Cisco CSPC 2.7.x

Quick Start Guide

Feb 2018

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1. Introduction to CSPC

This document provides information about how to download, install and configure a new Common Services

Platform Collector (CSPC) on a virtual machine that is running ESXi 5.x or higher.

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

If you are updating an existing CSPC, please refer to the CSPC Upgrade Guide.

In order to configure a CSPC and ensure a successful setup, a workflow wizard which simplifies CSPC configuration is included with the CSPC 2.7 release.

CSPC is an SNMP-based tool that discovers and collects information from your Cisco devices. 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, fill in and send this email form

CSPC Supported Browsers

- Firefox version 27 to 49
- Internet Explorer (IE) version 9 to 11

2. 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 2.7.3 release, there is a single configurable OVA image that supports multiple configurations. Below are listed the minimum system requirements for the collector images that runs on a ESXi 5.x or higher virtual platform:

	Ultra Small (up to 5,000 devices)	Small (up to 10,000 devices)	Medium (10,000 to 20,000 devices)	Large (20,000 to 40,000 devices)
vCore count	2	4	8	12
RAM	2 GB	4 GB	8 GB	16 GB
HDD (GB)	40	250	500	1000

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

For more detailed virtual machine requirements, please refer to the latest CSPC Release Notes.

3. 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 software image can be obtained from the download center. The download center contains the most recent software image. 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 click **Download**. Accept the Terms and Conditions to start the image download.

- Deploy this image to your environment.

4. Configure Appliance IP Address

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

```
Please select from the below options:

1. IPv4 Configuration
2. IPv6 Configuration
3. Go to Command Line (Shell)


Enter your choice :
```

Configure IPv4 address

1. Select 1 to configure IPv4 address

2. Select any one option:

3. Select 1 to fetch IP address automatically.

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

5. Select 3 to go back to main menu.

Configure IPv6 Address

1. Select 2 to configure IPv6 address

2. Select any one option:

3. Select 1 to fetch IP address automatically.

4. Select 2 to enter the IP Address manually.

5. 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 the "Configure CSPC appliance via CLI" for instructions.

5. 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.

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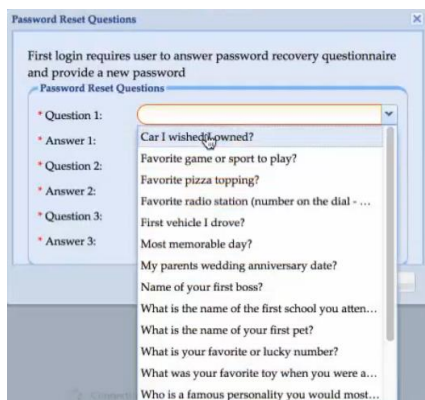
- Read and accept the Cisco Systems - End User License Agreement. The Install screen for the collector is displayed.
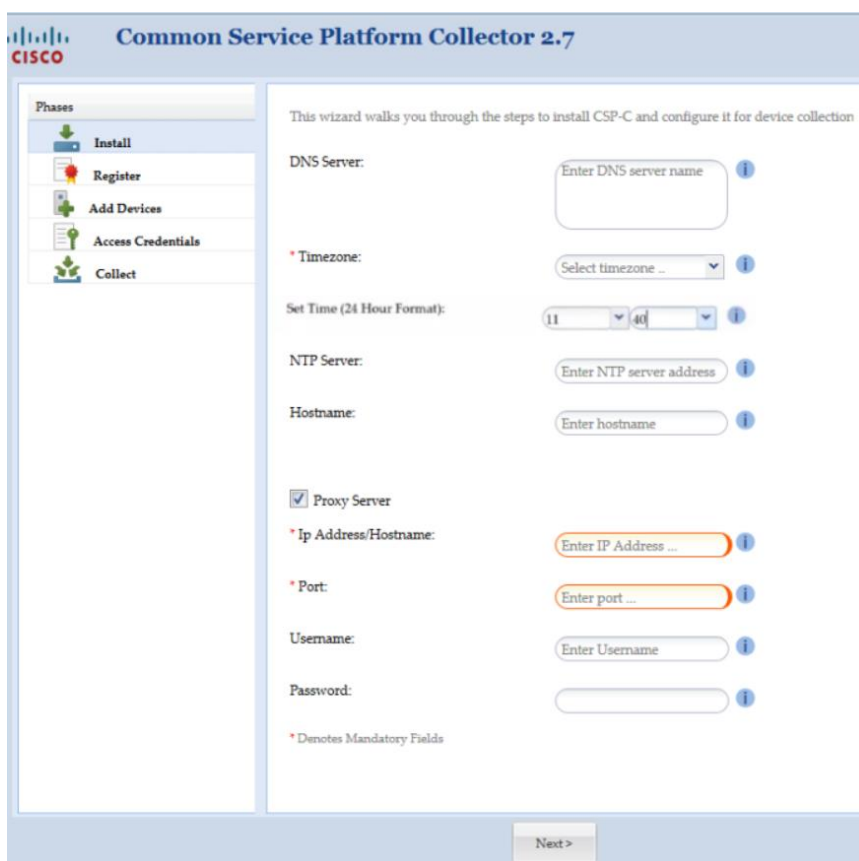
6. Configure CSPC using the Wizard

