	EXCMD_STOP_STATISTIC_IIB_MESSAGE_FLOW	Gives users the ability to stop statistics for IIB message flows.
IIB RESOURCE		
Delete IIB Resource	EXCMD_DELETE_IIB_RESOURCE	Allows users to remove IIB resources.
Show IIB Resource	EXCMD_INQUIRE_IIB_RESOURCE	Allows users to view the details of a specific IIB resource.
Show IIB Resources	EXCMD_INQUIRE_IIB_RESOURCE_NAMES	Allows users to view a list of the IIB resources that exist.
IIB REST API		
Delete IIB Rest API	EXCMD_DELETE_IIB_REST_API	Gives users the ability to remove IIB Rest APIs.
Show IIB Rest API	EXCMD_INQUIRE_IIB_REST_API	Allows users to view the details of a specific REST API.
Show IIB Rest API Status	EXCMD_INQUIRE_IIB_REST_API_STATUS	Allows users to view the status of IIB Rest APIs.
Show IIB Rest APIs	EXCMD_INQUIRE_IIB_REST_API_NAMES	Allows users to view a list of the REST APIs that exist.
Start Flow Monitoring On IIB Rest API	EXCMD_START_FLOW_MONITORING_IIB_REST_AP I	Gives users the ability to start flow monitoring on IIB Rest APIs.
Start IIB Rest API	EXCMD_START_IIB_REST_API	Gives users the ability to start IIB Rest APIs.
Start Statistic On IIB Rest API	EXCMD_START_STATISTIC_IIB_REST_API	Gives users the ability to start statistics on IIB REST APIs.

Stop Flow Monitoring On IIB Rest API	EXCMD_STOP_FLOW_MONITORING_IIB_REST_API	Gives users the ability to stop flow monitoring on IIB REST APIs.
Stop IIB Rest API	EXCMD_STOP_IIB_REST_API	Gives users the ability to stop IIB Rest APIs.
Stop Statistic On IIB Rest API	EXCMD_STOP_STATISTIC_IIB_REST_API	Gives users the ability to stop statistics on IIB REST APIs.
IIB SERVER		
Create IIB Server	EXCMD_CREATE_IIB_SERVER	Allows users to create IIB servers.
Delete All Content On IIB Server	EXCMD_DELETE_ALL_CONTENT_IIB_SERVER	Gives users the ability to delete content on IIB servers.
Delete IIB Server	EXCMD_DELETE_IIB_SERVER	Gives users the ability to delete IIB servers.
Deploy Content On IIB Server	EXCMD_DEPLOY_CONTENT_IIB_SERVER	Gives users the ability to deploy content on IIB servers.
Show IIB Server	EXCMD_INQUIRE_IIB_SERVER	Allows users to view the details of a specific IIB server.
Show IIB Server Status	EXCMD_INQUIRE_IIB_SERVER_STATUS	Allows users to view the status of IIB servers.
Show IIB Servers	EXCMD_INQUIRE_IIB_SERVER_NAMES	Allows users to view a list of the IIB servers that exist.
Start All Apps On IIB Server	EXCMD_START_ALL_APP_TYPES_IIB_SERVER	Gives users the ability to start applications on IIB servers.
Start All Message Flows On IIB Server	EXCMD_START_ALL_MSG_FLOWS_IIB_SERVER	Gives users the ability to start all message flows on IIB servers.
Start All Resource Statistic On IIB Server	EXCMD_START_RESOURCE_STATISTIC_IIB_SERVER	Gives users the ability to start all resource statistics on IIB servers.
Start All Statistic On IIB Server	EXCMD_START_STATISTIC_IIB_SERVER	Allows user to access the Statistics On option on the IIB Servers viewlet action menu.
Start IIB Server	EXCMD_START_IIB_SERVER	Allows users to start IIB servers (integration servers).
Stop All Apps On IIB Server	EXCMD_STOP_ALL_APP_TYPES_IIB_SERVER	Allows users to stop all applications on IIB servers.

Stop All Message Flows On IIB Server	EXCMD_STOP_ALL_ALL_MSG_FLOWS_IIB_SERVER	Allows users to stop all message flows on IIB servers.
Stop All Resource Statistic On IIB Server	EXCMD_STOP_RESOURCE_STATISTIC_IIB_SERVER	Allows users to stop all resource statistics on IIB servers.
Stop All Statistic On IIB Server	EXCMD_STOP_STATISTIC_IIB_SERVER	Allows users to stop all statistics on IIB servers.
Stop IIB Server	EXCMD_STOP_IIB_SERVER	Allows users to stop IIB servers.
IIB SERVICE		
Delete IIB Service	EXCMD_DELETE_IIB_SERVICE	Allows users to remove IIB services.
Show IIB Service	EXCMD_INQUIRE_IIB_SERVICE	Allows users to view the details of a specific IIB service.
Show IIB Service Status	EXCMD_INQUIRE_IIB_SERVICE_STATUS	Allows users to view the status of IIB services.
Show IIB Services	EXCMD_INQUIRE_IIB_SERVICE_NAMES	Allows users to view a list of the IIB services that exist.
Start Flow Monitoring On IIB Service	EXCMD_START_FLOW_MONITORING_IIB_SERVICE	Allows users to start flow monitoring on IIB services.
Start IIB Service	EXCMD_START_IIB_SERVICE	Allows users to start IIB services.
Start Statistic On IIB Service	EXCMD_START_STATISTIC_IIB_SERVICE	Allows users to start statistics on IIB services.
Stop Flow Monitoring On IIB Service	EXCMD_STOP_FLOW_MONITORING_IIB_SERVICE	Allows users to stop flow monitoring on IIB services.
Stop IIB Service	EXCMD_STOP_IIB_SERVICE	Allows users to stop IIB services.
Stop Statistic On IIB Service	EXCMD_STOP_STATISTIC_IIB_SERVICE	Allows users to stop statistics on IIB services.
IIB SHARED LIBRARY		
Delete IIB Shared Library	EXCMD_DELETE_IIB_SHARED_LIBRARY	Allows users to remove IIB shared libraries.
Show IIB Shared Libraries	EXCMD_INQUIRE_IIB_SHARED_LIBRARY_NAMES	Allows users to view a list of the IIB shared libraries that exist.
Show IIB Shared Library	EXCMD_INQUIRE_IIB_SHARED_LIBRARY	Allows users to view the details of a specific IIB shared library.

Show IIB Shared Library Status	EXCMD_INQUIRE_IIB_SHARED_LIBRARY_STATUS	Allows users to view the status of IIB shared libraries.
IIB SUB FLOW		
Delete IIB Sub Flow	EXCMD_DELETE_IIB_SUB_FLOW	Allows users to remove IIB sub flows.
Show IIB Sub Flow	EXCMD_INQUIRE_IIB_SUB_FLOW	Allows users to view the details of a specific IIB sub flow.
Show IIB Sub Flow Status	EXCMD_INQUIRE_IIB_SUB_FLOW_STATUS	Allows users to view the status of IIB sub flows.
Show IIB Sub Flows	EXCMD_INQUIRE_IIB_SUB_FLOW_NAMES	Allows users to view a list of the IIB sub flows that exist.

Table C-6. Kafka Rights		
Right	**Feature Code**	**Explanation**
KAFKA BROKER		
Change Kafka Broker	EXCMD_CHANGE_KAFKA_BROKER	Allows users to change Kafka brokers.
Show Kafka Broker	EXCMD_INQUIRE_KAFKA_BROKER	Allows users to view details of a Kafka broker.
Show Kafka Broker Status	EXCMD_INQUIRE_KAFKA_BROKER_STATUS	Allows users to view the status of Kafka brokers.
Show Kafka Brokers	EXCMD_INQUIRE_KAFKA_BROKER_NAMES	Allows users to view Kafka brokers.
KAFKA CONNECT		
Change Kafka Connect	EXCMD_CHANGE_KAFKA_CONNECT	Allows users to change Kafka connects.
Create Kafka Connect	EXCMD_CREATE_KAFKA_CONNECT	Allows users to create Kafka connects.
Delete Kafka Connect	EXCMD_DELETE_KAFKA_CONNECT	Gives users the ability to delete Kafka connects.
Pause Kafka Connect	EXCMD_PAUSE_KAFKA_CONNECT	Allows users to pause Kafka connects.
Reset Kafka Connect Topics	EXCMD_RESET_KAFKA_CONNECT_TOPICS	Allows users to reset Kafka connect topics.
Restart Kafka Connect	EXCMD_RESTART_KAFKA_CONNECT	Allows users to restart Kafka connects.
Resume Kafka Connect	EXCMD_RESUME_KAFKA_CONNECT	Allows users to resume Kafka connects.
Show Kafka Connect	EXCMD_INQUIRE_KAFKA_CONNECT	Allows users to view the details of a specific Kafka connect.

Show Kafka Connect Status	EXCMD_INQUIRE_KAFKA_CONNECT_STATUS	Allows users to view the status of Kafka connects.
Show Kafka Connects	EXCMD_INQUIRE_KAFKA_CONNECT_NAMES	Allows users to view a list of the Kafka connects that exist.
KAFKA CONNECT INSTANCE		
Show Kafka Connect Instance	EXCMD_INQUIRE_KAFKA_CONNECT_INSTANCE	Allows users to view the details of a specific Kafka connect instance.
Show Kafka Connect Instances	EXCMD_INQUIRE_KAFKA_CONNECT_INSTANCE_NAMES	Allows users to view a list of the Kafka connect instances that exist.
KAFKA CONNECT PLUGIN		
Show Kafka Connect Plugin	EXCMD_INQUIRE_KAFKA_CONNECT_PLUGIN	Allows users to view the details of a specific Kafka connect plugin.
Show Kafka Connect Plugins	EXCMD_INQUIRE_KAFKA_CONNECT_PLUGIN_NAMES	Allows users to view a list of the Kafka connect plugins that exist.
Validate Kafka Connect Plugin	EXCMD_VALIDATE_KAFKA_CONNECT_PLUGIN	Gives users the ability to validate Kafka Connect plugins.
KAFKA CONNECT TASK		
Restart Kafka Connect Task	EXCMD_RESTART_KAFKA_CONNECT_TASK	Allows users to restart Kafka Connect tasks.
Show Kafka Connect Task	EXCMD_INQUIRE_KAFKA_CONNECT_TASK	Allows users to view the details of a specific Kafka connect task.
Show Kafka Connect Task Status	EXCMD_INQUIRE_KAFKA_CONNECT_TASK_STATUS	Allows users to view the status of Kafka Connect tasks.
Show Kafka Connect Tasks	EXCMD_INQUIRE_KAFKA_CONNECT_TASK_NAMES	Allows users to view a list of the Kafka connect tasks that exist.
KAFKA CONSUMER		
Show Kafka Consumer	EXCMD_INQUIRE_KAFKA_CONSUMER	Allows users to view the details of a specific Kafka consumer.
Show Kafka Consumer Status	EXCMD_INQUIRE_KAFKA_CONSUMER_STATUS	Allow users to view the status of Kafka consumers.
Show Kafka Consumers	EXCMD_INQUIRE_KAFKA_CONSUMER_NAMES	Allows users to view a list of the Kafka consumers that exist.
KAFKA CONSUMER GROUP		

