

## Integrating Hitachi Virtual Storage Platform with Cisco Intersight

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Solution Implementation Guide

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## Revision history

Changes	Date
Updated diagrams, verbiage updates for VSP One Block High End, removal of End of Sale (EOS) systems, and updated table for VSP Intersight Cloud Orchestrator tasks.	January 2026
Added support for VSP One Block High End and image updates.	November 2024
Updated overview diagram.	October 2024
Added additional information regarding Cisco Intersight.	February 2022

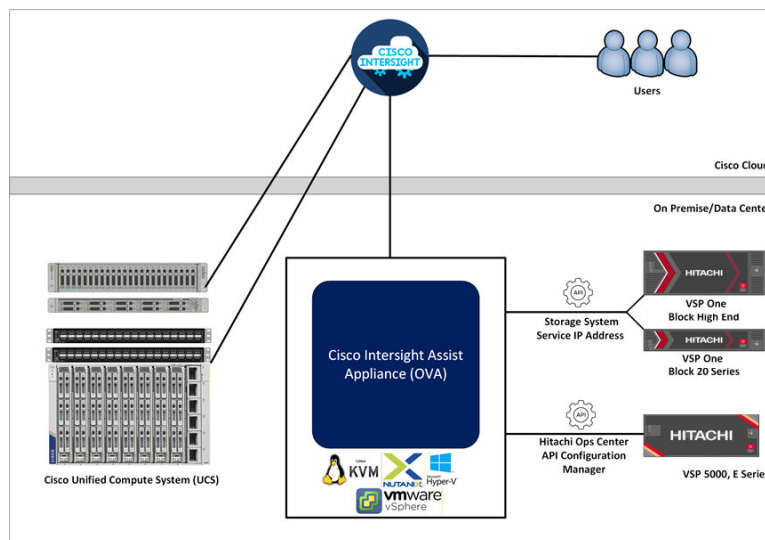
# Quick Start Guide

This guide provides the step-by-step procedures for configuring and integrating Hitachi Virtual Storage Platform storage systems with Cisco Intersight.

The components in this integration are:

- Hitachi Virtual Storage Platform storage systems
- Hitachi Ops Center API Configuration Manager
- Cisco Intersight Assist OVA
- Cisco Intersight account and license
- Domain Name System (DNS) server

The VSP storage system must be deployed by Hitachi professional services with an available DNS server and deployed infrastructure stack, providing a VMware vCenter environment for Cisco Intersight Assist OVA deployment and configuration. For additional supported system information see the [Cisco Intersight System Support page](#).



## Workflow

The following list outlines the installation and configuration steps:

1. [Install Hitachi Ops Center API Configuration Manager \(on page 5\)](#)
2. [Onboard Hitachi Virtual Storage Platform storage systems to Hitachi Ops Center API Configuration Manager \(on page 7\)](#)
3. [Configure the DNS \(on page 19\)](#)
4. [Deploy the Intersight Assist OVA \(on page 21\)](#)
5. [Create an Intersight account \(on page 24\)](#)

6. [Claim Assist using Intersight \(on page 25\)](#)
7. [Onboard VSP storage systems to Intersight \(on page 27\)](#)

After the systems have been configured, users can refer to the [Hitachi Virtual Storage Platform with Cisco Intersight Cloud Orchestrator](#) as well as the [Hitachi Virtual Storage Platform Universal Volume Manager with Cisco Intersight](#) best practice guides for additional information on how to manage the VSP storage system.

## Hitachi Ops Center API Configuration Manager prerequisites

Hitachi Ops Center API Configuration Manager provides the Web API for getting information or changing the configuration of storage systems. Hitachi Ops Center API Configuration Manager is required to use Hitachi Virtual Storage Platform storage systems with Cisco Intersight.

To obtain the installation package contact your Hitachi representative; or, if you have access to [support.hitachivantara.com](https://support.hitachivantara.com), you can download it from [here](#).



**Note:** Hitachi Ops Center API Configuration Manager v10.5.1 is used for the examples in this guide.



**Note:** When using VSP One Block High End or VSP One Block 20 systems, it is not required to onboard the system to Hitachi Ops Center API Configuration Manager for Intersight connectivity.

To view the documented Hitachi Ops Center API Configuration Manager system requirements visit the Product Documentation portal at <https://docs.hitachivantara.com/> and follow these steps:

1. From the More versions drop-down select the version of Hitachi Ops Center being used.
2. Download the product documentation library (PDL) for version 10.5.x.

10.5.x

More versions ▼

Download all documents:



[Ops Center 10.5.x Product Documentation Library \(PDL\)](#)

Release Notes

Get Started with Ops Center

3. Scroll down to Ops Center API Configuration Manager section.
4. Select the applicable System Requirements PDF.

## Ops Center API Configuration Manager

Document	Part Number	Size
 Hitachi Ops Center API Configuration Manager REST API Reference Guide	MK-99CFM000-07	7.3MB
 HCM_v10_5_1_System_Requirements_MK-99CFM002-08.pdf	MK-99CFM002-08	548.9KB

## Install Hitachi Ops Center API Configuration Manager

This section covers installing Hitachi Ops Center API Configuration Manager on a Windows or Linux system.

### Before you begin

- Verify that a supported operating system has been deployed and that you have network connectivity to the Web API.



**Note:** If you are using a different version of Hitachi Ops Center API Configuration Manager, verify that the directory names match the version that you use.

## Windows installation

To install Hitachi Ops Center API Configuration Manager with the Windows operating system, follow these steps:



**Note:** Windows 2016 was used in this example.

### Procedure

- Mount the ISO package *HOC10-51-00\_E02\_CONFMANAGER* to the Windows machine.
- Select the mounted ISO package, and then select the *Windows* folder.
- Right-click the *setup.exe* binary, and then select **Run as administrator**.
- On the InstallShield Wizard, click **Next**.
- Keep the default installation destination, and then click **Next**.
- Review the settings, and then click **Install**.

### Result

REST API services will automatically start when installation completes.

### Next steps

Continue with [Onboard Hitachi Virtual Storage Platform storage systems to Hitachi Ops Center API Configuration Manager \(on page 7\)](#)

## Linux installation

To install Hitachi Ops Center API Configuration Manager using the Linux operating system, follow these steps:



**Note:** A Red Hat Enterprise Linux 7.8 server was used in this example.

### Procedure

1. Open a command window and log in using a root or sudo user account with root permissions.
2. Mount the ISO package *HOC10-51-00\_E02\_CONFMANAGER* to the Linux machine.
3. Verify the mount point of the ISO package. Enter: `df -h`

```
[root@RHEL7CM ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        1.9G   0 1.9G   0% /dev
tmpfs           1.9G   0 1.9G   0% /dev/shm
tmpfs           1.9G  11M 1.9G   1% /run
tmpfs           1.9G   0 1.9G   0% /sys/fs/cgroup
/dev/mapper/rhel-root 14G  3.9G  9.6G  29% /
/dev/sda1       1014M  183M  832M  19% /boot
tmpfs           379M   40K  379M   1% /run/user/1000
tmpfs           379M   48K  379M   1% /run/user/0
/dev/sr0        962M  962M    0 100% /run/media/root/OPCNF_105100
```

4. Change the directory to the ISO package mount directory. Enter: `cd /run/media/root/OPCNF_105100`
5. Navigate to the Linux directory: `cd Linux/`
6. Run the *install.sh* script. Enter: `./install.sh`
7. Press **Enter**.
8. Keep the default installation directory. Enter: `y`

```
[root@RHEL7CM Linux]# ./install.sh
Starting Configuration Manager REST API installation.
The following product will be installed on this system:
  Configuration Manager REST API 10.5.1-00 [New]

Caution: Quit all programs. If security, process, and virus monitoring programs are running, the installation can fail.
Press Enter to continue.

<<Current Settings>>

Installation destination directory:
  /opt/hitachi

To leave things as they are and not make changes, press y.
To make changes, press e.
To cancel installation, press n.
> y
Progress
  Now performing pre-installation processing...
  Now installing Configuration Manager REST API...
  Now performing post-installation processing...
  Now starting the Configuration Manager REST API server services...
Configuration Manager REST API installation completed successfully.
```

### Result

Hitachi Ops Center API Configuration Manager is now installed. Applicable binaries for start/stop are located in the */opt/hitachi/ConfManager* folder.

