# Cisco CSPC

## Quick Start Guide 2.10

April 2023

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# Introduction to CSPC

The Cisco Common Service Platform Collector (CSPC) is an SNMP-based tool that discovers and collects information from the Cisco devices installed on your network. The CSPC software provides an extensive collection mechanism to gather various aspects of customer device data. Information gathered by the collector is used by several Cisco Service offers, such as Smart Net Total Care, Partner Support Service, and Business Critical Services. The data is used to provide inventory reports, product alerts, configuration best practices, technical service coverage, lifecycle information, and many other detailed reports and analytics for both the hardware and operating system (OS) software.

This document provides information about how to download, install and configure a new CSPC collector on a virtual machine that is running ESXi 6.5 or higher.

If you are using the ISO image for the CSPC, please refer to the CSPC ISO Image Installation Guide for instructions.

In order to configure a CSPC and ensure a successful setup, a workflow wizard which simplifies the CSPC configuration is included with the CSPC 2.9 and later releases. You should know the SNMP credentials that are set up on your devices.

This document will walk you through the steps for a basic first time CSPC setup.

## Prerequisites

Register to the required services:

- How to register SNTC Service
- To register for PSS portal access, please click to open a new mail, copy the below and provide the requested details.
  Please open a case to assign a Super Admin for my Company. (please submit the information below.)

  Partner Company Name:
  Partner Location:

  Super Admin Name:
  Super Admin Cisco.com ID:
  Super Admin Email:

  Technical Contact Phone Number:
  Technical Contact Cisco.com ID:
  Technical Contact Email:
  Technical Contact Phone Number:

  Existing PSS contract number:

## CSPC Supported Browsers

- Firefox version 109
- Internet Explorer (IE) version 11
- Chrome 112

**Note**: Allocate 2-4 hours for the installation, depending on your network size. The algorithm runs only once to optimize storage and reduces the time required in future upgrades. The system will automatically reboot after installing the patch.

# Virtual Platform Requirements

This section provides information about the virtual platform requirements. This guide does not provide directions on how to install the different virtual platforms.

As of CSPC 2.9 release, there is a single configurable OVA image that supports multiple configurations. Below are listed the minimum system requirements for the collector images that run on a ESXi 6.5 or higher virtual platform:

Table 1: VM Specification for SNTC/PSS Customer

| Specification | Small | Medium | Large |
|---|---|---|---|
| vCore count | 4 | 8 | 12 |
| RAM | 4 GB | 8 GB | 16 GB |
| HDD (GB) | 250 | 500 | 1000 |
| Number of Devices | Up to10,000 | 20K or less | 40K or less |

A minimum of one virtual NIC is needed for all configurations. The number of NICs required is dependent upon the network topology.

Table 2: VM Specification for BCS Customer

| Specification | Medium CSPC | Large CSPC |
|---|---|---|
| Number of Devices | <10,000 | Up to 40,000 |
| Physical Core Count (Cores) | 4 | 6 |
| Core to vCore Count | 2 | 2 |
| vCore Count (Cores) | 8 | 12 |
| RAM (GB) | 8 GB | 16 GB |
| Hard Disk Space | 500 GB | 1 TB |

# Important Note

**On Installation**: If 2.10 startup job(/etc/rc.d/rc.local) is running for more than 20 mins then try pressing Alt+F1 through Alt+F6 to shift to alternate virtual terminals and you may see one of them waiting for with the admin password prompt. (if so, enter password)


# Download the Virtual Machine Image

After ensuring that your virtual environment can provide the needed resources, the next step is to download the CSPC collector image. The most recent software image can be obtained from the download center.

To access the CSPC collector image, perform the following steps:

- Go to the following URL: CSPC Image Download Center
- Login with your CCO Credential if requested.
- Select the required image and click **Download**. Accept the Terms and Conditions to start the image download.
- Deploy this image to your environment.

# Configure Appliance IP Address

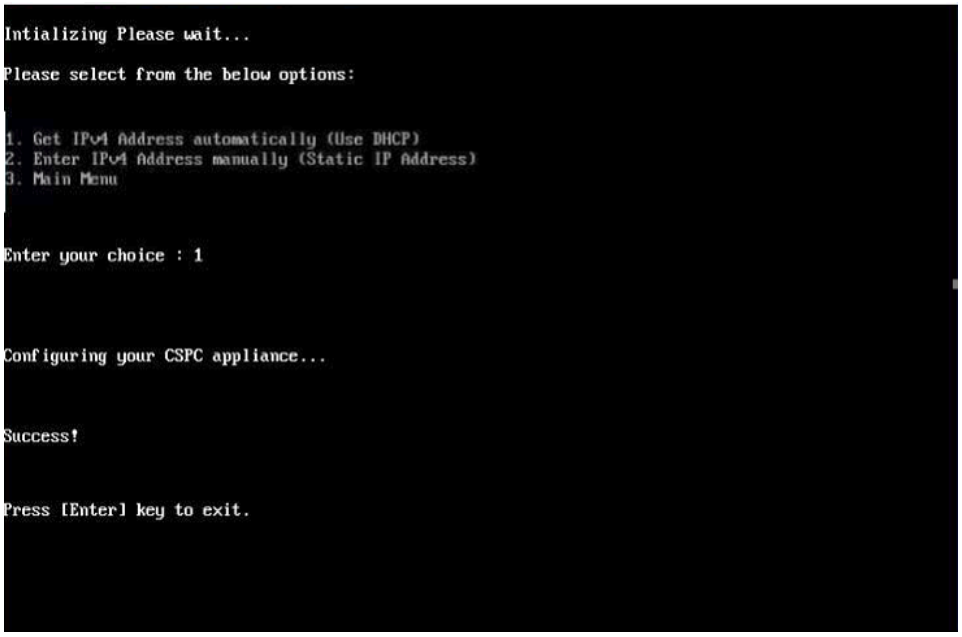
After the OVA has been installed, you are prompted to enter an IP Address for the collector. Choose one of the three options:


