JUNIPER NETWORKS | Engineering Simplicity

Juniper Mist Managed Service Provider (MSP) Guide

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Juniper Mist Managed Service Provider (MSP) Guide
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CHAPTER

Get Started

Juniper Mist Managed Service Provider (MSP) Portal Overview

IN THIS SECTION

The Juniper Mist™ Managed Service Provider (MSP) portal simplifies your multitenant operations and provides visibility across all customer organizations and sites. The MSP portal provides one place to manage your entire customer estate. From Day 0 to Day 2+, the portal streamlines your work and provides insight into network operations.

For example:

- Quickly onboard new customers by using other customer organizations as templates.

- Use a single dashboard to check the status of all customers' subscriptions and devices.

- Monitor real-time performance, and view recommended Marvis Actions.

- Jump from the MSP dashboard to your customers' Juniper Mist portals, where you can perform all administrative tasks.

Juniper Mist Managed Service Tiers

Juniper offers the MSP portal with three tiers of service: Partner, Base, and Advanced.

This table shows the features that are available to the various tiers.

Table 1: MSP Tiers

Features	Partner Tier	Base Tier	Advanced Tier
Multi-Organization View	☑	☑	☑

Table 1: MSP Tiers *(Continued)*

Features	Partner Tier	Base Tier	Advanced Tier
Full Stack Inventory Summary	☑	☑	☑
Full Stack Subscription Summary	☑	☑	☑
Organization Template	☑	☑	☑
Labels	☑	☑	☑
Single Sign-On	☑	☑	☑
Role-Based Access Control (RBAC) and Identity Provider Integrations	☑	☑	☑
Subscription Transfers Between Organizations	☒	☑	☑
Customize Logo	☒	☒	☑
AIOPS Tab	☒	☒	☑

Signing Up

To become a Juniper Mist MSP partner, contact **mistpartners@juniper.net** and provide these details:

- Preferred MSP name

- MSP cloud region

- MSP administrator name and e-mail address

- https://www.juniper.net/us/en/the-feed/topics/operations/ai-driven-enterprise-for-managed-services-demo.html

- https://www.juniper.net/us/en/solutions/managed-services.html

- https://www.juniper.net/content/dam/www/assets/solution-briefs/us/en/delivering-the-ai-driven-enterprise-as-a-managed-service.pdf

- https://www.juniper.net/content/dam/www/assets/solution-briefs/us/en/cloud-services/simplify-multitenant-operations-with-juniper-mist-managed-services-dashboard.pdf

- https://www.juniper.net/content/dam/www/assets/solution-briefs/us/en/network-automation/implementing-branch-networks-for-ai-driven-enterprise-customers.pdf

Manage Access to the MSP Portal

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To manage access to the Juniper Mist™ Managed Service Provider (MSP) portal, use the Administrators page.

NOTE: You must have the Super User role to manage user accounts.

To manage access to the MSP portal:

- To find the Administrators page, select **MSP** > **Administrators** from the left menu of the MSP portal.

- To add an MSP user, click the **Invite Administrators** button at the top-right corner of the page. Enter the user information and role, and then click **Invite**. The user will receive an email with a link to complete the process of creating an account.

- When creating or editing an account, you need to assign a role. The role determines the user's access.

  Select one of following MSP roles:

- Super User—Has full access to the MSP portal and all tenant organizations. This user can manage other administrators.

- Network Admin—Has limited access to the MSP portal. Can be granted access to all organizations or specific organizations, with access to limited features in the organizations' portals.

- Observer—Has view-only access to limited features in the MSP portal. Can be granted access to all organizations or specific organizations, with view-only access to limited features in the organizations' portals.

- Installer—Can be granted access to all organizations or specific organizations, with only the ability to install access points for these organizations.

- Helpdesk—Can be granted access to all organizations or specific organizations, with only helpdesk monitoring and workflow capabilities for these organizations.

