

Cisco CLI Analyzer

User Guide

December 2024

Contents

Overview of the Cisco CLI Analyzer	4
New Features for v3.7.2	4
About the Cisco CLI Analyzer	4
System Requirements	4
Versions of the Cisco CLI Analyzer	5
Download and Install the Cisco CLI Analyzer	5
Supported Devices and Platforms	10
External Site Access Requirements	10
Tool Descriptions	11
Get Started.....	14
Open the Cisco CLI Analyzer	14
View Your Devices	14
Configure Application Settings.....	16
Configure the General Tab	17
Configure the Connection Tab	20
Configure the Security Tab	22
Configure the Display Tab	25
Configure the Advanced Tab	26
Manage Your Devices	27
Locate Devices	27
Add a Device to the Device List	28
Import Devices from a CSV File	31
Import Devices from PuTTY	32
Import Devices from SecureCRT	34
Export Devices	36
Connect to a Device (SSH or Telnet)	36
Initiate an SSH Session from the Command Line	38
Connect to a Device (Serial)	38
View a Device Session in a Separate Window	40
Work With Shared Device Sessions	41
Work with Duplicate Devices	43
Use Application Features	44
Use Keyboard Shortcuts	44
Log Your Current Session	45
Work With Tags for Your Devices	46

Run CLI Commands	47
Run Cisco CLI Analyzer Scripts.....	47
Search the Tool Results Window	50
Filter Diagnostic Events	50
Send Feedback About Diagnostic Events	52
Search the Command Output	52
Create a Backup Copy of the Running Configuration.....	53
Create and Update Support Cases	53
Collect TAC Data	55
Analyze Offline Files	57
Compare Configuration Differences	59
Use Contextual Help and Highlighting	60
Set Context Menu Options	68
Frequently Asked Questions	69
Additional Resources	74
Submit Comments and Questions	74

Overview of the Cisco CLI Analyzer

New Features for v3.7.2

The latest version of the Cisco CLI Analyzer updates some functionality to ensure that the tool:

- Supports login for a wide range of screen resolutions
- Implements a new login flow for improved security and speed by using your system browser (see the Feature Guide in the application for more details)
- Captures all your feedback so that we can continue to improve

Note: To submit comments and questions about the Cisco CLI Analyzer, click **Feedback** in the left panel of the application.

For information on v3.7.1 and functionality of previous versions, please check the [Frequently Asked Questions](#).

About the Cisco CLI Analyzer

The Cisco CLI Analyzer is a smart SSH client designed to help troubleshoot and check the overall health of your supported devices. For a full list of tools included in the Cisco CLI Analyzer, see [Tool Descriptions](#).

Note: You must have a valid Cisco.com account to use the Cisco CLI Analyzer. If you do not have a valid Cisco.com account, [register](#) on Cisco.com and then [associate a service contract](#) to your profile.

System Requirements

Ensure that your system meets these minimum software and hardware requirements to run the Cisco CLI Analyzer.

Software

- Windows 10 x64 or Windows 11
- macOS version 13 (Ventura)

Hardware

- 2 gigabytes (GB) of RAM
- 512 megabytes (MB) of available space on the hard disk

Check the [version information](#) to ensure that you install the version of the application that works with your system hardware.

Versions of the Cisco CLI Analyzer

Starting with version 3.7.2, the Cisco CLI Analyzer offers several versions to best work with different processing hardware. Check below for information on installing or upgrading the application on your system.

Windows-Based Computers

If you are running Windows 10 or Windows 11, use the appropriate Windows installation files to download and install the latest version.

Mac Computers

Version 3.7.2 is available for two different architectures – Intel-based (x64) and ARM-based (M-Series).

Intel Macs

If you are running an Intel-based MacOS, follow the standard upgrade process and ensure that you use **only** the Intel version of the MacOS files to download and install the latest version.

ARM-Based Macs (e.g., M-Series)

If you are running an ARM-based MacOS, download the ARM-based version of the MacOS files and perform a fresh installation. This process will retain your individual settings.

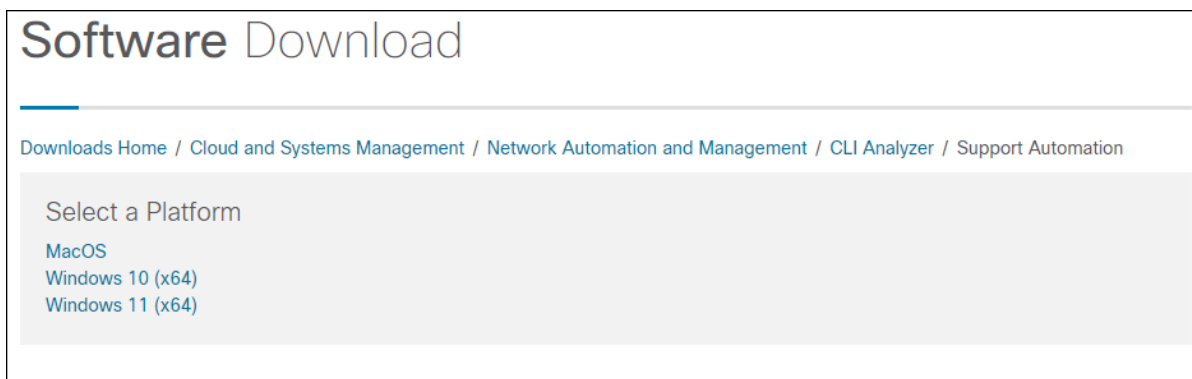
Note: If you use the files that do not match your architecture, the installation will fail, and you'll need to reboot your MacOS before performing a fresh installation with correct files for your version.

Download and Install the Cisco CLI Analyzer

Complete these steps to download and install the Cisco CLI Analyzer.

Note: Installing a new version of this application will replace any previous versions on your computer.

1. From the [Software Download area for the Cisco CLI Analyzer](#), click the link for your operating system.



2. Click on the release number for the version you want to download. The latest release always contains the most current features and functionality.

