Platform Manage GUI

About Manage

The Catalyst Center platform **Manage** window provides access to the following features:

- **Bundles**: Access to bundles that you can use to integrate Catalyst Center with your own applications or to enhance the performance of Catalyst Center itself. Bundles are comprised of groupings of APIs, events, integration flows, data services, or applications.

  Note To view the bundle components, click the menu icon and choose **Platform** > **Developer Toolkit** > **APIs** or **Platform** > **Developer Toolkit** > **Integration Flows**.

- **Configurations**: Ability to configure global settings for a single bundle or across multiple bundles for a custom platform experience.

About Bundles

Catalyst Center platform provides access to bundles that you can use to integrate Catalyst Center with your own applications or to enhance the performance of Catalyst Center itself.

The following Catalyst Center platform information is accessible using the GUI:

- Bundle name, vendor, version, version release date, tags, and description.
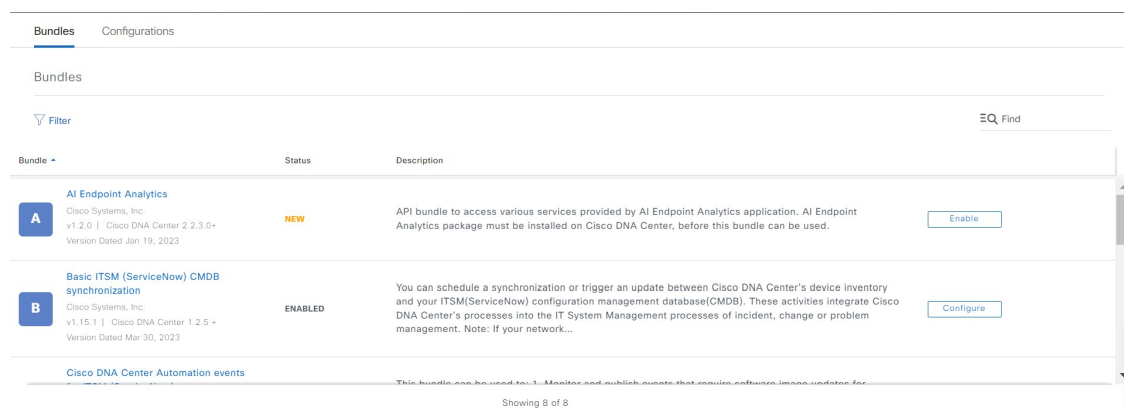
- Status of the bundle:

- **NEW**: Bundle that is available through Catalyst Center platform, but has not yet been enabled. Click **Enable** to enable the bundle for configuration and subsequent activation.

- **ENABLED**: Bundle that has been enabled, but not yet configured. Once enabled, the bundle's integration flows and API code can be viewed under the **Contents** tab. Click **Configure** to configure at the bundle level.

  The enablement and configuration of bundles are two separate steps, because a business manager will usually enable a particular bundle as a business decision. The follow-up configuration of the bundle will usually be performed by an IT or network administrator.

- **DISABLED**: The bundle has been stopped from executing any further.

- **ACTIVE**: After either reviewing and/or configuring the bundle (configuring bundle-specific values), you can activate the bundle in your network by clicking **Activate**.

- **UPDATE**: When you upgrade from one version of Catalyst Center platform to a later version of Catalyst Center platform.

- **ERROR**: There is an issue with the bundle and it cannot be activated within your network.

Bundle Features

You can review, enable, and configure bundles using the **Bundles** window in the Catalyst Center GUI.

Figure 1: Catalyst Center Platform Bundles Window

Access the bundles in the GUI to accomplish the following tasks:

- Review and try out supported Catalyst Center APIs. For more information, see Work with APIs.

- Enable Rogue Management and the Cisco Advanced Wireless Intrusion Prevention System (aWIPS) to detect wired and wireless threats, including rogue access points. For more information, see Work with APIs.

- Configure a destination (Event Management or REST API endpoint) to receive events for ServiceNow. For information on using the GUI to configure a destination, see Configure Bundles: Destination to Receive Events, on page 3.

- Configure access settings for Catalyst Center to ServiceNow (hostname, username, password, and so on). For information on using the GUI to configure access settings to ServiceNow, see Configure Bundles: ServiceNow Access Settings, on page 6.

- Configure data synchronization between Catalyst Center and ServiceNow (including the option to configure operational and source identifiers). For information on using the GUI to configure data synchronization, see Configure Bundles: CMDB Data Synchronization for ServiceNow, on page 9.