> **NOTE**: If you invite a user who already has an organization-level user account, be aware that the higher role will take precedence. For example, if a user has the Observer role for an organization, and you invite them as a Super User at the MSP level, they will now have Super User access to the organization as well.

- To review administrators' status and access, scroll or search in the user list.
  - You can filter the list to specify certain organizations and roles, or to show all organizations and all roles.

Administrators

| All Organizations ▾ | All Roles ▾ | Search by Name or Email 🔍 |

  - You can search by name or email address.

Administrators

| All Organizations ▾ | All Roles ▾ | Search by Name or Email 🔍 |
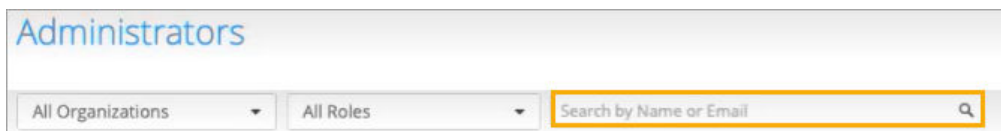
  - The **Role** column includes the designation **MSP** or **Org**.
    - **MSP**—This user has access to the MSP portal, with the role shown.
    - **Org**—This user has access to one or more organization portals, with the role shown. These users' access is limited to individual organizations. They do not have access to the MSP portal.

User Privileges

SUMMARY

Understand how conflicting privileges are resolved.

The Juniper Mist portal won't allow you to configure multiple privileges for a user; however, you can get into this situation when setting up user accounts through the API.

When different user roles are assigned at different levels (Managed Service Provider, organization, or site), the highest granted privilege applies.

For example, if a user is granted the Super User role at the organization level and the Helpdesk role at the site level, the Super User role takes effect at the site level.

> **NOTE**: In the API, the /self API query fetches only the explicitly granted privileges for an MSP user. It does not fetch the inherited privileges of the user. To view the inherited privileges at the organization level, you need to run the GET API query '/msps/:msp_id/orgs' at the MSP level. To view the inherited privileges at the site level, run the GET API query (/orgs/:org_id/sites) at the organization level.

Dashboard Overview (Organizations Page)

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- View Information for Organizations, Sites, and Devices (Inventory View) | **8**
- Monitor Service Levels and Marvis Actions (AI Ops View) | **9**
- Audit Logs | **12**

Finding the Juniper Mist MSP Dashboard (Organizations Page)

The Organizations page is the homepage of the Juniper Mist™ Managed Service Provider (MSP) portal. It is often called the MSP dashboard.

If you have full access to the portal, you'll see the Organizations page when you log in to Juniper Mist. From any other page in the portal, you can return to the Organizations page by selecting **Organization** from the left menu of the MSP portal.

Selecting a View

To select a view, use the buttons at the top of the Organizations page.

- Click **Inventory** for the Inventory view. Here, you can see details such as total organizations and sites, device inventory, labels, and subscription status. For more information, see "View Information for Organizations, Sites, and Devices (Inventory View)" on page 8.

- Click **AI Ops** for the AI Ops view. Here, you can see details such as Service Level Expectations (SLEs) and Marvis actions. For more information, see "Monitor Service Levels and Marvis Actions (AI Ops View)" on page 9.

  > **NOTE**: AI Ops view is available only with the MSP Advanced Tier. For more information about MSP tiers, see "Juniper Mist Managed Service Provider (MSP) Portal Overview" on page 2.

Organizations and Subscriptions

To add organizations and transfer subscriptions, use the buttons at the top-right corner of the Organizations page.

For more information, see:

- "Create an Organization" on page 17

- "Transfer Subscriptions Between Organizations" on page 20

View Information for Organizations, Sites, and Devices (Inventory View)

IN THIS SECTION

Finding the Inventory View

To find the Inventory view, select **Organization** from the left menu of the Juniper Mist™ Managed Service Provider portal.

The Inventory view is the default view for the Organizations page. If you go to the AI Ops view, you can return to this view by clicking the **Inventory** button.