## Configure IPv4 address

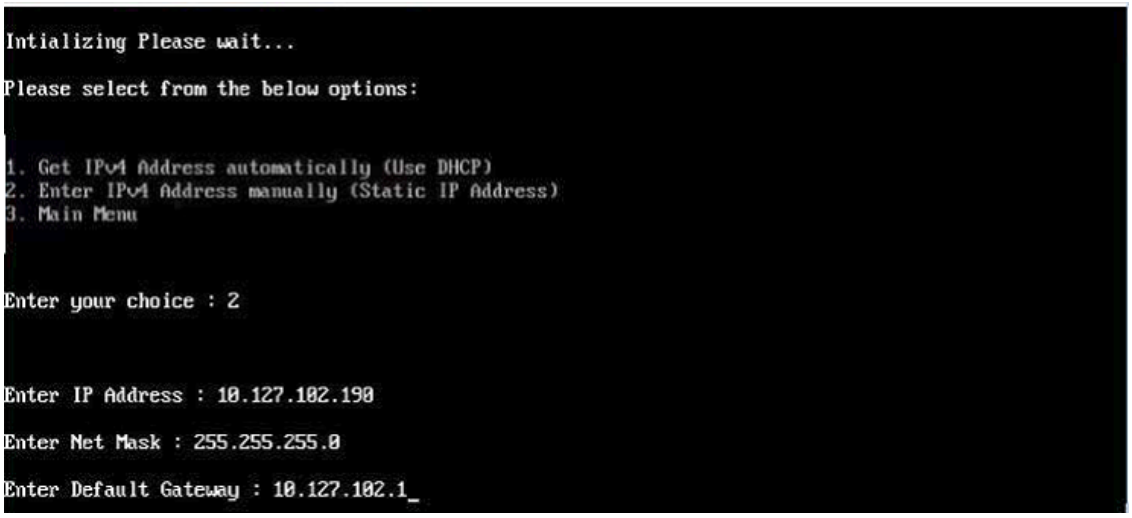
1. Select 1 to configure IPv4 address

2. Select any one option:

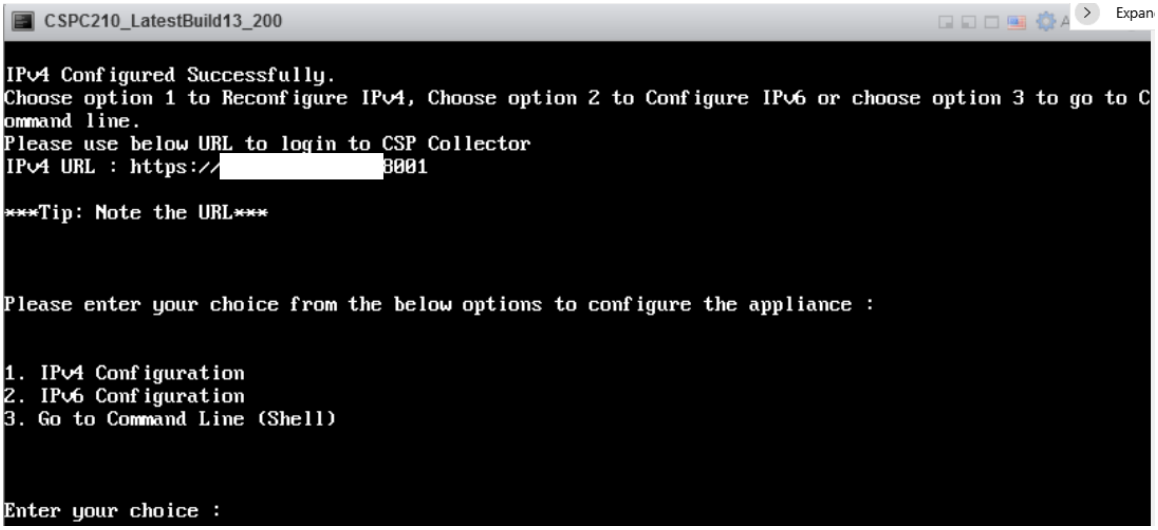
    a. Select 1 to fetch IP address automatically.




    b. Select 2 to enter a static IP Address for your appliance. Enter the Net Mask and Default Gateway.




