

Walk Through ServiceNow Integration with Catalyst Center

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Introduction

This document describes the step-by-step process for preparing and configuring Catalyst Center, ServiceNow, and a MID server to be integrated.

Prerequisites

Ensure that these prerequisites are met:

- Administrator access to ServiceNow.
- Administrator access to Cisco Catalyst Center.
- A virtual machine (VM) server running Ubuntu, RHEL, Windows, or CentOS to host the MID server.
- TCP port 443 must be allowed between Cisco Catalyst Center, ServiceNow, and the MID server.

Components Used

These components were used for this guide:

- Cisco Catalyst Center release: 2.3.7.9
- ServiceNow release: Yokohama
- Ubuntu VM release: 22.04

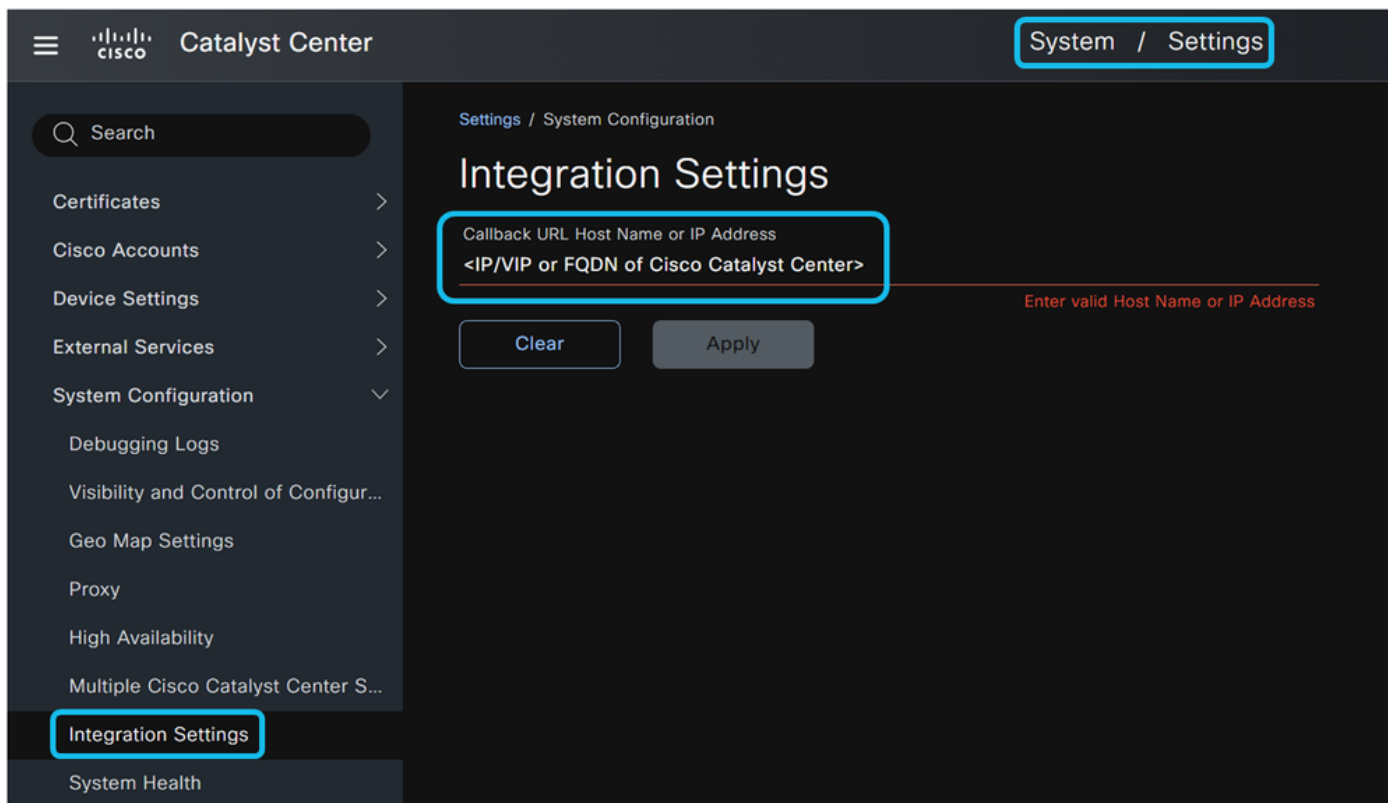
The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Acronyms

- CatC = Cisco Catalyst Center

Section 1: Setting up the Cisco Catalyst Center

1. Log in to the Cisco Catalyst Center graphical user interface (GUI).
2. Navigate to **System > Settings > System Configurations > Integration Settings**.