Features of the Inventory View (Video)

Video: MSP Dashboard Overview

Inventory Tiles

These tiles display high-level information:

- Organizations—The total number of organizations associated with your MSP account.

- Active Sites—The total number of sites across all your organizations. A site is active if devices are claimed.

- Device Inventory—The total number of access points (APs), switches, and WAN Edges across all your organizations. In smaller type, each tile also indicates the number of devices in use.

- Subscriptions—The total number of organizations with active, expired, and exceeded subscriptions.

Filtering and Sorting Options

Use these options to adjust the information that appears in the table:

- To sort by a column heading, click the heading.

- To filter by an organization name or a label, enter the name in the **Filter** box.

- To filter by the subscription status, click either the **Orgs with Active Subscriptions**, **Orgs with Expired Subscriptions**, or **Orgs with Exceeded Subscriptions** tile.

Check Box Actions

If you select one or more check boxes for organizations, you can perform these tasks:

- "Delete Organizations" on page 22

- "Add or Remove MSP Labels" on page 23

Monitor Service Levels and Marvis Actions (AI Ops View)

IN THIS SECTION

Finding the AI Ops View

To find the AI Ops view, select **Organization** from the left menu of the Juniper Mist™ Managed Service Provider portal, and then click the **AI Ops** button at the top of the Organizations page.

> **NOTE**: AI Ops view is available only with the MSP Advanced Tier. For more information about MSP tiers, see "Juniper Mist Managed Service Provider (MSP) Portal Overview" on page 2.

Features of the AI Ops View (Video)

Video: Monitor Service Levels and Marvis Actions on the MSP Dashboard

Service Level Expectation Metrics (SLEs)

AI Ops view shows the overall health of each organization, as determined by SLEs.

- Green—High SLE compliance.

- Yellow—Low SLE compliance.

- Red—Very low SLE compliance.

Below the **Wireless**, **Wired**, and **WAN** columns, the Overall Service appears. You can click the right-arrow button (**>**) to show the SLE details in each group.

In this example, the Wireless and Wired columns show only the Overall Service. The WAN column is expanded to show SLE details.

WIRELESS >	WIRED >	WAN <			
Overall Service	Overall Service	Overall Service	WAN Edge Health	WAN Link Health	Application Health
88%	76%	97%	97%	96%	98%
0%	99%	69%	7%	100%	100%
98%	100%	100%	100%	100%	--
96%	--	--	--	--	--

To view more information, click a percentage to go to the corresponding page in the customer's portal.

For more information about SLEs, see the Juniper Mist Network Monitoring Guide.

Marvis Actions

This feature is available only with the MSP advanced tier.

The AI Ops view includes the **Marvis Actions** column. This column shows the number of Marvis actions that need your attention.

- Click the **Marvis Actions** column heading to change the sort order.

- Click the number in the Marvis Actions column to see a summary, as illustrated in the example below. If you want to investigate further, click the **Open Marvis Actions Page** button to go to the Marvis Actions page in this customer's Juniper Mist portal.

For more information about Marvis actions, see the Juniper Mist AI-Driven Operations Guide.

Filtering and Sorting Options in the AI Ops View

Use these options to adjust the information that appears in the table.

- To filter by organization name, enter the name in the **Filter** field.

- To sort by a column heading, click the column heading.

Audit Logs

SUMMARY

Use the Audit Logs page to monitor logins and to see what actions were taken by each user.

IN THIS SECTION

Overview

On the Audit Logs page of the Juniper Mist™ Managed Service Provider (MSP) portal, you can see who logged in, when they logged in, and what they did.

When you first open this page, it shows all logins for all users and all sites on the current date. You can use the drop-down lists at the top of the page to select the time period, filter by users, filter by sites, or search for certain types of activities.