3. Select 3 to go back to main menu.



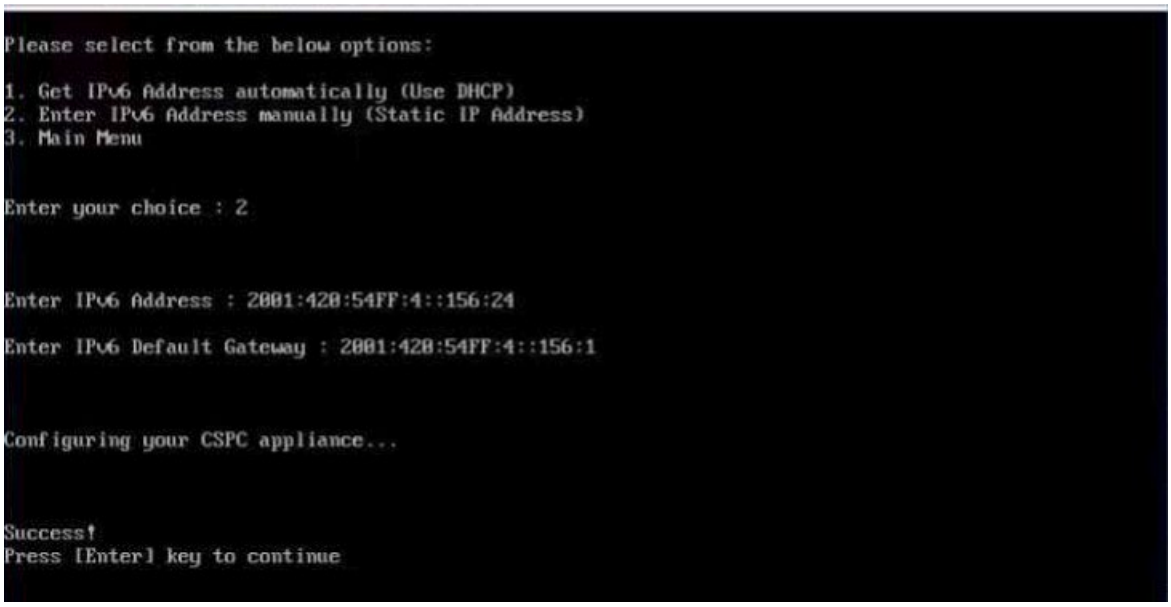

Choose option 1 to reconfigure IPv4 address, choose option 2 to reconfigure IPv6 address or choose option 3 to go to command line.

After selecting option 3, ssl certificate will be generatedduring installation instead of static certificates.

## Configure IPv6 Address

1. Select 2 to configure IPv6 address
2. Select any one option:
    a. Select 1 to fetch IP address automatically.


    b. Select 2 to enter the IP Address manually.




3. Select option 3 to go to the Command Line (Shell) if you would like to use CLI commands to configure the collector IP address instead of using the installation wizard. Refer to Configure CSPC appliance via CLI for instructions.

# Setup the Software Appliance for the First Time

Open the browser and enter the URL displayed at the bottom of the last screen in the previous step using the following URL format: https://<cspc-server-ip>:8001/.

The first time you log in, the installation wizard will prompt you to establish an **admin** password.


- Enter an **admin** password and confirm it.

  **Note** Passwords must be at least (8) characters long and must contain

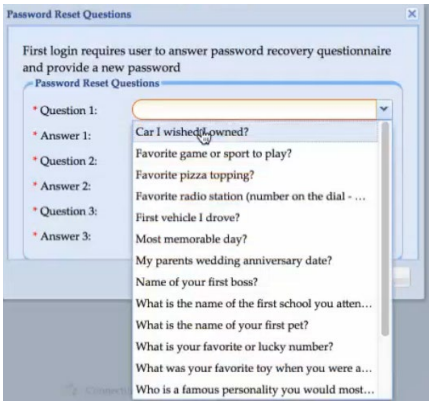
  - At least one lowercase letter (a, b, c, d...z)
  - At least one Uppercase letter (A, B, C, D…Z)
  - At least one number (0, 1, 2, 3…9)
  - At least one special characters - ,@#!$%^&*()_+|~-=\`{}[]:";'<>?,/).

- Enter the characters shown in the grey captcha box. Click **Login**.

**Note** This will create a new admin password which will be used to access the collector UI via browser.

**Note** Record the admin password!

- You will be prompted to login again. Enter the **credentials** you just created, and the captcha characters. Click **Login**.
- Select and answer the password reset questions when prompted and click **OK**.




- Read and accept the Cisco Systems - End User License Agreement. The **Install** screen for the collector is displayed.

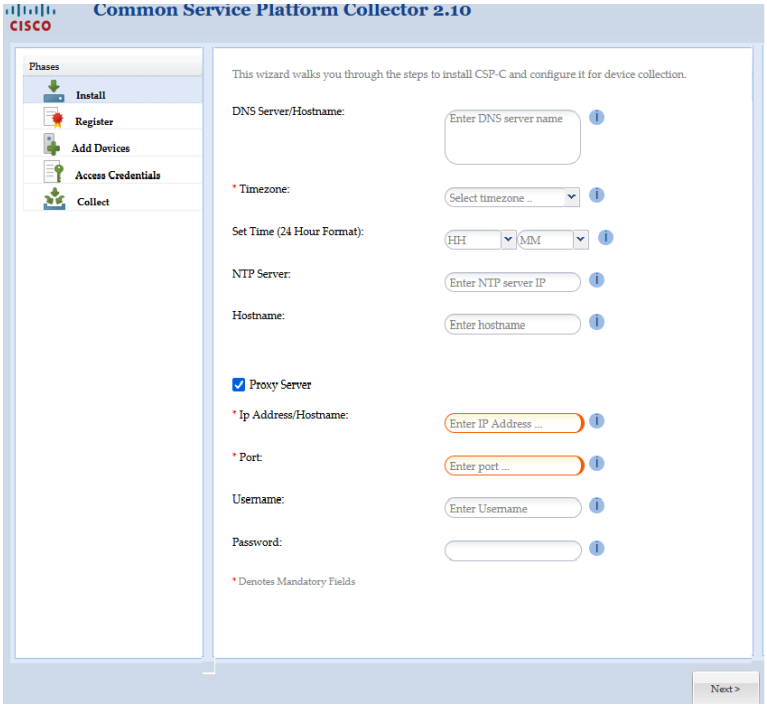
# Configure CSPC using the Wizard

In this section, you will see how to use the workflow provided by the wizard to configure the CSPC to collect device information.

## Install

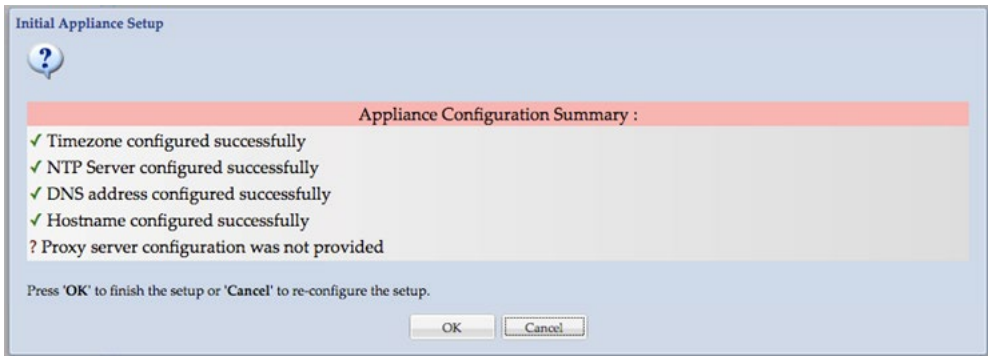
The **Install** and **Register** screens appear only the first time you log into the CSPC. The red asterisk * indicates a required field.