REST API services will automatically start when installation completes.

### Next steps

Continue with [Onboard Hitachi Virtual Storage Platform storage systems to Hitachi Ops Center API Configuration Manager \(on page 7\)](#)

## Onboard Hitachi Virtual Storage Platform storage systems to Hitachi Ops Center API Configuration Manager

Hitachi Virtual Storage Platform (VSP) storage systems must be onboarded to the Hitachi Ops Center API Configuration Manager. After VSP storage systems are onboarded, these resources can be configured and managed from a single storage system window. You can onboard VSP storage systems using a REST API client, Python, or cURL. For VSP One Block storage systems, it is not required to onboard to Hitachi Ops Center API Configuration Manager.

### Onboard using a REST API client

You can onboard VSP storage systems to Hitachi Ops Center API Configuration Manager using a REST API client such as Postman.

#### Before you begin

- The binaries for your REST API client need to be installed before starting this procedure.



**Note:** All of the calls in the following procedure can use SSL HTTPS on port 23451.

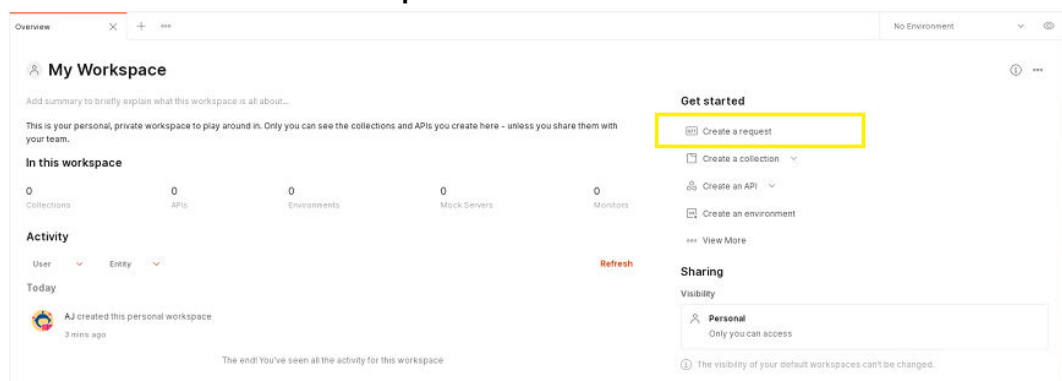
### Verify communication between Hitachi Ops Center API Configuration Manager and the REST API client

Before onboarding a VSP storage system, you must verify communication between Hitachi Ops Center API Configuration Manager and the REST API client.

To verify communication, follow these steps:

#### Procedure

1. Launch the Postman application from your desktop.
2. Click **Get Started > Create a request**.



3. For the API call type, select **GET**.
4. Enter the URL for the deployed Hitachi Ops Center API Configuration Manager IP address.
5. Click **Send**.

Communication is successful when the API call returns **200 OK** status, **apiVersion**, and **productName** details as shown.

The screenshot shows a REST client interface with the following details:

- Method:** GET
- URL:** http://10.10.10.10:23450/ConfigurationManager/configuration/version
- Send Button:** Highlighted with a yellow box.
- Response Status:** 200 OK, 22 ms, 413 B. This status bar is highlighted with a yellow box.
- Response Body (JSON):**

```

1 {
2   "productName": "Configuration Manager REST API",
3   "apiVersion": "1.23.0"
4 }

```

This JSON response is also highlighted with a yellow box.

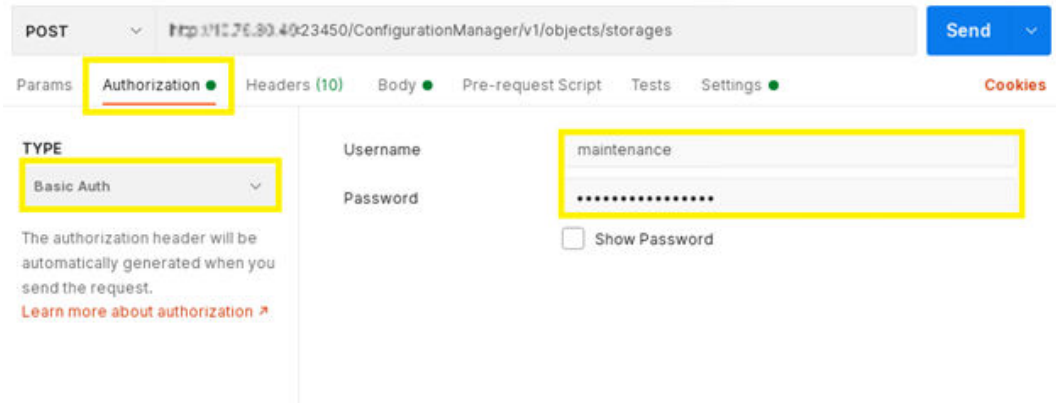
## Onboard VSP storage systems using the REST API client

After verifying communication between Hitachi Ops Center API Configuration Manager and the REST API client, onboard the VSP storage systems.

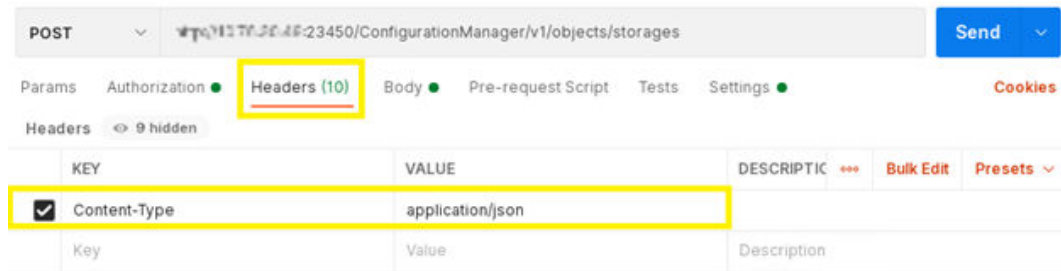
To onboard, follow these steps:

### Procedure

1. For the API type, select **Post**.
2. Enter the URL for the deployed Hitachi Ops Center API Configuration Manager IP address.
3. Click the **Authorization** tab.
  - a. Select **TYPE > Basic Auth**.
  - b. Enter the VSP storage system **Username** and **Password**.



4. Click the **Headers** tab.
  - a. Under **KEY** check **Content-Type**.
  - b. For **VALUE** select **application/json**.