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 screen appears only for the first time you log into the CSPC. The red asterisk * indicates a required field.

Note Do not skip this configuration step because the **Install** screen does not appear with subsequent logins to the wizard.
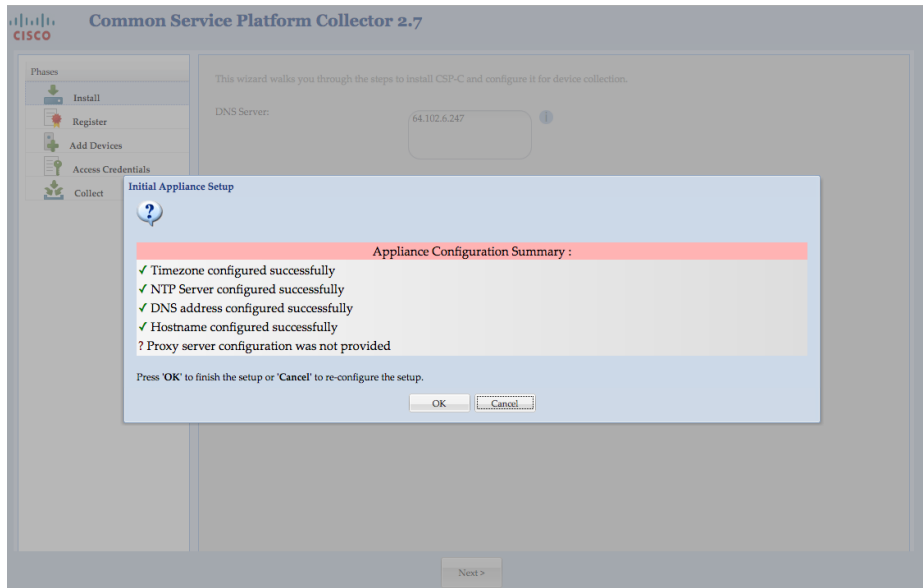

Note Enter time in 24hour format

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**. Click **Cancel** to go back to the configuration screen.

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.

Uploading registration certificate file and
applying service specific features... please wait..