3. Click the **Download** icon.

Software Download

[Downloads Home](#) / [Cloud and Systems Management](#) / [Network Automation and Management](#) / [CLI Analyzer](#) / [Support Automation](#) / [Windows 11 \(x64\)- 3.7.0](#)

Expand All Collapse All

Latest Release ▼

3.7.0

All Release ▼

3 ▼

3.7.0

3.6.8

CLI Analyzer



Release 3.7.0

[My Notifications](#)

Related Links and Documentation

[CLI Analyzer Overview](#)

[CLI Analyzer Help](#)

File Information	Release Date	Size	
Cisco CLI Analyzer SSH client software	10-May-2023	132.32 MB	 
Cisco-CLI-Analyzer.3-7-0.x64.msi			

4. Follow the instructions on the Strong Encryption Eligibility dialog, then click **Accept**.

The screenshot shows a dialog box titled "Strong Encryption Eligibility" with a close button (X) in the top right corner. The dialog contains the following sections:

- Instructions:** To apply for eligibility to download strong encryption software images:
 1. Ensure the address listed in your [Cisco.com User Profile](#) is correct and complete.
 2. Review the conditions below and complete the questions.
 3. Submit this form.
- Conditions:** A form with four input fields: "First Name:", "Last Name:", "E-mail:", and "CCO User Id:".
- Business division's function: ***
 - Commercial/Civilian entity
 - Government entity, a Military entity or Defense Contractor
If Government entity, a Military entity or Defense Contractor, Are you in

Austria, Australia, Belgium, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom or the United States.
 Yes No
- Confirmation ***
 - By checking this field, I hereby certify that I, as a duly authorized representative of the organization, understand and agree to abide by the conditions set forth above regarding the usage of Cisco Systems, Inc. hardware and/or software.

At the bottom of the dialog are two buttons: "Decline" (dark grey) and "Accept" (light blue).

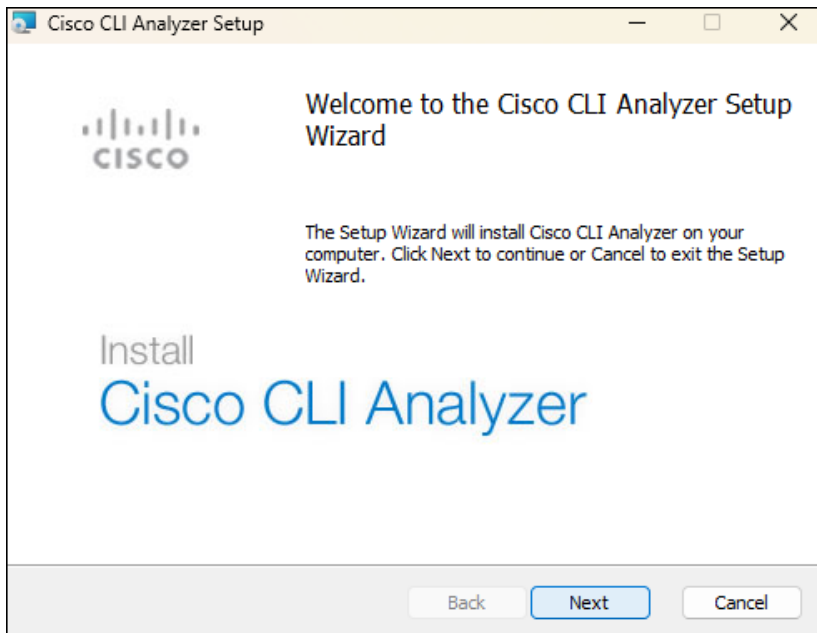
5. Review the linked documents on the Cisco's End User Software License Agreement dialog, then click **Accept License Agreement**.

The screenshot shows a dialog box titled "Cisco's End User Software License Agreement" with a close button (X) in the top right corner. The dialog contains the following text:

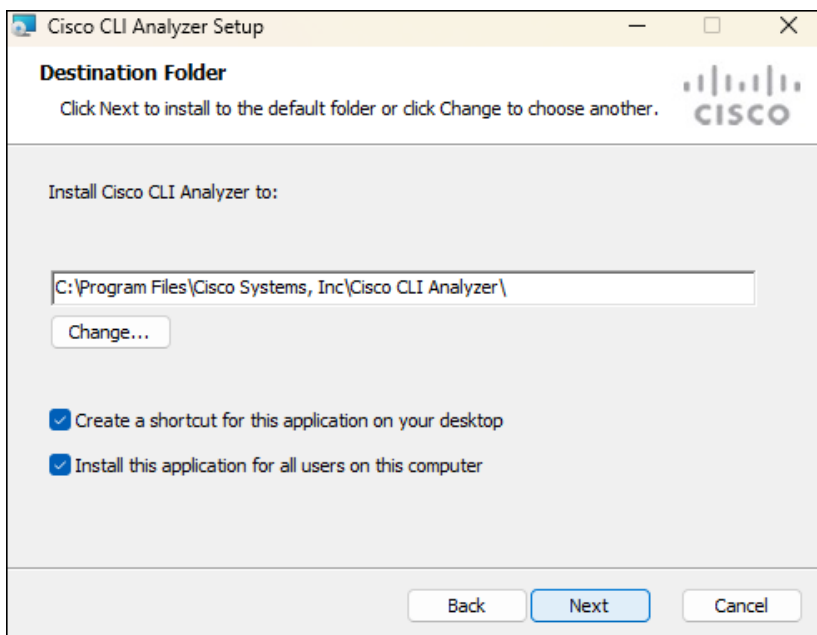
In order to download software, Please confirm that you have read and agree to be bound by the terms of the [Cisco End User License Agreement](#) and any [Supplemental Terms](#), if applicable.

At the bottom of the dialog are two buttons: "Cancel" (dark grey) and "Accept License Agreement" (light blue).