**Note** Do not skip these frist two configuration steps because they do not appear with subsequent logins to the wizard.




**Note** Enter time in 24-hour format and always ensure the date and time of the collector appliance is accurate with respect to the installed location time zone or else the appliance might be at risk to fail communicating with Cisco.

**Note** Proxy server is optional. It will take up to 30 seconds to finish installing the collector followed by a configuration summary.

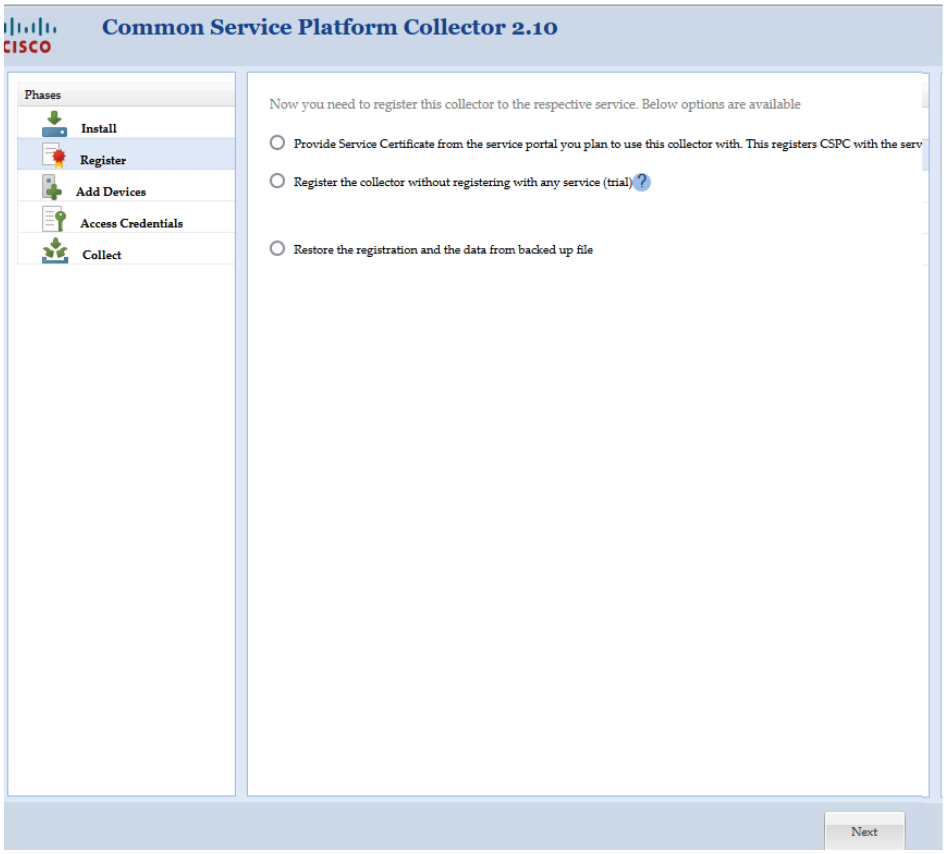



- Review the Initial Appliance Setup, and click **OK** to finish the setup or click **Cancel** to go back to the - **Install** step and make any necessary corrections.

## Register

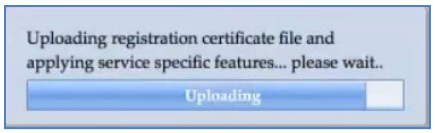
It is a leading practice to register the collector to a service such as Partner Support Service or Smart Net Total Care during the initial software installation. You should have generated and saved a Registration Certificate file from the specific service portal. In the **Register** screen of the wizard you will apply the registration certificate to the collector.

**Note** If you skip this configuration step and choose to register the collector without registering with a service, you will need to follow the registration upgrade instructions in the CSPC User Guide in order to be able to upload collected data to Cisco. The **Register** screen does not appear with subsequent logins to the wizard.




**Note** You must be connected to the Internet in order to register the collector to Cisco.

- Select the first option, **Provide Service Certificate from the service portal you plan to use this collector with, to register the CSPC to the Service**.
- **Browse** to the Service Certificate file you downloaded earlier.
- Click **Next** at the bottom of the screen to continue with registration.




- This takes several minitues, wait till the wizard uploads the registration certificate file and applies service specific rules package and components. Click **OK** when the successful upload message is displayed.