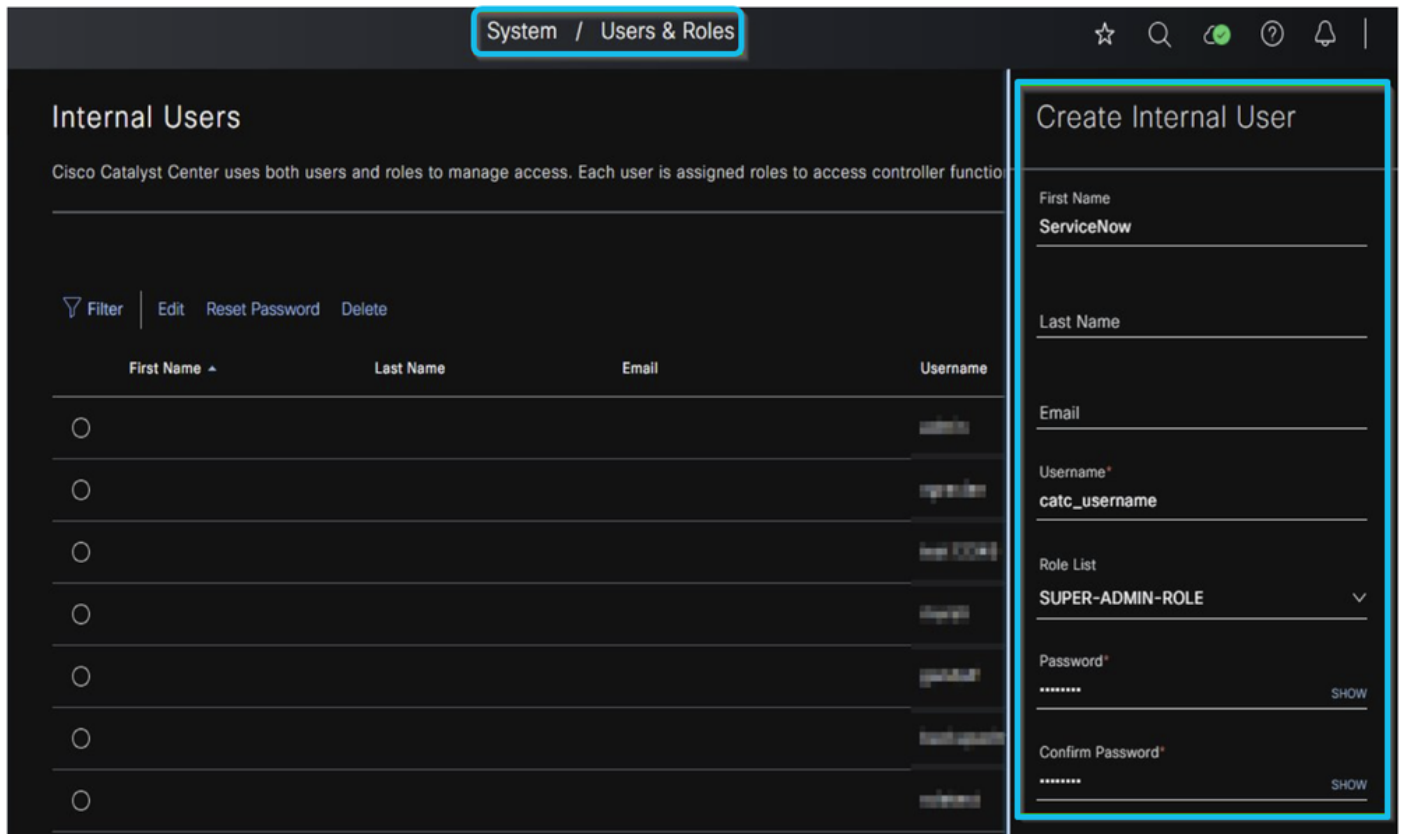


The Integration Settings page is crucial for enabling event notifications. When you enter an IP address, Virtual IP (VIP) address, or Fully Qualified Domain Name (FQDN) for Cisco Catalyst Center on this page, it establishes the callback URL that Cisco Catalyst Center uses when sending event notifications to external systems such as ServiceNow, webhook servers, or SMTP servers. This configuration is mandatory for Cisco Catalyst Center to successfully send event notifications and automatically create change and incident tickets in ServiceNow. Proper configuration of the IP address on the Integration Settings page ensures that ServiceNow can route API calls (for ticket details, approval details, ticket closure details, and CMDB synchronization details) to the correct Cisco Catalyst Center instance, especially when multiple Cisco Catalyst Center instances are connected to the same ServiceNow instance.



Note: The IP address, VIP address, or FQDN configured in the Integration Settings page must be reachable by end-users who access links sent from ServiceNow in incident and change tickets.

Next, create a username and password with super-administrator privileges. This account enables the Cisco Catalyst Center application within ServiceNow to connect to the Cisco Catalyst Center platform using HTTPS and ITSM APIs via the MID server.



Section 2: Creating and Setting up a ServiceNow User

1. Log in to the ServiceNow GUI using administrator credentials.

servicenow

User name

Password



Log in

[Forgot Password ?](#)

2. In the search field, type *users* and click **Users** under **Users and Groups**.



users



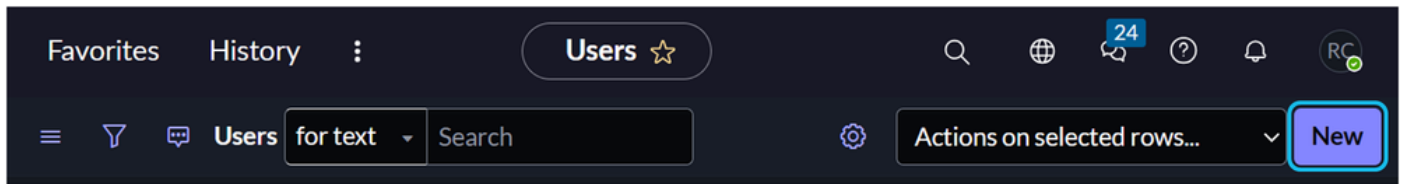
FAVORITES

No Results

ALL RESULTS

- Configuration
 - CI Lifecycle Management
 - CI State Registered Users
- Password Reset
 - Blocked Users
- Organization
 - Users
- System Security
 - Users and Groups
 - Users
 - Groups
 - Roles

3. Click on the **New** button.



4. Complete the user information. At a minimum, populate the **User ID** and **Password** fields, and ensure the **Active** checkbox is selected.

- If you enter the password directly into the Password field, the blue message prompt is a redundant step and can be disregarded.



User
New record

User ID

dummy.user

First name

Dummy

Last name

User

Title



Department



Password

●●●●●●●●●●●●●●●●

Password needs reset

☐

Locked out

☐

Active

☒

Web service access only

☐

Internal Integration User

☐

Submit

Related Links

[View linked accounts](#)

[View Subscriptions](#)

5. While still in the **Users** section, search for the newly created user and click on their entry.

User ID	Name	Email	Active	Created	Updated
dummy	Search	Search	Search	Search	Search
dummy.user	Dummy User		true	2025-01-28 09:56:23	2025-02-03 20:28:47

6. Click the **Roles** tab, then click **Edit**.

User ID: dummy.user

First name: Dummy

Last name: User

Title:

Department:

Password:

Password needs reset: ☐

Locked out: ☐

Active: ☒

Web service access only: ☐

Internal Integration User: ☐

Email:

Language: -- None --

Calendar integration: Outlook

Time zone: System (America/Los_Angeles)

Date format: System (yyyy-MM-dd)

Business phone:

Mobile phone:

Photo: Click to add...

Update Set Password Delete

Related Links

[View linked accounts](#)

[View Subscriptions](#)

[Reset a password](#)