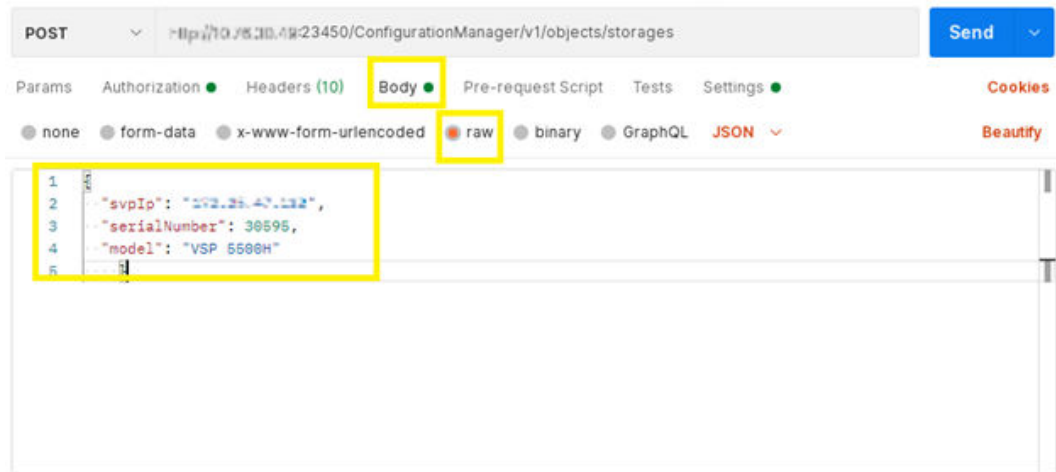
5. Click the **Body** tab.
  - a. For the body type, select **raw**.
  - b. Enter the onboarding parameters for your VSP storage system.  
 Use the **SVP IP address**, **serial number**, and **model** for the following:
    - VSP 5000 series  
 Use the VSP storage system **controller addresses**, **serial number**, and storage system **model** for the following:
    - VSP E series

The following example uses a VSP 5500:

```
{
  "svpIp": "192.168.1.10",
  "serialNumber": 30595,
  "model": "VSP 5500H"
}
```

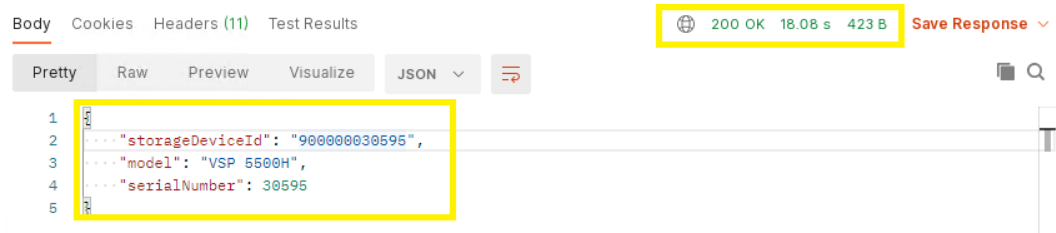
The following example uses a VSP G370:

```
{
  "ctl1Ip": "192.168.1.10",
  "ctl2Ip": "192.168.1.11",
  "model": "VSP G370",
  "serialNumber": 451139
}
```



#### 6. Click **Send**.

The body of the API call returns **200 OK** status, **apiVersion**, and **productName** details as shown.

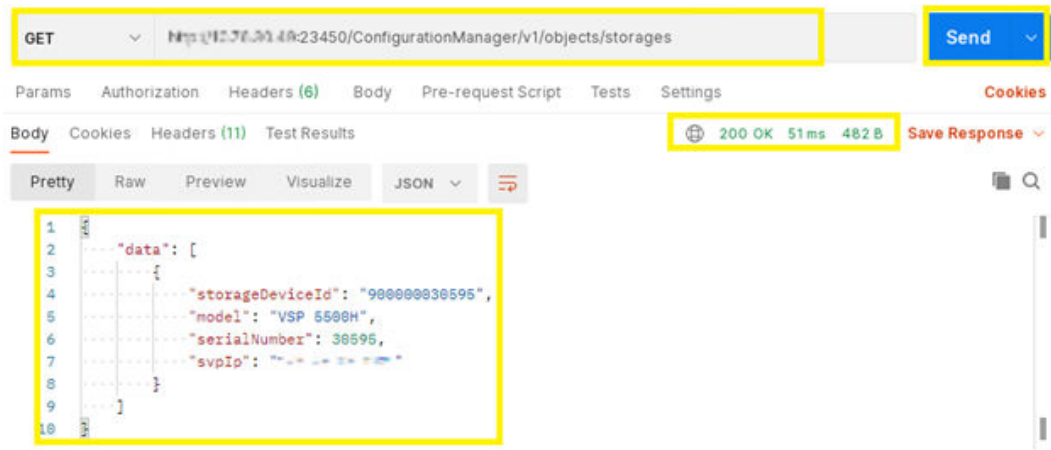


## Confirm REST API onboarding

Complete this procedure to confirm that your storage systems have been onboarded to the Hitachi Ops Center API Configuration Manager.

### Procedure

1. For the API type, select **GET**.
2. Enter the URL for the deployed Hitachi Ops Center API Configuration Manager IP address.
3. Click **Send**.  
The body of the API call returns **200 OK** status along with a list of onboarded storage systems.



### Next steps

Continue to [Intersight Assist](#) (on page 19).

## Onboard using Python scripts

Python can be used to onboard VSP storage systems to Hitachi Ops Center API Configuration Manager. The following procedures outline prerequisites and script configuration.

### Before you begin

- Configure your Python environment.



**Note:** The Windows operating system was used in the following example.

### Prerequisite Python scripts

You can run the Python scripts on Windows or Linux machines. Sample coding files can be found in the following directories of the Hitachi Ops Center API Configuration Manager ISO for each base operating system:

For Windows: DVD-ROM-drive:\Windows\samplecode.zip

For Linux: mount-directory-of-DVD-ROM/Linux/samplecode.tar

To obtain the needed scripts follow these steps:

### Procedure

1. Navigate in the ISO to locate sample code scripts.
2. Copy the following files to a location where they can be run by Python.
  - `block_storage_api.py`
  - `storage_param.py`
  - `rest_server_param.py`
  - `register_storage.py`

<input type="checkbox"/> Name	Type	Compressed size	Password pr...	Size
<input type="checkbox"/> auditlog_syslog_server_setting.py	PY File	3 KB	No	
<input type="checkbox"/> backup_encrvotion_keys.py	PY File	2 KB	No	
<input checked="" type="checkbox"/> block_storage_api.py	PY File	2 KB	No	
<input type="checkbox"/> local_copy.py	PY File	3 KB	No	
<input type="checkbox"/> provisioning.py	PY File	3 KB	No	
<input type="checkbox"/> recreate_parity_group.py	PY File	3 KB	No	
<input type="checkbox"/> register_remote_storage.py	PY File	3 KB	No	
<input checked="" type="checkbox"/> register_storage.py	PY File	2 KB	No	
<input type="checkbox"/> remote_copy_param.py	PY File	1 KB	No	
<input checked="" type="checkbox"/> rest_server_param.py	PY File	1 KB	No	
<input checked="" type="checkbox"/> storage_param.py	PY File	1 KB	No	
<input type="checkbox"/> synchronous_remote_copy.py	PY File	3 KB	No	

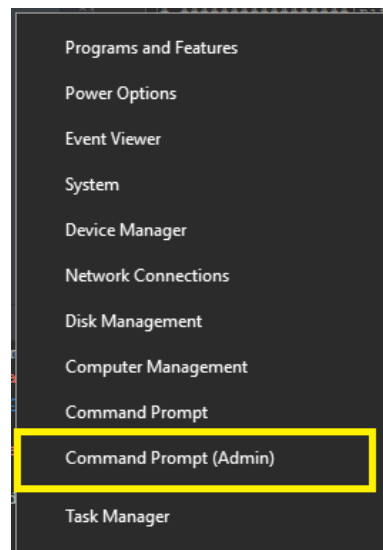
## Import and verify Python scripts

To successfully run scripts you must import necessary libraries to the Python environment. Standard libraries such as JSON, SYSTEM, HTTP.CLIENT, TIME, and TRACEBACK are used along with REQUEST, which is a third-party library.

To verify that the libraries are functional within Python follow these steps:

### Procedure

1. Open a CMD prompt as an Administrator:



2. Launch Python. Enter: `python`

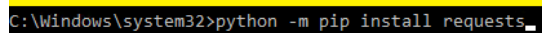
```
C:\Windows\system32>python
Python 3.7.0 (tags/v3.7.0:1019cc5095, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> _
```

### 3. Import the libraries. Enter the following:

```
import traceback
import requests
import json
import sys
import http.client
exit()
```

If the system takes the import parameters and does not provide any output that means you successfully have these parameters on your system.

