

# **Deploy Catalyst Center Platform**

- Overview, on page 1
- Install Catalyst Center Platform, on page 1
- Configure Integration Settings, on page 2
- API Prerequisites, on page 2
- Role-Based Access Control Support for Platform, on page 3

## **Overview**

To deploy the Catalyst Center platform, perform the following steps:

- 1. Install Catalyst Center, Release 2.3.7. For information, see Install Catalyst Center Platform, on page 1.
- 2. Configure the integration settings. For information, see Configure Integration Settings, on page 2.

After deploying the Catalyst Center platform, perform the following tasks:

- Review the API prerequisites. For information, see API Prerequisites, on page 2.
- Proceed to **Overview** in the GUI to review the brief feature descriptions to better understand the Catalyst Center platform. For information, see About Platform Overview.
- Proceed to **Bundles** in the GUI to enable, configure, and activate any of the bundles necessary for your network. For information, see Bundle Features.

## Install Catalyst Center Platform

When you install Catalyst Center, you also install the Catalyst Center platform. A separate installation procedure for the Catalyst Center platform is not required. For information about installing Catalyst Center, see the *Cisco Catalyst Center Installation Guide*.

The Catalyst Center platform is accessible to a user with a SUPER-ADMIN-ROLE. You can log in and view the Catalyst Center platform, as well as perform actions through its GUI after logging in as a user with a SUPER-ADMIN-ROLE. Additionally, as a user with a SUPER-ADMIN-ROLE, you are able to create a custom role with read, write, or deny permissions to various platform functionality (APIs, bundles, events, and reports). From the top-left corner, click the menu icon and choose **System** > **Users & Roles** > **Role Based Action Access Control** to access this feature.

## **Configure Integration Settings**

In cases where firewalls or other rules exist between Catalyst Center and any third-party applications that need to reach Catalyst Center platform, you will need to configure **Integration Settings**. These cases occur when the IP address of Catalyst Center is internally mapped to another IP address that connects to the internet or an external network.

```
•
```

Important

After a backup and restore of Catalyst Center, you must access the **Integration Settings** window and update (if necessary) the **Callback URL Host Name** or **IP Address** using this procedure.

### Before you begin

You have deployed Catalyst Center platform as described in the previous section.

- Step 1
   From the top-left corner, click the menu icon and choose System > Settings > System Configuration > Integration Settings.
- **Step 2** Enter the **Callback URL Host Name** or **IP Address** that the third-party application needs to connect to when communicating with Catalyst Center platform.
  - **Note** The **Callback URL Host Name** or **IP Address** is the external facing hostname or IP address that is mapped internally to Catalyst Center. Configure the VIP address for a three-node cluster setup.
- Step 3 Click Apply.

### What to do next

Review the API prerequisites for Catalyst Center platform.

## **API Prerequisites**

To work with the Catalyst Center APIs and the Catalyst Center platform, you must meet the following API prerequisites.

#### Supported Programming Language

In order to use the code previews that Catalyst Center platform generates, you must use a supported programming language and perform any other necessary language-specific tasks to use the generated code.

For example, to use Python scripts generated by Catalyst Center platform, you must install the requests library. You can use pip (Pip Installs Packages) to install using a CLI command:

pip install requests

Catalyst Center platform is able to generate code previews for the following languages in the GUI:

• Shell

- Node HTTP
- Node Unirest
- Node Request
- Python
- Ruby
- JavaScript
- JQuery
- PHP
- Go
- Ansible

### Authentication

The Catalyst Center APIs use token-based authentication and the lifetime of a token is 60 seconds. You need to log into the APIs using an authentication script (using the supported programming language of your choice). As an example, run the following Python script to log in:

```
def get_token():
    token = requests.post(
        'https://<cluster IP>/api/system/vl/auth/token',
        auth=HTTPBasicAuth(
            username=<username>,
            password=<password>
        ),
        headers={'content-type': 'application/json'},
        verify=False,
        )
        data = token.json()
        return data['Token']
```

## **Role-Based Access Control Support for Platform**

Catalyst Center platform supports role-based access control (RBAC), which enables a user with SUPER-ADMIN-ROLE privileges to define custom roles that permit or restrict users access to certain platform features.

Use this procedure to define a custom role and then assign a user to that role.



## Note

The Catalyst Center platform is accessible to a user with a SUPER-ADMIN-ROLE. You can log in and view the Catalyst Center platform, as well as perform actions through its GUI after logging in as a user with a SUPER-ADMIN-ROLE. The NETWORK-ADMIN-ROLE and the OBSERVER-ROLE have more limited and restricted capabilities with the Catalyst Center platform. For example, these two roles do not permit the user to perform the following actions:

- Generate reports
- · Subscribe to events
- · Configure event settings
- Enable and configure bundles
- · Configure users and roles

For more information, see the "Manage Users" chapter in the Cisco Catalyst Center Administrator Guide.

### Before you begin

Only a user with SUPER-ADMIN-ROLE permissions can perform this procedure.

### **Step 1** Define a custom role.

- a) From the top-left corner, click the menu icon and choose System > Users & Roles > Role Based Access Control.
- b) Click Create a New Role.

The **Create a User Role** window appears. If this is your first iteration of RBAC, after you have created the new role, you will be asked to assign users to the new role.

c) Click Let's Do it.

If you want to skip this screen in the future, check the **Don't show this to me again** check box.

The Create a New Role window appears.

d) Enter a name for the role and then click Next.

The **Define the Access** window appears with a list of options.

e) Click > next to **Platform** to expand it.

The following options appear, which allow you to set **Deny** (the default), **Read**, or **Write** permissions for the new role:

- APIs: Allows you to view and try out the APIs.
- Bundles: Allows you to configure and activate the bundles and ITSM integration settings.
- Events: Allows you to configure event settings for email, REST API endpoints, and SNMP traps.
- Reports: Allows you to schedule, view, and download reports.
- f) Click Next.

The **Summary** window appears.

- g) Review the summary. If the summary information is correct, click **Create Role**. Otherwise, click **Edit** and make the appropriate changes.
- Step 2 To assign a user to the custom role you just created, click Add Users.

The User Management > Internal Users window appears, which allows you to assign the custom role to an existing user or to a new user.

- To assign the custom role to an existing user, do the following:
  - **a.** In the **Internal Users** window, click the radio button next to the user to whom you want to assign the custom role, and then click **Edit**.

The Update Internal User slide-in pane appears.

- **b.** From the **Role List** drop-down list, choose the custom role, and then click **Save**.
- To assign the custom role to a new user, do the following:
- a. Click Add.

The Create Internal User slide-in pane appears.

- **b.** Enter the first name, last name, email, and username in the fields provided.
- c. From the Role List drop-down list, choose the custom role to assign to the new user.
- d. Enter the password and then confirm it.
- e. Click Save.
- **Step 3** If you are an existing user who was logged in when the administrator was making changes to your access permissions, you must log out of Catalyst Center and then log back in for the new permission settings to take effect.