

Advanced Configurations

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Advanced admin configurations

Advanced configurations in Cisco Cyber Vision are specialized settings that allow you to customize and optimize the system beyond basic setup.

- Transforming interface modes: You can switch between single and dual interface modes by modifying configuration files and using CLI commands to ensure proper interface usage.
- Adjusting MTU values: You can optimize the system performance by adjusting the MTU for each network interface; simply edit the configuration files and reboot the Center.
- Restarting Cyber Vision Services : You can restart all Cyber Vision services with a single command to apply changes and ensure system stability.
- Upgrading Cyber Vision extensions: You can upgrade extensions via the CLI; be sure to verify the steps to ensure successful activation.

For instance, you may need to switch the Center from single to dual interface mode to support a segmented network. This involves editing the configuration file, executing the appropriate CLI command, and verifying the change through the GUI. Similarly, adjusting the MTU value for a specific interface can help prevent packet fragmentation and improve communication with connected devices.

Verify the CV Center interface type

This task helps you verify if the Center is configured with a single or dual interface.

- Knowing the interface type is important for troubleshooting and configuration validation.

Use this procedure to determine whether the Center is installed as a single or dual interface by checking the configuration file and verifying the interface status.

Before you begin

- Ensure you have administrator access to the Center CLI.
- Verify that you have permission to read the `sbs-config.json` file.
- Confirm you can log in to the Center GUI and access system diagnostics.

Procedure

Step 1 **Verify using CLI**

a) Access the configuration file.

Locate the `sbs-config.json` file at this location: `/data/etc/sbs/`

b) Run the verification command.

Example:

```
root@CenterDoc1-65:~# : grep -i "single-interface" /data/etc/sbs/sbs-config.json
```

c) Identify the result.

If...	Then...
The output displays `"single-interface": true`	The Center is configured as a single interface.
The output displays `"single-interface": false`	The Center is configured as a dual interface.

Step 2 **Verify using GUI**

a) Click **System Statistics** -> **Center** -> **Download diagnostics**. The file is downloaded to your machine.

b) Go to the location where you downloaded the file, and then open the configuration file.

- Go to `sbs-diag-export/conf/sbs`.
- Open the `sbs-config.json` file.
- Look for the `single-interface` field.

Example `sbs-config.json` file:

```
"sbs-init-key": "Wed Aug 28 15:28:55 UTC 2024",
  "single-interface": false,
```

Transform CV Center to a single interface mode

Switch the Center from dual interface to single interface mode.

Use when network configuration or deployment requires operation with a single interface.

Before you begin

- Eensure you have a complete backup of your Cyber Vision Center configuration files and important data.
- Notify users or stakeholders of potential service interruption. Switching interface modes may require a system reboot and could cause temporary downtime. Notify users or stakeholders of potential service interruption.
- You must have administrative privileges to make network configuration changes and access relevant files on the Center.

Procedure

Step 1 Enable single interface mode:

Example:

```
root@CenterDoc1-65:~# setup-center-cli network single-interface ON
```

Step 2 Delete the eth1 configuration file:

Example:

```
root@CenterDoc1-65:~# rm /data/etc/systemd/network/00-eth1-static.network
```

Step 3 Reboot the Center system:

Example:

```
root@CenterDoc1-65:~# reboot
```

Note
To revert to dual interface mode, reconfigure eth1 and disable single interface mode.

The Center operates in single interface mode.

Change the MTU value on a network interface

Change the Maximum Transmission Unit (MTU) value for a network interface on the Center system.

Adjust the MTU for performance optimization or to resolve network compatibility issues.

Procedure

Step 1 In the Center CLI, edit the file:

Example:

```
/data/etc/systemd/network/00-eth1-static.network
```

Step 2 Add or update a **[Link]** section in the file, as follows:

Example:

```
[Link]

MTUBytes=xxxx

[Match]
Name=eth1

[Link]
MTUBytes=1000

[Network]
Address=<IP address assigned to the specific network interface>
```

Step 3 Replace `1000` with the desired MTU value.

Step 4 Save the file and reboot the Center.

The network interface applies the new MTU setting after reboot.

Upgrade CV extensions via CLI

Upgrade the Cyber Vision Reports Management and sensor management extension modules using the CLI.

Keep extensiosn modules up to date for new features or bug fixes.

Procedure

Step 1 Download the extension from the Cisco Software Download portal.

Step 2 In the Center CLI, run:

Example:

```
root@CenterDoc1-65:~# sbs-extension upgrade <file> [--run]
```

- Replace **<file>** with the extension package file.

  Note
  When you use the `--run` flag, the upgraded extension will not just be updated on the system, but it will also be launched right away, eliminating the need for a separate command to start it manually after the upgrade process.

Step 3 To upgrade the extension in the background, run:

Example:

```
root@CenterDoc1-65:~# sbs-extension upgrade --background my_extension.pkg
```

Step 4 To get a list of available extensions, run:

Example:

```
root@CenterDoc1-65:~# sbs-extension list
```

The specified extension module is upgraded.

Restart all Cyber Vision services

Restart all Cyber Vision (SBS) core services for troubleshooting or after reconfiguration.

Ensures that all managed services reload and operate with the latest configuration changes.

Before you begin

- Back up important configurations and data, especially if recent changes were made or critical operations are ongoing.

  Confirm that no critical tasks (such as extension upgrades, sensor onboarding, or data exports) are in progress, as these may be interrupted.
- Notify users or stakeholders about the planned restart and expected downtime, if applicable.

Procedure

Step 1 In the Center CLI, run:

Example:

```
root@CenterDoc1-65:~# systemctl restart sbs-services.target
```

This restarts all Cyber Vision core services managed under the `sbs-services.target` group.

Step 2 To see the full list of services included in the target, run:

Example:

```
root@CenterDoc1-65:~# systemctl list-dependencies sbs-services.target
```

All core Cyber Vision services are restarted.