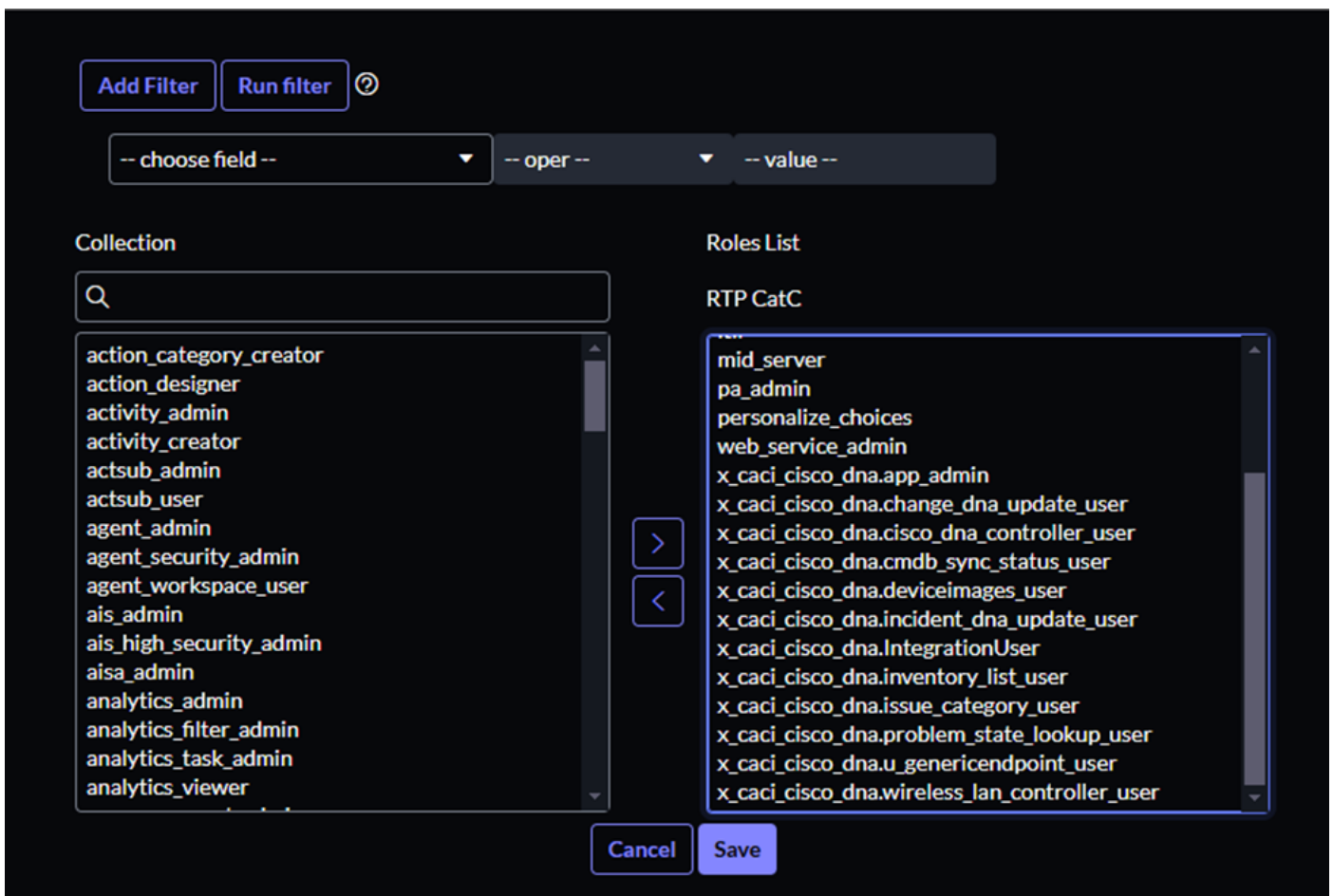
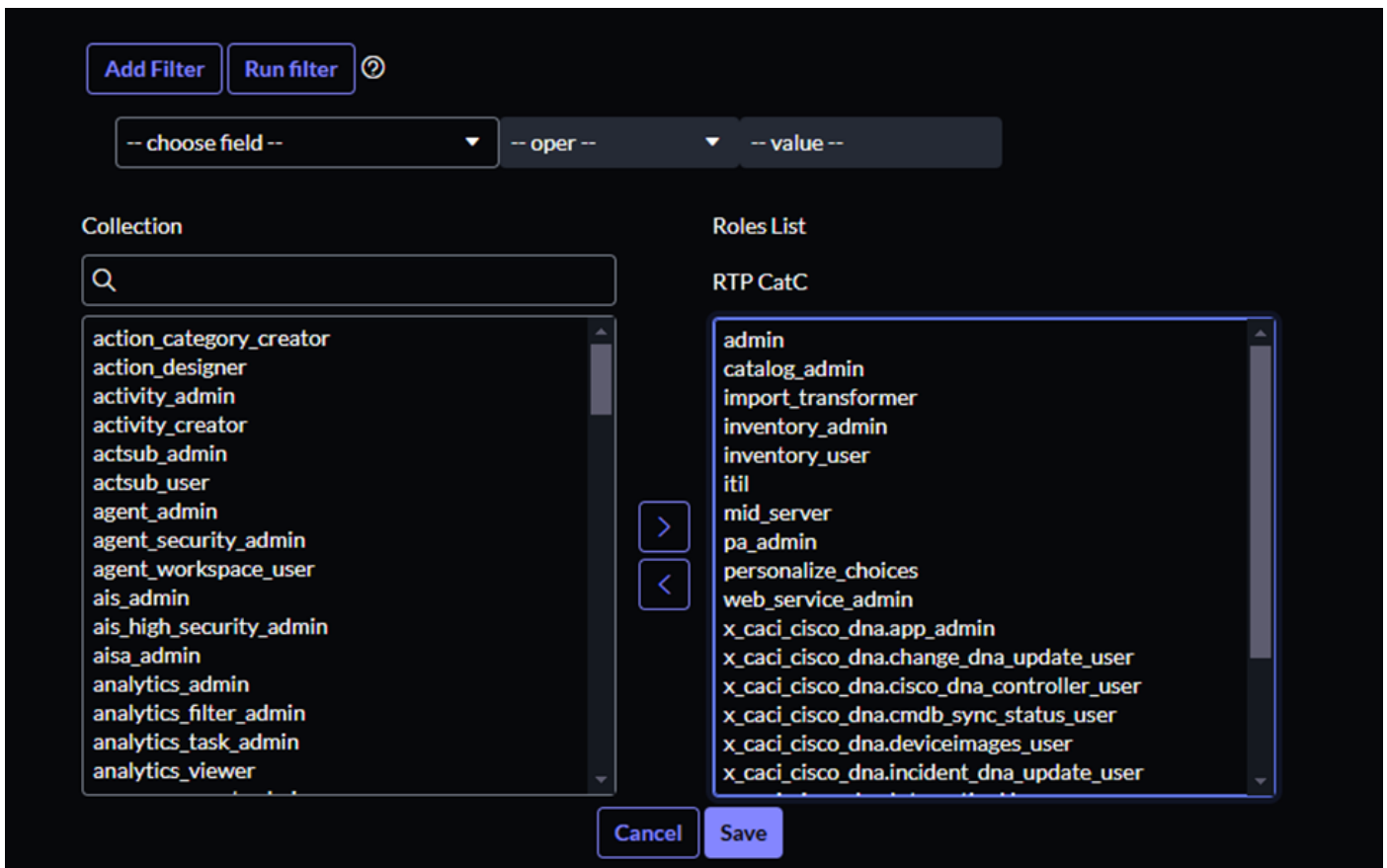
Entitled Custom Tables Roles Groups Delegates Subscriptions User Client Certificates

Role Search

Edit...

7. Add these required roles for a successful integration:

1. Admin
2. Catalog_admin
3. Import_transformer
4. Inventory_admin
5. Inventory_user
6. Itil
7. Mid_server
8. Pa_admin
9. Personalize_choices
10. Web_service_admin
11. All roles beginning with x_caci.

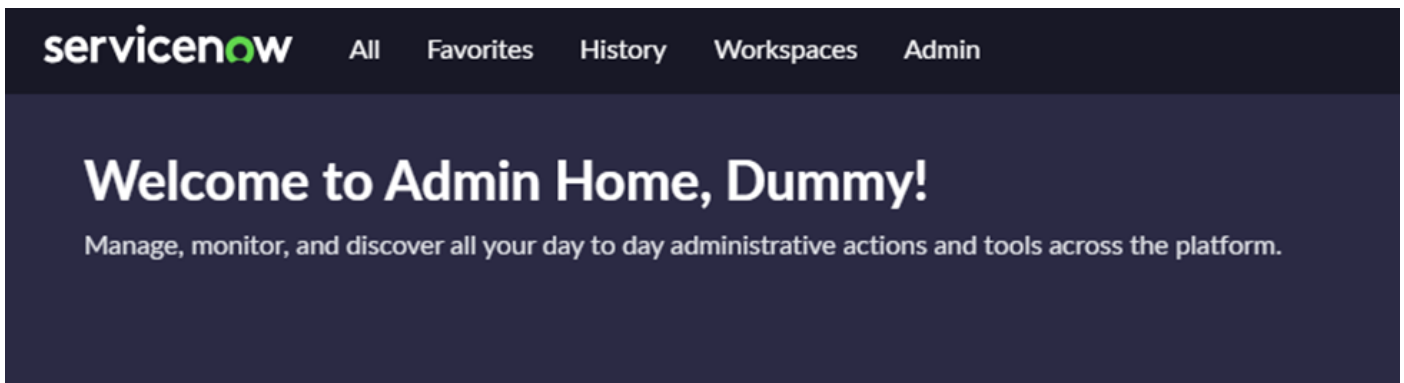


8. Click the **Save** button.

- Assigning the *mid_server* role to this user eliminates the need to create a separate user specifically for

the MID server in a subsequent step.