Create Kafka Consumer Group	EXCMD_CREATE_KAFKA_CONSUMER_GROUP	Allows users to create Kafka consumer groups.
Delete Kafka Consumer Group	EXCMD_DELETE_KAFKA_CONSUMER_GROUP	Allows users to remove Kafka consumer groups.
Delete Kafka Consumer Group Member	EXCMD_DELETE_KAFKA_CONSUMER_GROUP_MEMBER	Allows users to remove Kafka consumer group members.
Delete Kafka Consumer Group Offset	EXCMD_DELETE_KAFKA_CONSUMER_GROUP_OFFSET	Allows user to access the Delete Group Offset option on the Kafka Consumer viewlet action menu.
Show Kafka Consumer Group	EXCMD_INQUIRE_KAFKA_CONSUMER_GROUP	Allows users to view the details of a specific Kafka Consumer Group.
Show Kafka Consumer Group Members	EXCMD_INQUIRE_KAFKA_CONSUMER_GROUP_MEMBER	Allows users to view a list of the Kafka Consumer Group Members that exist.
Show Kafka Consumer Group Offsets	EXCMD_INQUIRE_KAFKA_CONSUMER_GROUP_OFFSET	Allows users to view a list of the Kafka Consumer Group Offsets that exist.
Show Kafka Consumer Group Status	EXCMD_INQUIRE_KAFKA_CONSUMER_GROUP_STATUS	Allows users to view the status of Kafka Consumer Groups.
Show Kafka Consumer Groups	EXCMD_INQUIRE_KAFKA_CONSUMER_GROUP_NAMES	Allows users to view a list of the Kafka Consumer Groups that exist.
Kafka Ksql Instance		
Execute Ksql On Kafka Ksql Instance	EXCMD_EXECUTE_KAFKA_KSQL_INST_KSQL	Allows users to execute Ksql on Kafka Ksql Instances.
Execute Query On Ksql Instance	EXCMD_EXECUTE_KAFKA_KSQL_INST_QUERY	Allows users to execute queries on Kafka Ksql Instances.
Show Kafka Ksql Instance	EXCMD_INQUIRE_KAFKA_KSQL_INST	Allows users to view the details of a specific Kafka Ksql Instance.
Show Kafka Ksql Instance Queries	EXCMD_INQUIRE_KAFKA_KSQL_INST_QUERIES	Allows users to view a list of the Kafka Ksql instance queries that exist.
Show Kafka Ksql Instance Streams	EXCMD_INQUIRE_KAFKA_KSQL_INST_STREAMS	Allows users to view a list of the Kafka Ksql instance streams that exist.
Show Kafka Ksql Instance Tables	EXCMD_INQUIRE_KAFKA_KSQL_INST_TABLES	Allows users to view a list of the Kafka Ksql instance tables that exist.

Show Kafka Ksql Instances	EXCMD_INQUIRE_KAFKA_KSQL_INST_NAMES	Allows users to view a list of the Kafka Ksql instances that exist.
KAFKA MDS		
Add Kafka Principal Role	EXCMD_ADD_KAFKA_PRINCIPAL_ROLE	Allows users to add a new principal for a role (such as ClusterAdmin or AuditAdmin), using the Add New Principal button on the details dialog for
Add Kafka Principal Role Resources	EXCMD_ADD_KAFKA_PRINCIPAL_ROLE_RESOURC ES	Allows users to assign a principal to a role resource (such as topics or permissions). The ability to assign a principal to a role resource type does not apply to the AuditAdmin or
Remove Kafka Principal Role	EXCMD_REMOVE_KAFKA_PRINCIPAL_ROLE	Allows users to remove a principal from a role, using the Delete Principal button on the details dialog for the role
Remove Kafka Principal Role Resources	EXCMD_REMOVE_KAFKA_PRINCIPAL_ROLE_RESO URCES	Allows users to remove a principal from a resource type.
Set Kafka Principal Role Resources	EXCMD_SET_KAFKA_PRINCIPAL_ROLE_RESOURC ES	Allows users to override existing role resources for a principal by assigning a new set of resources.
Show Kafka MDS	EXCMD_INQUIRE_KAFKA_MDS	Allows users to view the details of a specific Kafka MDS node.
Show Kafka MDS Names	EXCMD_INQUIRE_KAFKA_MDS_NAMES	Allows users to view a list of the Kafka MDS nodes that exist.
Show Kafka MDS Visible Clusters	EXCMD_INQUIRE_KAFKA_MDS_VISIBLE_CLUSTER S	Allows users to view a list of the visible Kafka clusters that host MDS.
Show Kafka Principal Role Resources	EXCMD_INQUIRE_KAFKA_PRINCIPAL_ROLE_RESO URCES	Allows users to view a list of the resource types that a principal has access to.
Show Kafka Principal Roles	EXCMD_INQUIRE_KAFKA_PRINCIPAL_ROLES	Allows users to view a list of the principal roles that exist.
Show Kafka Role	EXCMD_INQUIRE_KAFKA_ROLE	Allows users to view the details of a specific Kafka role.

Show Kafka Role Names	EXCMD_INQUIRE_KAFKA_ROLE_NAMES	Allows users to view a list of the Kafka roles that exist.
Show Kafka Role Principals	EXCMD_INQUIRE_KAFKA_ROLE_PRINCIPALS	Allows users to view a list of the principals that a role is bound to.

KAFKA PARTITION		
Change Kafka Partition	EXCMD_CHANGE_KAFKA_PARTITION	Allows users to change Kafka partitions.
Show Kafka Partition	EXCMD_INQUIRE_KAFKA_PARTITION	Allows users to view the details of a specific Kafka partition.
Show Kafka Partition Status	EXCMD_INQUIRE_KAFKA_PARTITION_STATUS	Allows users to view the status of Kafka partitions.
Show Kafka Partitions	EXCMD_INQUIRE_KAFKA_PARTITION_NAMES	Allows users to view a list of the Kafka partitions that exist.

Kafka Replicator		
Show Kafka Replicator	EXCMD_INQUIRE_KAFKA_REPLICATOR	Allows users to view the details of a specific Kafka replicator.
Show Kafka Replicator Metrics	EXCMD_INQUIRE_KAFKA_REPLICATOR_METRICS	Allows users to see the Kafka replicator metrics.
Show Kafka Replicator Source Topics	EXCMD_INQUIRE_KAFKA_REPLICATOR_SRC_TOPICS	Allows users to view a list of the Kafka replicator source topics that exist.
Show Kafka Replicator Workers	EXCMD_INQUIRE_KAFKA_REPLICATOR_WORKERS	Allows users to view a list of the Kafka replicator workers that exist.
Show Kafka Replicators	EXCMD_INQUIRE_KAFKA_REPLICATOR_NAMES	Allows users to view a list of the Kafka replicators that exist.

Kafka Schema Registry		
Change Kafka Schema Registry	EXCMD_CHANGE_KAFKA_SCH_REG	Allows users to change Kafka schema registries.
Show Kafka Schema Registries	EXCMD_INQUIRE_KAFKA_SCH_REG_NAMES	Allows users to view a list of the Kafka schema registries that exist.
Show Kafka Schema Registry	EXCMD_INQUIRE_KAFKA_SCH_REG	Allows users to view the details of a specific Kafka schema registry.
Show Kafka Schema Registry Schema	EXCMD_INQUIRE_KAFKA_SCH_REG_SCHEMA	Allows users to view the details of a specific Kafka schema registry schema.

Show Kafka Schema Registry Schema Subject	EXCMD_INQUIRE_KAFKA_SCH_REG_SUBJECT_VERSIONS	Allows users to view a list of the Kafka Schema registry schema subject versions that exist.
Kafka Schema Registry Subject		
Change Kafka Schema Registry Subject	EXCMD_CHANGE_KAFKA_SCH_REG_SUBJ	Allows users to change Kafka schema registry subjects.
Check Schema Registered On Kafka Schema Registry Subject	EXCMD_CHECK_KAFKA_SCH_REG_SUBJ_REGISTERED_SCHEMA	Checks whether the schema has already been registered under the specified subject (REST API).
Delete Kafka Schema Registry Subject	EXCMD_DELETE_KAFKA_SCH_REG_SUBJ	Allows users to remove Kafka schema registry subjects.
Register Kafka Schema Registry Subject Schema	EXCMD_REGISTER_KAFKA_SCH_REG_SUBJ_SCHEMA	Allows users to register a Kafka schema registry subject schema.
Show Kafka Schema Registry Subject	EXCMD_INQUIRE_KAFKA_SCH_REG_SUBJ	Allows users to view the details of a specific Kafka schema registry subject.
Show Kafka Schema Registry Subjects	EXCMD_INQUIRE_KAFKA_SCH_REG_SUBJ_NAMES	Allows users to view a list of the Kafka schema registry subjects that exist.
Kafka Schema Registry Subject Versions		
Check Schema Compatible On Kafka Schema Registry Subject	EXCMD_CHECK_KAFKA_SCH_REG_SUBJ_VER_COMPATIBLE_SCHEMA	Checks whether the input schema is compatible with the version of the subject's schema (REST API).
Delete Kafka Schema Registry Subject Version	EXCMD_DELETE_KAFKA_SCH_REG_SUBJ_VER	Allows users to remove Kafka schema registry subject versions.
Show Kafka Schema Registry Subject Version	EXCMD_INQUIRE_KAFKA_SCH_REG_SUBJ_VER	Allows users to view the details of a specific Kafka schema registry subject version.

Show Kafka Schema Registry Subject Versions	EXCMD_INQUIRE_KAFKA_SCH_REG_SUBJ_VER_N AMES	Allows users to view a list of the Kafka schema registry subject versions that exist.
KAFKA TOPIC		
Change Kafka Topic	EXCMD_CHANGE_KAFKA_TOPIC	Allows users to change Kafka topics.
Copy Kafka Topic	EXCMD_COPY_KAFKA_TOPIC	Allows users to copy Kafka topics.
Create Kafka Topic	EXCMD_CREATE_KAFKA_TOPIC	Allows users to create Kafka topics.
Delete Kafka Topic	EXCMD_DELETE_KAFKA_TOPIC	Allows users to remove Kafka topics.
Show Kafka Topic	EXCMD_INQUIRE_KAFKA_TOPIC	Allows users to view the details of a specific Kafka topic.
Show Kafka Topic Status	EXCMD_INQUIRE_KAFKA_TOPIC_STATUS	Allows users to view the status of Kafka topics.
Show Kafka Topics	EXCMD_INQUIRE_KAFKA_TOPIC_NAMES	Allows users to view a list of the Kafka topics that exist.

Table C-7. RabbitMQ Rights		
Right	**Feature Code**	**Explanation**
RabbitMQ CHANNEL		
Show RabbitMQ Channel	EXCMD_INQUIRE_RABBITMQ_CHANNEL	Allows users to view the details of a specific RabbitMQ channel name.
Show RabbitMQ Channel Names	EXCMD_INQUIRE_RABBITMQ_CHANNEL_NAMES	Allows users to view a list of the RabbitMQ channel names that exist.
Show RabbitMQ Channel Stats	EXCMD_INQUIRE_RABBITMQ_CHANNEL_STATS	Allows users to view RabbitMQ channel statistics.
Show RabbitMQ Channel Status	EXCMD_INQUIRE_RABBITMQ_CHANNEL_STATUS	Allows users to view the status of RabbitMQ channels.
RabbitMQ COMPONENT		
Change RabbitMQ Component	EXCMD_CHANGE_RABBITMQ_COMPONENT	Allows users to change RabbitMQ components.
Create RabbitMQ Component	EXCMD_CREATE_RABBITMQ_COMPONENT	Allows users to create RabbitMQ components.