Uploading
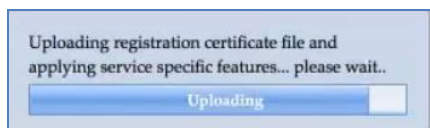
- Wait while the wizard uploads the registration certificate file and applies service specific rules package and components. Click **OK** when the successful upload message is displayed.
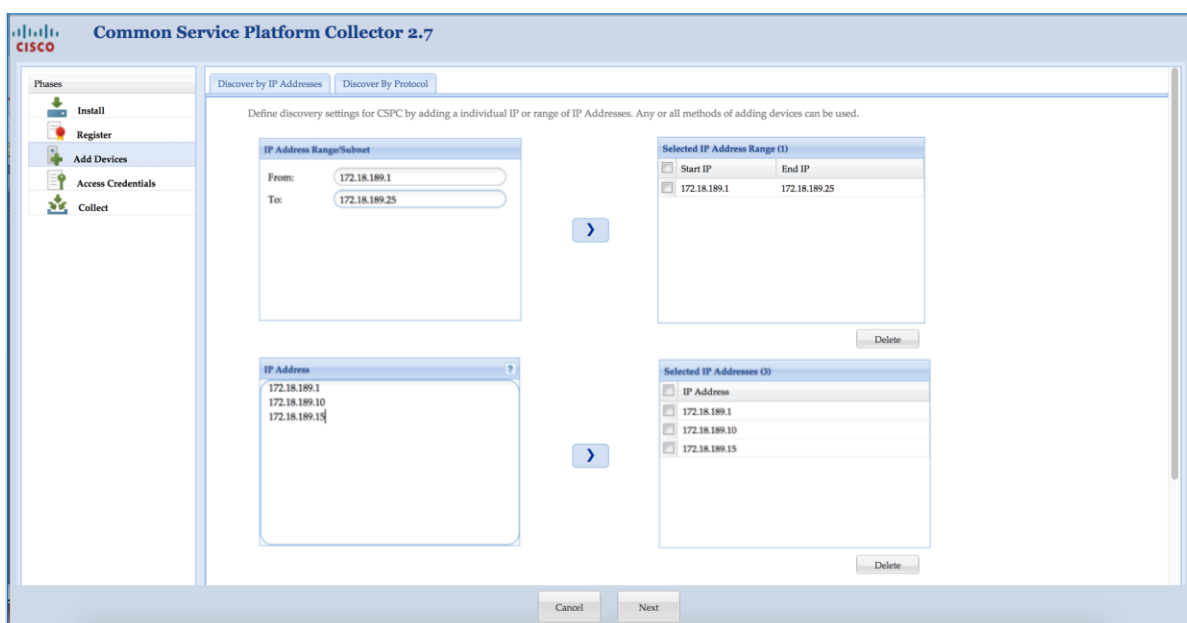
Add Devices

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. 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 IP Address or IP Address Range lists.

- Click the tab to Discover by Protocol 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 seed IP Address list.

- When done specifying devices, click **Next**.
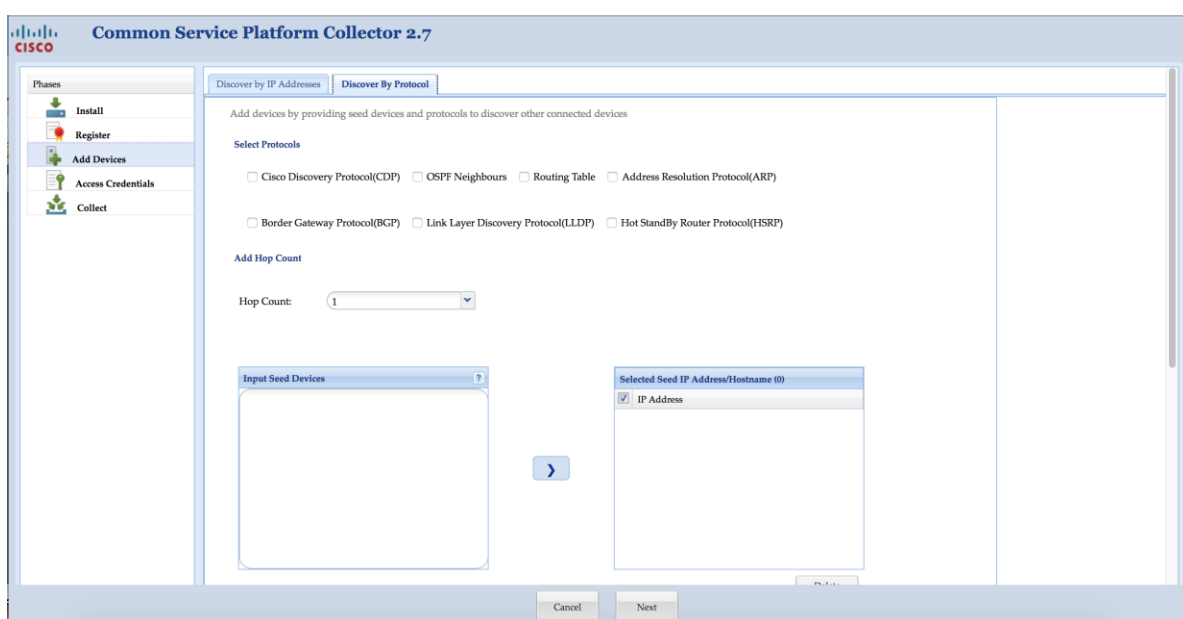
Access Credentials