9. Log out of ServiceNow and verify the credentials of the new user.



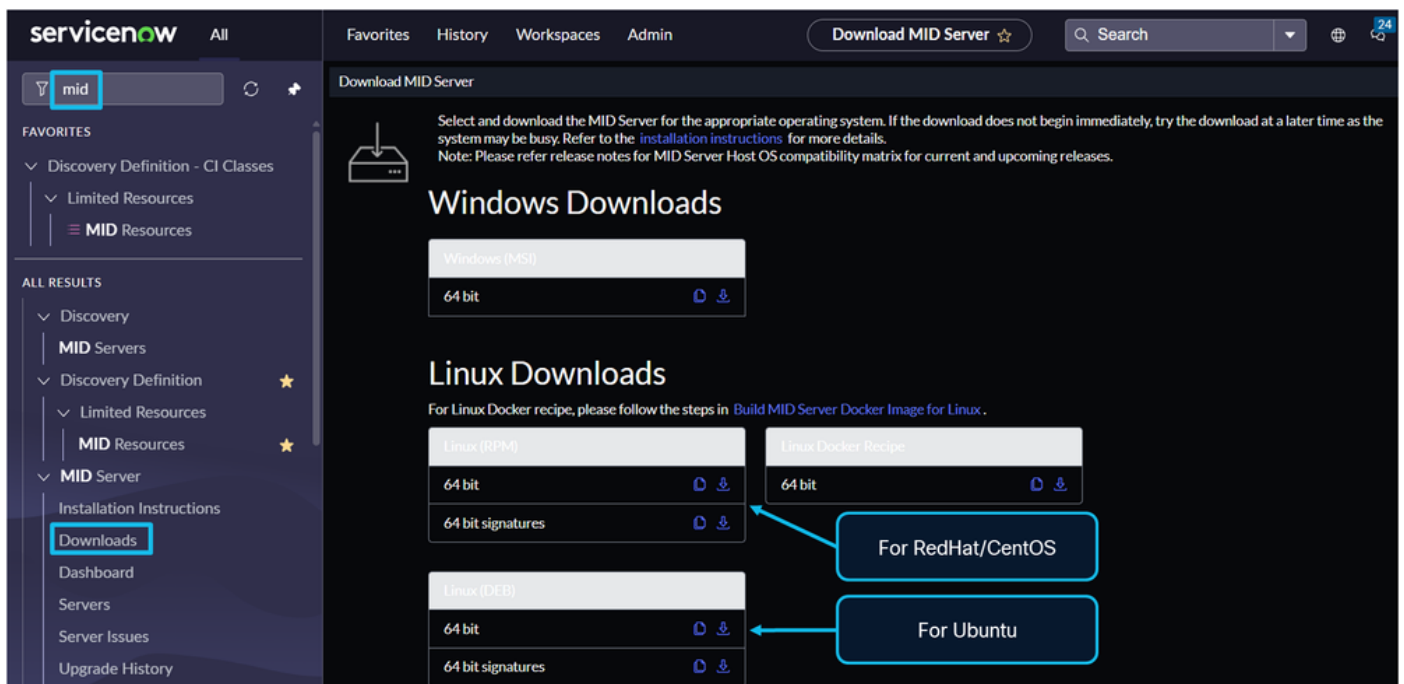
Section 3: Setting up the MID server

Before downloading and deploying the MID server package, select one of these compatible operating systems for the virtual machine (VM):

- Ubuntu
- CentOS
- RedHat
- Windows

Deploy the VM. The VM must have internet access and HTTPS access to both ServiceNow and Cisco Catalyst Center.

1. In the ServiceNow GUI search field, type *mid* and select **Downloads**.



2. Download the MID server installation package. You can either:

- Download it to a local computer and then transfer it to the VM server.
- Access the terminal of the VM and use the `wget` command with the URL of the package to download it directly to the VM server.
- Click the **Copy** icon, located next to the **Download** icon, to copy the URL of the package.



Note: This section provides examples using the Ubuntu command-line interface (CLI). The steps for deploying the MID server package vary for CentOS, RedHat, or Windows VMs. For more information, refer to the external ServiceNow documentation, ["Install a MID Server on Linux"](#) and ["Install a MID Server on Windows"](#) available on the ServiceNow website.

3. Use the "Install a MID server on Linux" guide to download and deploy the MID server package on the VM.

Use the `wget` command with the URL of the MID server installation package to download the package.

```
dcloud@dcloud:~$ wget https://install.service-now.com/glide/distribution/builds/package/app-signed/mid-linux-installer/2025/06/04/mid-linux-installer.yokohama-12-18-2024_patch4-05-14-2025_06-04-2025_1836.linux.x86-64.deb
--2025-07-21 21:11:11-- https://install.service-now.com/glide/distribution/builds/package/app-signed/mid-linux-installer/2025/06/04/mid-linux-installer.yokohama-12-18-2024_patch4-05-14-2025_06-04-2025_1836.linux.x86-64.deb
Resolving install.service-now.com (install.service-now.com)... 149.96.6.98
Connecting to install.service-now.com (install.service-now.com)|149.96.6.98|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 310020358 (296M) [application/vnd.debian.binary-package]
Saving to: 'mid-linux-installer.yokohama-12-18-2024_patch4-05-14-2025_06-04-2025_1836.linux.x86-64.deb'

mid-linux-installer.yokohama-12-18-2024_patch4-05-14-2025_06-04-2025_1 100%[=====]
2025-07-21 21:12:16 (4.58 MB/s) - 'mid-linux-installer.yokohama-12-18-2024_patch4-05-14-2025_06-04-2025_1836.linux.x86-64.deb' saved [310020358/310020358]
```

```
dcloud@dcloud:~$ ls -lht
total 296M
-rw-rw-r-- 1 dcloud dcloud 296M Jun  5 04:53 mid-linux-installer.yokohama-12-18-2024_patch4-05-14-2025_06-04-2025_1836.linux.x86-64.deb
```

Install the DEB package.

```
dcloud@dcloud:~$ sudo dpkg -i mid-linux-installer.yokohama-12-18-2024_patch4-05-14-2025_06-04-2025_1836.linux.x86-64.deb
[sudo] password for dcloud:
Selecting previously unselected package agent.
(Reading database ... 122152 files and directories currently installed.)
Preparing to unpack mid-linux-installer.yokohama-12-18-2024_patch4-05-14-2025_06-04-2025_1836.linux.x86-64.deb ...
Unpacking agent (27.4.0.10-20034.el7) ...
Setting up agent (27.4.0.10-20034.el7) ...
This system supports neither RPM nor DEB.
MID Server has been installed at /opt/servicenow/mid
MID Server can be configured using /opt/servicenow/mid/agent/installer.sh script
Please refer README file for more details
```

Obtain root privileges using `sudo -i` and change directories to `/opt/servicenow/mid/agent`.

```

root@dcloud:/opt/servicenow/mid/agent# ls -lh
total 268K
drwxr-x--- 3 root root 4.0K Jul 21 21:13 bin
-rwxr-x--- 1 root root 11K Jun 5 04:47 boot-config-reference.yaml
-rwxr-x--- 1 root root 1.3K Jun 5 04:47 boot-config-sample.yaml
drwxr-x--- 2 root root 4.0K Jul 21 21:13 conf
-rwxr-x--- 1 root root 35K Jun 5 04:47 configure.sh
-rwxr-x--- 1 root root 8.0K Jun 5 04:47 config.xml
drwxr-x--- 2 root root 4.0K Jul 21 21:13 etc
-rwxr-x--- 1 root root 71K Jun 5 04:47 'EULA - MID Server.pdf'
drwxr-x--- 2 root root 4.0K Jun 5 04:47 extlib
-rwxr-x--- 1 root root 367 Jun 5 04:47 installer.sh
drwxr-x--- 6 root root 4.0K Jul 21 21:13 jre
drwxr-x--- 3 root root 32K Jul 21 21:13 lib
-rwxr-x--- 1 root root 883 Jun 5 04:47 linux-x86-64.xml
drwxr-x--- 2 root root 4.0K Jun 5 04:47 logs
drwxr-x--- 2 root root 4.0K Jul 21 21:13 midinstaller
drwxr-x--- 4 root root 4.0K Jul 21 21:13 package
drwxr-x--- 2 root root 4.0K Jul 21 21:13 properties
-rwxr-x--- 1 root root 16 Jun 5 04:47 start.sh
-rwxr-x--- 1 root root 15 Jun 5 04:47 stop.sh
-rwxr-x--- 1 root root 1.1K Jun 5 04:47 uninstall.sh
drwxr-x--- 2 root root 4.0K Jun 5 04:47 work
-rwxr-x--- 1 root root 30K Jun 5 04:47 wrapper-development-license-1.3.txt
-rwxr-x--- 1 root root 12K Jun 5 04:47 wrapper-tsims-addendum-1.3.txt