Delete RabbitMQ Component	EXCMD_DELETE_RABBITMQ_COMPONENT	Allows users to delete RabbitMQ components.
Show RabbitMQ Component	EXCMD_INQUIRE_RABBITMQ_COMPONENT	Allows users to view the details of a specific RabbitMQ component.
Show RabbitMQ Component Names	EXCMD_INQUIRE_RABBITMQ_COMPONENT_NAMES	Allows users to view a list of the RabbitMQ components that exist.
RabbitMQ CONNECTION		
Close RabbitMQ Connection	EXCMD_CLOSE_RABBITMQ_CONNECTION	Allows users to close RabbitMQ connections.
Show RabbitMQ Connection	EXCMD_INQUIRE_RABBITMQ_CONNECTION	Allows users to view the details of a specific RabbitMQ connection name.
Show RabbitMQ Connection Names	EXCMD_INQUIRE_RABBITMQ_CONNECTION_NAMES	Allows users to view a list of the RabbitMQ connection names that exist.
Show RabbitMQ Connection Stats	EXCMD_INQUIRE_RABBITMQ_CONNECTION_STATS	Allows users to view RabbitMQ connection statistics.
Show RabbitMQ Connection Status	EXCMD_INQUIRE_RABBITMQ_CONNECTION_STATUS	Allows users to view the status of RabbitMQ connections.
RabbitMQ CONSUMER		
Show RabbitMQ Consumer	EXCMD_INQUIRE_RABBITMQ_CONSUMER	Allows users to view the details of a specific RabbitMQ consumer.
Show RabbitMQ Consumer Names	EXCMD_INQUIRE_RABBITMQ_CONSUMER_NAMES	Allows users to view a list of the RabbitMQ consumers that exist.
Show RabbitMQ Consumer Status	EXCMD_INQUIRE_RABBITMQ_CONSUMER_STATUS	Allows users to view the status of RabbitMQ consumers.
RabbitMQ EXCHANGE		
Change RabbitMQ Exchange	EXCMD_CHANGE_RABBITMQ_EXCHANGE	Allows users to change RabbitMQ exchanges.
Create RabbitMQ Exchange	EXCMD_CREATE_RABBITMQ_EXCHANGE	Allows users to create RabbitMQ exchanges.

Delete RabbitMQ Exchange	EXCMD_DELETE_RABBITMQ_EXCHANGE	Allows users to delete RabbitMQ exchanges.
Show RabbitMQ Exchange	EXCMD_INQUIRE_RABBITMQ_EXCHANGE	Allows users to view the details of a specific RabbitMQ exchange.
Show RabbitMQ Exchange Names	EXCMD_INQUIRE_RABBITMQ_EXCHANGE_NAMES	Allows users to view a list of the RabbitMQ exchanges that exist.
Show RabbitMQ Exchange Stats	EXCMD_INQUIRE_RABBITMQ_EXCHANGE_STATS	Allows users to view RabbitMQ exchange statistics.
Show RabbitMQ Exchange Status	EXCMD_INQUIRE_RABBITMQ_EXCHANGE_STATUS	Allows users to view the status of RabbitMQ exchanges.
RabbitMQ NODE		
Reset RabbitMQ Node	EXCMD_RESET_RABBITMQ_NODE	Allows users to reset RabbitMQ nodes.
Show RabbitMQ Node	EXCMD_INQUIRE_RABBITMQ_NODE	Allows users to view the details of a specific RabbitMQ node.
Show RabbitMQ Node Applications	EXCMD_INQUIRE_RABBITMQ_NODE_APPLICATIONS	Allows users to view RabbitMQ node applications.
Show RabbitMQ Node Auth Mechanisms	EXCMD_INQUIRE_RABBITMQ_NODE_AUTH_MECHANISMS	Allows users to view RabbitMQ Node Auth Mechanisms.
Show RabbitMQ Node Binary	EXCMD_INQUIRE_RABBITMQ_NODE_BINARY	Allows users to view RabbitMQ Node binary information.
Show RabbitMQ Node Contexts	EXCMD_INQUIRE_RABBITMQ_NODE_CONTEXTS	Allows users to view RabbitMQ Node contexts.
Show RabbitMQ Node Exchange Types	EXCMD_INQUIRE_RABBITMQ_NODE_EXCHANGE_TYPES	Allows users to view RabbitMQ Node exchange types.
Show RabbitMQ Node Memory	EXCMD_INQUIRE_RABBITMQ_NODE_MEMORY	Allows users to view RabbitMQ Node memory information.
Show RabbitMQ Node Names	EXCMD_INQUIRE_RABBITMQ_NODE_NAMES	Allows users to view a list of the RabbitMQ nodes that exist.

Show RabbitMQ Node Stats	EXCMD_INQUIRE_RABBITMQ_NODE_STATS	Allows users to view RabbitMQ node statistics.
Show RabbitMQ Node Status	EXCMD_INQUIRE_RABBITMQ_NODE_STATUS	Allows users to view the status of RabbitMQ nodes.
RabbitMQ OPERATOR POLICY		
Change RabbitMQ Operator Policy	EXCMD_CHANGE_RABBITMQ_OPERATOR_POLICY	Allows users to change RabbitMQ operator policies.
Create RabbitMQ Operator Policy	EXCMD_CREATE_RABBITMQ_OPERATOR_POLICY	Allows users to create RabbitMQ operator policies.
Delete RabbitMQ Operator Policy	EXCMD_DELETE_RABBITMQ_OPERATOR_POLICY	Allows users to delete RabbitMQ operator policies.
Show RabbitMQ Operator Policy	EXCMD_INQUIRE_RABBITMQ_OPERATOR_POLICY	Allows users to view the details of a specific RabbitMQ operator policy.
Show RabbitMQ Operator Policy Names	EXCMD_INQUIRE_RABBITMQ_OPERATOR_POLICY_NAMES	Allows users to view a list of the RabbitMQ operator policies that exist.
RabbitMQ POLICY		
Change RabbitMQ Policy	EXCMD_CHANGE_RABBITMQ_POLICY	Allows users to change RabbitMQ policies.
Create RabbitMQ Policy	EXCMD_CREATE_RABBITMQ_POLICY	Allows users to create RabbitMQ policies.
Delete RabbitMQ Policy	EXCMD_DELETE_RABBITMQ_POLICY	Allows users to delete RabbitMQ policies.
Show RabbitMQ Policy	EXCMD_INQUIRE_RABBITMQ_POLICY	Allows users to view the details of a specific RabbitMQ policy.
Show RabbitMQ Policy Names	EXCMD_INQUIRE_RABBITMQ_POLICY_NAMES	Allows users to view a list of RabbitMQ policies.
RabbitMQ QUEUE		
Cancel RabbitMQ Queue Sync	EXCMD_CANCEL_RABBITMQ_QUEUE_SYNC	Allows users to cancel the synchronization of RabbitMQ queues.
Change RabbitMQ Queue	EXCMD_CHANGE_RABBITMQ_QUEUE	Allows users to change RabbitMQ queues.

Create RabbitMQ Queue	EXCMD_CREATE_RABBITMQ_QUEUE	Allows users to create RabbitMQ queues.
Delete RabbitMQ Queue	EXCMD_DELETE_RABBITMQ_QUEUE	Allows users to delete RabbitMQ queues.
Purge RabbitMQ Queue	EXCMD_PURGE_RABBITMQ_QUEUE	Allows users to purge RabbitMQ queues.
Show RabbitMQ Queue	EXCMD_INQUIRE_RABBITMQ_QUEUE	Allows users to view the details of a specific RabbitMQ queue.
Show RabbitMQ Queue Names	EXCMD_INQUIRE_RABBITMQ_QUEUE_NAMES	Allows users to view a list of the RabbitMQ queues that exist.
Show RabbitMQ Queue Stats	EXCMD_INQUIRE_RABBITMQ_QUEUE_STATS	Allows users to view the statistics of RabbitMQ queues.
Show RabbitMQ Queue Status	EXCMD_INQUIRE_RABBITMQ_QUEUE_STATUS	Allows users to view the status of RabbitMQ queues.
Sync RabbitMQ Queue	EXCMD_SYNC_RABBITMQ_QUEUE	Allows users to synchronize RabbitMQ queues.
RabbitMQ SERVER		
Change RabbitMQ Cluster Name	EXCMD_CHANGE_RABBITMQ_CLUSTER_NAME	Allows users to change RabbitMQ Server name.
Change RabbitMQ Topic Permission	EXCMD_CHANGE_RABBITMQ_TOPIC_PERMISSION	Allows users to change RabbitMQ Topic Permissions.
Change RabbitMQ User Permission	EXCMD_CHANGE_RABBITMQ_USER_PERMISSION	Allows users to change RabbitMQ User Permissions.
Check RabbitMQ Health Alarms	EXCMD_CHECK_RABBITMQ_HEALTH_ALARMS	Allows users to check RabbitMQ alarms health checks.
Check RabbitMQ Health Certificate Expiration	EXCMD_CHECK_RABBITMQ_HEALTH_CERTIFICATE_EXPIRATION	Allows users to perform RabbitMQ certificate-expiration health checks.
Check RabbitMQ Health Local Alarms	EXCMD_CHECK_RABBITMQ_HEALTH_LOCAL_ALARMS	Allows users to perform RabbitMQ local-alarm health checks.

Check RabbitMQ Health Node Mirror Sync Critical	EXCMD_CHECK_RABBITMQ_HEALTH_NODE_MIRROR_SYNC_CRITICAL	Allows users to perform node-is-mirror-sync-critical health check.
Check RabbitMQ Health Node Quorum Critical	EXCMD_CHECK_RABBITMQ_HEALTH_NODE_QUORUM_CRITICAL	Allows users to perform node-is-quorum-critical health check.
Check RabbitMQ Health Port Listener	EXCMD_CHECK_RABBITMQ_HEALTH_PORT_LISTENER	Allows users to perform port-listener health check.
Check RabbitMQ Health Protocol Listener	EXCMD_CHECK_RABBITMQ_HEALTH_PROTOCOL_LISTENER	Allows users to perform protocol-listener health check.
Check RabbitMQ Health Virtual Hosts	EXCMD_CHECK_RABBITMQ_HEALTH_VIRTUAL_HOSTS	Allows users to perform virtual-hosts health check.
Create RabbitMQ Binding	EXCMD_CREATE_RABBITMQ_BINDING	Allows users to add RabbitMQ Vhost bindings.
Create RabbitMQ Topic Permission	EXCMD_CREATE_RABBITMQ_TOPIC_PERMISSION	Allows users to create RabbitMQ topic permissions.
Create RabbitMQ User Permission	EXCMD_CREATE_RABBITMQ_USER_PERMISSION	Allows users to create RabbitMQ user permissions.
Delete RabbitMQ Auth Attempts	EXCMD_DELETE_RABBITMQ_AUTH_ATTEMPTS	Allows users to delete RabbitMQ auth attempts.
Delete RabbitMQ Binding	EXCMD_DELETE_RABBITMQ_BINDING	Allows users to delete RabbitMQ Vhost bindings.
Delete RabbitMQ Global Parameter	EXCMD_DELETE_RABBITMQ_GLOBAL_PARAMETER	Allows users to delete RabbitMQ Server global parameters.
Delete RabbitMQ Topic Permission	EXCMD_DELETE_RABBITMQ_TOPIC_PERMISSION	Allows users to delete RabbitMQ topic permissions.
Delete RabbitMQ User Permission	EXCMD_DELETE_RABBITMQ_USER_PERMISSION	Allows users to delete RabbitMQ user permissions.