Find the Audit Logs Page

From the left menu of the MSP portal, select **MSP** > **Audit Logs**.
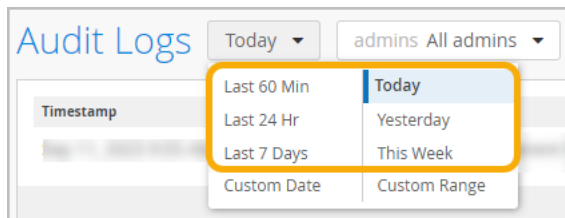
The Audit Logs page appears.

Select the Time Period

To select the time period: Use the first drop-down menu on the Audit Logs page.
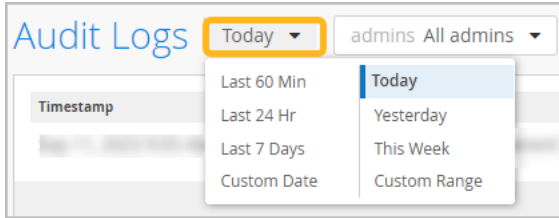
Select preset times and days, select a date, or enter a range of dates.

- Preset Times and Days

  - Last 60 Min—From 60 minutes ago to the current time.

  - Last 24 Hr—From 24 hours ago to the current time.

  - Last 7 Days—From midnight 7 days ago to the current date and time.

  - Today—From midnight to the current time today.

  - Yesterday—From midnight to 11:59 PM on the previous day.

  - This Week—From midnight Sunday to the current date and time.

- Custom Date—Select a date within the past 60 days. The Audit Logs page will show all logins from midnight to 11:59 PM on the selected date.

  Custom Date Example

- Custom Range—Specify a range of dates within the past 60 days. On the left, enter the start time and date. On the right, enter the end time and date.

  Custom Range Example

Filter by Organizations

1. Click the **orgs** drop-down menu at the top of the Audit Logs page.
2. Select the check box for the organization that you want to include.

   The page reloads, showing the logins for the selected organization.

   > **TIP:**
   >
   > - To select additional organizations, repeat the previous steps until the page shows all the organizations that you want to see.

- To quickly find an organization, start typing in the **Search** box. As you type, the drop-down list shows only the organizations that match your search string. Select the check box for the organization that you want to include.

- To deselect an organization, click the **orgs** drop-down menu, and clear the check box from the organization name.

Search by Name or Email

To search for a particular user, start typing a name or email address in the **Search by Admin Name or Email** box at the top of the Audit Logs page.

Filter by Users' Tasks

To find records for specific tasks, such as accessing the organization or updating the site settings, use the **Search by Message** box at the top of the Audit Logs page.

To filter by users' tasks:

1. Skim through the records to get familiar with the task descriptions in the Message column.

   Messages typically consist of a few words. These words might include:

   - An action word such as *accessed*, *update*, *add*, or *delete*.

   - The name of an organization, site, user, or other entity (such as webhook or API token) that was affected by the action.

   - The name of a feature that the user updated, such as *subscription*, *zone*, or *site settings*.

2. Start typing in the **Search by Message** box.

   As you type, the page reloads to show only the messages that contain the specified characters.

View Details

For certain types of actions, additional details are available.

If the **View details** link appears, click it to see more information about the action.

To close the View details window, click **X** in the top right corner.

Reset the Page to the Defaults

To reset the Audit Logs page, click the **Refresh** button in the web browser's toolbar.

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CHAPTER

Manage Organizations

Create an Organization

Introduction

Day 0 onboarding is easy with the Juniper Mist™ Managed Service Provider (MSP) portal. When you add a customer, you can use another customer's organization as a template. The cloned organization inherits all organization settings from the source organization.

During this process, you also can specify MSP labels. These labels can help you to identify organizations that are similar in certain ways. For example, you might add labels based on the business type, such as retail or healthcare. You might add labels based on the region, such as North, South, East, or West. In the MSP dashboard, you can use labels to filter the organizations.

> **TIP**: As a best practice, create sample organizations that you can use as templates. For example, create Retail, Medical, and Education organizations. Use them as templates to quickly onboard similar customers in the future.

