Cisco DNA Center to PagerDuty Integration

About Cisco DNA Center to PagerDuty Integration

You can now integrate Cisco DNA Center with PagerDuty.

Note PagerDuty is an incident management platform that provides reliable notifications to help detecting and correcting infrastructure problems. For information about PagerDuty, see https://www.pagerduty.com/.

The following table displays the supported Cisco DNA Center to PagerDuty integration workflow.

Table 1: Cisco DNA Center to PagerDuty Integration Workflow

Step	Description
Step 1	Review the Cisco DNA Center to PagerDuty integration requirements. The following are the requirements for an integration: • Cisco DNA Center, Release 2.2.3 • PagerDuty **Note** PagerDuty integration with Cisco DNA Center is accomplished using REST APIs and webhooks. For information about the PagerDuty integration with Cisco DNA Center using these APIs, see https://developer.pagerduty.com/docs/events-api-v2/overview/.

Step	Description
Step 3	Select and subscribe one or more event notifications from Cisco DNA Center to PagerDuty. To access an event in Cisco DNA Center, click the **Menu** icon > **Platform** > **Developer Toolkit** > **Events**. Review and select an event from the **Events** table that supports PagerDuty integration. For example, from the list of events in the window, select **AP Down** and proceed to subscribe to that event. Click **Subscribe** to configure the event for a subscription.
Step 4	Configure the PagerDuty settings in the selected event. The following data must be entered in the Cisco DNA Center platform GUI for the selected event: • PagerDuty Events REST API URL • PagerDuty Integration key (routing key) For detailed information about this event configuration procedure, see Subscribe Cisco DNA Center Event Notifications to PagerDuty, on page 3.
Step 5	Notifications for the selected event are now forwarded to PagerDuty from Cisco DNA Center. The following are the supported workflow connections between Cisco DNA Center issues and PagerDuty events: • Open Cisco DNA Center to trigger PagerDuty.
Step 6	PagerDuty responds to Cisco DNA Center with one of the following REST API responses: • 202: The event has been accepted by PagerDuty. • 400: Bad Request - Check that the JSON is valid. • 429: Too many API calls at a time. • 500 or other 5xx: Internal Server Error - the PagerDuty server experienced an error while processing the event. • Networking Error: Error while trying to communicate with PagerDuty servers.
Step 7	Review and change (if necessary) the incident status in PagerDuty. **Note** Refer to your PagerDuty documentation for information about performing this step.

Step	Description
Step 8	Close the incident in PagerDuty. **Note** Refer to your PagerDuty documentation for information about performing this step.
Step 9	PagerDuty integration is a one-way notification from Cisco DNA Center to PagerDuty. Cisco DNA Center is not dependent on Pagerduty status to close an issue.

Subscribe Cisco DNA Center Event Notifications to PagerDuty

You can configure a Cisco DNA Center platform event notification to appear in PagerDuty as an alert. Follow the steps described in this procedure to configure a Cisco DNA Center event notification so that it appears in PagerDuty.

Before you begin

Ensure that you have PagerDuty running on a system that you will integrate with Cisco DNA Center platform. Refer to your PagerDuty documentation for instructions on setting up PagerDuty.

You must have the appropriate permissions to perform the tasks as described in this procedure. For information about Role-Based Access Control for the Cisco DNA Center platform, see the Cisco DNA Center Platform User Guide.

Step 1 In the Cisco DNA Center GUI, click the **Menu** icon (☰) and choose **Platform** > **Developer Toolkit** > **Events**.

The **Events** window appears.

Step 2 In the **Events** window, review the events table that is displayed by the GUI.

Note You can adjust the events that are displayed in the GUI by entering a keyword in the **Find** field.

Step 3 Review the data on an individual event within the table.

The following **Events** data is provided:

- **Event ID**: Identification number for the event.
- **Name**: Name of the event (link).