Rebalance RabbitMQ Queues	EXCMD_REBALANCE_RABBITMQ_QUEUES	Allows users to rebalance RabbitMQ queues.
Set RabbitMQ Definitions	EXCMD_SET_RABBITMQ_DEFINITIONS	Allows users to set RabbitMQ definitions.
Set RabbitMQ Global Parameter	EXCMD_SET_RABBITMQ_GLOBAL_PARAMETER	Allows users to set (change or add) RabbitMQ Server global parameters.
Show RabbitMQ Auth	EXCMD_INQUIRE_RABBITMQ_AUTH	Allows users to view RabbitMQ Server OAuth information.
Show RabbitMQ Auth Attempts	EXCMD_INQUIRE_RABBITMQ_AUTH_ATTEMPTS	Allows users to view RabbitMQ Server auth attempts.
Show RabbitMQ Binding	EXCMD_INQUIRE_RABBITMQ_BINDING	Allows users to view the details of a specific RabbitMQ Vhost binding.
Show RabbitMQ Bindings	EXCMD_INQUIRE_RABBITMQ_BINDINGS	Allows users to view a list of RabbitMQ Node bindings.
Show RabbitMQ Definitions	EXCMD_INQUIRE_RABBITMQ_DEFINITIONS	Allows users to view RabbitMQ definitions.
Show RabbitMQ Exchange Destination Bindings	EXCMD_INQUIRE_RABBITMQ_EXCHANGE_DESTIN ATION_BINDINGS	Allows users to inquire RabbitMQ Exchange destination bindings.
Show RabbitMQ Exchange Source Bindings	EXCMD_INQUIRE_RABBITMQ_EXCHANGE_SOURC E_BINDINGS	Allows users to inquire RabbitMQ Exchange source bindings.
Show RabbitMQ Extensions	EXCMD_INQUIRE_RABBITMQ_EXTENSIONS	Allows users to inquire RabbitMQ Server extensions.
Show RabbitMQ Feature Flags	EXCMD_INQUIRE_RABBITMQ_FEATURE_FLAGS	Allows users to inquire RabbitMQ Server feature flags.
Show RabbitMQ Global Parameters	EXCMD_INQUIRE_RABBITMQ_GLOBAL_PARAMETE RS	Allows users to inquire RabbitMQ Server global parameters.
Show RabbitMQ Queue Bindings	EXCMD_INQUIRE_RABBITMQ_QUEUE_BINDINGS	Allows users to inquire RabbitMQ Queue bindings.
Show RabbitMQ Server	EXCMD_INQUIRE_RABBITMQ_SERVER	Allows users to inquire RabbitMQ Server properties.

Show RabbitMQ Server Contexts	EXCMD_INQUIRE_RABBITMQ_SERVER_CONTEXTS	Allows users to inquire RabbitMQ Server contexts.
Show RabbitMQ Server Exchange Types	EXCMD_INQUIRE_RABBITMQ_SERVER_EXCHANGE_TYPES	Allows users to inquire RabbitMQ Server exchange types.
Show RabbitMQ Server Listeners	EXCMD_INQUIRE_RABBITMQ_SERVER_LISTENERS	Allows users to inquire RabbitMQ Server listeners.
Show RabbitMQ Server Names	EXCMD_INQUIRE_RABBITMQ_SERVER_NAMES	Allows users to view RabbitMQ Server Names.
Show RabbitMQ Server Stats	EXCMD_INQUIRE_RABBITMQ_SERVER_STATS	Allows users to view RabbitMQ Server statistics.
Show RabbitMQ Server Status	EXCMD_INQUIRE_RABBITMQ_SERVER_STATUS	Allows users to view the status of RabbitMQ servers.
Show RabbitMQ Topic Permissions	EXCMD_INQUIRE_RABBITMQ_TOPIC_PERMISSIONS	Allows users to view RabbitMQ topic permissions.
Show RabbitMQ User Permissions	EXCMD_INQUIRE_RABBITMQ_USER_PERMISSIONS	Allows users to view RabbitMQ user permissions.
RabbitMQ USER		
Change RabbitMQ User	EXCMD_CHANGE_RABBITMQ_USER	Allows users to change RabbitMQ users.
Create RabbitMQ User	EXCMD_CREATE_RABBITMQ_USER	Allows users to create RabbitMQ users.
Delete RabbitMQ User	EXCMD_DELETE_RABBITMQ_USER	Allows users to delete RabbitMQ users.
Delete RabbitMQ User Limits	EXCMD_DELETE_RABBITMQ_USER_LIMITS	Allows users to delete RabbitMQ user limits (the limits on the number of connections and channels a specific user can open).
Set RabbitMQ User Limits	EXCMD_SET_RABBITMQ_USER_LIMITS	Allows users to set RabbitMQ user limits (the limits on the number of connections and channels a specific user can open).
Show RabbitMQ User	EXCMD_INQUIRE_RABBITMQ_USER	Allows users to view the details of a specific RabbitMQ user name.

Show RabbitMQ User Limits	EXCMD_INQUIRE_RABBITMQ_USER_LIMITS	Allows users to view RabbitMQ user limits.
Show RabbitMQ User Names	EXCMD_INQUIRE_RABBITMQ_USER_NAMES	Allows users to view a list of the RabbitMQ user names that exist.
RabbitMQ VHOST		
Change RabbitMQ Vhost	EXCMD_CHANGE_RABBITMQ_VHOST	Allows users to change RabbitMQ virtual hosts.
Check RabbitMQ Vhost Aliveness	EXCMD_CHECK_RABBITMQ_VHOST_ALIVENESS	Allows users to check for the aliveness of a RabbitMQ virtual host (alive = 200 status "ok" response)
Create RabbitMQ Vhost	EXCMD_CREATE_RABBITMQ_VHOST	Allows users to create RabbitMQ virtual hosts.
Delete RabbitMQ Vhost	EXCMD_DELETE_RABBITMQ_VHOST	Allows users to delete RabbitMQ virtual hosts.
Delete RabbitMQ Vhost Limits	EXCMD_DELETE_RABBITMQ_VHOST_LIMITS	Allows users to delete the limits (for example, number of queues or concurrent connections) that have been set on a virtual host.
Set RabbitMQ Vhost Limits	EXCMD_SET_RABBITMQ_VHOST_LIMITS	Allows users to set limits on a virtual host (for example, number of queues or concurrent connections)
Show RabbitMQ Vhost	EXCMD_INQUIRE_RABBITMQ_VHOST	Allows users to view the details of a specific RabbitMQ virtual host.
Show RabbitMQ Vhost Limits	EXCMD_INQUIRE_RABBITMQ_VHOST_LIMITS	Allows users to view the limits (for example, number of queues or concurrent connections) that have been set on a virtual host.
Show RabbitMQ Vhost Names	EXCMD_INQUIRE_RABBITMQ_VHOST_NAMES	Allows users to view a list of the RabbitMQ Vhost names that exist.
Show RabbitMQ Vhost Stats	EXCMD_INQUIRE_RABBITMQ_VHOST_STATS	Allows users to view the statistics for a virtual host.
Show RabbitMQ Vhost Status	EXCMD_INQUIRE_RABBITMQ_VHOST_STATUS	Allows users to view RabbitMQ virtual host status.

Start RabbitMQ Vhost	EXCMD_START_RABBITMQ_VHOST	Allows users to start RabbitMQ virtual hosts.

Table C-8. Solace Rights		
Right	**Feature Code**	**Explanation**
SOLACE ACL PROFILE		
Change Solace ACL Profile	EXCMD_CHANGE_SOLACE_ACL_PROFILE	Allows users to change Solace ACL profiles.
Create Solace ACL Profile	EXCMD_CREATE_SOLACE_ACL_PROFILE	Allows users to create Solace ACL profiles.
Create Solace ACL Profile Client Connect Exception	EXCMD_CREATE_SOLACE_ACL_PROFILE_CLIENT_ CONNECT_EXCEPTION	Allows users to create Solace ACL Profile Client Connect Exceptions.
Create Solace ACL Profile Publish Topic Exception	EXCMD_CREATE_SOLACE_ACL_PROFILE_PUBLIS H_TOPIC_EXCEPTION	Allows users to create Solace ACL Profile Publish Topic Exceptions.
Create Solace ACL Profile Subscribe Share Name Exception	EXCMD_CREATE_SOLACE_ACL_PROFILE_SUBSC RIBE_SHARE_NAME_EXCEPTION	Allows users to create Solace ACL Profile Subscribe Share Name Exceptions.
Create Solace ACL Profile Subscribe Topic Exception	EXCMD_CREATE_SOLACE_ACL_PROFILE_SUBSC RIBE_TOPIC_EXCEPTION	Allows users to create Solace ACL Profile Subscribe Topic Exceptions.
Delete Solace ACL Profile	EXCMD_DELETE_SOLACE_ACL_PROFILE	Allows users to delete Solace ACL Profiles.
Delete Solace ACL Profile Client Connect Exception	EXCMD_DELETE_SOLACE_ACL_PROFILE_CLIENT_ CONNECT_EXCEPTION	Allows users to delete Solace ACL Profile Client Connect Exceptions.
Delete Solace ACL Profile Publish Topic Exception	EXCMD_DELETE_SOLACE_ACL_PROFILE_PUBLISH _TOPIC_EXCEPTION	Allows users to delete Solace ACL Profile Publish Topic Exceptions.
Delete Solace ACL Profile Subscribe Share Name Exception	EXCMD_DELETE_SOLACE_ACL_PROFILE_SUBSCR IBE_SHARE_NAME_EXCEPTION	Allows users to delete Solace ACL Profile Subscribe Share Name Exceptions.
Delete Solace ACL Profile Subscribe Topic Exception	EXCMD_DELETE_SOLACE_ACL_PROFILE_SUBSCR IBE_TOPIC_EXCEPTION	Allows users to delete Solace ACL Profile Subscribe Topic Exceptions.