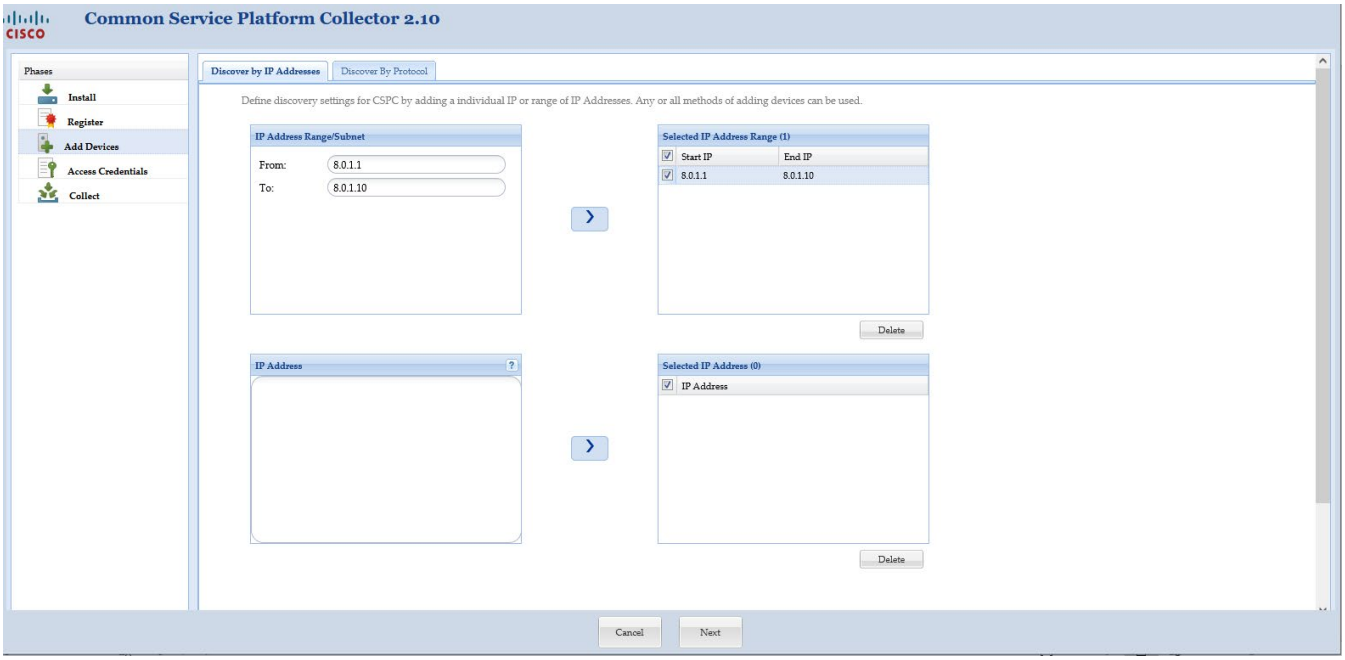
## Add Devices

In order to discover network devices and collect device data, you must enter the device credentials. In this section, you will see the process of configuring the CSPC Collector to discover by IP Address or by Protocol from the **Add Devices** screens.

The IP addresses that are referenced should be as tight or as restrictive as possible, while allowing coverage for all required devices.

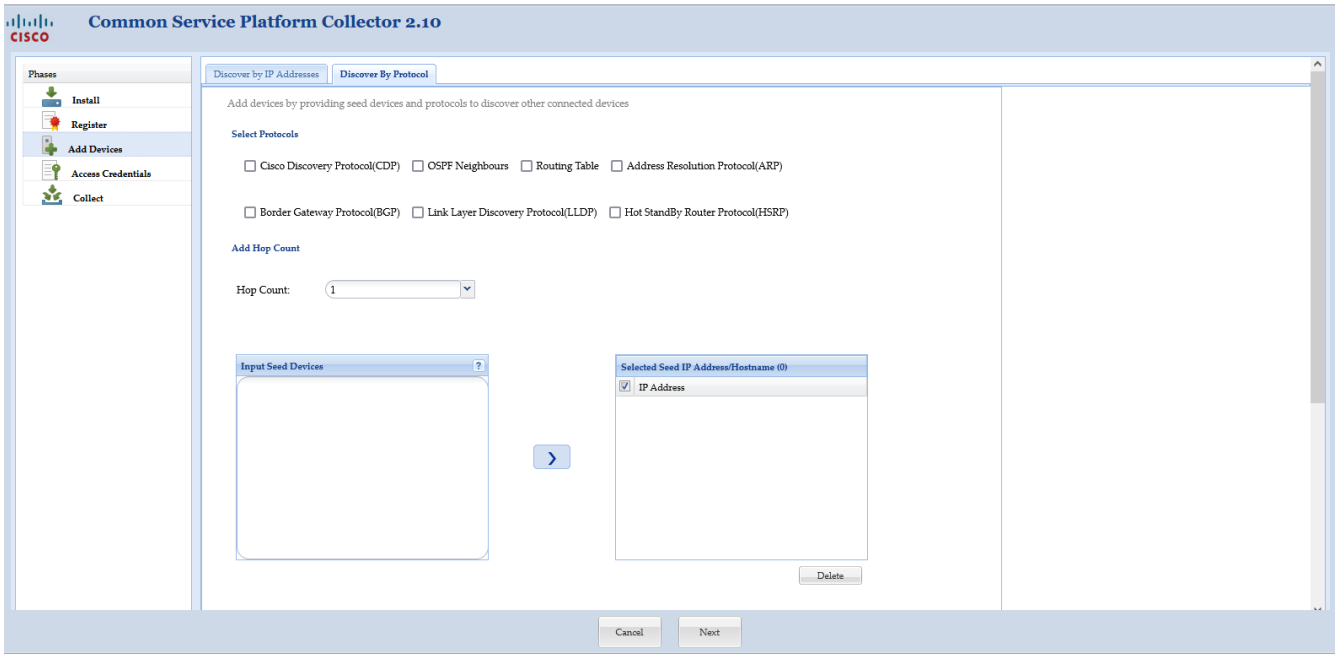
- The two lists specify which IPs the CSPC may use for collector operations such as discoveries or data collection.
- Specific IPs can be provided or wildcards can be used to replace octets of an IP to create a range.
- If an IP or range of IPs is not included in these fields, the CSPC will not communicate with a device that has such an IP.
- Entering *.*.*.* will allow CSPC to use the credential with any IP. For example: 172.16.*.* would only allow the  credentials to be used for devices in the 172.16.0.0/16 subnet.

As your network changes, you can return to the CSPC installation wizard and modify the list of devices.




You can add devices by entering a specific IP address or an IP address range. Use > to add your entries to the selected IP Address or selected IP Address Range lists.