  If you click this link, the **Name** slide-in pane opens for the event. The **Name** slide-in pane consists of two tabs: **Events Details** and **Active Subscriptions**.
- **Description**: Brief description of the event.
- **Type**: Network, App, System, Security, or Integrations type of event.
- **Category**: Error, Warn, Info, Alert, Task Progress, Task Complete.
- **Severity**: 1–5.

  Note Severity 1 is the most important or critical priority and should be assigned for this type of an event.

- **Status**: Subscription status (whether a user has subscribed to the event). If subscribed to an event, then a link appears in this column to the **Active Subscription** tab.

Step 4 Click a **Name** link to open an event subscription slide-in pane.

Step 5 Review the data displayed in the event subscription slide-in pane.

The following **Event Details** tab data is displayed:

- **Description**: Brief description of the event and how it is triggered.
- **Event ID**: Identification number of the event.
- **Version**: Version number of the event.
- **Namespace**: Namespace of the event.

  The default value for this release for all of the events is ASSURANCE.
- **Domain**: REST API domain to which the event belongs.
- **Sub Domain**: Subgroup under the REST API domain to which the event belongs.
- **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 for this type of an event.
- **Cisco DNA Event Link**: Event broadcast using REST URL.
- **Note**: Additional information about the event or to help further understanding the event.
- **Tenant Aware**: Whether the event is tenant aware or not.
- **Tags**: Tags indicate what Cisco DNA Center component is affected by the event. The default value for tags for this release is ASSURANCE with more syntax for the specific Assurance issue.
- **Supported Endpoints**: What endpoint types are supported for the event notifications. The following endpoints are supported with this release:
  - REST API
  - Syslog server
  - Email
  - SNMP trap
- **Model Schema**: Presents model schema about the event:
  - **Details**: Example of model schema detail for the event.
  - **REST Schema**: REST schema format for the event.

Step 6 Click the **Active Subscriptions** tab.

The following **Active Subscriptions** tab data is displayed:

- **Broadcast Methods**: Email, REST API, or SNMP trap
- **Count and Instances**: Number of instances of notifications for emails, REST APIs or SNMP traps.

  Note After subscribing to an event, click the subscription count under **Count and Instances** to edit or unsubscribe to the active subscription. After clicking on the individual subscription count, click **Unsubscribe** to unsubscribe or **Edit** to further edit it. For multiple subscriptions, you will need to unsubscribe to each subscription one at time. The ability for multiple subscribing or unsubscribing is not supported using the GUI.

- **Actions**: Either unsubscribe or edit the active subscription.

  Note After subscribing to an event, a **Try It** button will appear in the **Active Subscriptions** tab. By clicking on this button, you are able to run an event simulation.

Step 7 Click the **Subscribe** button to add this event to your active subscription of events. For a *PagerDuty subscription*, configure the following fields:

- **Name**: Name of the event.
- **Subscription Type**: **PAGER_DUTY**

  Note Subscription type can be set for either email, REST API endpoint (webhook), syslog server, SNMP trap, or PagerDuty.

- **Select an existing endpoint**: Select the Subscription Endpoint by using the drop-down arrow.
- **Create a new endpoint**: Enter a new **Endpoint Name** and **Endpoint Description**.

Enter values for the following fields:

- **PagerDuty Events API URL**
- **PagerDuty Integration Key**
- **PagerDuty Events API Version**

Click **Subscribe** to save and enable the subscription or **Cancel** to cancel and exit the window.

Step 8 Review your subscriptions in the **Active Subscriptions** tab.

The following information is provided for a subscription:

- **Broadcast Method**: Email, REST API, or SNMP trap notification.
- **Counts and Instances**: Number of instances of notification.

  Click the **Unsubscribe** and **Edit** links to unsubscribe or edit the subscription respectively.

- **Actions**: Actions taken for the events.

Note You can adjust the subscriptions that are displayed in the GUI by clicking the **Filter** icon and using the filter, or entering a keyword in the **Find** field.

What to do next

Proceed to access PagerDuty to review the events.

The Cisco DNA Center events will appear in PagerDuty as alerts within the PagerDuty **INCIDENTS** window. You can review and mark the alert as **Resolved** in this window.