```

4. Configure the MID server by executing the *installer.sh* bash script (*./installer.sh*) and completing the prompts.

```

root@dcloud:/opt/servicenow/mid/agent# ./installer.sh
Enter the ServiceNow Instance URL [https://YOUR_INSTANCE.service-now.com/] : https://vwa3374811.service-now.com/
Do you want to use proxy? [Enter Y or N] : n
Validating the Instance URL...
Do you want to use Mutual Authentication? [Enter Y or N] : n
Enter the username for mid user : dummy.user
Enter the password for mid user:
Validating the Mid-user details...
Username and password are valid.
Do you want to enable Certificate Revocation? [Enter Y or N] : n
Enter the Mid Server Name [My Linux Mid Server] : Dummy-ServiceNow-MID-Server
Enter the unique name for the service to be created [mid] : dummy-mid-server
Please remove the white spaces or special characters from the -APP_NAME [service name]
Enter the unique name for the service to be created [mid] : dummy_mid_server
Checking for the uniqueness of the service name...
Enter the long name for the service [ServiceNow_MID_Server] : Dummy_ServiceNow_MID_Server
Warning: The MID Server installation path does not meet the minimum space requirement of 36 GB. Continue installation or exit to choose a different path.
Press N to exit or Enter to continue :
Enter the Non-Root User Name to run this service : dcloud
*****
NOTE: A non-root user can manage a service only when the user has required privileges.
For more information, refer https://hi.service-now.com/kb_view.do?sysparm_article=KB0815542
*****
Enter yes for the below displayed prompt if you want to start the daemon with out any errors...
The agent directory is /opt/servicenow/mid/agent
Do you want to block all other user access and change the ownership of the entire agent directory at /opt/servicenow/mid/agent based on the mid.shconf_override sett
ings (Enter yes or YES to confirm) ? no
Detected Linux:
Installing the Dummy_ServiceNow_MID_Server daemon with systemd...
Creating default service file...
Created symlink /etc/systemd/system/multi-user.target.wants/dummy_mid_server.service -> /etc/systemd/system/dummy_mid_server.service.
Starting Dummy_ServiceNow_MID_Server with systemd...
Waiting for Dummy_ServiceNow_MID_Server...
running: PID:1735902
Mid is running as a service successfully..

```

The user that we created on the ServiceNow GUI. The user that we gave "mid_server" role to.

The username of the MID server VM.

5. To verify if the MID server has started, execute the *start.sh* bash script.

```

root@dcloud:/opt/servicenow/mid/agent# ./start.sh
Dummy_ServiceNow_MID_Server is already running.

```

If the MID server did not start after configuration, use *start.sh* to initiate its services. To stop the MID server, run *stop.sh*. To uninstall the MID server service, run *uninstall.sh*.

For recent logs detailing interactions between Cisco Catalyst Center and ServiceNow, examine the `logs/agent0.log.0` file

https://www.servicenow.com/docs/bundle/vancouver-servicenow-platform/page/product/mid-server/reference/r_MIDServerTroubleshooting.html

```
root@dcloud:/opt/servicenow/mid/agent# ls -lh logs
total 164K
-rw-r--r-- 1 dcloud dcloud 153K Jul 22 15:50 agent0.log.0
-rw-r--r-- 1 dcloud dcloud 0 Jul 22 14:55 agent0.log.0.lck
-rw-r--r-- 1 dcloud dcloud 1.1K Jul 22 14:55 FileHandlerReport.txt
-rw-r--r-- 1 dcloud dcloud 1.6K Jul 22 14:55 wrapper.log
```

6. Temporarily stop the MID server: `./stop.sh`

7. Edit the `config.xml` file (for example using `nano`)

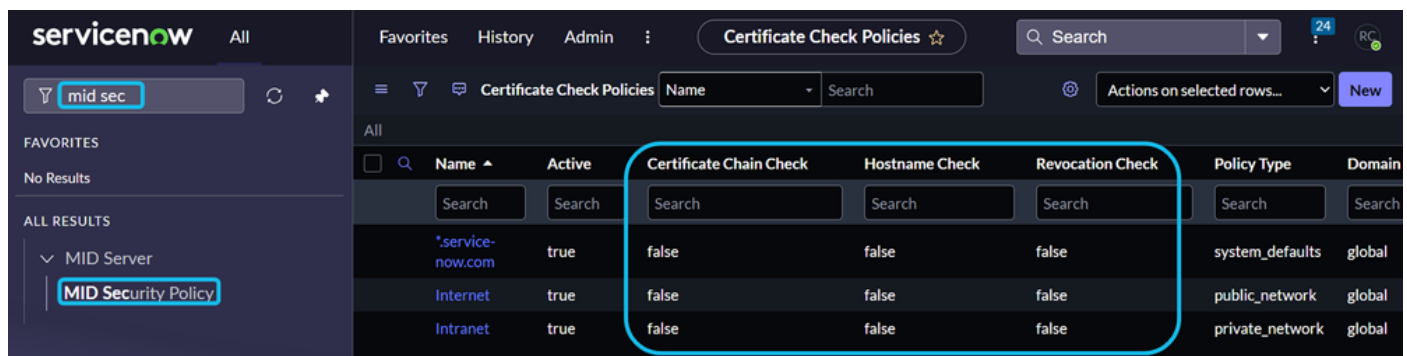
- Set `mid.proxy.use_proxy` to `false` if no proxy server exists between the MID server and ServiceNow.
- Set TLS values from `true` to `false`. This action disables certificate, certificate chain, and CRL checks, and prevents values on the ServiceNow "MID Security Policy" page from overwriting `config.xml` settings.
- Save the changes.

```
root@dcloud:/opt/servicenow/mid/agent# ls -lh
total 304K
-rwxr-x--- 1 dcloud dcloud 8.0K Jul 22 14:51 backup_config.xml
-rwxr-x--- 1 dcloud dcloud 1.1K Jul 22 14:51 backup_mid.shconf_override
drwxr-x--- 3 dcloud dcloud 4.0K Jul 22 14:54 bin
-rwxr-x--- 1 dcloud dcloud 11K Jun 5 04:47 boot-config-reference.yaml
-rwxr-x--- 1 dcloud dcloud 1.3K Jun 5 04:47 boot-config-sample.yaml
drwxr-x--- 2 dcloud dcloud 4.0K Jul 21 21:13 conf
-rwxr-x--- 1 dcloud dcloud 35K Jun 5 04:47 configure.sh
-rwxr-x--- 1 dcloud dcloud 8.1K Jul 22 16:02 config.xml
drwxr-x--- 2 dcloud dcloud 4.0K Jul 21 21:13 etc
-rwxr-x--- 1 dcloud dcloud 71K Jun 5 04:47 'EULA - MID Server.pdf'
drwxr-x--- 2 dcloud dcloud 4.0K Jun 5 04:47 extlib
-rwxr-x--- 1 dcloud dcloud 367 Jun 5 04:47 installer.sh
drwxr-x--- 6 dcloud dcloud 4.0K Jul 21 21:13 jre
drwxr-x--- 3 dcloud dcloud 32K Jul 21 21:13 lib
-rwxr-x--- 1 dcloud dcloud 883 Jun 5 04:47 linux-x86-64.xml
drwxr-x--- 2 dcloud dcloud 4.0K Jul 22 16:03 logs
drwxr-x--- 2 dcloud dcloud 4.0K Jul 21 21:13 midinstaller
drwxr-x--- 4 dcloud dcloud 4.0K Jul 21 21:13 package
drwxr-x--- 2 dcloud dcloud 4.0K Jul 21 21:13 properties
drwxr-xr-x 6 dcloud dcloud 4.0K Jul 22 14:56 scripts
drwxr-xr-x 2 dcloud dcloud 4.0K Jul 22 14:55 security
drwxr-xr-x 2 dcloud dcloud 4.0K Jul 22 14:55 SecurityAudit
drwxr-xr-x 2 dcloud dcloud 4.0K Jul 22 16:03 security_backup
-rwxr-x--- 1 dcloud dcloud 16 Jun 5 04:47 start.sh
-rwxr-x--- 1 dcloud dcloud 15 Jun 5 04:47 stop.sh
drwxr-xr-x 2 dcloud dcloud 4.0K Jul 22 14:56 tools
-rwxr-x--- 1 dcloud dcloud 1.1K Jun 5 04:47 uninstall.sh
drwxr-x--- 5 dcloud dcloud 4.0K Jul 22 16:03 work
-rwxr-x--- 1 dcloud dcloud 30K Jun 5 04:47 wrapper-development-license-1.3.txt
-rwxr-x--- 1 dcloud dcloud 12K Jun 5 04:47 wrapper-tsims-addendum-1.3.txt
```

```
<!--
<parameter name="mid.proxy.use_proxy" value="false"/>
<parameter name="mid.proxy.host" value="YOUR_PROXY_HOST"/>
<parameter name="mid.proxy.port" value="YOUR_PROXY_PORT"/>
-->
```

```
<!-- Bootstrap properties for TLS Connection policies that are controlled from the instance table (mid_cert_check_policy) -->
<parameter name="mid.ssl.bootstrap.default.check_cert_hostname" value="false"/>
<parameter name="mid.ssl.bootstrap.default.check_cert_chain" value="false"/>
<parameter name="mid.ssl.bootstrap.default.check_cert_revocation" value="false"/>
<!-- If true, MID Sec Policy from SNOW instance will overwrite MID bootstrap cert policy in config.xml; false, otherwise -->
<parameter name="mid.ssl.use.instance.security.policy" value="false"/>
```