Show Solace ACL Profile	EXCMD_INQUIRE_SOLACE_ACL_PROFILE	Allows users to view the details of a specific Solace ACL Profile.
Show Solace ACL Profile Client Connect Exception	EXCMD_INQUIRE_SOLACE_ACL_PROFILE_CLIENT _CONNECT_EXCEPTION	Allows users to browse client connect exceptions.
Show Solace ACL Profile Publish Topic Exception	EXCMD_INQUIRE_SOLACE_ACL_PROFILE_PUBLIS H_TOPIC_EXCEPTION	Allows users to browse publish topic exceptions.
Show Solace ACL Profile Status	EXCMD_INQUIRE_SOLACE_ACL_PROFILE_STATUS	Allows users to view the status of Solace ACL profiles.
Show Solace ACL Profile Subscribe Share Name Exception	EXCMD_INQUIRE_SOLACE_ACL_PROFILE_SUBSC RIBE_SHARE_NAME_EXCEPTION	Allows users to browse shared subscription exceptions.
Show Solace ACL Profile Subscribe Topic Exception	EXCMD_INQUIRE_SOLACE_ACL_PROFILE_SUBSC RIBE_TOPIC_EXCEPTION	Allows users to browse topic subscription exceptions.
Show Solace ACL Profiles	EXCMD_INQUIRE_SOLACE_ACL_PROFILE_NAMES	Allows users to view a list of the Solace ACL Profiles that exist.
SOLACE BRIDGE		
Change Solace Bridge	EXCMD_INQUIRE_SOLACE_BRIDGE, EXCMD_CHANGE_SOLACE_BRIDGE	Allows users to change Solace bridges.
Change Solace Bridge Status	EXCMD_CHANGE_SOLACE_BRIDGE_STATUS	Allows users to change the status of (enable or disable) Solace bridges.
Clear Solace Bridge Event	EXCMD_CLEAR_SOLACE_BRIDGE_EVENT	Allows users to clear a specified Solace bridge event.
Clear Solace Bridge Statistics	EXCMD_INQUIRE_SOLACE_BRIDGE_STATISTICS	Allows users to clear the statistics of Solace bridges.
Create Solace Bridge	EXCMD_CREATE_SOLACE_BRIDGE	Allows users to create Solace bridges.
Create Solace Bridge Remote Subscription	EXCMD_CREATE_SOLACE_BRIDGE_REMOTE_SUB SCRIPTION	Allows users to create Solace bridge remote subscriptions.
Delete Solace Bridge	EXCMD_DELETE_SOLACE_BRIDGE	Allows users to remove Solace bridges.
Delete Solace Bridge Remote Subscription	EXCMD_DELETE_SOLACE_BRIDGE_REMOTE_SUB SCRIPTION	Allows users to remove Solace bridge remote subscriptions.

Disconnect Solace Bridge	EXCMD_DISCONNECT_SOLACE_BRIDGE	Allows users to disconnect a Solace bridge.
Show Solace Bridge	EXCMD_INQUIRE_SOLACE_BRIDGE	Allows users to view the details of a specific bridge.
Show Solace Bridge Remote Subscription	EXCMD_INQUIRE_SOLACE_BRIDGE_REMOTE_SUBSCRIPTION	Allows users to view Solace bridge remote subscriptions.
Show Solace Bridge Statistics	EXCMD_INQUIRE_SOLACE_BRIDGE_STATISTICS	Allows users to view bridge statistics.
Show Solace Bridge Status	EXCMD_INQUIRE_SOLACE_BRIDGE_STATUS	Allows users to view the status of Solace bridges.
Show Solace Bridges	EXCMD_INQUIRE_SOLACE_BRIDGE_NAMES	Allows users to view a list of the bridges that exist.
SOLACE CACHE CLUSTER		
Change Solace Cache Cluster	EXCMD_CHANGE_SOLACE_CACHE_CLUSTER	Allows users to change Solace cache clusters.
Change Solace Cache Cluster Status	EXCMD_CHANGE_SOLACE_CACHE_CLUSTER_STATUS	Allows users to change the status of (enable or disable) Solace cache clusters.
Clear Solace Cache Cluster Event	EXCMD_CLEAR_SOLACE_CACHE_CLUSTER_EVENT	Allows users to clear a specified Solace cache cluster event.
Create Solace Cache Cluster	EXCMD_CREATE_SOLACE_CACHE_CLUSTER	Allows users to create a Solace cache cluster.
Create Solace Cache Cluster Home Cache Cluster	EXCMD_CREATE_SOLACE_CACHE_CLUSTER_HOME_CACHE_CLUSTER	Allows users to create a Solace home cache cluster.
Create Solace Cache Cluster Home Cache Cluster Topic Prefix	EXCMD_CREATE_SOLACE_CACHE_CLUSTER_HOME_CACHE_CLUSTER_TOPIC	Allows users to create a Solace home cache cluster topic prefix.
Create Solace Cache Cluster Topic	EXCMD_CREATE_SOLACE_CACHE_CLUSTER_TOPIC	Allows users to create a Solace cache cluster topic.
Delete Solace Cache Cluster	EXCMD_DELETE_SOLACE_CACHE_CLUSTER	Allows users to delete Solace cache clusters.
Delete Solace Cache Cluster Home Cache Cluster	EXCMD_DELETE_SOLACE_CACHE_CLUSTER_HOME_CACHE_CLUSTER	Allows users to delete a Solace home cache cluster.

Delete Solace Cache Cluster Home Cache Cluster Topic Prefix	EXCMD_DELETE_SOLACE_CACHE_CLUSTER_HOME_CACHE_CLUSTER_TOPIC	Allows users to delete a Solace home cache cluster topic prefix.
Delete Solace Cache Cluster Messages	EXCMD_DELETE_SOLACE_CACHE_CLUSTER_MESSAGES	Allows users to delete Solace cache cluster messages.
Delete Solace Cache Cluster Topic	EXCMD_DELETE_SOLACE_CACHE_CLUSTER_TOPIC	Allows users to delete Solace cache cluster topics.
Show Solace Cache Cluster	EXCMD_INQUIRE_SOLACE_CACHE_CLUSTER	Allows users to view the details of a specific Solace cache cluster.
Show Solace Cache Cluster Advanced	EXCMD_INQUIRE_SOLACE_CACHE_CLUSTER_ADVANCED	Allows users to view advanced properties for Solace cache clusters by turning on the Advanced slider in the properties dialog.
Show Solace Cache Cluster Home Cache Cluster	EXCMD_INQUIRE_SOLACE_CACHE_CLUSTER_HOME_CACHE_CLUSTER	Allows users to view Solace home cache clusters.
Show Solace Cache Cluster Home Cache Cluster Topic Prefix	EXCMD_INQUIRE_SOLACE_CACHE_CLUSTER_HOME_CACHE_CLUSTER_TOPIC	Allows users to view Solace home cache cluster topic prefixes.
Show Solace Cache Cluster Status	EXCMD_INQUIRE_SOLACE_CACHE_CLUSTER_STATUS	Allows users to view the status of Solace cache clusters.
Show Solace Cache Cluster Topic	EXCMD_INQUIRE_SOLACE_CACHE_CLUSTER_TOPIC	Allows users to view Solace cache cluster topics.
Show Solace Cache Clusters	EXCMD_INQUIRE_SOLACE_CACHE_CLUSTER_NAMES	Allows users to view a list of the Solace cache clusters that exist.
Start Solace Cache Cluster	EXCMD_START_SOLACE_CACHE_CLUSTER	Allows users to start a Solace cache cluster.
SOLACE CACHE INSTANCE		
Backup Solace Cache Instance Messages	EXCMD_BACKUP_SOLACE_CACHE_INSTANCE_MESSAGES	Allows users to back up Solace cache instance messages.
Cancel Solace Cache Instance Backup Messages	EXCMD_CANCEL_SOLACE_CACHE_INSTANCE_BACKUP_MESSAGES	Allows users to cancel an ongoing Solace cache instance message backup.

Cancel Solace Cache Instance Restore Messages	EXCMD_CANCEL_SOLACE_CACHE_INSTANCE_RESTORE_MESSAGES	Allows users to cancel an ongoing Solace cache instance message restore
Change Solace Cache Instance	EXCMD_CHANGE_SOLACE_CACHE_INSTANCE	Allows users to change Solace cache instances.
Change Solace Cache Instance Status	EXCMD_CHANGE_SOLACE_CACHE_INSTANCE_STATUS	Allows users to change the status of (enable or disable) Solar cache instances.
Clear Solace Cache Instance Event	EXCMD_CLEAR_SOLACE_CACHE_INSTANCE_EVENT	Allows users to clear a specified Solace cache instance event.
Clear Solace Cache Instance Statistics	EXCMD_CLEAR_SOLACE_CACHE_INSTANCE_STATS	Allows users to clear the statistics of Solace cache instances.
Create Solace Cache Instance	EXCMD_CREATE_SOLACE_CACHE_INSTANCE	Allows users to create Solace cache instances.
Delete Solace Cache Instance	EXCMD_DELETE_SOLACE_CACHE_INSTANCE	Allows users to remove Solace cache instances.
Delete Solace Cache Instance Messages	EXCMD_DELETE_SOLACE_CACHE_INSTANCE_MESSAGES	Allows users to remove Solace cache instance messages.
Restore Solace Cache Instance Messages	EXCMD_RESTORE_SOLACE_CACHE_INSTANCE_MESSAGES	Allows users to restore Solace cache instance messages.
Show Solace Cache Instance	EXCMD_INQUIRE_SOLACE_CACHE_INSTANCE	Allows users to view the details of a specific Solace cache instance.
Show Solace Cache Instance Remote Home Cache Cluster	EXCMD_INQUIRE_SOLACE_CACHE_INSTANCE_REMOTE_HOME_CACHE_CLUSTER	Allows users to view Solace cache instance remote home cache clusters
Show Solace Cache Instance Remote Topic	EXCMD_INQUIRE_SOLACE_CACHE_INSTANCE_REMOTE_TOPIC	Allows users to view Solace cache instance remote topics.
Show Solace Cache Instance Statistics	EXCMD_INQUIRE_SOLACE_CACHE_INSTANCE_STATISTICS	Allows users to view the statistics of Solace cache instances.
Show Solace Cache Instance Status	EXCMD_INQUIRE_SOLACE_CACHE_INSTANCE_STATUS	Allows users to view the status of Solace cache instances.
Show Solace Cache Instances	EXCMD_INQUIRE_SOLACE_CACHE_INSTANCE_NAMES	Allows users to view a list of the Solace cache instances that exist.
Start Solace Cache Instance	EXCMD_START_SOLACE_CACHE_INSTANCE	Allows users to start Solace cache instances.
SOLACE CLIENT		

Clear Solace Client Event	EXCMD_CLEAR_SOLACE_CLIENT_EVENT	Allows users to clear specified Solace client events.
Clear Solace Client Statistics	EXCMD_CLEAR_SOLACE_CLIENT_STATS	Allows users to clear the statistics of Solace clients.
Delete Solace Client Transacted Session	EXCMD_DELETE_SOLACE_CLIENT_TRANSACTED_ SESSION	Allows users to remove Solace client transacted sessions.
Disconnect Solace Client	EXCMD_DISCONNECT_SOLACE_CLIENT	Allows users to disconnect Solace clients.
Show Solace Client	EXCMD_INQUIRE_SOLACE_CLIENT	Allows users to view the details of a specific Solace client.
Show Solace Client Connection	EXCMD_INQUIRE_SOLACE_CLIENT_CONNECTION	Allows users to view Solace client connections.
Show Solace Client Queue Statistics	EXCMD_INQUIRE_SOLACE_CLIENT_QUEUE_STAT S	Allows users to view Solace client queue statistics.
Show Solace Client RX Flow	EXCMD_INQUIRE_SOLACE_CLIENT_RX_FLOW	Allows users to view Solace client RX flows.
Show Solace Client Statistics	EXCMD_INQUIRE_SOLACE_CLIENT_STATISTICS	Allows users to view the statistics of Solace clients.
Show Solace Client Subscription	EXCMD_INQUIRE_SOLACE_CLIENT_SUBSCRIPTIO N	Allows users to view Solace client subscriptions.
Show Solace Client Transacted Session	EXCMD_INQUIRE_SOLACE_CLIENT_TRANSACTED _SESSION	Allows users to view Solace client transacted sessions.
Show Solace Client TX Flow	EXCMD_INQUIRE_SOLACE_CLIENT_TX_FLOW	Allows users to view Solace client TX flows.
Show Solace Clients	EXCMD_INQUIRE_SOLACE_CLIENT_NAMES	Allows users to view a list of the Solace clients that exist.
SOLACE CLIENT CERTIFICATE AUTHORITY		
Change Solace Client Certificate Authority	EXCMD_CHANGE_SOLACE_CLIENT_CERT_AUT	Allows users to change Solace client certificate authorities.
Create Solace Client Certificate Authority	EXCMD_CREATE_SOLACE_CLIENT_CERT_AUT	Allows users to create Solace client certificate authorities.