The following bundles are available:

- **Basic ITSM (ServiceNow) CMDB synchronization**: Triggers or schedules a synchronization between Catalyst Center devices and your ServiceNow CMDB system. The ServiceNow CMDB provides a single system of record for IT.

  Note For an example of an integration flow and ServiceNow, see ServiceNow Integration.

- **REST API**: Contains the REST API supported by Catalyst Center. This API provides a rich set of capabilities to query network knowledge, as well as to initiate network programming.

- **Endpoint Attribute Retrieval with ITSM (ServiceNow)**: Retrieves detailed endpoint information and publishes it once or on a recurring schedule to Catalyst Center. This activity does not modify or delete any CIs on the existing ITSM (ServiceNow) tool.

- **Network Issue Monitor and Enrichment for ITSM (ServiceNow)**: Contains Catalyst Center components that monitor the network for assurance and maintenance issues, and publishes the event details to a ServiceNow system. It also contains APIs to access rich network context data.

- **Rogue and aWIPS**: Contains the REST API supported by Catalyst Center for Rogue Management and aWIPS. This API is used to detect wired and wireless threats, including rogue access points. You must install the **Rogue and aWIPS** package in Catalyst Center to use this bundle and its APIs.

- **Automation events for ITSM (ServiceNow)**: Monitors and publishes events that require software image updates for compliance, security, device provisioning activities, or other operational triggers to a ServiceNow system.

- **Disaster Recovery API**: Contains the REST APIs supported by disaster recovery and provides support to monitor the disaster recovery system.

- **AI Endpoint Analytics**: Lets you access various services provided by the AI endpoint analytics application. You must install the **AI Endpoint Analytics** package in Catalyst Center to use this bundle.

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

Configure Bundles: Destination to Receive Events

Perform this procedure to configure a destination to receive events (network and SWIM) for ServiceNow within a bundle.

You configure a destination to receive events for ServiceNow within the following bundles:

- **Network Issue Monitor and Enrichment for ITSM (ServiceNow)**

- **Automation events for ITSM (ServiceNow)**

Before you begin

See the latest *Cisco Catalyst Center ITSM Integration Guide* to understand how this procedure fits within a larger workflow when configuring a Catalyst Center-to-ServiceNow integration.

Step 1 From the top-left corner, click the menu icon and choose **Platform** > **Manage** > **Bundles**.

Step 2 Click either the **Network Issue Monitor and Enrichment for ITSM (ServiceNow)** or the **Automation events for ITSM (ServiceNow)** bundle link or icon.

The following information is provided:

- **General information**: Vendor, version, platform, tags displayed under the square icon.

  Note Tags indicate what the Catalyst Center component is used for or is affected by the bundle.

- **Information**: Tab that displays general information (purpose of bundle and how bundle works in the network), sample schemas, mapping notes, configuration notes, and other data about the bundle.

- **Contents**: Tab that accesses information about the integration flows within the bundle.

- **Release Notes**: Tab that displays latest release information about the bundle, including its version.

Step 3 Click each of the preceding tabs and review the information about the bundle.

Step 4 Click **Enable** to enable the bundle.

Step 5 In the **Information** field, click **Enable** to confirm enabling the bundle.

Step 6 In the Success message, click **Okay**.

Step 7 Click **Configure** to configure at the bundle level.

Step 8 In the configuration slide-in pane, click **Destination to receive events** to configure a Destination instance.

Figure 2: Example of Destination to Receive Events Configuration Fields

Configure Network Issue Monitor and Enrichment for ITSM (ServiceNow)

Configure your bundle ✕

> ServiceNow Access Settings

∨ Destination to receive events

INFORMATION

Instance Name *

Description

DESTINATION TO RECEIVE EVENTS

Destination to receive events *   ∨

Destination Uri

Enter a custom endpoint

Cancel   Activate

Note   Use the **Destination to receive events** configuration options for ServiceNow to receive network event and Catalyst Center automation event details in a REST API endpoint and create an incident, problem, or change ticket, based on the configuration chosen by the user in Catalyst Center. For additional information about setting this up with ServiceNow, see the Cisco Catalyst Center ITSM Integration Guide.

Step 9   Click the radio button to configure either an existing Destination instance or configure a new instance.

For configuring an existing Destination instance, choose it from the drop-down list in the window and click **Activate**

Step 10   For configuring a new Destination instance, enter the following information:

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

- **Description**: Descriptive text of the instance.