In the ServiceNow GUI, navigate to the **MID Security Policy** page. Verify that the values on this page align with the changes made in the *config.xml* file of the MID server. Correct configuration and matching values enable successful trust and connectivity during the validation process between ServiceNow and the MID server.



Name	Active	Certificate Chain Check	Hostname Check	Revocation Check	Policy Type	Domain
*service-now.com	true	false	false	false	system_defaults	global
Internet	true	false	false	false	public_network	global
Intranet	true	false	false	false	private_network	global



Note: If your company policy mandates certificate usage, update the relevant settings on both ServiceNow and the MID server to ensure proper certificate implementation for a successful connection.

8. Start the MID server: `./start.sh`

```
root@dcloud:/opt/servicenow/mid/agent# ./start.sh
Starting Dummy_ServiceNow_MID_Server with systemd...
Waiting for Dummy_ServiceNow_MID_Server...
running: PID:1836374
```

9. In the ServiceNow GUI, type *mid* in the search field and select **MID Servers**.

- Locate the newly created MID server entry (for example "Dummy-ServiceNow-MID-Server").

servicenow All

mid

FAVORITES

> Discovery Definition - CI Classes

ALL RESULTS

Discovery

MID Servers

Discovery Definition

Limited Resources

Favorites History Admin MID Servers View: Discovery

Search

Name Search

Actions on selected rows... New Pat

All

Name	Host name	Status	Validated	Version	Last refreshed	Started
Dummy-ServiceNow-MID-Server	dcloud	Up	No	yokohama-12-18-2024_patch4-05-14-2025_0...	2025-07-22 12:54:01	2025-07-22 12:03:30

10. Click the MID server entry, then click **Validate**.

<

≡

MID Server

Dummy-ServiceNow-MID-Server

View: Discovery

The MID Server facilitates communication between the ServiceNow platform and the MID Server. You can view the configuration parameters and capabilities here. Read about [configuring the MID Server](#).

Name

Dummy-ServiceNow-MID-Server

Status

Up

Version

yokohama-12-18-2024_patch4-1

Last refreshed

2025-07-22 13:19:01

Started

2025-07-22 12:03:30

Stopped

2025-07-22 12:03:00

Time zone

Etc/UTC

Logged in user

dummy.user

Update

Delete

Related Links

[Validate](#)

[Rekey](#)

[Grab MID logs, settings and thread dump](#)

11. ServiceNow initiates a validation process to confirm connectivity, configuration, and assigned roles.

 MID server being validated

Dummy-
ServiceNow-
MID-Server

dcloud

 Up

 Validating

12. The validation process typically completes within 5 minutes. If the status remains "Validating" for more than 10 minutes, perform these checks:

- Recheck the configuration settings on both ServiceNow and the MID server.
- Verify HTTPS connectivity between ServiceNow and the MID server.
- If these checks are successful examine the *agent0.log.0* file on the MID server for certificate or other issues.

A successful validation, with correct configuration and HTTPS connectivity, displays the expected status on the ServiceNow "MID Server" page.



Dummy-
ServiceNow-
MID-Server

dcloud

 Up

 Yes

Section 4: Create a CatC Entry on ServiceNow

1. Open the ServiceNow GUI and enter "cisco" in the search bar. Select **Cisco Catalyst Controller Properties**.



cisco



FAVORITES

> **Cisco** Catalyst Center① Inbound - **Cisco** Catalyst Inventory...

ALL RESULTS

✓ **Cisco** Catalyst Center**Cisco** Catalyst controller prop...

Issue Categories



Preferences



Troubleshooting Log



Wireless Lan Controllers



Support



✓ System Web Services

✓ Inbound

Cisco Catalyst Inventory D...

Passwords are encrypted and stored securely. When the property is used to generate the **x-auth-token** for CatC connections, the password is decrypted as needed.

The **MID Server** dropdown lists all available MID servers in your ServiceNow instance. Select the MID server you want to use to communicate with CatC.

FavoritesHistoryWorkspacesCisco Catalyst controller properties - Created 2025-0...

Search

<Cisco Catalyst controller propertiesCreated 2025-07-01 15:13:14

* IP address of Cisco Catalyst Engine Controller198.18.129.100

Password of the Cisco Catalyst Engine Controller.....