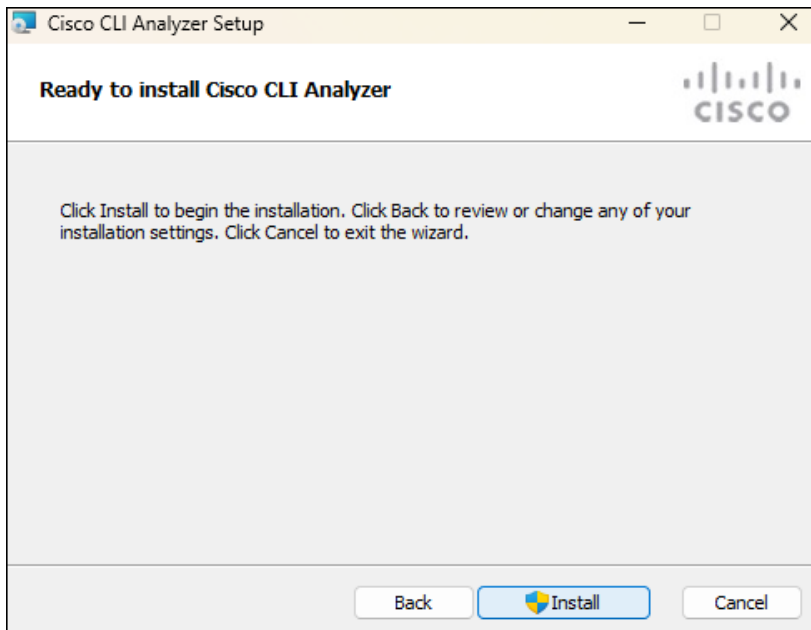
6. After the file downloads, double-click the executable to launch the setup wizard, then click **Next** to begin installation.



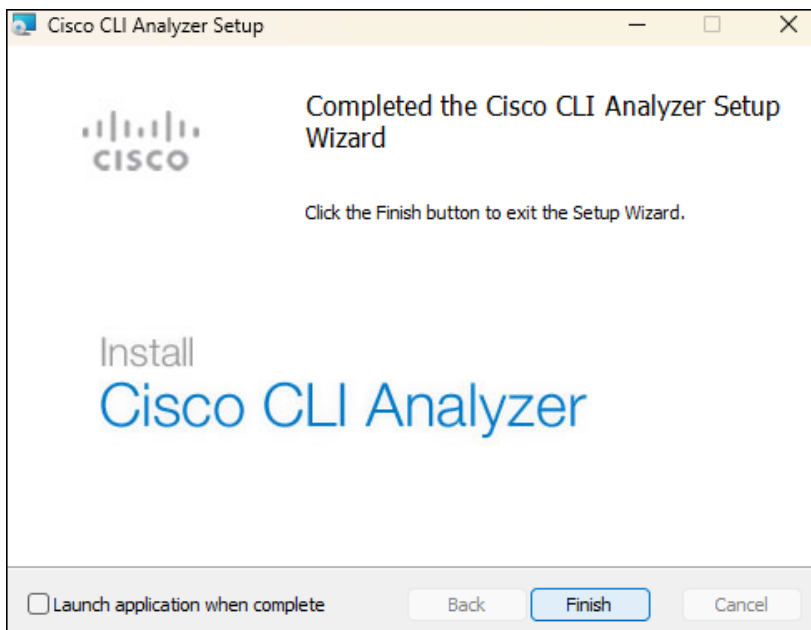
7. Configure the options to set the installation location, create a shortcut, or install for multiple user profiles. Click **Next**.



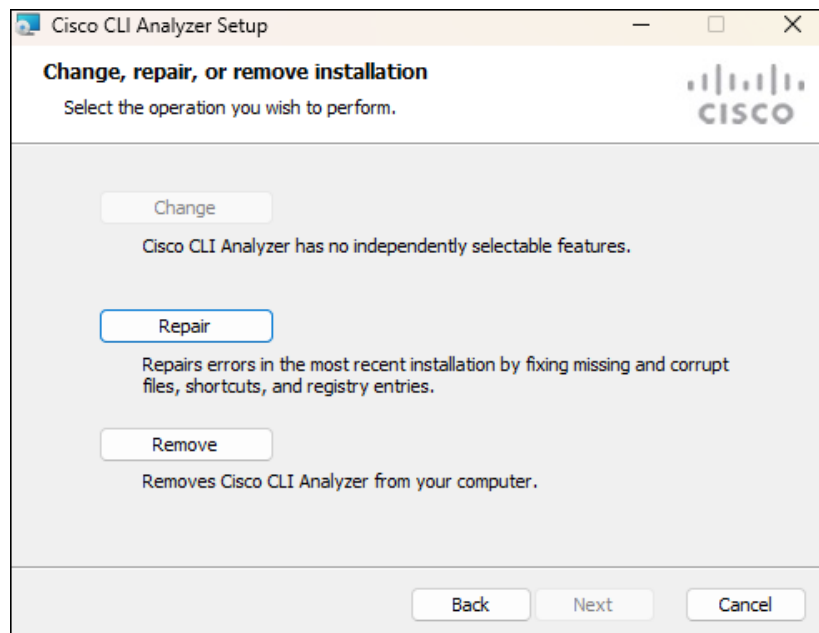
8. Click **Install** to set up the Cisco CLI Analyzer on your computer.



9. After installation is complete, click **Finish** to close the setup wizard.



Note: If you need to repair the Cisco CLI Analyzer or want to remove the application, run the executable file again.



Supported Devices and Platforms

The Cisco CLI Analyzer identifies the device details and provides analysis tools for these devices and operating systems.

Note: Not every analysis tool is available on every platform.