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.
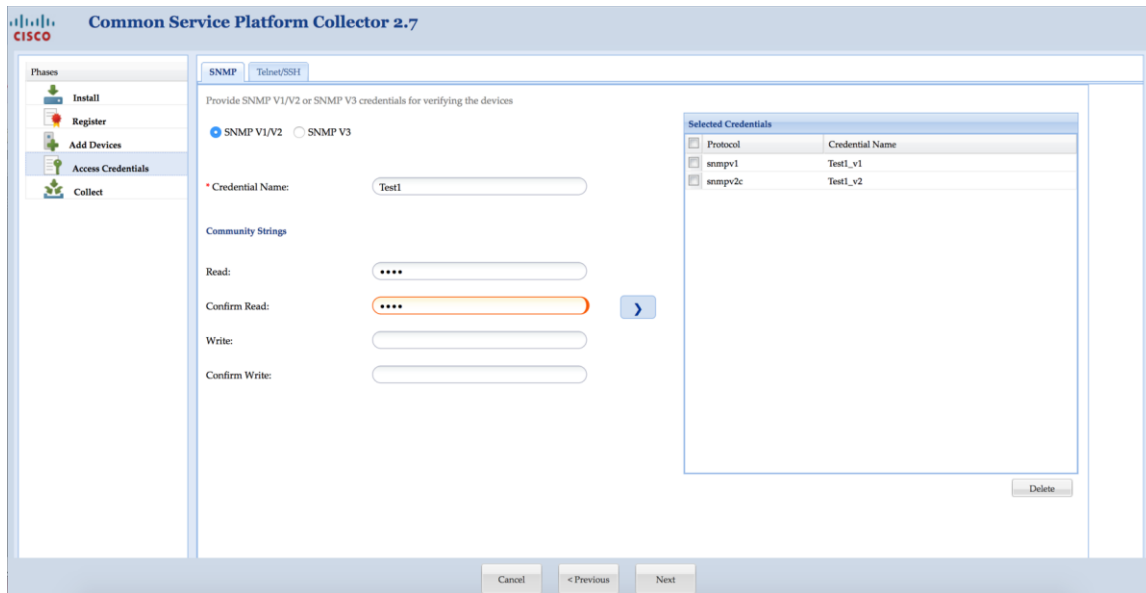
- You can add credential using one of following and click **Next**:

- If you select **SNMPV1/V2** enter **Credential Name**, and **Read String**. Use **>** to select the credential.