User Name of Cisco Catalyst Engine Controllerservicenow

MID Server used to connect to Cisco Catalyst CenterDummy-ServiceNow-MID-Server

UpdateDelete

UpdateDelete

198.18.129.100servicenow.....2025-07-01 15:13:14Dummy-ServiceNow-MID-Server

Section 5: Start the Integration in the CatC GUI

1. Open the Cisco Catalyst Center GUI. Navigate to **Platform > Manage > Bundles**. Enter *itsm* in the search field.

Cisco

Catalyst Center

Platform / Manage

☆

🔍

🔄

🔔

👤

Bundles

Configurations

Filter

🔍 itsm

Bundle	Status	Description	
B Basic ITSM (ServiceNow) CMDB synchronization Cisco Systems, Inc. v1.19.4 Catalyst Center 1.2.5 + Version Dated Jun 26, 2024	NEW	You can schedule a synchronization or trigger an update between Catalyst Center's device inventory and your ITSM(ServiceNow) configuration management database(CMDB). These activities integrate Catalyst Center's processes into the IT System Management processes of incident, change or problem management. Note: If your network...	Enable
C Catalyst Center Automation events for ITSM (ServiceNow) Cisco Systems, Inc. v1.14.14 Catalyst Center 1.2.5 + Version Dated Aug 19, 2024	NEW	This bundle can be used to: 1. Monitor and publish events that require software image updates for compliance, security or any other operational triggers, to an ITSM(ServiceNow) system. 2. Monitor and publish events that involve changes to the configuration of network devices for security or other operational triggers, to an...	Enable
E Endpoint Attribute Retrieval with ITSM (ServiceNow) Cisco Systems, Inc. v1.9.4 Catalyst Center 2.1.1 + Version Dated Jun 26, 2024	NEW	You can schedule a synchronization or trigger an update between the Endpoint Inventory and your ITSM (ServiceNow) configuration management database (CMDB). Endpoint attribute information from ServiceNow can be used to help profile endpoints on your network. ServiceNow appears in the endpoint profiling workspace as an...	Enable
N Network Issue Monitor and Enrichment for ITSM Cisco Systems, Inc. v1.14.10 Catalyst Center 1.2.5 + Version Dated Nov 11, 2024	NEW	You can use this bundle to monitor your network for assurance and maintenance issues, and then publish the event details about these issues to an ITSM(ServiceNow) system. This bundle also contains APIs that extract rich network context data. This bundle also enables closed loop integration. Please note that, for the ServiceNow...	Enable

2. Click **Enable** for the **Basic ITSM (ServiceNow) CMDB Synchronization** bundle. In the confirmation pop-up, click **Enable** again.

 **Note:** You must enable the *Basic ITSM (ServiceNow) CMDB Synchronization* bundle before

enabling other ITSM bundles.

3. Click **Configure** and complete the required fields:

- **Instance Name:** Enter a descriptive name for the ServiceNow instance.

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*

dCloud-Test

Description

- **URL, Username, and Password:** Enter the ServiceNow instance credentials and test the connection. Communication from CatC to ServiceNow uses TCP port 443.

Configure Basic ITSM (ServiceNow) CMDB synchronization

Configure your bundle

ServiceNow Access Settings

Host Name*

https://[REDACTED].service-now.com/

Username*

dummy.user

Password*

SHOW

Check connectivity



Connection Established



Note: Disable Multi-Factor Authentication (MFA) in the ServiceNow GUI to allow successful integration. If MFA is enabled an error is returned instead of the “Connection Established” message.

4. Enter a name for the CMDB instance.

- Specify the CMDB configuration details, including which device attributes to sync, the ServiceNow destination for CMDB details, connection settings, transformation mapping between Catalyst Center device families and ServiceNow CI classes, the maximum number of devices per API call, and discovery source information.

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

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*

CMDB dCloud

Description

5. Select **Yes** if the CatC App is installed on ServiceNow.

Configure Basic ITSM (ServiceNow) CMDB synchronization

Configure your bundle

Cisco ServiceNow Application

Do you have Cisco ServiceNow Application installed? 

☒ **Yes** ☐ No

6. Choose **Synchronize device inventory directly with CMDB**. This option sends data to a REST API endpoint within the CatC App on ServiceNow.

Configure Basic ITSM (ServiceNow) CMDB synchronization

Configure your bundle

Select Destination

Destination Type*

Synchronize device inventory directl... ▼

Synchronize device inventory directly with CMDB

Destination Uri

/api/now/import/x_caci_cisco_dna_cis

7. Use the default inventory data fields or add additional fields as needed. Click **Next** on the **Update Transforms** page.

Configure Basic ITSM (ServiceNow) CMDB synchronization

Configure your bundle

Select Inventory Data Fields

☒	Name	Description	Is Attribute / Is Reference	
☒	Host Name	Hostname of the device	☒ Attribute	☐ Reference
☒	MAC Address	MAC Address of the Device	☒ Attribute	☐ Reference
☒	Device Id	Id of the Device	☒ Attribute	☐ Reference
☒	IP Address	Management IP Address of the device	☒ Attribute	☐ Reference
☒	Serial Number	Serial Number of the device	☒ Attribute	☐ Reference
☒	Upgrade Failure Reason	Upgrade Failure Reason	☒ Attribute	☐ Reference
☒	CurrentSMU Upgrade Date	CurrentSMU Upgrade Date	☒ Attribute	☐ Reference
☒	CurrentSMU	CurrentSMU	☒ Attribute	☐ Reference
☒	Prior Upgrade Date	Prior Upgrade Date	☒ Attribute	☐ Reference
☒	Code Upgrade Date	Code Upgrade Date	☒ Attribute	☐ Reference

7. In this section, device families are mapped to CI classes in ServiceNow. Most device families are mapped,

but you can edit the mappings. Only valid CI classes under the “Network Gear” parent class can be selected. Valid classes appear in the “Update Transforms” section when configuring the Basic ITSM (ServiceNow) CMDB Synchronization bundle.

Configure Basic ITSM (ServiceNow) CMDB synchronization

Configure your bundle

Update Transforms

Device Family	CI Class
Routers	cmdb_ci_ip_router
Switches and Hubs	cmdb_ci_ip_switch
Unified AP	cmdb_ci_wap_network
Wireless Controller	x_caci_cisco_dna_wireless_lan_control

8. In the **Source Identifier (Exact Match)** dropdown, select **Cisco Catalyst Inventory, Other Automated**, or a custom identifier created in ServiceNow. The CatC retrieves the CI list via API. This field is for record-keeping and does not impact system behavior. In the **Inventory Items per Iteration** field, enter a low value (such as 25 or 100). This allows ServiceNow adequate time to process each batch before the next is sent.

Configure Basic ITSM (ServiceNow) CMDB synchronization

Configure your bundle

Set Source Identifier and Operational Limit

Source Identifier(Exact Match)*

dCloud-CatC



Inventory Items Per Iteration*

100

9. Review the summary page for the **Basic ITSM (ServiceNow) CMDB Synchronization** bundle. Click **Configure** to finish the setup.

Configure Basic ITSM (ServiceNow) CMDB synchronization

Configure your bundle



Summary

Review your configuration and make any changes.

Destination and Instance

Destination: ServiceNow Domain: https://.service-now.com/ Uri:
/api/now/import/x_caci_cisco_dna_cisco_dna_inventory_det Username: dummy.user Password: *****

Inventory Data Fields

Send To Destination: Host Name (A), MAC Address (A), Device Id (A), IP Address (A), Serial Number (A), Upgrade Failure Reason (A), CurrentSMU Upgrade Date (A), CurrentSMU (A), Prior Upgrade Date (A), Code Upgrade Date (A), Building (RF), Location (RF), Time Since Code Upgrade (A), Ports (A), Number Of Users (A), Role (A), Fabric Role (A), Uptime (A), Reachability status (A), Part Number (RF), Type (A), Software Version (A)

Data Transforms

Transformations: Routers: cmdb_ci_ip_router, Switches and Hubs: cmdb_ci_ip_switch, Unified AP: cmdb_ci_wap_network, Wireless Controller: x_caci_cisco_dna_wireless_lan_controller

Limit and source

Source Identifier: dCloud-CatC Inventory Items Per Iteration: 100

The bundle has been configured!

Configure Basic ITSM (ServiceNow) CMDB synchronization

Configure your bundle

Done! Bundle Configured.