- ACI-OS
- AP-COS
- APIC
- ASA
- DNAC
- Hyperflex
- IOS
- IOS-XE
- IOS-XR
- ISE
- NGFW
- NX-OS
- SMB
- StarOS
- UCS (B and C Series)
- VxWorks
- WLC

External Site Access Requirements

Some tools temporarily upload files to be processed to a file management system. Cisco CLI Analyzer versions 3.6.6 and later upload files to Amazon Web Services (AWS) S3.

Note: If your organization enforces access lists for external sites, you must permit access to **cx-d-prd-files-bucket.s3-accelerate.amazonaws.com**.

Note: If your access list uses IP addresses, refer to the AWS documentation on [AWS IP address ranges](#).

Tool Descriptions

If you have ideas for new tools or suggestions to enhance these tools, [send us feedback](#).

BGP Top Talkers

Supported platforms: IOS-XR

This tool helps determine which Border Gateway Protocol (BGP) peers have the highest rates of messages sent or received during a certain period of time.

Case Create

Supported platforms: ASA, IOS, IOS-XE, IOS-XR

This tool automates the collection of support case data for supported platforms. For devices on other platforms (FX-OS, NX-OS, UCS), you can [create a case](#) manually.

Configuration Difference

Supported platforms: ASA, IOS, IOS-XR

This tool compares the startup configuration and running configuration of the device and color-codes them to highlight differences. It also allows you to download each configuration as a text file.

Crashinfo Analyzer

Supported platforms: IOS, IOS-XE

This tool analyzes a crashinfo file that you upload and compares the contents of the file with known issues to determine the cause of the system reset.

Firewall Top Talkers

Supported platforms: ASA

This tool helps determine which connections that pass traffic through an ASA might have the highest bit rate during a certain period of time.

The tool compares two separate outputs of **show conn** or **show conn all**, taken a few seconds apart. It calculates the difference in the “bytes” value to see how much traffic each connection passed in the time between the outputs. It also identifies new connections found in the second output but not the first.

The tool then displays a list of the connections of interest, sorted by amount of traffic. You can export the results in JSON or CSV format.

Health Diagnostics

Supported platforms: NX-OS

This tool detects and reports known issues such as system problems, configuration mistakes, and best practice violations, based on Cisco TAC knowledge.

IP Multicast Analysis

Supported platforms: IOS, IOS-XE

This tool provides an analysis of the global IPv4 multicast traffic that is flowing through the device, as well as control plane traffic.

IP Route Analysis

Supported platforms: IOS, IOS-XE, NX-OS

This tool provides four different reports based on the analysis of IPv4 or IPv6 routes. (The NX-OS platform supports only IPv4 routes.)

- Route instability: checks for routing changes within a 60 second interval
- Route summary with next hop
- Routing table subnet prefix distribution
- Summary of administrative distances for all protocols

Note: If the routing table has 100,000 routes or more, this tool will not work.

L2VPN Service Check

Supported platforms: IOS-XR

This tool allows you to select an L2VPN Bridge-Domain or Xconnect. The tool then runs several **show** commands to determine the status of the L2VPN service.

L2VPN Top Talkers

Supported platforms: IOS-XR

This tool helps determine which Layer 2 VPN point-to-point circuits and Bridge-Domains have the highest packet rates during a certain period of time.

LPTS Top Talkers

Supported platforms: IOS-XR

This tool helps determine the types of traffic that are handed off from hardware to software processing and their rates. Local Packet Transport Services (LPTS) is the router feature that decides which traffic (such as Telnet, SSH, and SNMP) must be handed off, and limits rates in order not to overload the software.

(See a [demonstration video](#) of IOS-XR tools.)

Packet Capture

Supported platforms: ASA, IOS, IOS-XE, NX-OS

This tool helps you set up and perform a packet capture and analyze the results. You can specify the kind of packets to capture based on the device platform, decode captured packets in the terminal, and view traffic analytics.

Packet Tracer

Supported platforms: ASA

This tool allows administrators to send simulated packets through the ASA as a test. If the packet is dropped, the ASA configuration portion or feature that could have contributed to the packet drop is identified.

Note: ASA version 7.2 (the first version to include the command) and later are supported.

Show Run Diagnostics

Supported platforms: AireOS (on Wireless LAN Controller)

Show Tech Diagnostics

Supported platforms: AireOS (on Wireless LAN Controller)

System Diagnostics

Supported platforms: ASA, IOS, IOS-XE, IOS-XR

This tool utilizes Cisco TAC knowledge to analyze a Cisco supported device and detect known problems such as system problems, configuration mistakes, and best practice violations.

Note: This analysis sends the output of the **show tech-support** command to Cisco to be processed. IOS-XR analysis will vary in the use of **show** commands.

TAC Data Collection

Supported platforms: ASA, IOS, IOS-XE, IOS-XR, NX-OS, UCS, AireOS (on Wireless LAN Controller)

This tool automates the collection of diagnostic data needed to resolve support cases. A TAC engineer provides a TaskID code to you. When you enter the TaskID into the TAC Data Collection tool, the Cisco CLI Analyzer automatically performs the diagnostic commands and uploads the output to the support case.

(See a [demonstration video](#) of this tool.)

Traceback Analyzer

Supported platforms: ASA

This tool attempts to match the root cause of a crash to a known bug if the ASA has experienced a system traceback. If a match is found, the ASA version or versions in which the bug is fixed are provided.

Note: This analysis requires the output of the **show crashinfo** command and is sent to Cisco to be processed. All ASA software versions are supported.

Unused Policy Detector

Supported platforms: ASA

This tool looks for unused configuration policies such as unused access-lists, object-groups, and objects. Some of these could also indicate misconfigurations. This tool collects the output of the commands **show run** and **show access-list | excl ^ |elem**. The output is uploaded to Cisco for analysis. Full tool functionality is available in ASA releases 9.x and above.

Upgrade Helper

Supported platforms: NX-OS

This tool provides supported upgrade paths for NX-OS 7K platforms.

Zone Based Firewall Visualizer

Supported platforms: IOS, IOS-XE

This tool creates a diagram that illustrates the complex and nested zone-based firewall policies on the router.