- Click the Discover by Protocol tab if you have seed devices or want to discover other connected devices using protocols. Discovering devices by protocol will take longer than Discover by IP Address.
- Select the required Protocol(s), HOP Count, and Seed IP Address. Use > to add the devices to the selected Seed IP Address list.
- When done specifying devices, click **Next**.

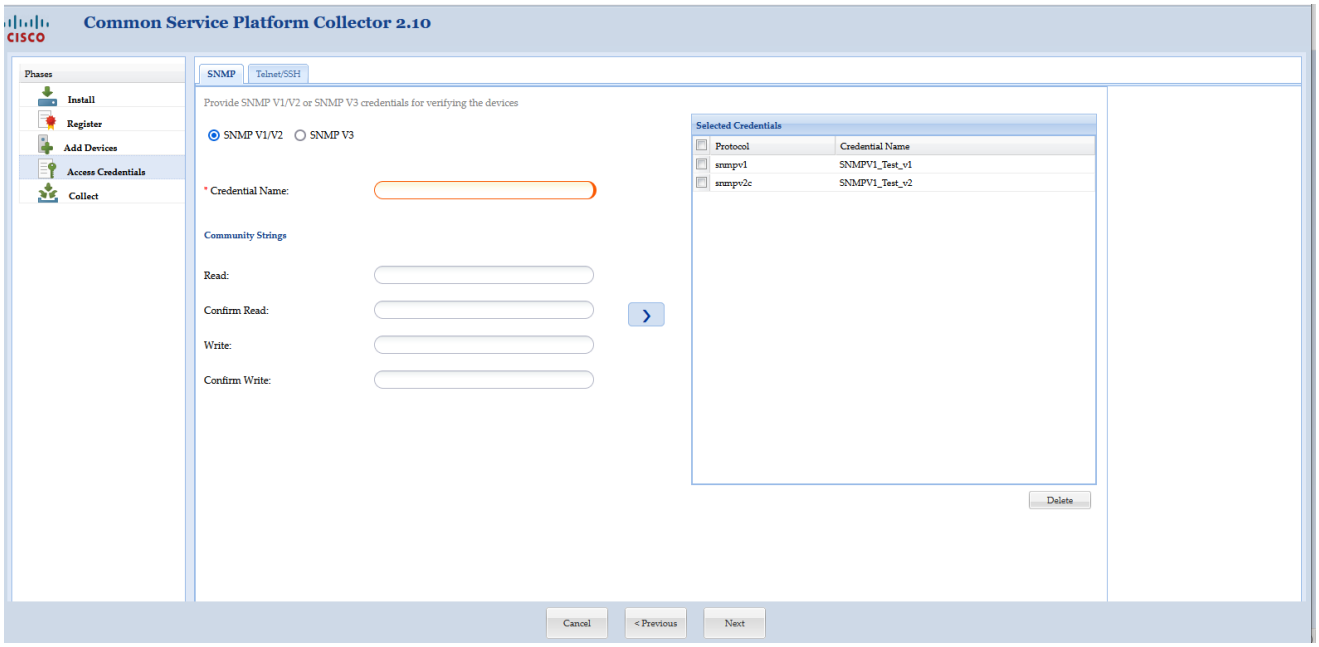



## Access Credentials

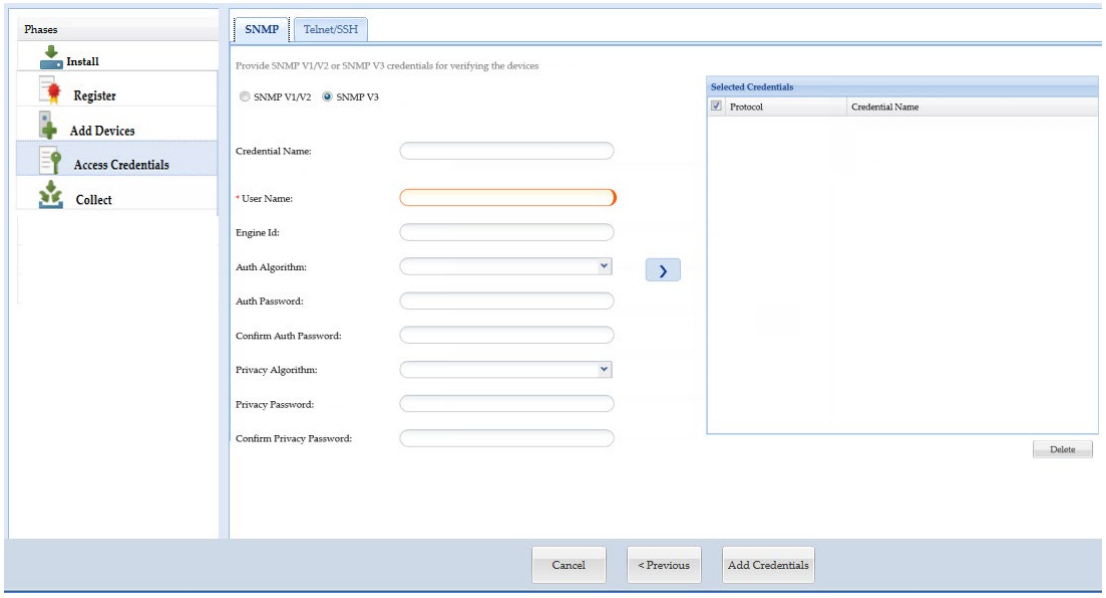
Collector operation requires that you enter the CSPC device credentials in order to discover network devices and collect device data. The setup of device credentials in CSPC is used for two purposes:

- SNMP credentials are used for the initial discovery of the devices, and for data collection.
- In addition to SNMP, the remaining credentials (Telnet or SSH) are used for data collection from the discovered devices.

You can return to the wizard workflow to make changes to the Access Credentials as your network changes.