- **Destination to receive events**: Choose one of the following:

    - **Event Management**: When setting up Catalyst Center integration with ServiceNow without using the Catalyst Center app, choose the **Event Management** option. The **Event Management** option also requires that you have the Event Management plug-in configured within the ServiceNow instance.

    - **REST API Endpoint**: The **REST API Endpoint** option can be used with the Catalyst Center app. Data is sent to a REST API endpoint within the Catalyst Center 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.

For detailed information about integrating Catalyst Center with ServiceNow, see the *Cisco Catalyst Center ITSM Integration Guide*.

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

After entering this information, proceed to the next step.

Step 11   Click **Activate** to save your changes and activate the bundle, or click **Cancel** to cancel the configuration and close the slide-in pane.

> **Note**   By clicking **Activate**, you enable the changes that are made to the bundle and the changes take effect immediately. Additionally, the bundle's status changes from **ENABLED** to **ACTIVE**.

What to do next

To review your configuration, choose **Manage** > **Configurations** > **General Settings** and use the **Filter** or **Find** tools to locate the specific destination instance configured in this procedure.

If necessary, later you can edit, update, or delete the instance in the **General Settings** window. For additional information, see Configure General Settings: Edit an Instance.

Configure Bundles: ServiceNow Access Settings

Perform this procedure to configure access settings for ServiceNow within a bundle.

You configure ServiceNow access settings within the following bundles:

- **Endpoint Attribute Retrieval with ITSM (ServiceNow)**

- **Network Issue Monitor and Enrichment for ITSM (ServiceNow)**

- **Automation events for ITSM (ServiceNow)**

Before you begin

See the latest *Cisco Catalyst Center ITSM Integration Guide* to understand how this procedure fits within a larger workflow when configuring a Catalyst Center-to-ServiceNow integration.

Step 1   From the top-left corner, click the menu icon and choose **Platform** > **Manage** > **Bundles**.

Step 2   Click the **Network Issue Monitor and Enrichment for ITSM (ServiceNow)**, **Automation events for ITSM (ServiceNow)**, or **Endpoint Attribute Retrieval with ITSM (ServiceNow)** bundle link or icon.

> **Note**   For this procedure and as an example, the **Endpoint Attribute Retrieval with ITSM (ServiceNow)** is selected.

The following information is provided:

- **General information**: Vendor, version, platform, and tags are displayed under the square icon.

> **Note**   Tags indicate what the Catalyst Center component is used for or is affected by the bundle.

• **Information**: Tab that displays general information (purpose of bundle and how bundle works in the network), sample schemas, mapping notes, configuration notes, and other data about the bundle.

• **Contents**: Tab that provides access to information about the integration flows within the bundle.

Note   For the **Endpoint Attribute Retrieval with ITSM (ServiceNow)** bundle, access is provided to the **Scheduler for ServiceNow Asset Sync** integration flow.

• **Release Notes**: Tab that displays latest release information about the bundle, including its version.

Step 3   Click each of the preceding tabs and review the information about the bundle.

Step 4   Click **Enable** to activate the link.

Step 5   In the **Information** field, click **Enable** to confirm enabling the bundle.

Step 6   In the success message, click **Okay**.

Step 7   Click the **Contents** tab.

For the **Endpoint Attribute Retrieval with ITSM (ServiceNow)** bundle, a link to the **Scheduler for ServiceNow Asset Sync** integration flow appears. Click the link to perform the following tasks:

• Review the **Description**, **Tags**, **How to Use this Flow**, and scheduler.

• Click **Run Now** (to run the scheduler now), **Run Later** (to schedule for a later time), or **Recurring** (to set up a recurring schedule).

For **Run Later**, you must select a date, time, and time zone. For **Recurring**, you must set a repeating interval (daily or weekly), an interval duration (minutes or hours), and a start and end date.

• Click **Schedule** to enable the scheduler.

Important   Only configure and enable an integration flow schedule after you have finished configuring the bundle itself as described in the following steps. You can configure and enable an integration flow schedule by returning to this view and clicking **Schedule** or by choosing **Platform** > **Developer Toolkit** > **Integration Flows** > **Scheduler for ServiceNow Asset Sync**.

For the other bundles, **Network Issue Monitor and Enrichment for ITSM (ServiceNow)** and **Automation events for ITSM (ServiceNow)**, there is no link to an integration flow. Only information about integration flows is displayed.

Step 8   Click the **X** icon to close the window and return to the previous bundle window.