Create Solace Client Certificate Authority OCSP Trusted Common	EXCMD_CREATE_SOLACE_CLIENT_CERT_AUT_OCSP_TRUSTED_COMMON_NAME	Allows users to create Solace client certificate authority OCSP trusted common names.
Delete Solace Client Certificate Authority	EXCMD_DELETE_SOLACE_CLIENT_CERT_AUT	Allows users to remove Solace client certificate authorities.
Delete Solace Client Certificate Authority OCSP Trusted Common	EXCMD_DELETE_SOLACE_CLIENT_CERT_AUT_OCSP_TRUSTED_COMMON_NAME	Allows users to remove Solace client certificate authority OCSP trusted common names.
Refresh Solace Client Certificate Authority CRL	EXCMD_REFRESH_SOLACE_CLIENT_CERT_AUT_CRL	Allows users to refresh the Solace client certificate authority certificate revocation list.
Show Solace Client Certificate Authorities	EXCMD_INQUIRE_SOLACE_CLIENT_CERT_AUT_NAMES	Allows users to view a list of the Solace client certificate authorities that exist.
Show Solace Client Certificate Authority	EXCMD_INQUIRE_SOLACE_CLIENT_CERT_AUT	Allows users to view Solace client certificate authorities.
Show Solace Client Certificate Authority OCSP Trusted Common	EXCMD_INQUIRE_SOLACE_CLIENT_CERT_AUT_OCSP_TRUSTED_COMMON_NAME	Allows users to view Solace client certificate authority OCSP trusted names.
Show Solace Client Certificate Authority Status	EXCMD_INQUIRE_SOLACE_CLIENT_CERT_AUT_STATUS	Allows users to view the status of Solace client certificate authorities.
SOLACE CLIENT PROFILE		
Change Solace Client Profile	EXCMD_CHANGE_SOLACE_CLIENT_PROFILE	Allows users to change Solace client profiles.
Create Solace Client Profile	EXCMD_CREATE_SOLACE_CLIENT_PROFILE	Allows users to create Solace client profiles.
Delete Solace Client Profile	EXCMD_DELETE_SOLACE_CLIENT_PROFILE	Allows users to delete Solace client profiles.

Show Solace Client Profile	EXCMD_INQUIRE_SOLACE_CLIENT_PROFILE	Allows users to view the details of a specific Solace client profile.
Show Solace Client Profile Advanced	EXCMD_INQUIRE_SOLACE_CLIENT_PROFILE_ADVANCED	Allows users to view advanced properties for Solace client profiles by turning on the Advanced slider in the properties
Show Solace Client Profile Status	EXCMD_INQUIRE_SOLACE_CLIENT_PROFILE_STATUS	Allows users to view the status of Solace client profiles.
Show Solace Client Profiles	EXCMD_INQUIRE_SOLACE_CLIENT_PROFILE_NAMES	Allows users to view a list of the Solace client profiles that exist.
SOLACE CLIENT USERNAME		
Change Solace Client Username	EXCMD_CHANGE_SOLACE_CLIENT_USERNAME	Allows users to change Solace client usernames.
Change Solace Client Username Status	EXCMD_CHANGE_SOLACE_CLIENT_USERNAME_STATUS	Allows users to change the status of (enable or disable) Solace client usernames.
Create Solace Client Username	EXCMD_CREATE_SOLACE_CLIENT_USERNAME	Allows users to create Solace client usernames.
Delete Solace Client Username	EXCMD_DELETE_SOLACE_CLIENT_USERNAME	Allows users to delete client usernames.
Show Solace Client Username	EXCMD_INQUIRE_SOLACE_CLIENT_USERNAME	Allows users to view the details of a specific Solace client username.
Show Solace Client Username Status	EXCMD_INQUIRE_SOLACE_CLIENT_USERNAME_STATUS	Allows users to view the status of Solace client usernames.
Show Solace Client Usernames	EXCMD_INQUIRE_SOLACE_CLIENT_USERNAME_NAMES	Allows users to view a list of the Solace client usernames that exist.
SOLACE CSPF NEIGHBOR		
Change Solace CSPF Neighbor	EXCMD_CHANGE_SOLACE_CSPF_NEIGHBOR	Allows users to change Solace CSPF neighbors.
Create Solace CSPF Neighbor	EXCMD_CREATE_SOLACE_CSPF_NEIGHBOR	Allows users to create Solace CSPF neighbors.

Create Solace CSPF Neighbor TLS Trusted Common	EXCMD_CREATE_SOLACE_CSPF_NEIGHBOR_TLS _TRUSTED_COMMON_NAME	Allows users to create Solace CSPF neighbor TLS names.
Delete Solace CSPF Neighbor	EXCMD_DELETE_SOLACE_CSPF_NEIGHBOR	Allows users to delete Solace CSPF neighbors.
Delete Solace CSPF Neighbor TLS Trusted Common	EXCMD_DELETE_SOLACE_CSPF_NEIGHBOR_TLS_ TRUSTED_COMMON_NAME	Allows users to delete Solace CSPF neighbor TLS names.
Show Solace CSPF Neighbor	EXCMD_INQUIRE_SOLACE_CSPF_NEIGHBOR	Allows users to view the details of a specific Solace CSPF neighbor.
Show Solace CSPF Neighbor Status	EXCMD_INQUIRE_SOLACE_CSPF_NEIGHBOR_STA TUS	Allows users to view the status of Solace CSPF neighbors.
Show Solace CSPF Neighbor TLS Trusted Common	EXCMD_INQUIRE_SOLACE_CSPF_NEIGHBOR_TLS _TRUSTED_COMMON_NAME	Allows users to view Solace CSPF neighbor TLS names.
Show Solace CSPF Neighbor XML Connection	EXCMD_INQUIRE_SOLACE_CSPF_NEIGHBOR_XML _CONNECTION	Allows users to view Solace CSPF neighbor XML connections.
Show Solace CSPF Neighbors	EXCMD_INQUIRE_SOLACE_CSPF_NEIGHBOR	Allows users to view a list of the Solace CSPF neighbors that exist.
SOLACE DISTRIBUTED CACHE		
Change Solace Distributed Cache	EXCMD_CHANGE_SOLACE_DISTRIBUTED_CACHE	Allows users to change Solace distributed caches.
Change Solace Distributed Cache Status	EXCMD_CHANGE_SOLACE_DISTRIBUTED_CACHE_STATUS	Allows users to change the status of (enable or disable) Solace distributed caches.
Clear Solace Distributed Cache Event	EXCMD_CLEAR_SOLACE_DISTRIBUTED_CACHE_EVENT	Allows users to clear a specified Solace distributed cache event.
Create Solace Distributed Cache	EXCMD_CREATE_SOLACE_DISTRIBUTED_CACHE	Allows users to create Solace distributed caches.

Delete Solace Distributed Cache	EXCMD_DELETE_SOLACE_DISTRIBUTED_CACHE	Allows users to remove Solace distributed caches.
Delete Solace Distributed Cache Messages	EXCMD_DELETE_SOLACE_DISTRIBUTED_CACHE_MESSAGES	Allows users to remove Solace distributed cache messages.
Show Solace Distributed Cache	EXCMD_INQUIRE_SOLACE_DISTRIBUTED_CACHE	Allows users to view the details of a specific Solace distributed cache.
Show Solace Distributed Cache Status	EXCMD_INQUIRE_SOLACE_DISTRIBUTED_CACHE_STATUS	Allows users to view the status of Solace distributed caches.
Show Solace Distributed Caches	EXCMD_INQUIRE_SOLACE_DISTRIBUTED_CACHE_NAMES	Allows users to view a list of the Solace distributed caches that exist.
Start Solace Distributed Cache	EXCMD_START_SOLACE_DISTRIBUTED_CACHE	Allows users to start Solace distributed caches.
SOLACE DMR CLUSTER		
Change Solace DMR Cluster	EXCMD_CHANGE_SOLACE_DMR_CLUSTER	Allows users to change Solace DMR clusters.
Change Solace DMR Cluster Link	EXCMD_CHANGE_SOLACE_DMR_CLUSTER_LINK	Allows users to change Solace DMR cluster links.
Create Solace DMR Cluster	EXCMD_CREATE_SOLACE_DMR_CLUSTER	Allows users to create Solace DMR clusters.
Create Solace DMR Cluster Link	EXCMD_CREATE_SOLACE_DMR_CLUSTER_LINK	Allows users to create Solace DMR cluster links.
Create Solace DMR Cluster Link Remote Address	EXCMD_CREATE_SOLACE_DMR_CLUSTER_LINK_REMOTE_ADDRESS	Allows users to create a Remote Address on the Solace DMR Cluster Link Remote Address dialog.
Delete Solace DMR Cluster	EXCMD_DELETE_SOLACE_DMR_CLUSTER	Allows users to remove Solace DMR clusters.
Delete Solace DMR Cluster Link	EXCMD_DELETE_SOLACE_DMR_CLUSTER_LINK	Allows users to remove Solace DMR cluster links.
Delete Solace DMR Cluster Link Remote Address	EXCMD_DELETE_SOLACE_DMR_CLUSTER_LINK_REMOTE_ADDRESS	Allows users to remove Solace DMR cluster link remote addresses.
Show Solace DMR Cluster	EXCMD_INQUIRE_SOLACE_DMR_CLUSTER	Allows users to view the details of a specific DMR cluster.
Show Solace DMR Cluster Link	EXCMD_INQUIRE_SOLACE_DMR_CLUSTER_LINK	Allows users to view Solace DMR cluster links.

