Configurations

About Configurations

Cisco DNA Center platform provides you with **Configurations** to configure a customized network experience using the following options:

- **Event Settings**: Cisco DNA Center platform supports specific Cisco DNA Assurance events (or incidents) that may occur within your network. This means that Cisco DNA Center platform can recognize these events and permits you to configure settings that customize the type, category, and severity under which Cisco DNA Center reports them. Configuring this information in the GUI also permits you to customize the information that Cisco DNA Center sends to an external system, such as ServiceNow (or perhaps to one or more REST endpoints that you can configure).

- **General Settings**: You can add or edit REST and ITSM endpoint instances within a single or multiple bundles.

Note You can also configure various types of destinations to deliver the events from the Cisco DNA Center Platform. Click the menu icon (☰) and choose **System** > **Settings** > **External Services** > **Destinations** to access the GUI window to configure a webhook, email, syslog, SNMP trap, or ITSM destination.

Configure Event Settings

A preset number of issues (or events) that may occur within your network can be found in **Event Settings** in the **Configurations** window. You can configure the type, category, severity, and workflow of these events.

> **Note**
> The **Event Settings** window functionality is only applicable for an ITSM (ServiceNow) integration and not for generic event notifications. For guidance about how to use this procedure within a larger set of procedures to configure ITSM integration between Cisco DNA Center and ServiceNow, see the *Cisco DNA Center ITSM Integration Guide*. See the text at the top of this window and click the link (**here**) to access the **Events** window in platform, where you can subscribe to events and receive notifications by email, webhook (REST API), SNMP trap, or syslog server.

Figure 1: Event Settings Window

Step 1 Click the menu icon (☰) and choose **Platform** > **Manage** > **Configurations** > **Event Settings**.

Step 2 Review the **Event Settings** table that appears.

The following **Event Settings** information is displayed:

- **Event Name**: Name of the Cisco DNA Center event.

- **Domain**: Domain of the Cisco DNA Center event.

- **Type**: Network, App, System, Security, or Integrations type of event.

- **Category**: Error, Warn, Info, Alert, Task Progress, Task Complete.

- **Severity**: 1 through 5.

  > **Note** Severity 1 is the most important or critical priority and should be assigned as such.

- **Workflow**: Incident, Problem, Event, or RFC.

- **Actions**: Edit.

You can adjust what is displayed in the table by clicking the **Filter** icon and using the filter, or by typing a keyword in the **Find** field. For example, to display all access point notifications, type 'AP' in the **Find** field. To view all network notifications, type 'Network' in the **Find** field. To view all severity 1 notifications, type '1' in the **Find** field.

You can edit the event, so that its notification is customized to your network standards and conventions.

Step 3 Click **Edit** in the **Actions** column to edit an event.

Choose a setting by clicking on the downward pointing angle and adjust the value. For example, click **Network** and adjust to **App**. This changes the event type from a network type to an application type. Click **Severity** and adjust to **1** from **5**. This raises the severity level from 5 to 1.

Step 4 Click the box next to the event name to enable notifications.

This enables notifications through Cisco DNA Center when the event occurs in the future.

Step 5 Click **Save** to save your configuration.

What to do next

- Click the menu icon (≡) > **Platform** > **Runtime Dashboard**.

  Notifications for events display in the **Events Summary** field.

- Click **View Details** to view the notifications.

Configure General Settings: Edit an Instance

You can edit an instance within a single or multiple bundles using **Configurations**.

Figure 2: Cisco DNA Center Platform Configurations Window

Before you begin

Enable, configure, and activate the bundles for your network in **Bundles**. For information about **Bundles** see Bundle Features.

Step 1   Click the menu icon (☰) and choose **Platform** > **Manage** > **Configurations** > **General Settings**.

Step 2   Review the **General Settings** table that appears.

The following **General Settings** information is displayed:

- **Name**: Name of the instance and version.

- **Description**: Description of the settings that contain the instances.

- **Instances**: Number of instances currently configured.

- **Usage**: Number of bundles where the instance or instances are used.

- **Actions**: Specific task that you could perform for the setting (for example, edit or add an instance for the setting).