Step 9   Click **Configure** to configure at the bundle level.

Step 10   In the configuration slide-in pane, click **ServiceNow Access Settings** to configure a ServiceNow instance.

Step 11   Click the radio button to configure either an existing ServiceNow instance or configure a new instance.

Figure 3: Example of ServiceNow Instance Configuration Fields

Configure Endpoint Attribute Retrieval with ITSM (ServiceNow)

Configure your bundle   ×

ⓘ This bundle has additional configurations for its Schedule-Based Integration Flows. View Flows

    • Scheduler for ServiceNow Asset Sync - Unscheduled

⌄ ServiceNow Access Settings

    >> Back to Select Instance

    INFORMATION

    Instance Name *

    Description

    SERVICENOW ACCESS SETTINGS

    Host Name *

    https://<servicenow-host-name>

    Username *

    <username-for-servicenow-host>

    Password *

    •••••••••••••••••••••••••••••••••••   SHOW

                                                                       Hint

    Check connectivity

                                       Cancel   **Activate**

To configure an existing ServiceNow instance, choose it from the drop-down list and click **Activate**.

Step 12   To configure a new ServiceNow instance, enter the following information:

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

- **Description**: Descriptive text of the instance.

- **Host name**: Hostname for the ServiceNow system.

- **Username**: Username required to access the ServiceNow system.

- **Password**: Password required to access the ServiceNow system.

Step 13   Click **Check Connectivity** to test whether you can connect to the server where the endpoint is located.

After a successful test of connectivity to the server, proceed to the next step.

Step 14   Click **Activate** to save your changes and activate the bundle, or click **Cancel** to cancel the configuration and close the slide-in pane.

Note   By clicking **Activate**, you enable the changes that are made to the bundle and the changes take effect immediately. Additionally, the bundle's status changes from **ENABLED** to **ACTIVE**.

What to do next

To review your configuration, choose **Manage** > **Configurations** > **General Settings** and use the **Filter** or **Find** tools to locate the ServiceNow instance configured in this procedure.

If necessary, later you can edit, update, or delete the instance in the **General Settings** window. For additional information, see Configure General Settings: Edit an Instance.

Configure Bundles: CMDB Data Synchronization for ServiceNow

Perform this procedure to configure data synchronization between Catalyst Center and ServiceNow (including the option to configure operational and source identifiers) within a bundle.

You configure data synchronization and set the operational limit and identifier for ServiceNow within the **Basic ITSM (ServiceNow) CMDB synchronization** bundle.

Before you begin

See the latest Cisco Catalyst Center ITSM Integration Guide to understand how this procedure fits within a larger workflow when configuring a Catalyst Center-to-ServiceNow integration.

Step 1 From the top-left corner, click the menu icon and choose **Platform** > **Manage** > **Bundles**.

Step 2 Click the **Basic ITSM (ServiceNow) CMDB synchronization** bundle link or icon.

The following information is provided:

- **General information**: Vendor, version, platform, tags displayed under the square icon.

  Note Tags indicate what the Catalyst Center component is used for or is affected by the bundle.

- **Information**: Tab that displays general information (purpose of bundle and how bundle works in the network), sample schemas, mapping notes, configuration notes, and other data about the bundle.

- **Contents**: Tab that accesses the integration flows that make up the bundle, or provides information about the integration flows that make up the bundle.

- **Release Notes**: Tab that displays latest release information about the bundle, including its version.

Step 3 Review the bundle data in the **Information** tab and click the **Contents** tab.

Step 4 Click the **Integration Flows** header.

Review the list of available integration flows (links) under the header. For detailed information about integration flows and their purpose, see Work with Integration Flows.

Step 5 Click **Enable** to activate the links.

Step 6 In the **Information** field, click **Enable** to confirm enabling the bundle.

Step 7 In the success message, click **Okay**.

Step 8 Click the integration flow link to perform the following tasks:

- Review the **Description**, **Tags**, **How to Use this Flow**, and scheduler.

- Click **Run Now** (to run the scheduler now), **Run Later** (to schedule for a later time), or **Recurring** (to set up a recurring schedule).

For **Run Later**, you need to select a date, time, and time zone. For **Recurring**, you need to set a repeating interval (daily or weekly), an interval duration (minutes or hours), and a start and end date.

- Click **Schedule** to enable the scheduler.