### 4. If your system does not have the third-party requests library, use the PIP installer to install the library. Enter: `python -m pip install requests`



```
C:\Windows\system32>python -m pip install requests_
```

## Update scripts to match local environment needs

After the scripts have been imported and verified, the following scripts must be edited to match your local environment:

- `rest_server_param.py`
- `storage_param.py`
- `register_storage.py`

### Edit `rest_server_param.py`

In a Python script editor:

1. Set the value for `REST_SERVER_IP_ADDR` to your Hitachi Ops Center API Configuration Manager IP address.
2. Set the value for `REST_SERVER_PORT` to 23451.
3. Save and close the file.



```
rest_server_param.py x block_storage_api.py x storage_param.py x register_storage.py x
1 # coding:utf-8
2
3 """
4 server_param
5
6 Define the parameter of REST server
7 """
8
9 # An SVP IP address
10 REST_SERVER_IP_ADDR = "10.76.80.13"
11 # A port number
12 REST_SERVER_PORT = "23451"
13
```

**Edit storage\_param.py**

In a Python script editor:

1. Update the field for the storage system being onboarded.

Use the SVP IP address, serial number, and model for the following:

- VSP 5000 series

Use the VSP storage system controller addresses, serial number, and storage system model for the following:

- VSP E series

2. Save and close the file.

```

1  # coding:utf-8
2
3  """
4  storage_param
5
6  Define the parameter of storage
7  """
8
9  # An SVP IP address
10 SVP_IP_ADDR = None
11 # A IP of the GUM1 controller
12 GUM1_IP_ADDR = None
13 # A IP of the GUM2 controller
14 GUM2_IP_ADDR = None
15 # A target storage model
16 STORAGE_MODEL = None
17 # A target storage serial number
18 SERIAL_NUMBER = None
19
20 # When REST server communicates with SVP
21 SVP_IP_ADDR = "172.28.47.111"
22 STORAGE_MODEL = "VSP 5500H"
23 SERIAL_NUMBER = "30595"
24
25 # When REST server communicates with GUM
26 #GUM1_IP_ADDR = "172.28.47.111"
27 #GUM2_IP_ADDR = "172.28.47.111"
28 #STORAGE_MODEL = "VSP G370"
29 #SERIAL_NUMBER = "451139"

```



**Note:** If you receive the "InsecureRequestWarning" message when running register\_storage.py you can enter the following to avoid it:

```

import urllib3
urllib3.disable_warnings(urllib3.exceptions.InsecureRequestWarning)

```

**Edit register\_storage.py**

In a Python script editor:

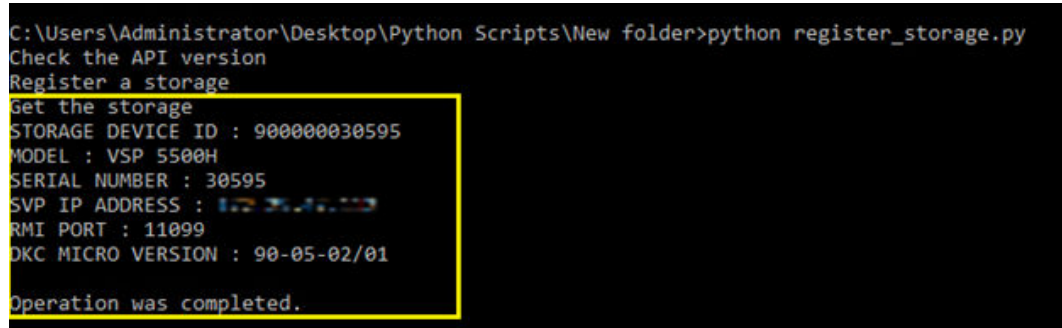
1. Update the USER\_CREDENTIAL field to match your target VSP storage system credentials.
2. Save and close the file.

**Onboard VSP storage systems using Python scripts**

To onboard VSP storage systems to Hitachi Ops Center API Configuration Manager, follow these steps.

**Procedure**

1. Open CMD as an Administrator.
2. Change to the directory where the scripts are located.
3. Enter: `python register_storage.py`
4. The system will return the storage device ID and a completion message.



```
C:\Users\Administrator\Desktop\Python Scripts\New folder>python register_storage.py
Check the API version
Register a storage
Get the storage
STORAGE DEVICE ID : 900000030595
MODEL : VSP 5500H
SERIAL NUMBER : 30595
SVP IP ADDRESS : 172.24.1.100
RMI PORT : 11099
DKC MICRO VERSION : 90-05-02/01
Operation was completed.
```

**Next steps**

Continue to [Intersight Assist \(on page 19\)](#).

**Onboarding using the cURL utility**

The cURL utility can be used to onboard VSP storage systems to Hitachi Ops Center API Configuration Manager. The following procedures outline prerequisites and script configuration.



**Note:** All of the calls in the following procedure can use SSL HTTPS on port 23451.

**Before you begin**

- The cURL utility needs to be downloaded and installed before starting this procedure.

**Verify communication between Hitachi Ops Center API Configuration Manager and the cURL utility**

Before onboarding a VSP storage system, verify communication between Hitachi Ops Center API Configuration Manager and the cURL utility.

To verify communication, follow these steps:

### Procedure

1. Navigate to your cURL utility.
2. Enter the following command:

```
Curl -v -H "Accept:application/json" -H "Content-Type:application/json" -X GET
<URL of the deployed Hitachi Ops Center API Configuration Manager IP address>
```

The body of the cURL call returns **200 OK** status, **apiVersion**, and **productName** as shown.

```
> GET /ConfigurationManager/configuration/version HTTP/1.1
> Host: 10.75.30.43:23450
> User-Agent: curl/7.75.0
> Accept:application/json
> Content-Type:application/json
>
Mark bundle as not supporting multiuse
HTTP/1.1 200 OK
< Date: Thu, 11 Feb 2021 00:21:12 GMT
< Server: Apache
< X-Frame-Options: sameorigin
< X-XSS-Protection: 1; mode=block
< X-Content-Type-Options: nosniff
< Content-Type: application/json;charset=utf-8
< Cache-Control: no-store
< Pragma: no-cache
< Content-Length: 81
<
{
  "productName" : "Configuration Manager REST API",
  "apiVersion" : "1.23.0"
}
Connection #0 to host 10.75.30.43 left intact
```

## Onboard VSP storage systems using the cURL utility

After verifying communication between Hitachi Ops Center API Configuration Manager and the cURL utility onboard the VSPstorage systems.

To onboard follow these steps:

### Procedure

1. Navigate to your **cURL** utility.
2. Create a JSON file with the input parameters for your VSP:

Use the **SVP IP address**, **serial number**, and **model** for the following:

- VSP 5000 series

Use the VSP storage system **controller addresses**, **serial number**, and storage system **model** for the following:

- VSP E series

The following example uses a VSP 5500:

```
{
  "svpIp": "192.168.1.10",
  "serialNumber": 30595,
  "model": "VSP 5500H"
}
```

The following example uses a VSP G370:

```
{
  "ctl1Ip": "192.168.1.10",
  "ctl2Ip": "192.168.1.11",
  "model": "VSP G370",
  "serialNumber": 451139
}
```

3. Enter the following command to register the VSP storage system to Hitachi Ops Center API Configuration Manager:

```
Curl -v -H "Accept:application/json" -H "Content-Type:application/json" -u
maintenance:raid-maintenance -X POST "data-binary @./InputParameters.json
http:// OpsCenterConfigurationManagerIP:23450/ConfigurationManager/v1/objects/
storages
```



**Note:** A local JSON file named *InputParameters.json* with VSP parameters is created that includes the VSP storage system SVP IP address, serial number, and model.