You can adjust what is displayed in the table by clicking the **Filter** icon and using the filter, or by entering a keyword in the **Find** field.

Step 3   Click the arrow for one of the displayed instances. For example, click the **CMDB Synchronization Settings (v1)** or **Destination to Receive Events (v1)** arrow.

The list of instances for that setting is displayed.

Step 4   In the **Usage** column, hover your mouse pointer over **Bundles**.

Cisco DNA Center displays the bundles that use the specified instance.

Step 5   Click the **Edit** icon ('Pad and Pen' icon) in the **Actions** column to edit an existing instance.

Edit the appropriate instance for your requirements in the following steps.

Step 6   (Optional) To edit the CMDB synchronization details for a **CMDB Synchronization Settings** instance, choose **Edit** > **Actions** and edit one or more of the following instance fields in the slide-in panes that appear:

- **ServiceNow Access Settings**: Select an instance from the drop-down menu.

- **CMDB Inventory Settings**: Enter an **Instance Name** and **Description**.

- **Select Destination**: Enter **Destination Type** and **Destination URI**. Options include **Synchronize device inventory directly with CMDB** or **Post device inventory details to a staging table**.

- **Select Inventory Data Fields**: Select both the Inventory Data Fields to synchronize, as well as whether the data field is an attribute or reference.

- **Update Transforms**: Accept or update the CI class to the device family.

- **Set Source Identifier and Operational Limit**: Configure the discovery source and maximum limit.

- **Summary**: Review the configuration and make any changes before saving.

Step 7   (Optional) To edit a **Destination to receive events** instance, choose **Edit** > **Actions** and edit one or more of the following fields in the slide-in pane:

- **Instance Name**: Name of instance.

- **Description**: Description of instance.

- **Destination to Receive Events**: Choose one of the following:

  - **Event Management**: When setting up Cisco DNA Center integration with ServiceNow without using the Cisco DNA App, choose the **Event Management** option. The **Event Management** option also requires that you have the Event Management plugin configured within the ServiceNow instance.

  - **REST API Endpoint**: The **REST API Endpoint** option can be used with the Cisco DNA App. Data is sent to a REST API endpoint within the Cisco DNA App with the **REST API Endpoint** option.

  - **Generic REST Endpoint in ServiceNow**: For the **Generic REST Endpoint in ServiceNow** option, you can send the data to a different staging table in ServiceNow.

- **Destination URI**: Enter a destination URI for the **Generic REST Endpoint in ServiceNow** option. This field is mandatory for this option.

For detailed information about integrating Cisco DNA Center with ServiceNow, see the *Cisco DNA Center ITSM Integration Guide* for this release.

Step 8 Click **Update** to save your edits to the instance.

The edits to the instance immediately take effect.

Configure General Settings: Add an Instance

You can add an instance within a single or multiple bundles using **Configurations**.

Figure 3: Cisco DNA Center Platform Configuration Window

Before you begin

Enable, configure, and activate the bundles for your network in **Bundles**. For information about **Bundles** see Bundle Features.

Step 1   Click the menu icon (≡) and choose **Platform** > **Manage** > **Configurations** > **General Settings**.

Step 2   Review the **General Settings** table that appears.

The following **General Settings** information is displayed:

- **Name**: Name of the instance and version.

- **Description**: Description of the settings that contain the instances.

- **Instances**: Number of instances in setting.

- **Usage**: Number of bundles where the instance or instances are used.

- **Actions**: Specific task that you could perform for the setting (for example, edit or add an instance for the setting).

You can adjust what is displayed in the table by clicking the **Filter** icon and using the filter, or by entering a keyword in the **Find** field.

Step 3   Click the arrow for one of the displayed instances. For example, click the **CMDB Synchronization Settings (v1)** or **Destination to Receive Events (v1)** arrow.

The list of instances for that setting is displayed.

Step 4   In the **Usage** column, hover your mouse pointer over **Bundles**.

Cisco DNA Center displays the bundles that use the specified instance.

Step 5   Click the **Add Instances** link in the **Actions** column to add an instance.

Add the appropriate instance or instances for your requirements in the following steps.