Get Started

After successfully installing the Cisco CLI Analyzer, you can open the application, configure settings, and begin to view and manage devices.

Open the Cisco CLI Analyzer

Click the **Cisco CLI Analyzer** icon on your computer's desktop to open the Cisco CLI Analyzer application.

AS of version 3.7.2, the Cisco CLI Analyzer uses your system browser to log in to Cisco. When prompted, enter your Cisco account credentials (your Cisco.com username or email and password), then click the **Open Cisco CLI Analyzer** button to launch the application.

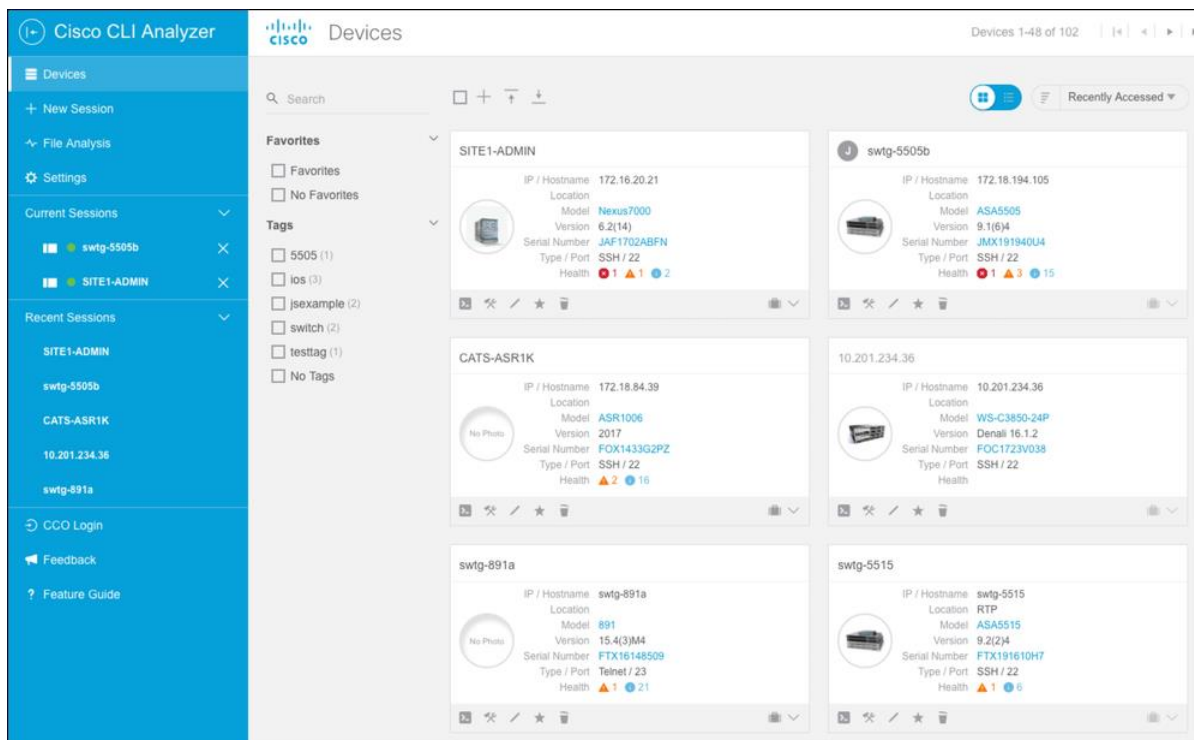
Note: To bypass the authentication confirmation in the future, check the **Always allow cway.cisco.com to open link...** check box. (See the Feature Guide in the application for more details.)

Note: If application settings prompt you for a master password, enter the password and click **OK**.

The Cisco CLI Analyzer interface appears, displaying the Devices window as the application home page.

View Your Devices

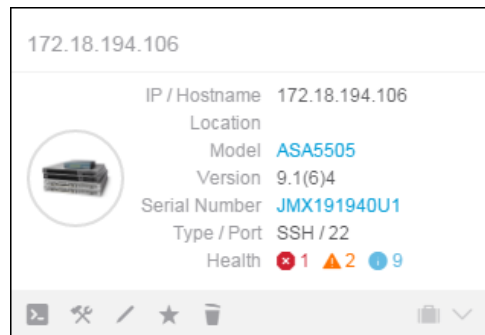
The Devices window displays information about each of your devices at a glance. Here you can see device information in list or tile format, initiate connections, and perform other functions. The tabs at the top of the sidebar allow you to switch between the Devices window and other application functions such as Settings and File Analysis.




In Grid View, information appears on device cards along with an image of the device (when available). The toolbar at the bottom of the device card provides options to open a session, view tool results, open a support case, and perform other functions.

Device cards also display the health of each device, according to the most recent scan. Click the Health information to open the Tool Results window for additional details.

Note: Supported devices include ASA, IOS, IOS-XE, IOS-XR, NX-OS, and WLC. The health information is based on the System Diagnostics tool results, except for WLC devices, which use Show Tech Diagnostics tool results.









The Devices window features:


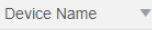


- **Current Sessions (in sidebar):** Click a device to switch to the console window for that device. A green circle appears beside devices with an active connection; a red circle appears beside disconnected devices. Click the X beside a device to close the current session and remove it from the list.
- **Recent Sessions (in sidebar):** Click a device to open the Session Login screen. Hover the pointer over a device to show the time and date of the last active session with that device. Click the X beside a device to remove the recent session from the list.
- **Toolbar:** The toolbar provides options that allow you to search and sort the device list, to perform bulk actions on selected devices, and to add, import, and export devices.
- **Filters:** Check filter check boxes to hide devices that do not match the filter criteria. Filters can be based on the devices that are marked as favorites or on tags added to devices. Click the **Filter** button  above the device list to show or hide available filters.

Check a check box in the list of filters to show only devices that match your selected filter. (For example, check the **No Favorites** check box to show only devices that are not marked as Favorites.)