Video Overview

Video: Create an Organization on the MSP Dashboard

> **NOTE**: The templates list consists of the organizations that you've added to your MSP dashboard.

Instructions

To create an organization:

1. From the left menu of the Juniper Mist™ MSP portal, select **Organization**.
2. At the top-right corner of the MSP dashboard, click **Create Organization** .
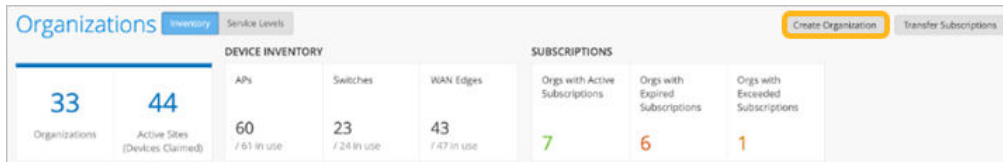
3. In the Add an Organization window:

   a. Enter a name and any organization-level labels that you need for this customer.

   b. (Optional) If you want to use another organization as a template, select it from the **Use Another Org As Template** list. Otherwise, select **None**.

   c. Click **Add Organization**.

> **NOTE**: The list includes all organizations that you've added to your estate in the MSP portal.

Next Steps

On the Organizations page, click the organization that you added. You'll go to the organization's Juniper Mist portal, where you can configure all the settings.

> **NOTE**: For more information about setting up organizations in the Juniper Mist portal, see *Create Your Account and Organization* in the Juniper Mist Management Guide.

Assign an Existing Organization to Your MSP Dashboard

You can assign an existing organization to your Juniper Mist™ Managed Service Provider (MSP) portal if these requirements are met.

- You must have an MSP Super User account. This role gives you access to the customer's Juniper Mist portal, where you perform this task.

- The organization must operate on the same Juniper Mist cloud instance as your MSP account.

> **TIP**: To identify the cloud instance, look in the URL in the address bar of the Juniper Mist portal. For example, the URL might contain ac1.mist.com or gc1.mist.com. For the full list of URLs and cloud instances, see *Juniper Mist Clouds* in the Juniper Mist Management Guide.
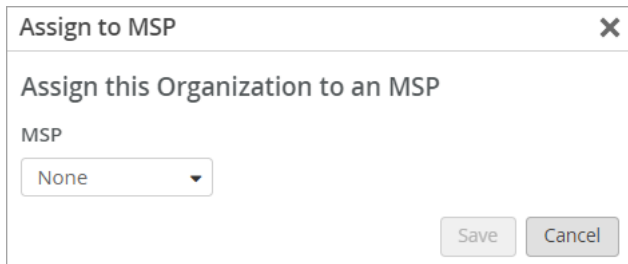
To assign an existing organization to your MSP portal:

1. Log in to the Juniper Mist portal for the organization that you want to assign to your MSP portal.
2. From the left menu of the Juniper Mist portal, select **Organization** > **Settings**.
3. In the Managed Service Provider section, click **Assign to an MSP**.

4. In the Assign to MSP window:
   a. Select the MSP.

   b. Click **Save** at the bottom of the Assign to MSP window.

5. Click **Save** in the top-right corner of the Organization Settings page.

Transfer Subscriptions Between Organizations

IN THIS SECTION

Introduction

If you have unused subscriptions, you can easily transfer them between organizations. The Juniper Mist™ Managed Service Provider portal ensures that you do not take subscriptions that an organization needs for its devices.

Requirements

- You must be a Base Tier or Advanced Tier MSP.

- Your user account must have the MSP Super User role to transfer subscriptions.

- You can transfer active subscriptions and subscriptions with future activation dates. You cannot transfer trial, expired, or usage-based subscriptions.

- You cannot transfer subscriptions that were already transferred from their original organization.

  For example, if Organization A originally claimed a subscription and you later transferred it to Organization B, it is now nontransferable. However, if you transfer the subscription back to Organization A, it is then transferable.