Important   Only configure and enable an integration flow schedule, after you have finished configuring the bundle itself as described in this procedure. You can configure and enable an integration flow schedule by returning to this view and clicking **Schedule**. Or, click the **View Flows** link in the **Configure Basic ITSM (ServiceNow) CMDB synchronization** slide-in pane (see the following steps). Or, click the menu icon and choose **Platform** > **Developer Toolkit** > **Integration Flows** > **Schedule to Publish Inventory Details-ServiceNow Connector**.

Step 9   Click the **X** icon at the upper right of the window to close it and return to the previous bundle window.

Step 10   Click **Configure** to configure at the bundle level.

A configuration slide-in pane appears. Review the CMDB synchronization information.

Step 11   Click the radio button to configure either existing or new ServiceNow access settings for the CMDB synchronization.

Figure 4: ServiceNow Access Settings

Configure Basic ITSM (ServiceNow) CMDB synchronization

Configure your bundle   ✕

ⓘ This bundle has additional configurations for its Schedule-Based Integration Flows. View Flows
   • Schedule to Publish Inventory Details - ServiceNow Connector - Unscheduled

ServiceNow Access Settings

This is used to specify the connection settings to a ServiceNow instance

○ Select an existing instance   ● Create a new instance

Instance Name *

Description

⏏ Exit   Next

To configure an existing setting, choose it from the drop-down menu in the window and click **Next**.

Step 12   To configure a new access setting, enter the following instance information:

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

- **Description**: Descriptive text of the instance.

Click **Next**.

Step 13 To configure a new access setting, enter the following additional settings information:

Figure 5: ServiceNow Access Settings

Configure Basic ITSM (ServiceNow) CMDB synchronization

Configure your bundle ✕

ServiceNow Access Settings

Host Name *
https://<servicenow-host-name>

Username *
<username-for-servicenow-host>

Password *
<password-to-connect-to-servicen

Check connectivity

⤺ Exit | | Back | Next

- **Hostname**: Hostname or IP address of the ServiceNow server.

- **Username**: Username for access to the ServiceNow server.

- **Password**: Password for access to the ServiceNow server.

Click **Check Connectivity** to check access to the ServiceNow server.

Click **Next**.

Step 14 Click the radio button to configure either an existing instance or configure a new instance for the CMDB inventory settings.

Figure 6: CMDB Inventory Settings

Configure Basic ITSM (ServiceNow) CMDB synchronization

Configure your bundle ✕

(i) This bundle has additional configurations for its Schedule-Based Integration Flows. View Flows

• Schedule to Publish Inventory Details - ServiceNow Connector - Unscheduled

CMDB Inventory Settings

This is used to specify the CMDB Configuration details for ServiceNow, which includes the list of device attributes(mandatory/optional) that needs to be synced, type of destination within ServiceNow to receive the CMDB details, connection settings to the ServiceNow instance, transformation mapping between Cisco DNA Center device families and ServiceNow CI classes, maximum number of devices that can be synced in a single API call and the discovery source details.

◯ Select an existing instance   ⦿ Create a new instance

Instance Name *

Description

⤺ Exit   Back   Next

To configure an existing instance, choose it from the drop-down menu in the window and click **Configure**.

Step 15   To configure a new instance, enter the following additional information:

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

•   **Description**: Descriptive text of the instance.

Click **Next**.

Step 16   In the **Select Destination** window, enter the following information:

•   **Destination Type**: There are two discovery source options to choose from:

•   **Synchronize device inventory directly with CMDB**

•   **Post device inventory details to a staging table**

Note   With a staging table, you can take the values from the table and map it to a ServiceNow CMDB.

•   **Destination URI**: Uniform Resource Indicator (URI) of the ServiceNow server (CMDB) or staging table.

Figure 7: Select Destination Window

Configure Basic ITSM (ServiceNow) CMDB synchronization

Configure your bundle ✕

Select Destination

Destination Type * ⌄

Destination Uri *

Enter a Custom Endpoint

⤶ Exit   Back   Next

Click **Next**.

Step 17 In the **Select Inventory Data Fields** window, select the inventory data fields to by synchronized.

> **Note** Inventory data fields are Cisco created data types that can be designated as an attribute or reference to be synchronized into a CMDB or staging table.

Clicking the top check box in the **Select Inventory Data Fields** window will select all of the inventory data fields for synchronization. Click this top check box if you want to sync all of the inventory data fields. Otherwise, review and click a check box at a time to create a smaller subset of inventory data fields for synchronization.