Step 6   (Optional) To add a **CMDB Synchronization Settings** instance, click **Add Instance** in the **Actions** column and enter the following instance fields in the slide-in panes that appear:

- **ServiceNow Access Settings**: Select an instance from the drop-down menu.

- **CMDB Inventory Settings**: Enter an **Instance Name** and **Description**.

- **Select Destination**: Enter **Destination Type** and **Destination URI**. Options include **Synchronize device inventory directly with CMDB** or **Post device inventory details to a staging table**.

- **Select Inventory Data Fields**: Select both the Inventory Data Fields to synchronize, as well as whether the data field is an attribute or reference.

- **Update Transforms**: Accept or update the CI class to the device family.

- **Set Source Identifier and Operational Limit**: Configure the discovery source and maximum limit.

- **Summary**: Review the configuration and make any changes before saving.

Step 7   (Optional) To add a **Destination to receive events** instance, click **Add Instance** in the **Actions** column and enter the following instance fields in the slide-in pane:

• **Instance Name**: Name of instance.

• **Description**: Description of instance.

• **Destination to Receive Events**: Choose one of the following:

• **Event Management**: When setting up Cisco DNA Center integration with ServiceNow without using the Cisco DNA App, choose the **Event Management** option. The **Event Management** option also requires that you have the Event Management plugin configured within the ServiceNow instance.

• **REST API Endpoint**: The **REST API Endpoint** option can be used with the Cisco DNA App. Data is sent to a REST API endpoint within the Cisco DNA App with the **REST API Endpoint** option.

• **Generic REST Endpoint in ServiceNow**: For the **Generic REST Endpoint in ServiceNow** option, you can send the data to a different staging table in ServiceNow.

• **Destination URI**: Enter a destination URI for the **Generic REST Endpoint in ServiceNow** option. This field is mandatory for this option.

For detailed information about integrating Cisco DNA Center with ServiceNow, see the *Cisco DNA Center ITSM Integration Guide* for this release.

Step 8   Click **Add** to save your instance addition.

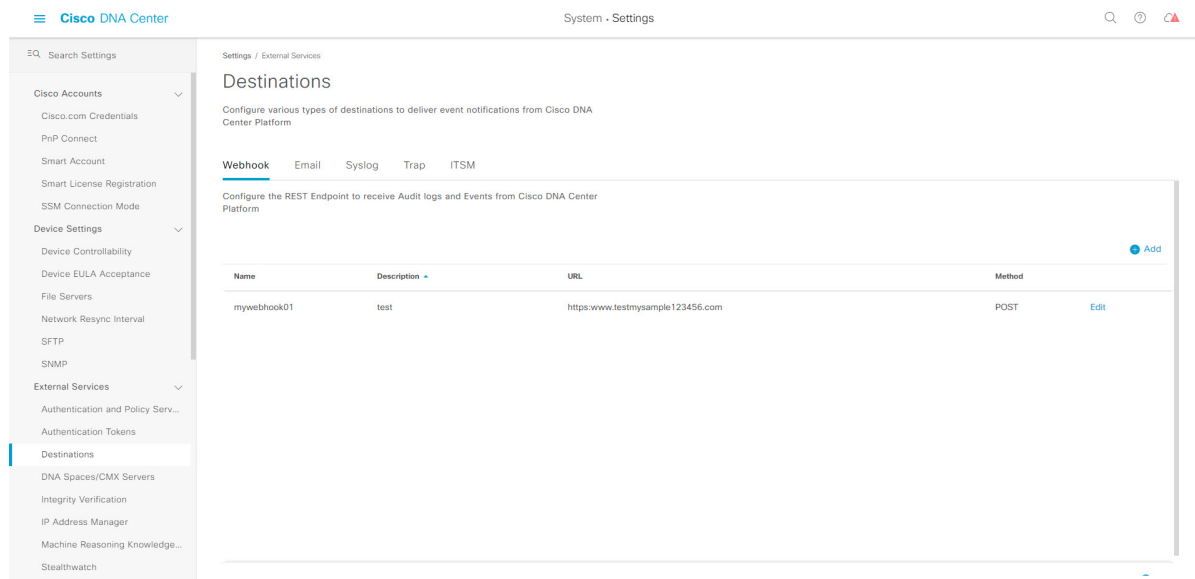The additions to the instance immediately take effect.