The body of the cURL call returns **200 OK** status, **model**, and **serialNumber** as shown.



```

> User-Agent: curl/7.75.0
> Accept:application/json
>
* Mark bundle as not supporting multiuse
< HTTP/1.1 200 OK
< Date: Thu, 11 Feb 2021 01:01:56 GMT
< Server: Apache
< X-Frame-Options: sameorigin
< X-XSS-Protection: 1; mode=block
< X-Content-Type-Options: nosniff
< Content-Type: application/json;charset=utf-8
< Cache-Control: no-store
< Pragma: no-cache
< Content-Length: 149
<
{
  "data" : [ {
    "storageDeviceId" : "900000030595",
    "model" : "VSP 5500H",
    "serialNumber" : 30595,
    "svpIp" : "172.20.17.11"
  } ]
}
} * Connection #0 to host 19.71.38.43 left intact

```

### Next steps

Continue to [Intersight Assist](#) (on page 19).

## Intersight Assist

Cisco Intersight Assist helps you add storage systems and other endpoint devices to Cisco Intersight. A datacenter could have multiple devices that do not connect directly with Cisco Intersight. Any device that is supported by Cisco Intersight but does not connect directly with it, needs a connection mechanism. Cisco Intersight Assist provides that connection mechanism, and helps you add devices to Cisco Intersight.

The following sections cover configuration and deployment of Intersight Assist.

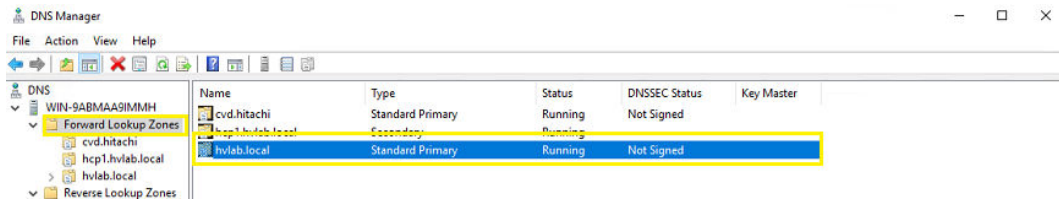
### Configure the DNS

Define alias records before deploying the Intersight Assist OVA, DNS with A/PTR, and CNAME

To configure A/PTR and CNAME records within a Windows DNS, follow these steps:

#### Procedure

1. Log in to your Windows DNS server.
2. Launch the **DNS Manager**.
3. In the navigator pane, select **Forward Lookup Zones**.



- Right-click on a zone and then select **New Host (A or AAAA)**.

**New Host**

Name (uses parent domain name if blank):  
intersightassistHV

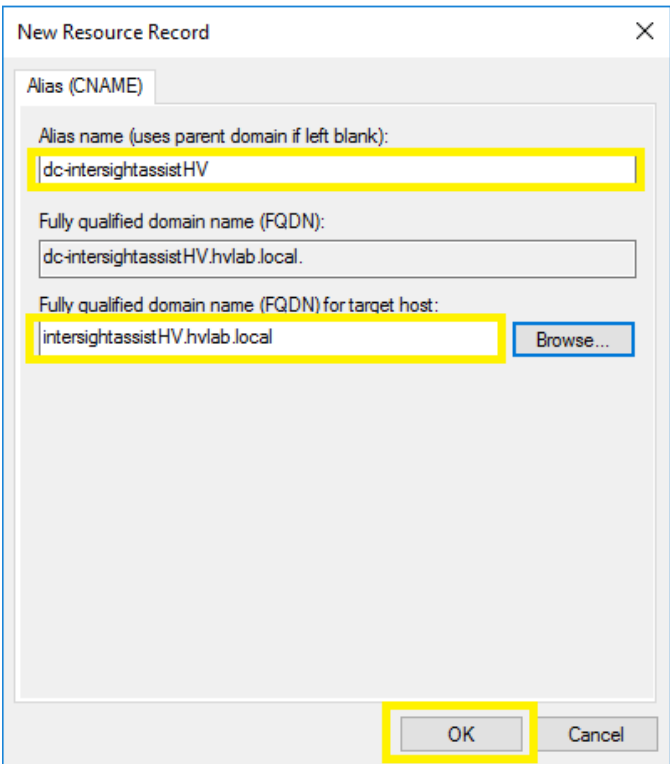
Fully qualified domain name (FQDN):  
intersightassistHV.hvlab.local.

IP address:  
10.76.20.77

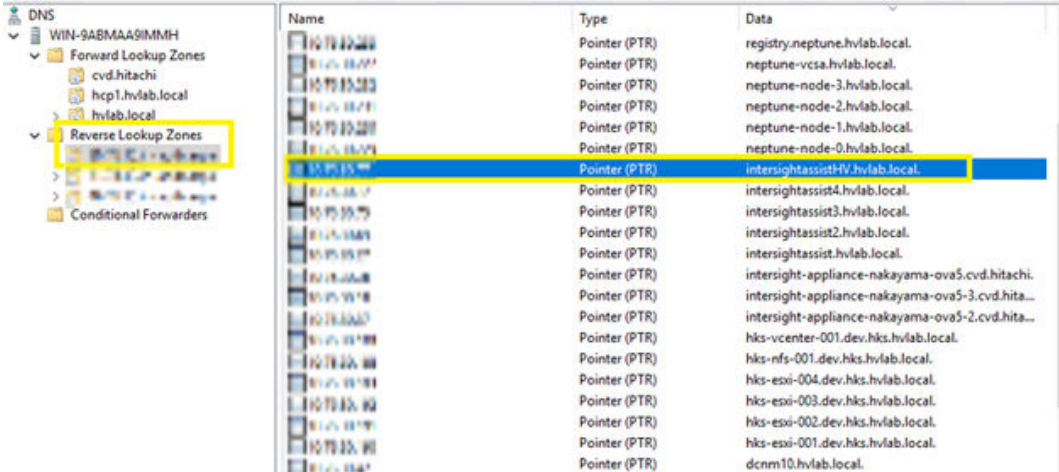
Create associated pointer (PTR) record

Add Host Cancel

- Enter a **Name** for the host.
- Enter an available domain **IP address**.
- Select **Create associated pointer (PTR) record**.
- Click **Add Host**.
- Click **OK** to confirm the record creation.
- Right-click and select **New Alias (CNAME)**.
- Enter an **Alias name**.
- Enter the **Fully qualified domain name** of the target host.
- Click **OK**.



- 14. In the navigator pane, select **Reverse Lookup Zones**.
- 15. Verify that the pointer record (PTR) has been created.




## Deploy the Intersight Assist OVA

Intersight Assist OVA is ready to be deployed after the DNS settings have been confirmed.

**Before you begin**

- You can upgrade existing installations to Intersight Assist version 1.0.9-232.
- For new installations, you can obtain the base Intersight Assist OVA from your Cisco representative, or download it from the Cisco software download center at: [Software Download - Cisco Systems](#).

 **Note:** Once Intersight Assist has established a connection to the production cloud, the latest available system version will be installed.

To deploy the Intersight Assist OVA on a VMware virtual infrastructure follow these steps:

**Procedure**

1. Log in to your VMware vSphere Client.
2. Right-click the VMware cluster where you want to deploy the OVA, and then select **Deploy OVF Template**.
3. Select **Local file**, and then click **Choose Files**.
4. Select the Intersight Assist OVA that you want to deploy, and then click **Open**.
5. Click **Next**.
6. Select your vCenter cluster, and then click **Next**.
7. Select an available compute resource from your cluster, and then click **Next**.
8. Review the template details, and then click **Next**.
9. Specify the deployment configuration. Select **Tiny (8 vCPU, 16GB RAM)**, and then click **Next**.