10. Return to the **Bundles** page and select **Basic ITSM (ServiceNow) CMDB Synchronization**.

The screenshot shows the Catalyst Center interface. At the top, there's a navigation bar with 'Catalyst Center' and 'Platform / Manage'. Below this, there are tabs for 'Bundles' and 'Configurations'. The 'Bundles' tab is active. A search bar on the right contains 'EQ itsm'. Below the search bar, there's a table with columns 'Bundle', 'Status', and 'Description'. One bundle is listed: 'Basic ITSM (ServiceNow) CMDB synchronization' with a status of 'ACTIVE'. A blue box highlights the bundle name. To the right of the bundle name, there's a 'Configure' button. Below the bundle name, there's a description: 'You can schedule a synchronization or trigger an update between Catalyst Center's device inventory and your ITSM(ServiceNow) configuration management database(CMDB). These activities integrate Catalyst Center's processes into the IT System Management processes of incident, change or problem management. Note: If your network...'

11. Go to the **Contents** tab, expand **Integration Flows**, and select **Schedule to Publish Inventory Details – ServiceNow Connector**.

The screenshot shows the Catalyst Center interface. At the top, there's a navigation bar with 'Catalyst Center' and 'Platform / Manage'. Below this, there are tabs for 'Bundles' and 'Configurations'. The 'Bundles' tab is active. A search bar on the right contains 'EQ itsm'. Below the search bar, there's a table with columns 'Bundle', 'Status', and 'Description'. One bundle is listed: 'Basic ITSM (ServiceNow) CMDB synchronization' with a status of 'ACTIVE'. A blue box highlights the bundle name. To the right of the bundle name, there's a 'Configure' button. Below the bundle name, there's a description: 'You can schedule a synchronization or trigger an update between Catalyst Center's device inventory and your ITSM(ServiceNow) configuration management database(CMDB). These activities integrate Catalyst Center's processes into the IT System Management processes of incident, change or problem management. Note: If your network devices have not been synchronized between Catalyst Center and the CMDB system, this bundle must be activated before activating any other bundles in Catalyst Center platform. Otherwise, further bundle integrations will not work.'

Below the bundle name, there's a sidebar with the following information:

- Vendor**: Cisco Systems, Inc.
- Version**: 1.19.4
- Platform**: Catalyst Center 1.2.5 +
- Tags**: Device Discovery, CMDB, Synchronization

Below the bundle name, there's a tabbed interface with 'Information', 'Contents', and 'Release Notes'. The 'Contents' tab is active. Below the 'Contents' tab, there's a section titled 'Integration Flows (1)'. Under this section, there's a link 'Schedule to Publish Inventory Details - ServiceNow Connector' with a 'SCHEDULE-BASED' label. Below this link, there's a description: 'This scheduler discovers the devices in the network in a scheduled frequency and extracts the required device information to be able to sync the Inventory with an ITSM system.'

12. Set a daily or weekly schedule, or run the synchronization immediately to send managed device data from CatC to ServiceNow.

Schedule to Publish Inventory Details - ServiceNow Connector

Not Scheduled

How to use this flow

The integration flows can be scheduled to run periodically at a specified date/time. Configure scheduling the integration flow with the form provided.

* Schedule window cannot be lower than 24 hours

☐ Run Now

☐ Run Later

☒ Recurring

Repeats

Daily

☒ Set Schedule Start

Jul 26, 2025

8:00

AM

Select Time Zone

(GMT-04:00) America/New_York

☐ Set Schedule End

Schedule

13. We can also run the synchronization process immediately to view managed devices from the CatC inventory page in the ServiceNow CMDB CI device list right away.

Schedule to Publish Inventory Details - ServiceNow Connector

Scheduled

Description

This scheduler discovers the devices in the network in a scheduled frequency and extracts the required device information to be able to sync the Inventory with an ITSM system.

Tags

ServiceNow

How to use this flow

The integration flows can be scheduled to run periodically at a specified date/time. Configure scheduling the integration flow with the form provided.

* Schedule window cannot be lower than 24 hours

Run Now

Run Later

Recurring

Schedule

14. Navigate to **Platform > Runtime Dashboard** to view the status and success of the CMDB inventory sync.

Catalyst Center

Platform / Runtime Dashboard

CMDB Synchronization Summary

Search Table

Devices from Inventory	Devices sent to ServiceNow	Devices synchronized	Failures	Unknown Sync. Error(s)	Synchronization Attempt
17	17	NA	NA	NA	a few seconds ago
17	17	17	0	0	a few seconds ago

Integration Flow Summary

REST-Based (0) | 0 Failed

Schedule-Based (1) | 0 Failed

Search Table

Export

Domain	Name	Version	Instances				Performance		
			All (N)				Minimum	Maximum	Average
Integrations	Schedule to Publish Inventory Details - ServiceNow Connector	V1	1	0	0	1	72.702s	72.702s	72.702s

15. In the ServiceNow GUI, enter `cmdb_ci.list` in the search bar and press Enter. Confirm that managed devices from the CatC inventory appear in the CMDB CI device list and are associated with the correct source identifier.

The screenshot shows the ServiceNow Configuration Items table. The left sidebar has a search bar with 'cmdb_ci.list' entered. The table has columns: Name, Manufacturer, Location, Description, Serial number, Class, Updated, Created, and Discovery source. The 'Discovery source' column is highlighted with a blue border. The table contains 10 rows of configuration items, all with 'dCloud-CatC' as the discovery source.

Name	Manufacturer	Location	Description	Serial number	Class	Updated	Created	Discovery source
RichardsonAP-0007	(empty)	Global/US/Richardson/Floor-1			Wireless Access Point	2025-07-25 17:16:17	2025-07-01 20:02:46	dCloud-CatC
RichardsonAP-0003	(empty)	Global/US/Richardson/Floor-1			Wireless Access Point	2025-07-25 17:16:17	2025-07-01 20:02:46	dCloud-CatC
MXC-RTR1.cisco.com	(empty)	Global/Mexico/MXC			IP Router	2025-07-25 17:16:17	2025-07-01 20:02:46	dCloud-CatC
Richardson-RTR1.cisco.com	(empty)	Global/US/Richardson			IP Router	2025-07-25 17:16:17	2025-07-01 20:02:46	dCloud-CatC
RichardsonAP-0006	(empty)	Global/US/Richardson/Floor-1			Wireless Access Point	2025-07-25 17:16:17	2025-07-01 20:02:46	dCloud-CatC
RichardsonAP-0002	(empty)	Global/US/Richardson/Floor-1			Wireless Access Point	2025-07-25 17:16:17	2025-07-01 20:02:46	dCloud-CatC
RTP-SW1.cisco.com	(empty)	Global/US/RTP			IP Switch	2025-07-25 17:16:17	2025-07-01 20:02:46	dCloud-CatC
RichardsonAP-0010	(empty)	Global/US/Richardson/Floor-1			Wireless Access Point	2025-07-25 17:16:17	2025-07-01 20:02:46	dCloud-CatC
RichardsonAP-0005	(empty)	Global/US/Richardson/Floor-1			Wireless Access Point	2025-07-25 17:16:17	2025-07-01 20:02:46	dCloud-CatC

I hope this workflow has been helpful!

References

[Cisco Catalyst Center ITSM Integration Guide, Release 2.3.7.x](#)

External Documentation on the feature with the Cisco Catalyst Center integrating with ServiceNow:

[Scope Underlying Concepts of Catalyst Center and ITSM Integration](#)

[Synchronize Catalyst Center Inventory with ServiceNow CMDB System](#)

[Use Catalyst Center Network Issue Monitor and Enrichment for ITSM](#)

[Monitor Catalyst Center Automation \(SWIM\) Events for ITSM](#)