Configure a Webhook Destination

Cisco DNA Center supports a webhook destination for both events and reports.

To configure a webhook destination for events or reports, perform the following steps using the Cisco DNA Center GUI.

Step 1   Click the menu icon (≡) and choose **System** > **Settings** > **External Services** > **Destination** > **Webhook**.

Step 2   Review the **Webhook** tab.

Figure 4: Webhook Tab

The following fields are displayed:

- **Name**: Name of the webhook.

- **Description**: Description (user provided) of the webhook.

- **URL**: URL of webhook (callback URL).

- **Method**: REST API method of webhook (POST).

- **Edit**: Link that opens field to edit the configured webhook fields. After editing the webhook configuration, click **Update** to save your changes.
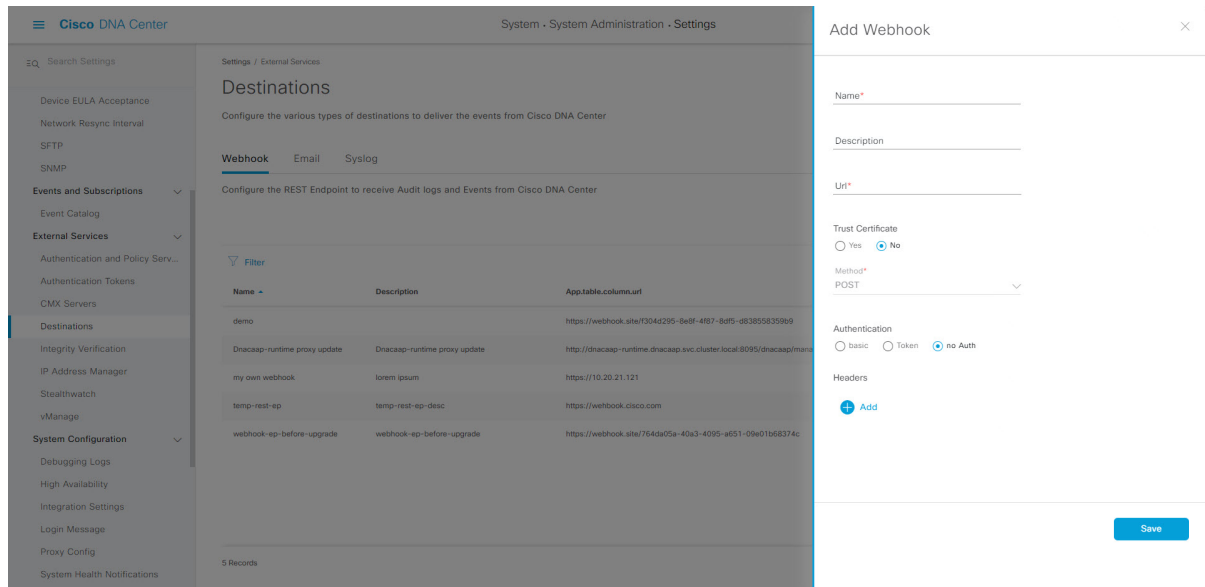
For this release, you can configure an IPv6 value for the URL.

Step 3   Click **Add** to configure a webhook.

An **Add Webhook** slide-in pane is displayed.

Step 4   Enter values in the fields in the **Add Webhook** slide-in pane to configure the webhook.

Figure 5: Add Webhook

- **Name**: Name of the webhook.

- **Description**: Description of the webhook.

- **URL**: URL address of the webhook (callback URL).

Step 5 Depending upon your webhook configuration, choose whether a trust certificate is associated with the webhook URL.

For the **Trust Certificate** radio button, click **Yes** or **No**.

Step 6 Depending upon your webhook configuration, choose the authentication type associated with your webhook URL.

For the **Authentication** radio button, choose one of the following:

- **Basic**: Authentication where the client sends HTTP requests with an Authorization header that contains the word **Basic**, followed by a space and a base64-encoded string *username:password*. If you select **Basic** in the GUI, the **Header Key** field is automatically populated with the **Authorization** value.