- If you select **SNMPV3** enter **Credential Name**, **User Name**, **Auth Algorithm**, **Password**, **Privacy Algorithm**, and **Password**. Use **>** to select the credential.
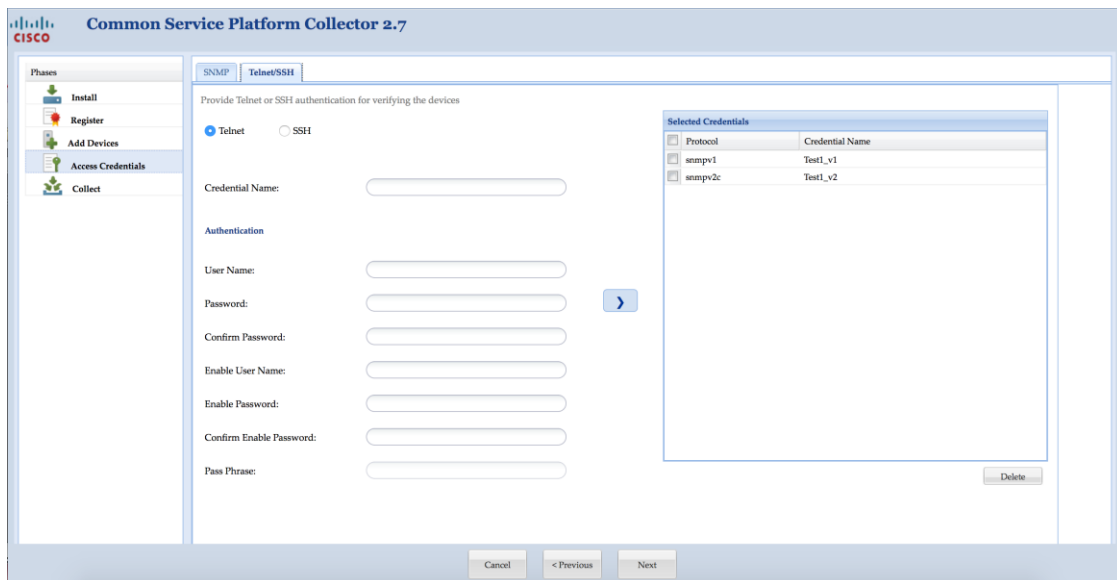

Collect

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.
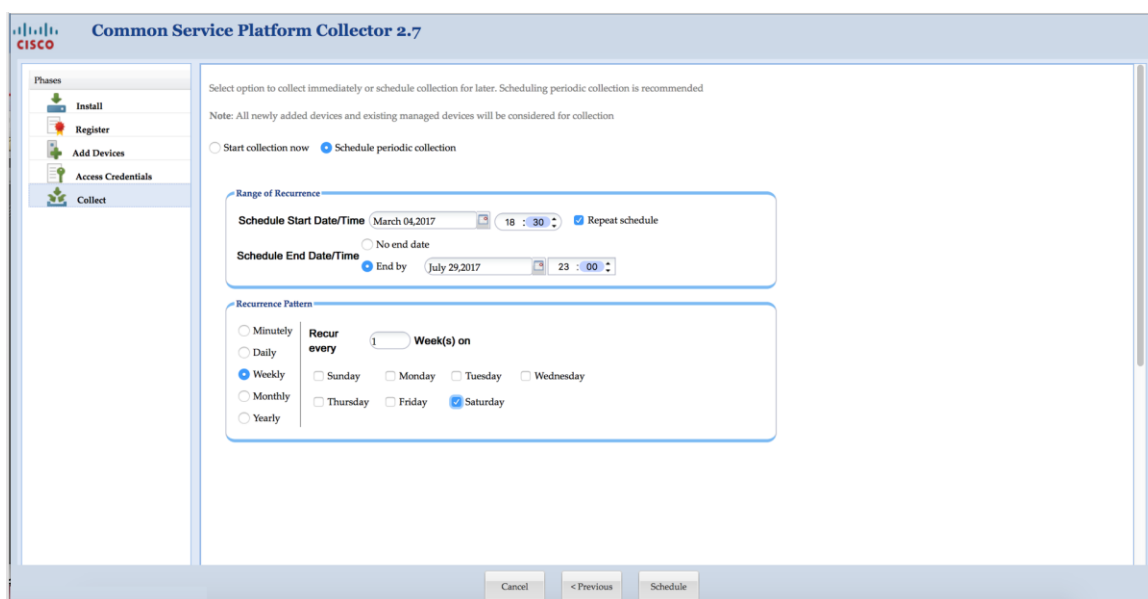
7. Port Usage Information

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.

SSL Details

Source IP Address	Source Port	Destination IP Address	Destination Port	Protocol	Direction
CSPC Server IP	Any	72.163.7.113	443	TCP	Outgoing
	Any	72.163.7.125	443	TCP	Outgoing

Remote Access from portal to collector

Host Name	IP Address	Port
concsoweb2-prd.cisco.com	72.163.7.125	HTTPS (TCP/442) outbound

Port requirements for Life Cycle Management (LCM) Agent Manager – Auto Upgrade

The CSPC collector supports on demand and automatic upgrades. This port needs to be enabled to support the patch upgrade feature.