- **Adjustable Sidebar:** Click the  and  buttons to collapse and expand the sidebar.

You can perform these actions on each device in your list:

- Click the **Connect** icon () to connect to that device.
- Click the **Tool Results** icon () to view the tool results for the device in the Tools Results window.
- Click the **Edit** icon () to open the Edit Device window, where you can update device information.
- Click the **Toggle Favorite** icon () to mark the device as a Favorite. Click the button again to remove the device from Favorites.
- Click the **Delete Device** icon () to remove the device from your device list.
- Click the **Support Cases** icon () for devices with support coverage to [open a support case](#) or view/update existing cases.

-
- Click the hyperlinked serial number of a device to check the service contract status of that device. The Cisco Device Coverage Checker tool opens in a browser window. (See a [demonstration video](#) of this feature.)
 - To select a device in Grid View, hover the mouse pointer over a device card and click the check mark (☑) in the upper right corner. To select a device in List View, click the check box (☐) next to the device. When the device is highlighted, the Bulk Actions button becomes available. To deselect a device, click anywhere on the device card to deselect it in Grid View, or uncheck the check box in List View.
 - To highlight all the devices in the list, check the **Select All** check box (☐). The check box indicates that all devices are selected (☑) and the Bulk Actions button becomes available. Click any individual device card to deselect that device.
 - With one or more devices selected, click the **Bulk Actions** button () and then choose an option in the drop-down list to perform that action (Connect, Check Coverage, Apply Credential Profile, Refresh Coverage, Delete Devices, Add Tags, or Delete Tags).
 - To sort devices into a specific order, click the sorting menu in the upper right () and choose a property from the drop-down list. In List View, click a column heading to sort by that property.
 - Click the sorting icons to toggle between descending sort order () and ascending sort order ().
 - Check a check box in the list of filters to show only devices that match your selected filter. (For example, check the **No Favorites** check box to show only devices that are not marked as Favorites.)
 - Enter a search term in the Search field and press **Enter** to search the device list.

Configure Application Settings

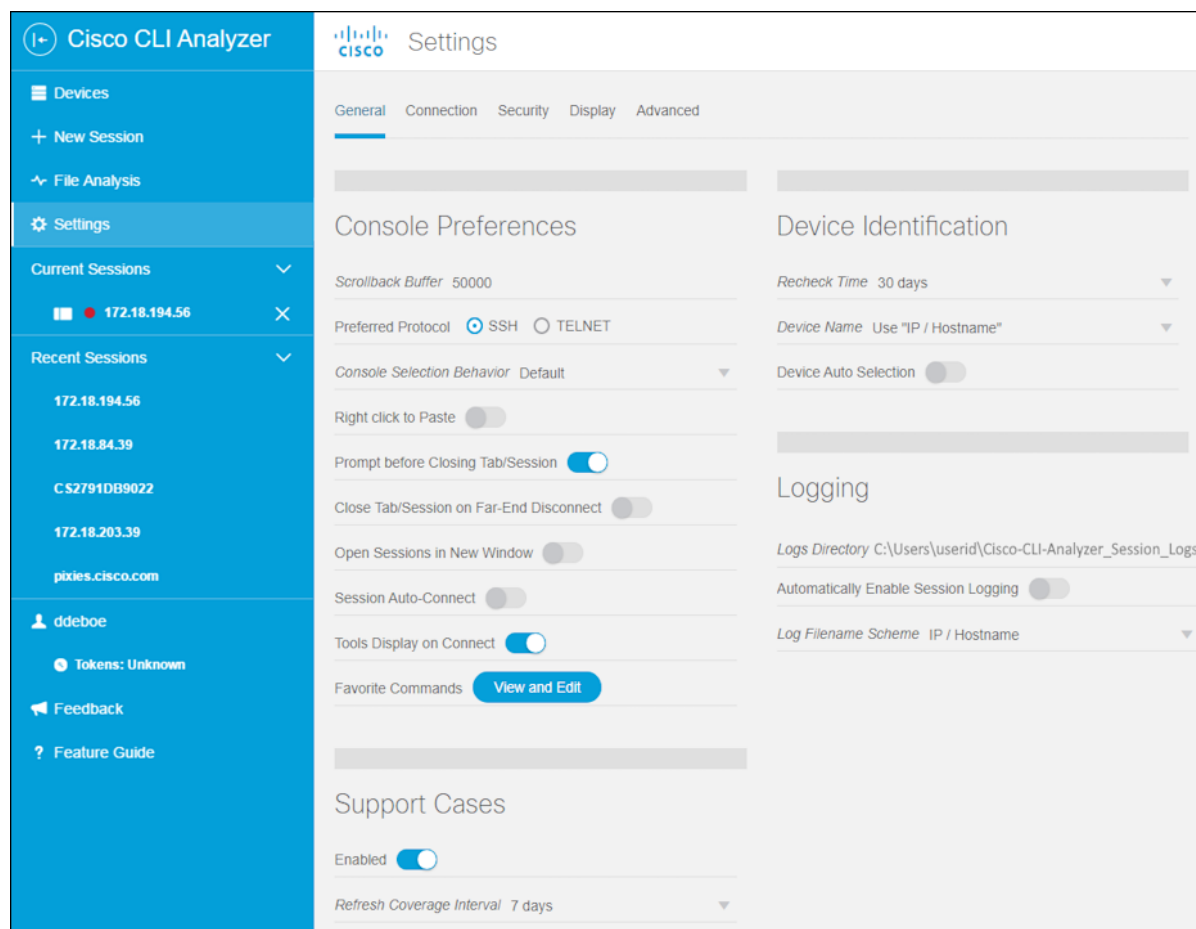
Click **Settings** in the sidebar to access global console settings. These settings apply across all device sessions.

The settings appear on these five tabs.