- You can add credential using one of following and click **Next**:
- If you select **SNMPV1/V2** enter **Credential Name**, and **Read String**. Use **>** to add the credential to the Selected Credentials list.
- If you select **SNMPV3** enter **Credential Name**, **User Name**, **Auth Algorithm**, **Password**, **Privacy Algorithm**, and **Password**. Use **>** to add the credential to the Selected Credentials list.



## Collect

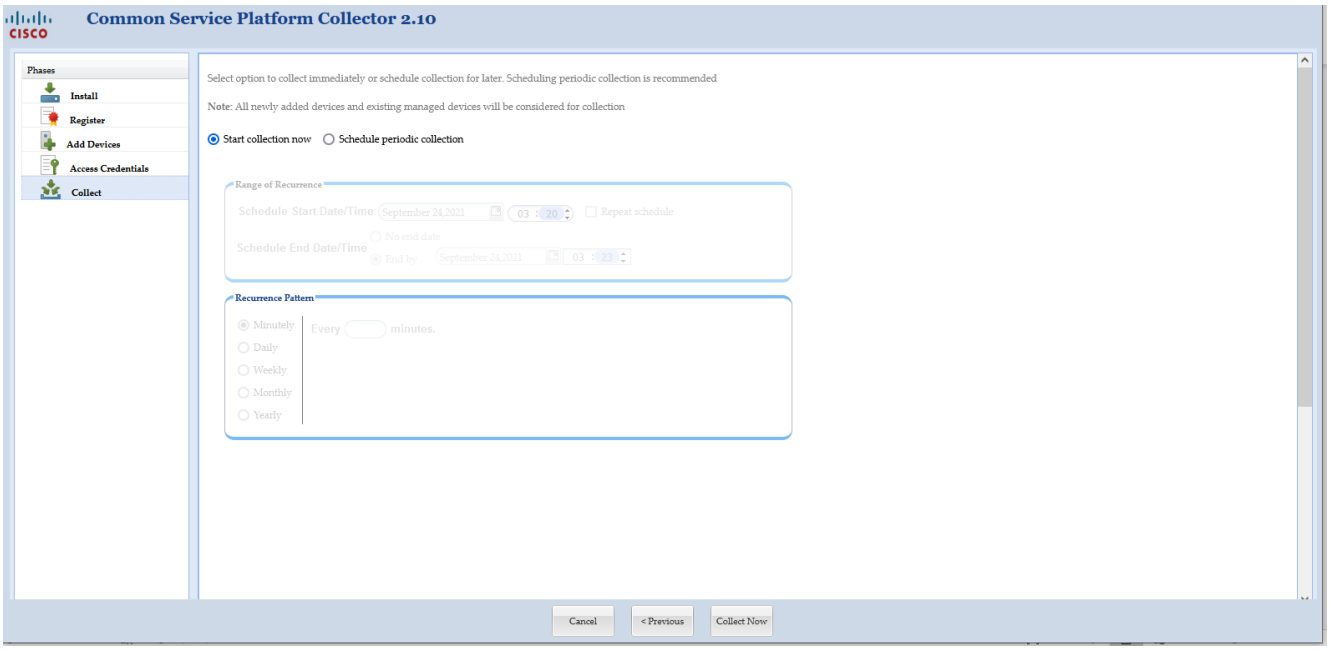
The final step of installing a CSPC Collector is to complete the process of discovering devices, collecting device information and uploading the inventory to the Cisco Data Center. From the CSPC wizard **Collect** screen, two options are available for device discovery, inventory collection and upload.

- Start the discovery, collection, and upload on demand right now.
- Create a collection schedule that recurs on a periodic basis.

Scheduling periodic collections is a leading practice.

Select **Start Collection now** and click **Collect Now** to start collection instantly or click **Schedule Periodic Collection** and click **Schedule** to collect at a later time. You can schedule **Start** and **End Date/Time** or select the Recurrence pattern as **Minutely**, **Daily**, **Weekly**, **Monthly**, or **Yearly** as shown in figure below.

It is recommended to schedule once a week.




# Port Usage Information

Connection to the list of Cisco servers (IP's and ports) in the below table is needed for the collector to communicate with them. In addition, the CCO login credentials that is registered and associated to the service contract is also needed. The CSPC uses SSL for uploading to the Cisco Data Center. ACL's on your firewall might need to be configured to allow the CSPC to upload successfully.

The CSPC collector supports on demand and automatic upgrades.

Note: By default, the auto-update feature is disabled. You should enable the auto-update feature to reduce the maintenance time of the collector.

| Host Name | IP Address | Port |
|---|---|---|
| concsoweb-prd.cisco.com | 72.163.7.113 | HTTPS (TCP/443) outbound |
| sso.cisco.com | 173.37.144.208 | HTTPS (TCP/443) outbound |

Note : If customer is registered with smart service account (such as SNTC, PSS, or SC) and want to install CPSC 2.8.1.4 or upgrading to 2.8.1.5 or 2.8.1.6 then, follow below steps to check connectivity is properly configured for uploading data to Cisco backend.

Execute below command as root user

```
grep nettools /opt/ConcsoTgw/tail-end-gateway-decoupled/conf/csof_config.xml
```

If above command returns the output then, follow below steps to configure connectivity as default to upload data to Cisco backend