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
dl.cisco.com dl1.cisco.com dl2.cisco.com	72.163.7.60 72.163.7.60 173.37.146.12	HTTPS (TCP/80) and HTTPS (TCP/443) outbound
sso.cisco.com	173.37.144.208	HTTPS (TCP/443)

8. Using Workflow Wizard

In this section, you will see how to access the CSPC and to open the wizard workflow.
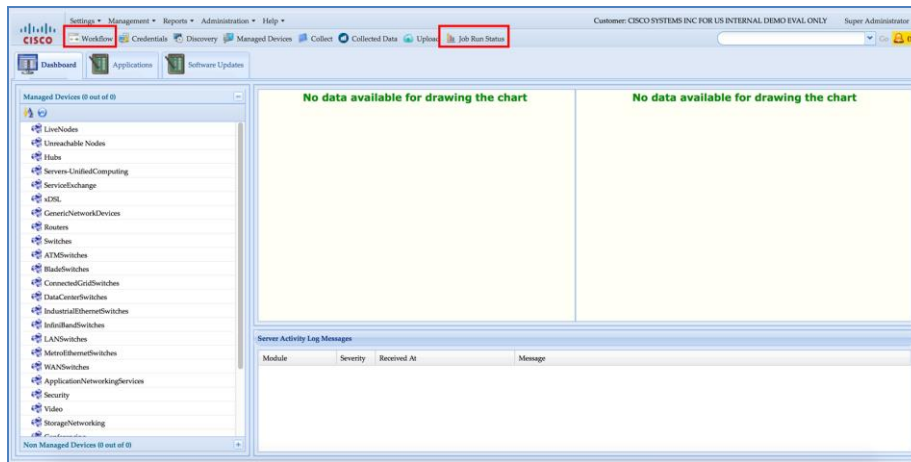
Access the CSPC in a browser window by completing the following steps:

- 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.

- Click the **Workflow** button in the toolbar to open the installation wizard for updates and changes to devices, credentials and collection settings.
- Click the **Job Run Status** button in the toolbar to see the results of discovery, collection and upload.
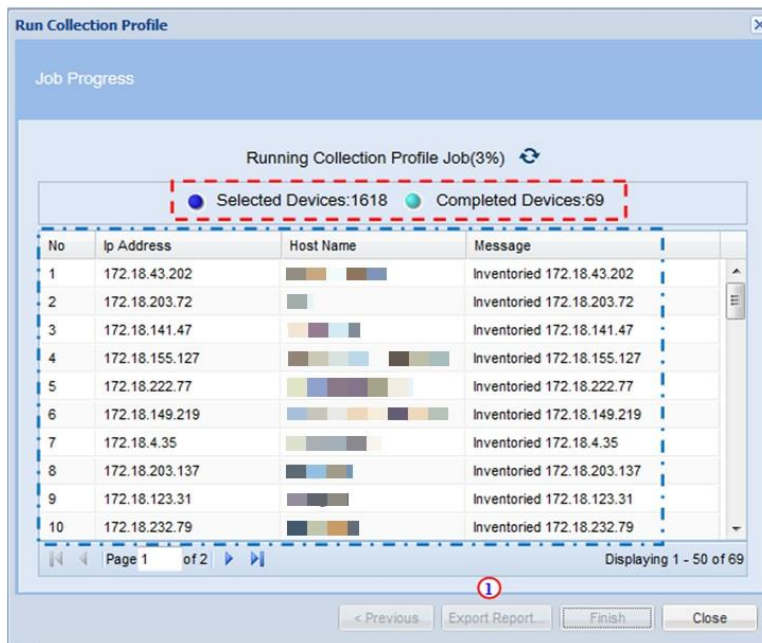
The details of the data collection are filled in. A summary is above ⌐ and the details are below. ⌐

- After the collection process finishes, click Export Report . ①
- Click Close when you are finished or to let the Collection run in the background.

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

You can view the upload status by going to the service's portal: https://tools.cisco.com/smartservices.

- For SNTC select Library > Administration > Upload Processing

- For PSS select Library > Inventory > Inventory Collection

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