- **Token**: Authentication where users are authenticated using a security token that is provided by the server. If you select **Token**, the **Header Key** field below enters the value **X-Auth-Token**.

- **No Authentication**: No authentication needed.

Step 7 Under **Headers**, enter values for the **Header Name** and **Header Value**.

Click **Add** to add the header name and value.

Note Depending on the type of authentication you chose, header names and values may be automatically populated.

Step 8 Click **Save** to save your webhook destination configuration.

What to do next

Configure a webhook destination for either an event or a report. For information about the procedures to configure an event or a report using the webhook destination, see Work with Event Notifications and Run Your First Report.

Configure an Email Destination

Cisco DNA Center supports email notification for both events and reports.

Note

- Emails are sent from Cisco DNA Center using the SMTP protocol. Cisco DNA Center only supports cleartext SMTP for email event notifications. If you use an email server that requires SSL/TLS support, you will not be able to receive the email event notifications.

- For the emails to have the correct Cisco DNA Center hyperlink, enter the IP address or hostname of Cisco DNA Center in the **Integrations Settings** window. To enter this information using the GUI, click the menu icon (≡) and choose **System** > **Settings** > **System Configuration** > **Integration Settings**. For more information, see Configure Integration Settings.

You must have the appropriate permissions to perform the tasks described in this procedure. For information about role-based access control for the Cisco DNA Center platform, see Role-Based Access Control Support for Platform.

Perform the following steps to configure an email destination for events or reports using the Cisco DNA Center GUI.

Figure 6: Email Tab

Step 1 Click the menu icon (☰) and choose **System** > **Settings** > **External Services** > **Destinations** > **Email**.

Step 2 Configure the required **Primary SMTP Server** fields:

- **Hostname/IP**: Hostname or IP address of the primary SMTP server. You can configure an IPv6 value for the hostname or IP address.

- **Port**: Port number of the server.

Step 3 Configure the optional **Secondary SMTP Server** fields:

- **Hostname/IP**: Hostname or IP address of the secondary SMTP server. You can configure an IPv6 value for the hostname or IP address.

- **Port**: Port number of the server.

Step 4 Configure the **Senders and Receivers** test email fields:

- **From**: Sender of the test email.

- **To**: Recipient of the test email.

- **Subject**: Enter text (up to a maximum of 200 characters) for a subject line for the test email.

Step 5   To test the email configuration, click **Test**.

After you click **Test**, a test email is sent using the parameters that are configured (for both primary and secondary SMTP server settings with **Cisco DNA Center SMTP configuration test email** as the subject line). A success (configuration validation) or failure message should appear depending on the test email connectivity results.

Step 6   To save the configuration, click **Save**.

To cancel the configuration, click **Cancel**.

What to do next

Configure an email destination for either an event or a report. For information, see Work with Event Notifications and Run Your First Report.
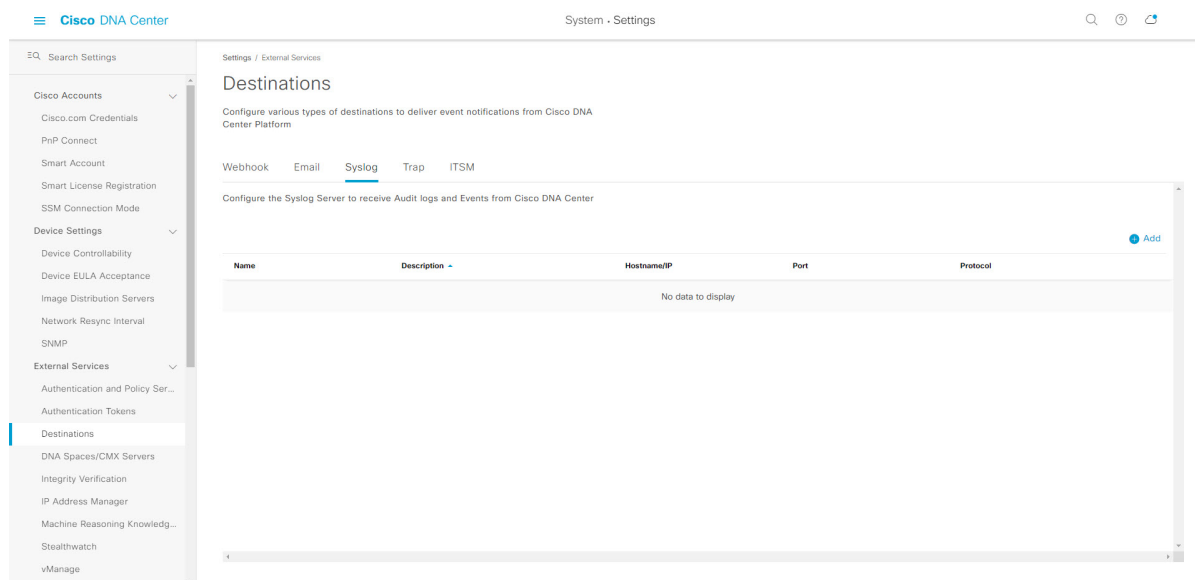
Configure a Syslog Server Destination