Show Solace DMR Cluster Link Channel	EXCMD_INQUIRE_SOLACE_DMR_CLUSTER_LINK_CHANNEL	Allows users to browse the channels of a Solace DMR cluster link.
Show Solace DMR Cluster Link Remote Address	EXCMD_INQUIRE_SOLACE_DMR_CLUSTER_LINK_REMOTE_ADDRESS	Allows users to browse the remote addresses of a Solace DMR cluster link.
Show Solace DMR Cluster Link TLS Trusted Common	EXCMD_INQUIRE_SOLACE_DMR_CLUSTER_LINK_TLS_TRUSTED_COMMON_NAME	Allows users to browse the TLS trusted names of a Solace DMR cluster link.
Show Solace DMR Cluster Status	EXCMD_INQUIRE_SOLACE_DMR_CLUSTER_STATUS	Allows users to view the status of Solace DMR clusters.
Show Solace DMR Cluster Topology Issue	EXCMD_INQUIRE_SOLACE_DMR_CLUSTER_TOPOLOGY_ISSUE	Allows users to view Solace DMR cluster topology issues.
Show Solace DMR Clusters	EXCMD_INQUIRE_SOLACE_DMR_CLUSTER_NAMES	Allows users to view a list of the Solace DMR clusters that exist.
SOLACE JNDI CONNECTION FACTORY		
Change Solace JNDI Connection Factory	EXCMD_CHANGE_SOLACE_JNDI_CONN_FACTORY	Allows users to change Solace JNDI connection factories.
Create Solace JNDI Connection Factory	EXCMD_CREATE_SOLACE_JNDI_CONN_FACTORY	Allows users to create Solace JNDI connection factories.
Delete Solace JNDI Connection Factory	EXCMD_DELETE_SOLACE_JNDI_CONN_FACTORY	Allows users to delete Solace JNDI connection factories.
Show Solace JNDI Connection Factories	EXCMD_INQUIRE_SOLACE_JNDI_CONN_FACTORY_NAMES	Allows users to view a list of the Solace JNDI connection factories that exist.
Show Solace JNDI Connection Factory	EXCMD_INQUIRE_SOLACE_JNDI_CONN_FACTORY	Allows users to view the details of a specific Solace JNDI connection factory.
SOLACE JNDI QUEUE		
Change Solace JNDI Queue	EXCMD_CHANGE_SOLACE_JNDI_QUEUE	Allows users to change Solace JNDI queues.
Create Solace JNDI Queue	EXCMD_CREATE_SOLACE_JNDI_QUEUE	Allows users to create Solace JNDI queues.

Delete Solace JNDI Queue	EXCMD_DELETE_SOLACE_JNDI_QUEUE	Allows users to delete Solace JNDI queues.
Show Solace JNDI Queue	EXCMD_INQUIRE_SOLACE_JNDI_QUEUE	Allows users to view the details of a specific Solace JNDI queue.
Show Solace JNDI Queues	EXCMD_INQUIRE_SOLACE_JNDI_QUEUE_NAMES	Allows users to view a list of the Solace JNDI queues that exist.
SOLACE JNDI TOPIC		
Change Solace JNDI Topic	EXCMD_CHANGE_SOLACE_JNDI_TOPIC	Allows users to change Solace JNDI topics.
Create Solace JNDI Topic	EXCMD_CREATE_SOLACE_JNDI_TOPIC	Allows users to create Solace JNDI topics.
Delete Solace JNDI Topic	EXCMD_DELETE_SOLACE_JNDI_TOPIC	Allows users to delete Solace JNDI topics.
Show Solace JNDI Topic	EXCMD_INQUIRE_SOLACE_JNDI_TOPIC	Allows users to view the details of a specific Solace JNDI topic.
Show Solace JNDI Topics	EXCMD_INQUIRE_SOLACE_JNDI_TOPIC_NAMES	Allows users to view a list of the Solace JNDI topics that exist.
SOLACE MQTT SESSION		
Change Solace MQTT Session	EXCMD_CHANGE_SOLACE_MQTT_SESSION	Allows users to change Solace MQTT sessions.
Change Solace MQTT Session Status	EXCMD_CHANGE_SOLACE_MQTT_SESSION_STATUS	Allows users to change the status of (enable or disable) Solace MQTT sessions.
Clear Solace MQTT Session Statistics	EXCMD_CLEAR_SOLACE_MQTT_SESSION_STATS	Allows users to clear the statistics of Solace MQTT sessions.
Create Solace MQTT Session	EXCMD_CREATE_SOLACE_MQTT_SESSION	Allows users to create Solace MQTT sessions.
Create Solace MQTT Session Subscription	EXCMD_CREATE_SOLACE_MQTT_SESSION_SUBSCRIPTION	Allows users to create Solace MQTT session subscriptions.
Delete Solace MQTT Session	EXCMD_DELETE_SOLACE_MQTT_SESSION	Allows users to remove Solace MQTT sessions.
Delete Solace MQTT Session Subscription	EXCMD_DELETE_SOLACE_MQTT_SESSION_SUBSCRIPTION	Allows users to remove Solace MQTT session subscriptions.
Show Solace MQTT Session	EXCMD_INQUIRE_SOLACE_MQTT_SESSION	Allows users to view the details of a specific Solace MQTT session.

Show Solace MQTT Session Advanced	EXCMD_INQUIRE_SOLACE_MQTT_SESSION_ADVANCED	Allows users to view advanced properties for Solace MQTT sessions by turning on the Advanced slider in the properties
Show Solace MQTT Session Statistics	EXCMD_INQUIRE_SOLACE_MQTT_SESSION_STATI STICS	Allows users to view the statistics of Solace MQTT sessions.
Show Solace MQTT Session Status	EXCMD_INQUIRE_SOLACE_MQTT_SESSION_STATUS	Allows users to view the status of MQTT sessions.
Show Solace MQTT Session Subscription	EXCMD_INQUIRE_SOLACE_MQTT_SESSION_SUBSCRIPTION	Allows users to view Solace MQTT session subscriptions.
Show Solace MQTT Sessions	EXCMD_INQUIRE_SOLACE_MQTT_SESSION_NAMES	Allows users to view a list of the Solace MQTT sessions that exist.
SOLACE MESSAGE VPN		
Change Solace Message VPN	EXCMD_CHANGE_SOLACE_MSG_VPN	Allows users to change Solace message VPNs.
Change Solace Message VPN DMR Status	EXCMD_CHANGE_SOLACE_MSG_VPN_DMR_STATUS	Allows users to change the status of (start or stop) Solace dynamic message routing.
Change Solace Message VPN Status	EXCMD_CHANGE_SOLACE_MSG_VPN_STATUS	Allows users to change the status of (start or stop) Solace message VPNs.
Change Solace MQTT Retain Cache	EXCMD_CHANGE_SOLACE_MQTT_RETAIN_CACHE	Allows users to change Solace MQTT retain caches.
Change Solace Replay Log	EXCMD_CHANGE_SOLACE_REPLAY_LOG	Allows users to change Solace replay logs.
Change Solace Replicated Topic	EXCMD_CHANGE_SOLACE_REPLICATED_TOPIC	Allows users to change Solace replicated topics.
Clear Solace Message VPN Guaranteed Messaging Statistics	EXCMD_CLEAR_SOLACE_MSG_VPN_MSG_SPOOL_STATS	Allows users to clear the guaranteed statistics of Solace message VPNs.
Clear Solace Message VPN Statistics	EXCMD_CLEAR_SOLACE_MSG_VPN_STATS	Allows users to clear the statistics of Solace message VPNs.
Create Solace Message VPN	EXCMD_CREATE_SOLACE_MSG_VPN	Allows users to create Solace message VPNs.
Create Solace MQTT Retain Cache	EXCMD_CREATE_SOLACE_MQTT_RETAIN_CACHE	Allows users to create Solace MQTT retain caches.

Create Solace Replay Log	EXCMD_CREATE_SOLACE_REPLAY_LOG	Allows users to create Solace replay logs.
Create Solace Replicated Topic	EXCMD_CREATE_SOLACE_REPLICATED_TOPIC	Allows users to create Solace replicated topics.
Delete Solace Message VPN	EXCMD_DELETE_SOLACE_MSG_VPN	Allows users to remove Solace MQTT VPNs.
Delete Solace MQTT Retain Cache	EXCMD_DELETE_SOLACE_MQTT_RETAIN_CACHE	Allows users to remove Solace MQTT retain caches.
Delete Solace Replay Log	EXCMD_DELETE_SOLACE_REPLAY_LOG	Allows users to remove Solace replay logs.
Delete Solace Replicated Topic	EXCMD_DELETE_SOLACE_REPLICATED_TOPIC	Allows users to remove Solace replicated topics.
Show Solace Message VPN	EXCMD_INQUIRE_SOLACE_MSG_VPN	Allows users to view the details of a specific Solace message VPN.
Show Solace Message VPN Advanced	EXCMD_INQUIRE_SOLACE_MSG_VPN_ADVANCED	Allows users to view advanced properties for Solace Message VPNs by turning on the Advanced slider in the properties dialog.
Show Solace Message VPN Statistics	EXCMD_INQUIRE_SOLACE_MSG_VPN_STATISTICS	Allows users to view the statistics of Solace message VPNs.
Show Solace Message VPN Status	EXCMD_INQUIRE_SOLACE_MSG_VPN_STATUS	Allows users to view the status of Solace message VPNs.
Show Solace Message VPNs	EXCMD_INQUIRE_SOLACE_MSG_VPN_NAMES	Allows users to view a list of the Solace message VPNs that exist.
Show Solace MQTT Retain Cache	EXCMD_INQUIRE_SOLACE_MQTT_RETAIN_CACHE	Allows users to view a list of Solace MQTT retain caches in the console.
Show Solace Replay Log	EXCMD_INQUIRE_SOLACE_REPLAY_LOG	Allows users to view a list of Solace replay logs in the console.
Show Solace Replicated Topic	EXCMD_INQUIRE_SOLACE_REPLICATED_TOPIC	Allows users to view a list of Solace replicated topics in the console.
Trim Solace Replay Log Messages	EXCMD_TRIM_SOLACE_REPLAY_LOG_MESSAGES	Not applicable.
SOLACE QUEUE		
Cancel Solace Queue Replay	EXCMD_CANCEL_SOLACE_QUEUE_REPLAY	Allows users to cancel message replay for a Solace queue.