Figure 8: Select Inventory Data Fields Window

The **Select Inventory Data Fields** window consists of the following columns:

- **Name**: Name of the inventory data field.

- **Description**: Brief description of the inventory data field.

- **Is Attribute/Is Reference**: Whether the inventory data field is an attribute or a reference. A reference data field is used to create a relationship between two tables in a database. An attribute data field is used to add more data to a table in a database.

Step 18   For the data fields selected to be synchronized in the preceding step, review their default designation as either an attribute or reference.

To change a data field's default designation, just click the desired data field designation (**Attribute** or **Reference**).

After selecting the data fields to be synchronized and whether the data field is an attribute or reference, click **Next**.

Step 19   In the **Update Transforms** window, either accept or update the ServiceNow transformation mapping between the Catalyst Center device families and the ServiceNow CI classes.

Figure 9: Update Transforms Window

Device families are the Catalyst Center device classifications (for example, Unified AP, Routers, Wireless Controller, Switches, and Hubs), where the inventory attributes/references mapping to ServiceNow is already available in the existing Catalyst Center application in ServiceNow. The type and number of device families can vary depending upon the different Cisco devices in the user's network.

Note Catalyst Center platform is able to automatically retrieve all of the device families in the user's Catalyst Center network and display them in this GUI window.

CI classes are the database tables for ServiceNow (for example, cmdb_ci_wap_network, cmdb_ci_ip_router, and cmdb_ci_ip_switchr). The **CI Class** column in the GUI window above is used to map the CI classes to their respective device families.

The following table displays the Catalyst Center default CI classes for each device family. The default CI classes can be modified by the user. In case of other device families not listed below, Cisco will not have any default values specified in the **CI Class** column. The ServiceNow application user needs to either manually create the corresponding CI Classes and attributes/references mapping or use a pre-existing CI class a 'parent' CI class.

Table 1: Default Device Family to CI Class Mapping List

Device Family	Corresponding CI Class
Unified AP	cmdb_ci_wap_network
Wireless Controller	x_caci_cisco_dna_wireless_lan_controller
Routers	cmdb_ci_ip_router
Switches and Hubs	cmdb_ci_ip_switch
Meraki Access Point	cmdb_ci_wap_network

Device Family	Corresponding CI Class
Meraki Cameras	cmdb_ci_netgear
Meraki Dashboard	cmdb_ci_netgear
Meraki Security Appliances	cmdb_ci_netgear
Meraki Switches	cmdb_ci_ip_switch

After accepting or updating the information in this window, click **Next**.

Step 20 In the **Set Source Identifier and Operational Limit** window, configure the data source and maximum limit.

Figure 10: Set Source Identifier and Operational Limit Window

Configure Basic ITSM (ServiceNow) CMDB synchronization

Configure your bundle

Set Source Identifier and Operational Limit

Enter Discovery Source *

Other Automated

Enter Max Limit *

1000

Configure the following values:

- **Enter Discovery Source**: Enter the same value as previously selected or keep the value at its default, **Other Automated**.

    - **Synchronize device inventory directly with CMDB**

    - **Post device inventory details to a staging table**

Note	**Other Automated** is a preconfigured value for the discovery source attribute in an OOB ServiceNow instance. This is the value that indicates the data source from where the ServiceNow CI was discovered. As a default, Cisco uses one of the existing preconfigured values for the integration.

- **Enter the Max Limit**: Maximum number of devices that can be synchronized in an iteration (single API call).

After entering the above information, click **Next**.

Step 21 In the **Summary** window, review the configuration summary.

After reviewing the information, click **Configure**.

For a successful configuration, you receive a **Done! Bundle Configured** message.

What to do next

Configure the Integration Flow for this bundle (**Schedule to Publish Inventory Details - ServiceNow Connector**), using one of the preceding methods.

Review your configuration, choose **Manage** > **Configurations** > **General Settings**, and use the **Filter** or **Find** tools to locate the instance configured in this procedure. If necessary, later on you can edit, update, or delete the instance in the **General Settings** window. For additional information, see Configure General Settings: Edit an Instance.

You can test the CMDB synchronization by performing the following tasks:

- In the Catalyst Center platform GUI, click the menu icon and choose **Platform** > **Runtime Dashboard** > **Event Summary**. Click **Refresh** to refresh the GUI view. Click the individual events in the window to view the event data and access links to ServiceNow.

- Go to ServiceNow and search for a synchronized device. Check the **Configuration** and **Other Attributes** tabs for the synchronized data in that device's record.