Deploy OVF Template

CANCEL    BACK    **NEXT**

10. Select an available datastore for deployment, and then click **Next**.
11. Select an available network, and then click **Next**.
12. Customize the template by modifying the following network parameters. Verify that they correspond to the DNS server parameter values defined previously, and then click **Next**.
  - IP Address
  - Net Mask
  - Default Gateway
  - DNS Domain
  - DNS Server
  - Admin Password
  - NTP Server

### Deploy OVF Template

✓ 1 Select an OVF template	▼ Uncategorized	1 settings
✓ 2 Select a name and folder	IP Address	IPv4 address (Must have PTR record in your DNS)
✓ 3 Select a compute resource		10.75.20.77
✓ 4 Review details	▼ Uncategorized	1 settings
✓ 5 Configuration	Net Mask	IPv4 Network Mask
✓ 6 Select storage		255.255.255.0
✓ 7 Select networks	▼ Uncategorized	1 settings
8 <b>Customize template</b>	Default Gateway	IPv4 Default Gateway
9 Ready to complete		10.75.30.1
	▼ Uncategorized	1 settings
	DNS Domain	DNS Search Domain
		hvlab.local
	▼ Uncategorized	1 settings
	DNS Servers	Comma-separated list of DNS servers
		10.75.20.77
	▼ Uncategorized	1 settings

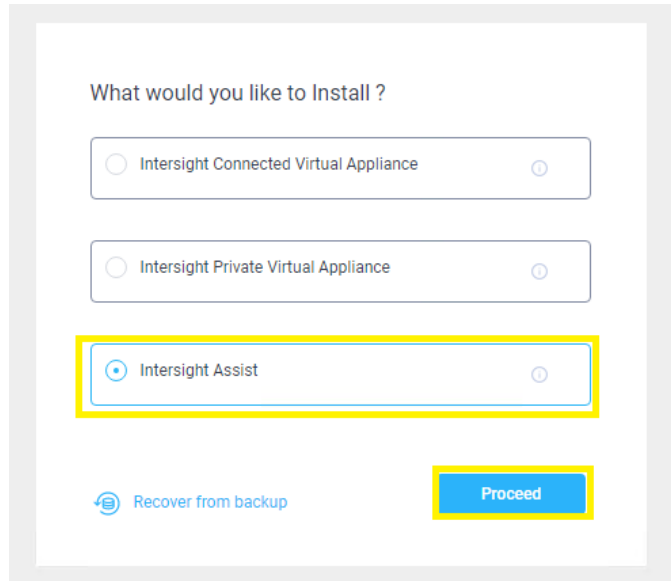
13. Review the settings, and then click **Finish**.

## Configure Intersight Assist

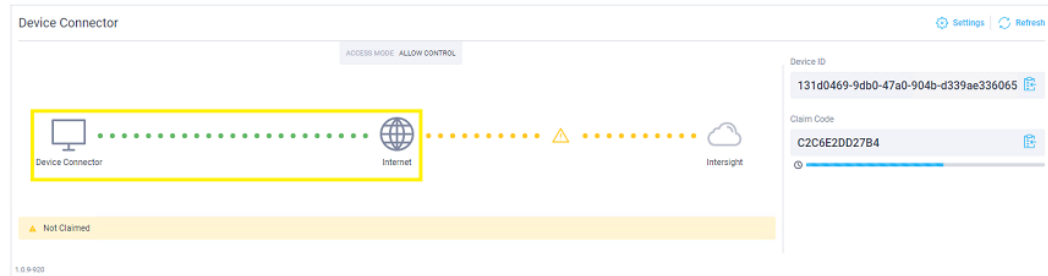
After an OVA template for Intersight Assist has been deployed, follow these steps to configure Intersight Assist:

## Procedure

1. Right-click on the Intersight Assist VM Appliance that you deployed in the previous section, and then select **Power > Power On**.
2. In a browser, navigate to the FQDN of Intersight Assist as defined in the DNS records. Verify that you are using HTTPS to access the URL.
3. Click **Advanced > Proceed** to bypass the certificate warning and to continue to Intersight Assist.
4. At the Install prompt, select **Intersight Assist**, and then click **Proceed**.



5. Confirm that Device Connector has Internet access, and then click **Connect Intersight Virtual Appliance**.



6. Continue to [Create an Intersight account](#) (on page 24).

## Create an Intersight account

Before claiming Cisco Assist, users must have created a Cisco Intersight Account. To create an account follow the directions identified in [Account Creation](#) from the Cisco help center.

**Before you begin**

- Verify access to the Intersight Assist appliance OVA as well as an Internet connection.

**Claim Assist using Intersight**

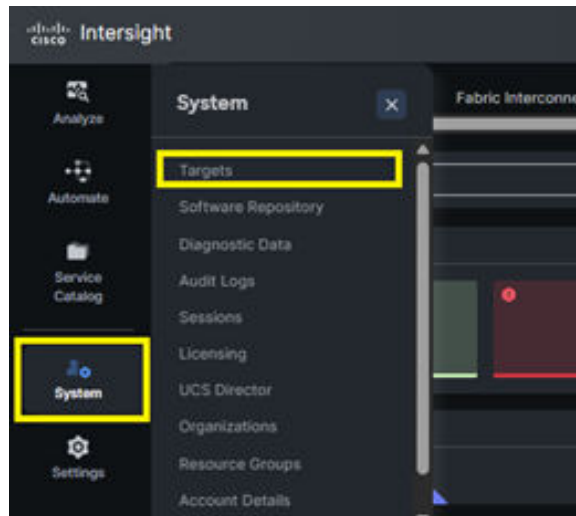
Use this procedure to claim Assist using the Intersight GUI.

**Before you begin**

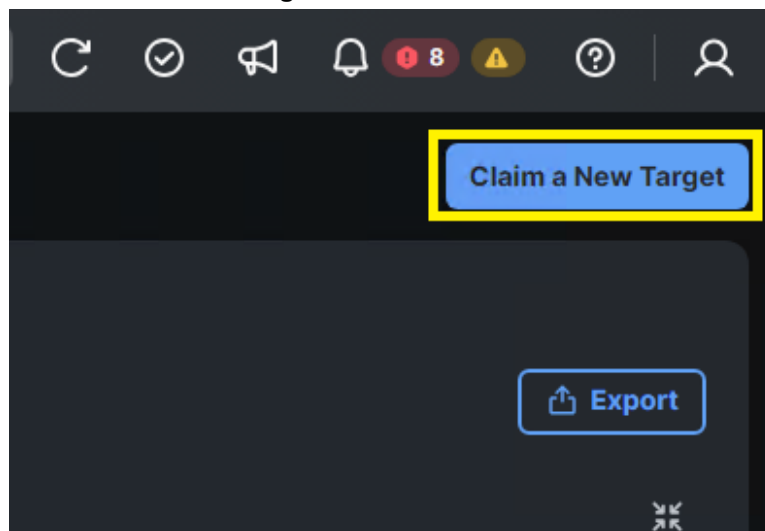
- Verify that you have an existing Intersight account.