- [General tab](#)
- [Connection tab](#)
- [Security tab](#)
- [Display tab](#)
- [Advanced tab](#)

Configure the General Tab

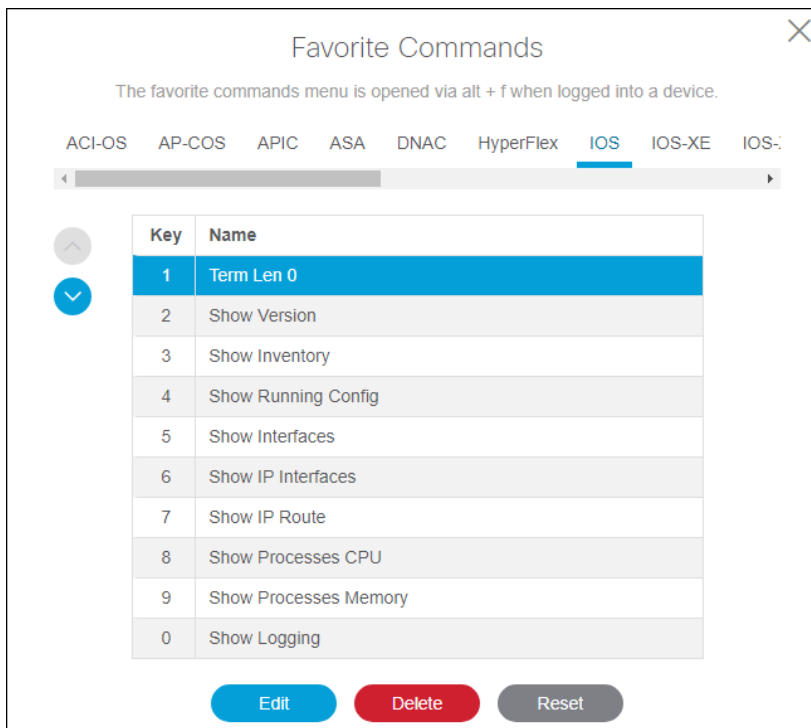
These settings affect multiple areas of functionality.



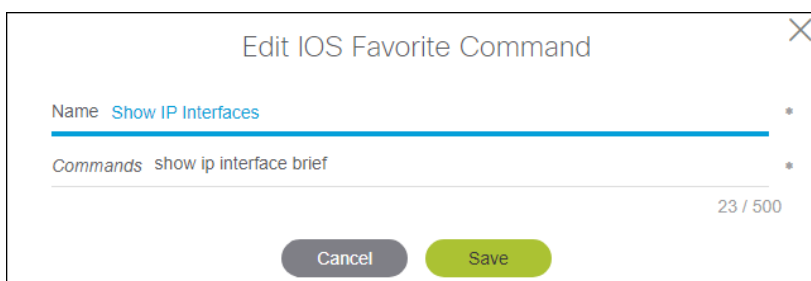
Console Preferences

- **Scrollback Buffer:** You can configure the number of command lines that are retained in memory. To configure the scrollback buffer, enter a number between 100 and 50,000.
- **Preferred Protocol:** Choose the protocol (SSH or Telnet) that you use most frequently. This protocol is selected by default when you create a new connection.
- **Console Selection Behavior:** Choose your preferred experience when you use the mouse to select text within the console window. In addition to the default text selection behavior, you can choose to emulate the behavior of PuTTY or SecureCRT.
- **Right click to Paste:** Click the toggle button to enable or disable the ability to paste clipboard content into the console window with the right mouse button. (When this feature is enabled, the context menu does not appear when you right-click inside the console window.)
- **Prompt Before Closing Tab/Session:** Click the toggle button to enable or disable the End Session dialog window. This window displays when you close the tab for a current session and prompts you to confirm whether you want to close the session.

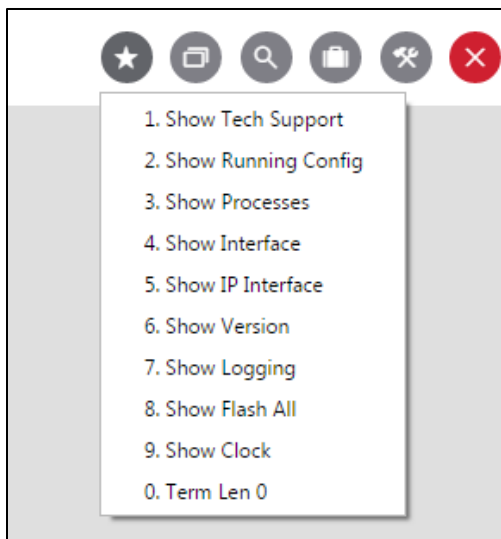
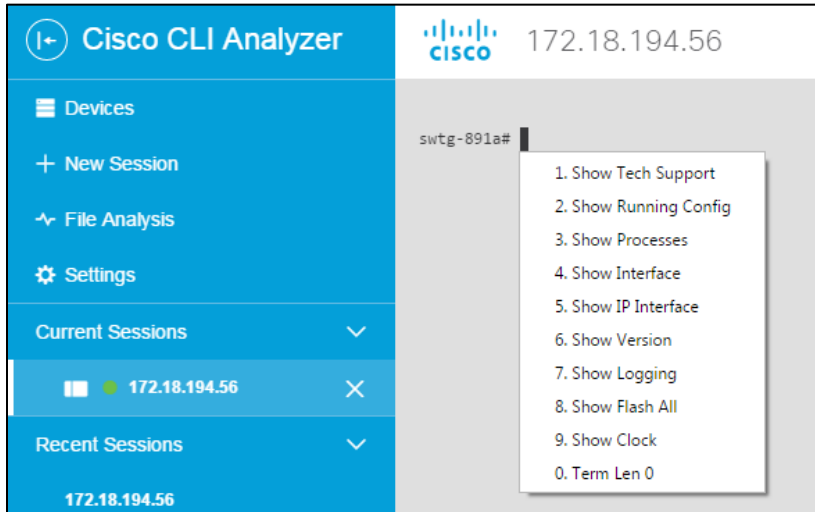
- **Close Tab/Session on Far-End Disconnect:** Click the toggle button to enable or disable the option to close a device session tab automatically when the connection is terminated at the device end.
- **Open Sessions in New Window:** Click the toggle button to enable or disable the option to open new device sessions in a separate window by default. Regardless of the default setting, you can always manually detach console windows and reattach them to the main application window.
- **Session Auto-Connect:** Click the toggle button to enable or disable the option to skip the session login screen when user credentials are remembered. When the option is disabled, the login screen always appears when a new session is initiated.
- **Tools Display on Connect:** Click the toggle button to show or hide analysis tools in a new session. If the tools panel is hidden when a session opens, click the **Tools** icon (🔧) to show the panel.
- **Favorite Commands:** Click the **View and Edit** button to open the Favorite Commands window. Use the tabs at the top of the window to configure commands for the chosen type of device. Click a command, then click the up and down arrow buttons to move the command within the list; this changes the number of its associated command key. (See a [demonstration video](#) of this feature.)