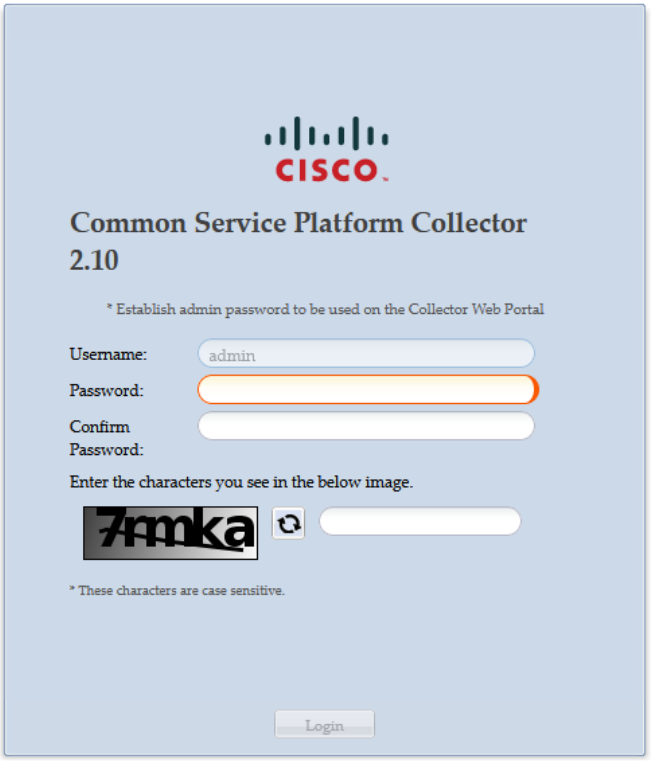
```
sed -i ':a;N;$!ba;s/file/#file/1' /opt/ConcsoTgw/tail-end-gateway-decoupled/bin/run.sh
sed -i 's/nettools-upload.cisco.com/72.163.7.113/g' /opt/ConcsoTgw/tail-end-gateway-decoupled/conf/csof_config.xml
service concsotgw restart
```

# Access CSPC User Interface

In this section, you will see how to access the CSPC, following the above intial set-up..

Access the CSPC in a browser window by completing the following steps:

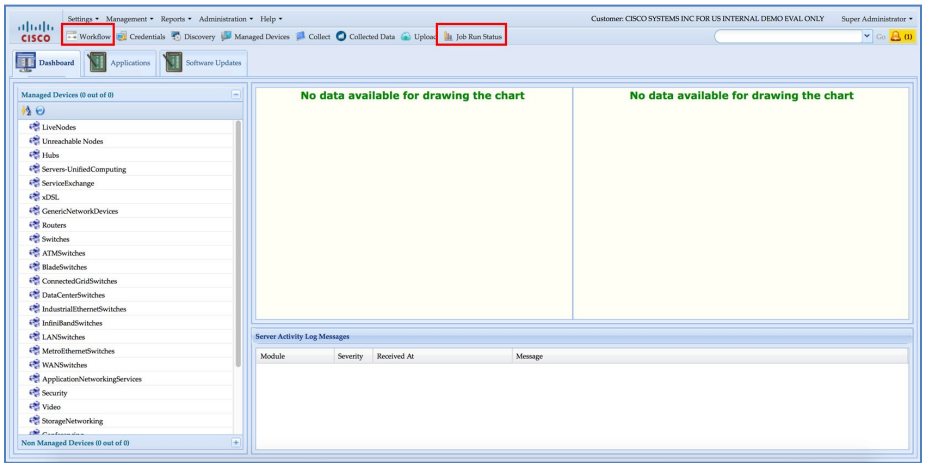
- Enter into the browser the IP Address of your collector using the following URL format: https://<cspc-server-ip>:8001/




- Enter the username, password and the text in the image, Click **Login**.

After all software is loaded, the CSPC graphical user interface (GUI) appears. From here you have access to all collector functions. Our CSPC User Guide provides details.

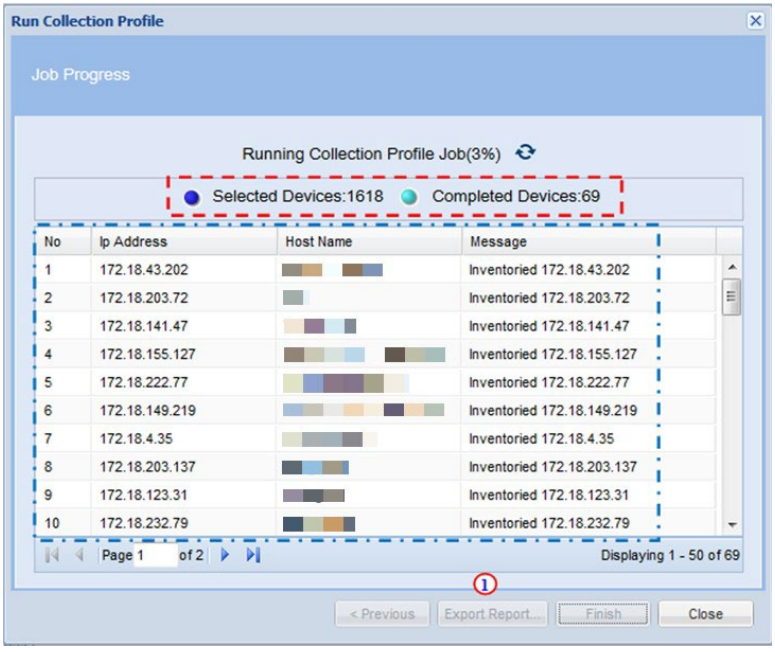
## Update Devices, Credentials and Collection Settings




Click the **Workflow** button in the toolbar to open the installation wizard to apply updates and changes to devices, credentials and collection settings.

## View Status of Discovery, Collection and Uploads

You can view status of collector jobs, click the **Job Run Status** button in the toolbar to view the results of discovery, collection and upload.




The details of the data collection are filled in. A summary is above and the details are below.

- You can review the collection report after the process has finished,, click **Export Report**.
- Click **Close** when you are finished. The job will continue to Collection run in the background.

Once you have registered the collector with a service certificate, when the collection job completes, inventory will run, then the upload will automatically be sent to the Cisco Data Center. It may take up to 24 hours before your upload will be processed and available in the portal.

After the initial upload is processed, you can view device details in the portal: https://services.cisco.com

Subsequent uploads can be viewed by going to the service's portal.

- For SNTC select Library > Administration > Upload Processing
- For PSS select Library > Inventory > Inventory Collection

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