**Procedure**

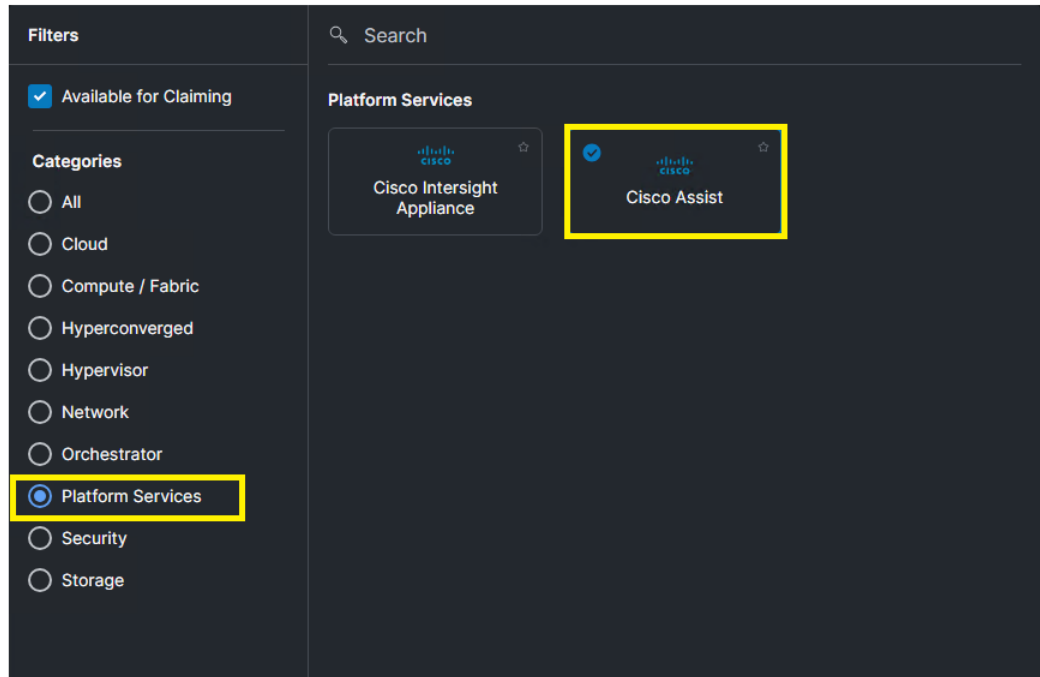
1. Log in to your Intersight account: <https://Intersight.com>
2. From the top banner drop down select **System**, and from the navigation tree select **Targets**.



3. Click **Claim a New Target**.



4. From the Categories list, select **Platform Services**, and then click **Cisco Assist**.



5. Click **Start**.
6. Enter the **Device ID** and **Claim Code** from the Intersight Virtual Appliance URL.

7. Click **Claim**.

**Claim a New Target**

**Claim Cisco Assist Target**  
To claim your target, provide the Device ID, Claim Code and select the appropriate Resource Groups.

**General**

Device ID \* ⓘ  Claim Code \* ⓘ

**Resource Groups**

*Select resource groups, if required. This is not mandatory, since by default, the claimed target will be added to "All" type resource groups.*

<input type="checkbox"/>	Name	Usage	Description
<input type="checkbox"/>	TEST_HTC-rg	TEST_HTC	

Rows per page: 50 < 1 >

[Back](#) [Cancel](#) [Claim](#)

## Onboard VSP storage systems to Intersight

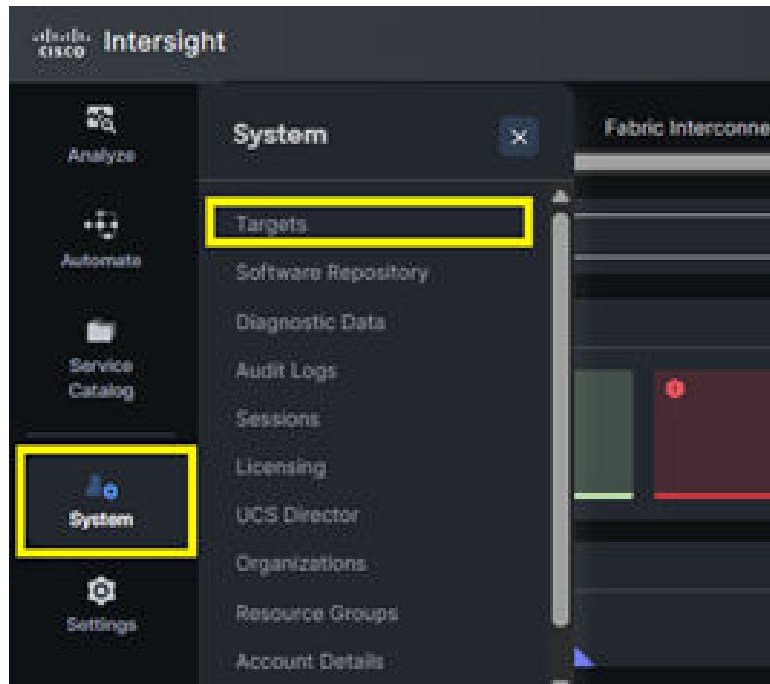
Use the following procedure to onboard a VSP storage system to Intersight using Intersight Assist.

### Before you begin

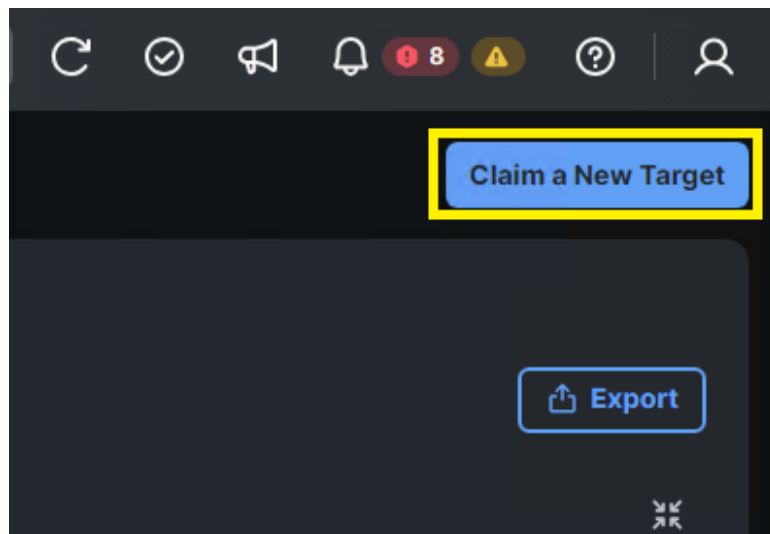
- Verify that all of the previous steps in this guide have been completed successfully.

### Procedure

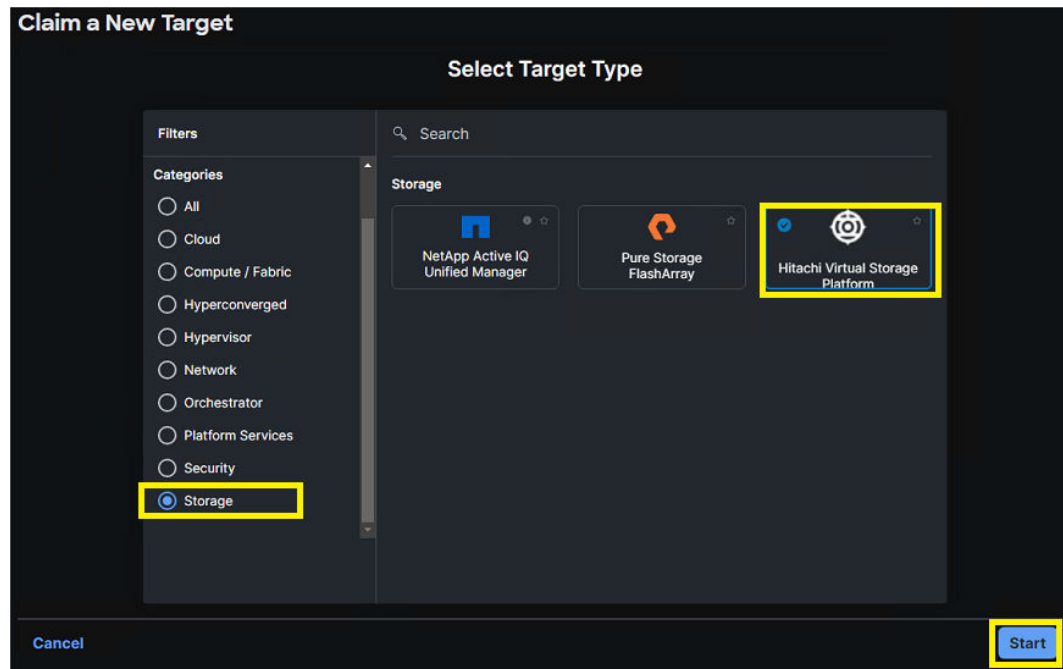
- Log in to your Intersight account: <https://Intersight.com>.
- From the side banner, select **System**, and from the navigation tree, select **Targets**.