> **NOTE**: Some MSPs set up a "staging" organization to store their purchased subscriptions. Then the MSPs can easily transfer subscriptions back and forth from the staging organization to their tenant organizations to adjust the distribution of subscriptions.

Video Overview

▷ **Video:** Transfer Subscriptions on the MSP Dashboard

Procedure

To transfer subscriptions:

1. From the left menu of the Juniper Mist™ MSP portal, select **Organization**.
2. Click **Transfer Subscriptions** at the top-right corner of the Organizations page.

3. In the Transfer Subscriptions window, select the **Source Organization** and the **Destination Organization**.

> **NOTE**: These lists include only the organizations that have been added to your MSP dashboard.

The subscriptions appear in the lower section of the page.

4. (Optional) Use the filtering options above the subscription list:

- **Hide non-transferable subscriptions**—If you select this check box, the page will show only the subscriptions that are transferable.

- **Filter**—If you are looking for a specific subscription, enter the name in the **Filter** box.

5. In the **Quantity** field, enter the number of subscriptions that you want to transfer from the source organization to the destination organization.

> **NOTE**:
>
> - Notice the number in the **Transferable Quantity** column. If you try to transfer a higher number of subscriptions, an error appears.
>
> - If the subscriptions were already transferred from their original organization, you cannot enter a value in the Quantity column. These subscriptions are nontransferable unless you first transfer the subscriptions back to the organization that originally claimed them. If you want to transfer them back, select the check box. After you complete this procedure, they return to the original organization. You can then repeat this procedure to transfer them if needed.
>
> **Example**
>
>

6. Click **Transfer** in the lower-right corner of the Transfer Subscriptions window.
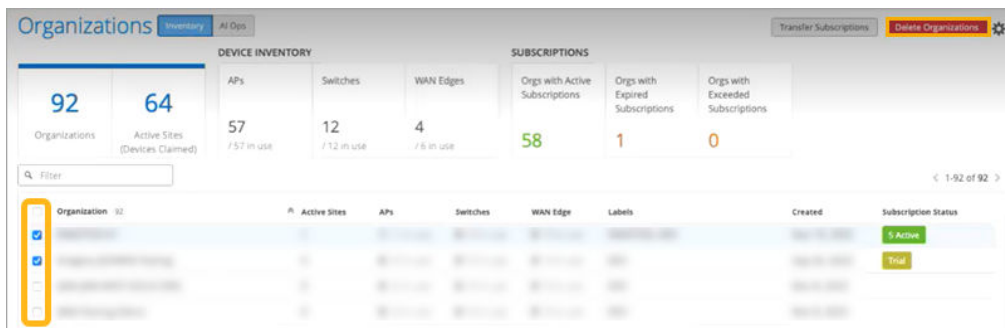
Delete Organizations

In the Inventory view of the Organizations page, you can delete organizations. This action completely removes the organization from the Juniper Mist™ cloud, including the organization's sites, floor plans, and administrator accounts.

> ⚠️ **CAUTION**: This action is permanent, and the data is not recoverable.

To delete organizations:

1. From the left menu of the Juniper Mist™ Managed Service Provider (MSP) portal, select **Organization**.
2. Select the check box for each organization that you want to delete.
3. Click **Delete Organization** at the top-right corner of the page.

4. In the Confirm Delete window, read the on-screen information, and review the list of selected organizations.
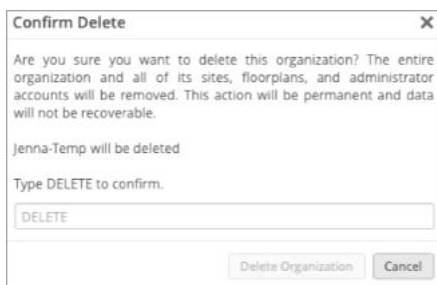
5. If you're sure that you want to permanently delete the selected organizations, enter **DELETE**, and then click **Delete Organization**.

Add or Remove MSP Labels

Managed Service Provider (MSP) labels help in grouping organizations (for example, in Single Sign-On policies). You can manage the MSP labels in the Inventory view of the Juniper Mist™ MSP dashboard.