Cisco DNA Center supports a syslog server destination for event notifications.

Perform the following steps to configure a syslog server destination for event notifications using the Cisco DNA Center GUI.

Step 1   Click the menu icon (≡) and choose **System** > **Settings** > **External Services** > **Destination** > **Syslog**.

Step 2   Review the **Syslog** tab.

Figure 7: Syslog Tab

The following fields are displayed:

• **Name**: Name of the syslog server.

• **Description**: Description of the syslog server.

• **Hostname/IP**: Hostname or IP address of the syslog server.

• **Port**: Port number of the syslog server.

• **Protocol**: Either TCP or UDP protocol.

Step 3 To configure a syslog server, click the **Addition** icon (+).

Figure 8: Configure a Syslog Server

Step 4 In the **Name** field, enter a name for the syslog server.

Step 5 In the **Description** field, enter a brief description of the syslog server.

Step 6 In the **Syslog Server Address** field, enter a hostname or IP address.

Step 7 In the **Syslog Server Port** field, enter a port number.

Step 8 (Optional) To test out the configuration, click **Validate**.

> **Note** If your configuration was successful, then you will be presented with a validation message.

Step 9 To save your syslog server destination configuration, click **Save**.

To cancel your configuration, click **Cancel**.

What to do next

Configure a syslog server destination for an event notification. For information, see Work with Event Notifications.

Configure a Trap Notification

Cisco DNA Center supports SNMP trap event notifications.

Perform the following steps to configure SNMP trap event notifications using the Cisco DNA Center GUI.

Step 1   Click the menu icon (☰) and choose **System** > **Settings** > **External Services** > **Destination** > **Trap**.

Step 2   Review the **Trap** window.

Figure 9: Trap Tab

Step 3   Click **Add** to configure a trap.

Figure 10: Add Trap

Step 4   Configure the following fields in the slide-in pane:

- **Name**: Name of the event.

- **Description**: Word or phrase about the event.

- **Hostname/IP Address**: Enter the hostname or IP address for the SNMP trap receiver (server).

  You can configure an IPv6 value for the **Hostname/IP address**.

- **Port**: Enter the port number for the SNMP trap receiver (server).

- **SNMP Version**: Choose the SNMP version from the drop-down list:

  - **SNMP V2C**: For SNMP Version 2C, enter the community string.

  - **SNMP V3**: For SNMP Version 3, enter the following additional information:

    - **Username**

    - **Mode**: Choose a mode from the drop-down list.

      - For **No Authentication, No Privacy** selection, no further configuration is required.

      - For **Authentication, No Privacy**, configure the Authentication Type (SHA or MD5), Authentication Password, Confirm Authentication Password.

      - For **Authentication and Privacy**, configure the **Authentication Type (SHA or MD5)**, **Authentication Password**, **Confirm Authentication Password**. Additionally, configure the **Privacy Type (AES128, DES)**, **Privacy Password**, and **Confirm Privacy Password**.

Step 5   Click **Save**.

What to do next

Access the **Events** window to select one or more events and subscribe to the configured SNMP trap destination. Click the menu icon (≡) and choose **Platform** > **Developer Toolkit** > **Events**. Choose an event that supports subscription to an SNMP trap destination (SYSTEM type event) and subscribe.