3. Click **Claim a New Target**.



4. From the categories list, select **Storage**, and then click **Hitachi Virtual Storage Platform**.
5. Click **Start**.



6. Enter the following:
  - a. From the Intersight Assist list, select the deployed **Intersight Assist Virtual Appliance**.
  - b. Enter the Service IP address, SVP IP address, or target controller IP address, for the target storage system.
 

Enter the SVP IP address for the following storage system models:

    - VSP One Block High End
    - VSP One Block 20

Enter the SVP IP address for the following storage system models:

    - VSP 5000 series

Enter the Target controller IP address for the following storage system models:

    - VSP E series
  - c. In the **Port** field, enter 23451 for systems that are onboarded to Hitachi Ops Center API Configuration Manager. For VSP One Block systems enter 443.
  - d. In the **Username** field enter the VSP storage system username.
  - e. In the **Password** field enter the VSP storage system password.
  - f. Enable the **Secure** option.
  - g. In the **Hitachi Ops Center API Configuration Manager Address/Storage System Service IP Address** field, enter the API Configuration Manager IP address that has the registered VSP storage system. For VSP One Block systems enter the Service IP address.
7. Click **Claim**.

**Claim a New Target**

**Claim Hitachi Virtual Storage Platform Target**

To claim any on-premises target an Cisco Assist Appliance is required. Deploy and claim a Cisco Assist Appliance if needed before claiming the target

Cisco Assist \* ⓘ  Hostname/IP Address \* ⓘ

Port ⓘ  0 - 65535

Username \* ⓘ  Password \* ⓘ  [Show](#)

Secure ⓘ

Certificate ⓘ  
[Select Certificate](#)

Hitachi Ops Center API Configuration Manager Address/Storage System ... ⓘ

[Back](#) [Cancel](#) [Claim](#)

8. Verify that the onboarded VSP storage system appears in the **Targets** device list.

\* All Targets ⓘ +

Filters 1 results

Health  1 Healthy 1

Connection  Connected 1

Top Targets by Types  1 Hitachi Virtual Stor... 1

Vendor  1 Hitachi 1

Name	Health	Status	Type	Claimed Time
<input type="checkbox"/> 172.25.45.205	<input checked="" type="checkbox"/> Healthy	<input checked="" type="checkbox"/> Connected	Hitachi Virtual Storage Platform	Jun 14, 2024 3:28 AM

## Cisco Intersight Capabilities with Hitachi Virtual Storage Platform

Hitachi has enabled a magnitude of storage management capabilities that will now be able to be done using Cisco Intersight with the goal of saving administrators time and frustration.

Within the Cisco Intersight management platform, administrators can use the concept of tasks and workflows to easily manage their hybrid IT environments.

Tasks are essentially a library of functions that leverage API invoke calls that can be customized, or they can be provided by Cisco out of the box. These tasks can be compiled to create workflows to enable quick and easy automation of infrastructure without requiring code experts. This provides true single pane of glass orchestration through Cisco Intersight, reducing the need for datacenter administrators to host multiple screens to complete functions.

The following table lists the current capabilities of Hitachi Virtual Storage Platform in orchestration with tasks and workflows provided by Intersight to end users.

**Table 1 List of support tasks for VSP storage systems**

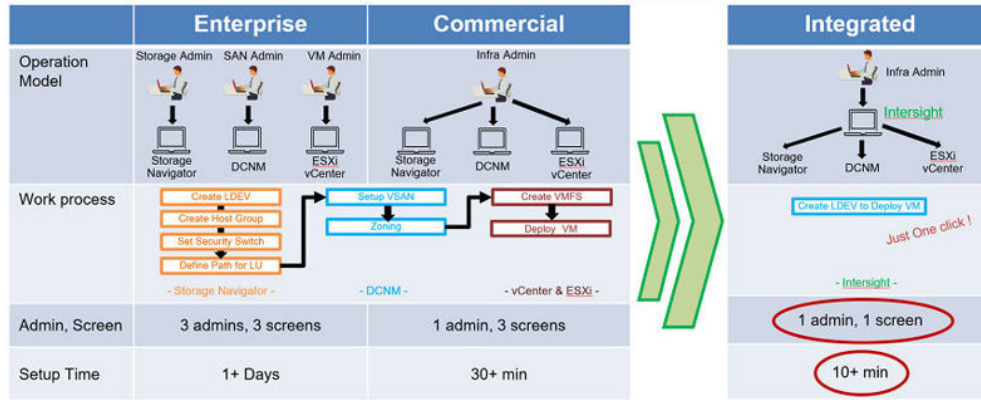
S.No.	Tasks	VSP storage systems
1.	Add Hitachi External Path	Y
2.	RemoveHitachi External Path	Y
3.	New Hitachi External Parity Group	Y
4.	Remove Hitachi External Parity Group	Y
5.	Disconnect Hitachi External Volume	Y
6.	Connect Initiators to Hitachi Host	Y
7.	Disconnect Initiators from Hitachi Host	Y
8.	New Hitachi Host	Y
9.	Remove Hitachi Host	Y
10.	New Hitachi Volume	Y
11.	Copy Hitachi Volume	Y
12.	Move Hitachi Volume	Y
13.	Format Hitachi Volume	Y
14.	Expand Hitachi Volume	Y
15.	Remove Hitachi Volume	Y
16.	Find Hitachi Volume by NAA ID	Y
17.	Remove Hitachi Pair for Volume Migration	Y
18.	Stop Hitachi Volume Migration	Y
19.	New Hitachi Pool	Y
20.	Edit Hitachi Pool	Y
21.	Expand Hitachi Pool	Y
22.	Compress Hitachi Pool	Y
23.	Remove Hitachi Pool	Y
24.	New Hitachi LUN ID	Y
25.	Remove Hitachi LUN ID	Y
26.	New Hitachi Snapshot Data	Y
27.	New Hitachi Snapshot Pair	Y

S.No.	Tasks	VSP storage systems
28.	Remove Hitachi Snapshot Data	Y
29.	Remove Hitachi Snapshot Pair	Y
30.	Restore Hitachi Snapshot Data	Y
31.	New Hitachi NVM Subsystem	Y
32.	New Hitachi NVM Subsystem Port	Y
33.	Add Hitachi Host Name Qualified Name (NQN)	Y
34.	Edit Hitachi NVM Subsystem	Y
35.	Remove Hitachi NVM Subsystem	Y
36.	Remove Hitachi NVM Subsystem Port	Y
37.	New Hitachi Namespace	Y
38.	New Hitachi Host-Namespace Path	Y
39.	New Hitachi Namespace Nickname	Y
40.	New Hitachi Host NQN Nickname	Y
41.	Remove Hitachi Host-Namespace Path	Y
42.	Remove Hitachi Namespace	Y
43.	Remove Hitachi Login Info of Host NQN	Y
44.	Remove Hitachi Host NQN	Y

With these capabilities administrators can complete a majority of day 0 to day N tasks to support their hybrid IT environment with VSP storage systems.

A related reference architecture has been published as part of Cisco and Hitachi Adaptive solutions, at [Hitachi Virtual Storage Platform with Cisco Intersight Reference Architecture Guide](#).

This reference architecture explores the benefits of integrated management with Cisco Intersight compared to conventional methods using multiple management interfaces. When creating a virtual environment for enterprise workloads with Cisco Intersight with VSP integration, on average 50 hours of time is saved over the course of a year and 80% fewer screens are required to complete such operations, as shown in the following figure.



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