To add or remove MSP labels:

1. From the left menu of the MSP portal, select **Organization**.

   The Organizations page appears, displaying the Inventory view.

2. Select the check box for each organization that you want to modify.

3. Click the **Settings** button at the top-right corner of the page.

4. Add or remove a label:

   - To remove a label, click **X**.

   - To add a label, enter it in the **Add Labels** box.

5. Click **OK** to save your changes.

3

CHAPTER

Set Up the MSP Portal

# Set Up Single Sign-On for Your MSP Portal

Setting up Single Sign-On (SSO) for your Juniper Mist™ Managed Service Provider (MSP) portal is similar to setting up SSO for any Juniper Mist organization. First add the Identity Provider (IdP), and then create the roles for the user accounts.

To set up single sign-on for your MSP portal:

1. From the left menu of the MSP portal, select **MSP** > **MSP Info**.
2. In the Single Sign-On section of the MSP Information page, select **Add IDP**.
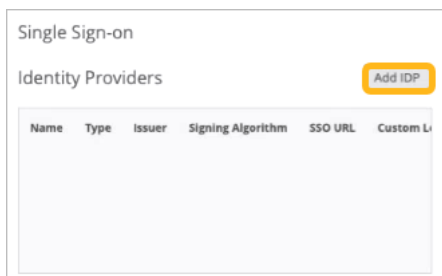
3. In the Create IdP window, follow the same process that you would use to add an identity provider (IdP) for any Juniper Mist organization. For more information, see *Add Identity Providers* in the Juniper Mist Management Guide.
4. After you add the IdP, go to the Roles section of the MSP Information page, and click **Create Role**.
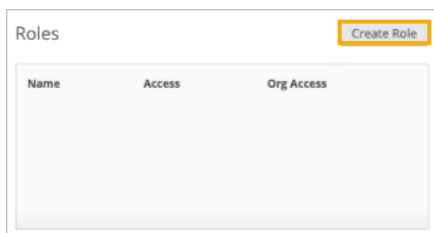
5. In the Create Role window, follow the same process that you would use to add IdP roles for any Juniper Mist organization. For more information, see *Create Custom Roles for Single Sign-On Access* in the Juniper Mist Management Guide.
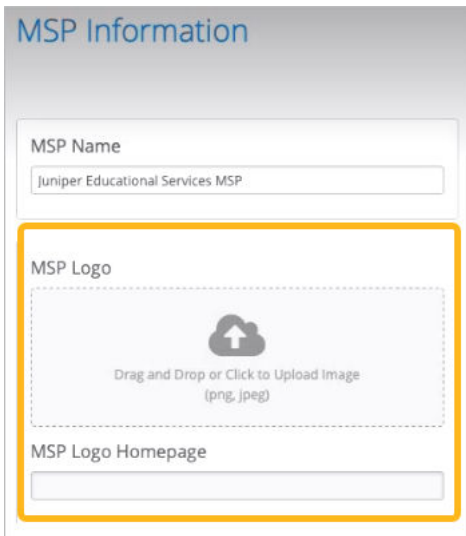
Add Your Logo to the Portals

With the advanced tier of the Juniper Mist™ Managed Service Provider (MSP) portal, you can brand the MSP portal and the tenant portals with your logo. Your logo replaces the Juniper Mist logo in the portals.

NOTE: This feature is available only with the advanced tier of the MSP portal.

Requirements: Your image file must be PNG or JPEG.

To add your logo to the portals:

1. From the left menu of the MSP portal, select **MSP** > **MSP Info**.
2. In the MSP Logo section of the MSP Information page, use one of these methods to add your logo:

   - Drag and drop your image file onto the gray box.

   - Click the icon to upload your image.

   - Enter the URL of an image file.

3. Click **Save** at the top-right corner of the MSP Information page.

Your logo now appears in the top-left corner of the MSP portal and the tenant portals.