Change Solace Queue	EXCMD_CHANGE_SOLACE_QUEUE	Allows users to change Solace queues.
Change Solace Queue Status	EXCMD_CHANGE_SOLACE_QUEUE_STATUS	Allows users to change the status of Solace queues (turn incoming or outgoing messages on or off)
Clear Solace Queue Statistics	EXCMD_CLEAR_SOLACE_QUEUE_STATS	Allows users to clear the statistics of Solace queues.
Create Solace Queue	EXCMD_CREATE_SOLACE_QUEUE	Allows users to create Solace queues.
Create Solace Queue Subscription	EXCMD_CREATE_SOLACE_QUEUE_SUBSCRIPTION	Allows users to create Solace queue subscriptions.
Delete Solace Queue	EXCMD_DELETE_SOLACE_QUEUE	Allows users to remove Solace queues.
Delete Solace Queue Subscription	EXCMD_DELETE_SOLACE_QUEUE_SUBSCRIPTION	Allows users to remove Solace queue descriptions.
Show Solace Queue	EXCMD_INQUIRE_SOLACE_QUEUE	Allows users to view the details of a specific Solace queue.
Show Solace Queue Advanced	EXCMD_INQUIRE_SOLACE_QUEUE_ADVANCED	Allows users to view advanced properties for Solace queues by turning on the Advanced slider in the properties dialog
Show Solace Queue Priority Statistics	EXCMD_INQUIRE_SOLACE_QUEUE_PRIORITY_STATS	Allows users to view Solace queue priority statistics.
Show Solace Queue Statistics	EXCMD_INQUIRE_SOLACE_QUEUE_STATISTICS	Allows users to view the statistics of Solace queues.
Show Solace Queue Status	EXCMD_INQUIRE_SOLACE_QUEUE_STATUS	Allows users to view the status of Solace queues.
Show Solace Queue Subscription	EXCMD_INQUIRE_SOLACE_QUEUE_SUBSCRIPTION	Allows users to view Solace queue subscriptions.
Show Solace Queue TX Flow	EXCMD_INQUIRE_SOLACE_QUEUE_TX_FLOW	Allows users to view Solace queue TX flows.
Show Solace Queues	EXCMD_INQUIRE_SOLACE_QUEUE_NAMES	Allows users to view a list of the Solace queues that exist.
Start Solace Queue Replay	EXCMD_START_SOLACE_QUEUE_REPLAY	Allows users to start message replay for a Solace queue.
SOLACE QUEUE TEMPLATE		

Change Solace Queue Template	EXCMD_CHANGE_SOLACE_QUEUE_TEMPLATE	Allows users to change Solace queue templates.
Create Solace Queue Template	EXCMD_CREATE_SOLACE_QUEUE_TEMPLATE	Allows users to create Solace queue templates.
Delete Solace Queue Template	EXCMD_DELETE_SOLACE_QUEUE_TEMPLATE	Allows users to remove Solace queue templates.
Show Solace Queue Template	EXCMD_INQUIRE_SOLACE_QUEUE_TEMPLATE	Allows users to view the details of a specific queue template.
Show Solace Queue Template Advanced	EXCMD_INQUIRE_SOLACE_QUEUE_TEMPLATE_ADVANCED	Allows users to view advanced properties for Solace queue templates by turning on the Advanced slider in the
Show Solace Queue Templates	EXCMD_INQUIRE_SOLACE_QUEUE_TEMPLATE_NAMES	Allows users to view a list of the Solace queue templates that exist.
SOLACE RDP		
Change Solace RDP	EXCMD_CHANGE_SOLACE_RDP	Allows users to change Solace RDPs.
Change Solace RDP Queue Binding	EXCMD_CHANGE_SOLACE_RDP_QUEUE_BINDING	Allows users to change Solace RDP queue bindings.
Change Solace RDP Queue Binding Request Header	EXCMD_CHANGE_SOLACE_RDP_QUEUE_BINDING_REQUEST_HEADER	Allows users to edit the Request Header Name in the RDP Queue Binding Request Header properties
Change Solace RDP Status	EXCMD_CHANGE_SOLACE_RDP_STATUS	Allows users to change the status of (enable or disable) Solace RDPs.
Create Solace RDP	EXCMD_CREATE_SOLACE_RDP	Allows users to create Solace RDPs.
Create Solace RDP Queue Binding	EXCMD_CREATE_SOLACE_RDP_QUEUE_BINDING	Allows users to create Solace RDP queue bindings.
Create Solace RDP Queue Binding Request Header	EXCMD_CREATE_SOLACE_RDP_QUEUE_BINDING_REQUEST_HEADER	Allows users to create Solace RDP queue binding request headers.
Delete Solace RDP	EXCMD_DELETE_SOLACE_RDP	Allows users to remove Solace RDPs.
Delete Solace RDP Queue Binding	EXCMD_DELETE_SOLACE_RDP_QUEUE_BINDING	Allows users to remove Solace RDP queue bindings.

Delete Solace RDP Queue Binding Request Header	EXCMD_DELETE_SOLACE_RDP_QUEUE_BINDING_REQUEST_HEADER	Allows users to remove Solace RDP queue binding request headers.
Show Solace RDP	EXCMD_INQUIRE_SOLACE_RDP	Allows users to view the details of a specific Solace RDP.
Show Solace RDP Queue Binding	EXCMD_INQUIRE_SOLACE_RDP_QUEUE_BINDING	Allows users to view Solace RDP queue bindings.
Show Solace RDP Queue Binding Request Header	EXCMD_INQUIRE_SOLACE_RDP_QUEUE_BINDING_REQUEST_HEADER	Allows users to browse request headers for Solace RDP queue bindings.
Show Solace RDP Status	EXCMD_INQUIRE_SOLACE_RDP_STATUS	Allows users to view the status of Solace RDPs.
Show Solace RDP's	EXCMD_INQUIRE_SOLACE_RDP_NAMES	Allows users to view a list of the Solace RDPs that exist.
SOLACE REST CONSUMER		
Change Solace Rest Consumer	EXCMD_CHANGE_SOLACE_REST_CONSUMER	Allows users to change Solace Rest consumers.
Change Solace Rest Consumer Status	EXCMD_CHANGE_SOLACE_REST_CONSUMER_STATUS	Allows users to change the status of (enable or disable) Solace Rest consumers.
Clear Solace Rest Consumer Statistics	EXCMD_CLEAR_SOLACE_REST_CONSUMER_STATS	Not applicable.
Create Solace Rest Consumer	EXCMD_CREATE_SOLACE_REST_CONSUMER	Allows users to create Solace Rest consumers.
Create Solace Rest Consumer OAuth JWT Claim	EXCMD_CREATE_SOLACE_REST_CONSUMER_OAUTH_JWT_CLAIM	Allows users to create Solace Rest consumer OAuth JWT claims.
Delete Solace Rest Consumer	EXCMD_DELETE_SOLACE_REST_CONSUMER	Allows users to remove Solace Rest consumers.
Delete Solace Rest Consumer OAuth JWT Claim	EXCMD_DELETE_SOLACE_REST_CONSUMER_OAUTH_JWT_CLAIM	Allows users to remove Solace Rest consumer OAuth JWT claims.
Show Solace Rest Consumer	EXCMD_INQUIRE_SOLACE_REST_CONSUMER	Allows users to view the details of a specific Solace Rest consumer.
Show Solace Rest Consumer OAuth JWT Claim	EXCMD_INQUIRE_SOLACE_REST_CONSUMER_OAUTH_JWT_CLAIM	Allows user to view Solace Rest consumer OAuth options.

Show Solace Rest Consumer Statistics	EXCMD_INQUIRE_SOLACE_REST_CONSUMER_STATISTICS	Allows users to view the statistics of Solace Rest consumers.
Show Solace Rest Consumer Status	EXCMD_INQUIRE_SOLACE_REST_CONSUMER_STATUS	Allows users to view the status of Solace Rest consumers.
Show Solace Rest Consumer TLS Trusted Common Name	EXCMD_INQUIRE_SOLACE_REST_CONSUMER_TLS_TRUSTED _COMMON_NAME	Allows users to view Solace Rest consumer TLS names.
Show Solace Rest Consumers	EXCMD_INQUIRE_SOLACE_REST_CONSUMER_NAMES	Allows users to view a list of Solace Rest consumers that exist.
SOLACE TOPIC ENDPOINT		
Cancel Solace Topic Endpoint Replay	EXCMD_CANCEL_SOLACE_TOPIC_ENDPOINT_REPLAY	Allows users to cancel message replay for a Solace topic endpoint.
Change Solace Topic Endpoint	EXCMD_CHANGE_SOLACE_TOPIC_ENDPOINT	Allows users to change Solace topic endpoints.
Change Solace Topic Endpoint Status	EXCMD_CHANGE_SOLACE_TOPIC_ENDPOINT_STATUS	Allows users to change the status of Solace topic endpoints (turn incoming or outgoing message on or off).
Clear Solace Topic Endpoint Statistics	EXCMD_CLEAR_SOLACE_TOPIC_ENDPOINT_STATS	Allows users to clear the statistics of Solace topic endpoints.
Create Solace Topic Endpoint	EXCMD_CREATE_SOLACE_TOPIC_ENDPOINT	Allows users to create Solace topic endpoints.
Delete Solace Topic Endpoint	EXCMD_DELETE_SOLACE_TOPIC_ENDPOINT	Allows users to remove Solace topic endpoints.
Show Solace Topic Endpoint	EXCMD_INQUIRE_SOLACE_TOPIC_ENDPOINT	Allows users to view the details of a specific Solae topic endpoint.
Show Solace Topic Endpoint Advanced	EXCMD_INQUIRE_SOLACE_TOPIC_ENDPOINT_ADVANCED	Allows users to view advanced properties for Solace topic endpoints by turning on the Advanced slider in the properties dialog.
Show Solace Topic Endpoint Priority Statistics	EXCMD_INQUIRE_SOLACE_TOPIC_ENDPOINT_PRIORITY_STATS	Allows users to view Solace topic endpoint priority statistics.
Show Solace Topic Endpoint Statistics	EXCMD_INQUIRE_SOLACE_TOPIC_ENDPOINT_STATISTICS	Allows users to view the statistics of Solace topic endpoints.

Show Solace Topic Endpoint Status	EXCMD_INQUIRE_SOLACE_TOPIC_ENDPOINT_STATUS	Allows users to view the status of Solace topic endpoints.
Show Solace Topic Endpoint TX Flow	EXCMD_INQUIRE_SOLACE_TOPIC_ENDPOINT_TX_FLOW	Allows users to view a list of Solace topic endpoint TX flows in the console.
Show Solace Topic Endpoints	EXCMD_INQUIRE_SOLACE_TOPIC_ENDPOINT_NAMES	Allows users to view a list of the Solace topic endpoints that exist.
Start Solace Topic Endpoint Replay	EXCMD_START_SOLACE_TOPIC_ENDPOINT_REPL AY	Allows users to start message replay for a Solace topic endpoint.
SOLACE TOPIC ENDPOINT TEMPLATE		
Change Solace Topic Endpoint Templates	EXCMD_CHANGE_SOLACE_TOPIC_ENDPOINT_TEMPLATE	Allows users to change Solace topic endpoint templates.
Create Solace Topic Endpoint Template	EXCMD_CREATE_SOLACE_TOPIC_ENDPOINT_TEMPLATE	Allows users to create Solace topic endpoint templates.
Delete Solace Topic Endpoint Template	EXCMD_DELETE_SOLACE_TOPIC_ENDPOINT_TEMPLATE	Allows users to remove Solace topic endpoint templates.
Show Solace Topic Endpoint Template	EXCMD_INQUIRE_SOLACE_TOPIC_ENDPOINT_TEMPLATE	Allows users to view the details of a specific Solace topic endpoint template.
Show Solace Topic Endpoint Template Advanced	EXCMD_INQUIRE_SOLACE_TOPIC_ENDPOINT_TEMPLATE_A DVANCED	Allows users to view advanced properties for Solace topic endpoint templates by turning on the Advanced slider in the
Show Solace Topic Endpoint Templates	EXCMD_INQUIRE_SOLACE_TOPIC_ENDPOINT_TEMPLATE_N AMES	Allows users to view a list of the Solace topic endpoint templates that exist.