Select a command in the list and click **Edit** to modify the command and/or its name. You can enter commands on multiple lines.



In a console session, click the **Favorites** icon (★) on the toolbar to select from a list of favorite commands. Alternatively, press **Alt+F** to display the list of commands.



Support Cases

- **Enabled:** Click the toggle button to enable or disable the creation of support cases. This feature is enabled by default.
- **Refresh Coverage Interval:** Choose how frequently the Cisco CLI Analyzer should check support coverage on devices and update the information on the Devices list. You can also refresh coverage manually for selected devices with the **Bulk Actions** button.

Device Identification

- **Recheck Time:** Choose the number of days to wait between automatic executions of the **show version** (or appropriate) command. (Default = 30 days.) If you choose **Always Check**, the command runs automatically at the beginning of every device session.
- **Device Name:** Choose whether new devices that you add to the list are named by IP address or by the device name from the router.

Logging

- **Logs Directory:** By default, log files are saved in these locations:
 - **Windows:** C:\Users\<<userid>\Cisco-CLI-Analyzer_Session_Logs
 - **Mac OS X:** /Users/<userid>/Cisco-CLI-Analyzer_Session_Logs

To choose a different folder, click the path that is currently displayed. Browse to the desired folder, select it, and click **OK**.

- **Automatically Enable Session Logging:** Click the toggle button to enable or disable automatic session logs. When enabled, activity is logged by default when you connect to a device, and a log file is saved automatically when you disconnect. You can still start and stop logging sessions manually from within the console. For more information, see [Log Your Current Session](#).
- **Log Filename Scheme:** Choose whether to name log files by the device's IP address or by the device name from the router.

Configure the Connection Tab

These settings affect the initiation and sharing of device sessions.

The screenshot shows the Cisco CLI Analyzer interface. The left sidebar contains navigation options: Devices, New Session, File Analysis, Settings (selected), Current Sessions (with a dropdown arrow), Recent Sessions (with a dropdown arrow), and user information (ddeboe, Tokens: Unknown, Feedback, Feature Guide). The main content area is titled 'Settings' and has tabs for General, Connection (selected), Security, Display, and Advanced. The 'Connection' tab is active, showing 'Serial Connection Defaults' and 'Session Sharing' sections. The 'Serial Connection Defaults' section includes fields for Port Name, Baud Rate (9600), Data Bits (8), Stop Bits (1), Parity (NONE), and Flow Control (XON/XOFF and RTS/CTS). The 'Session Sharing' section has an 'Enabled' toggle (checked), Port (8090), and a 'Remote Logging Enabled' toggle (unchecked). The right side of the page shows 'Send Keepalive String' with 'SSH Enabled' and 'Telnet Enabled' toggles (both unchecked), a 'String' field, and an 'Interval (seconds)' field (60). Below that is 'Send SSH Keepalive Packets' with an 'Enabled' toggle (unchecked) and an 'Interval (seconds)' field (60). At the bottom is 'Ignore SSH-KeyScan Failures' with an 'Enabled' toggle (unchecked).

Serial Connection Defaults

Note: TAC tools are not available in device sessions that use a serial connection.

- **Port Name:** Choose the COM port to use for serial connections or enter a port number manually. The drop-down list shows only active COM ports that are detected on the system.
- **Baud Rate:** Choose the baud rate to use for serial connections. If the console window does not display its contents correctly, you might need to adjust this value.
- **Data Bits:** Enter the number of data bits to use, or click the up and down arrows to adjust the number of bits.
- **Stop Bits:** Enter the number of stop bits to use, or click the up and down arrows to adjust the number of bits.
- **Parity:** Choose the parity type to use for serial connections.
- **Flow Control:** Choose the flow control type(s) to use for serial connections.

Session Sharing

- **Enabled:** Click the toggle button to enable shared device sessions.
- **Port:** Enter the port number to use for shared device sessions. (Session Sharing must be disabled to change the port number.) You must provide this port number to remote users who want to connect to a shared session.
- **Remote Logging Enabled:** When enabled, remote users have the option to log the device session.

Send KeepAlive String

- **SSH Enabled:** Click the toggle button to enable or disable KeepAlive strings in SSH sessions.
- **Telnet Enabled:** Click the toggle button to enable or disable KeepAlive strings in Telnet sessions.
- **String:** Type the character(s) to send in the KeepAlive string. By default, the string is a single space.
- **Interval (seconds):** Enter or select the number of seconds between each KeepAlive string.

Send SSH KeepAlive Packets

This option is useful when, in between the Cisco CLI Analyzer and the SSH server, there are NAT/routers that drop connections after a period of inactivity.

Note: This setting has no effect on the session timeout for far-end Cisco devices.

- **Enabled:** Click the toggle button to enable or disable KeepAlive packets in SSH sessions.
- **Interval (seconds):** Enter or select the number of seconds between each KeepAlive packet.

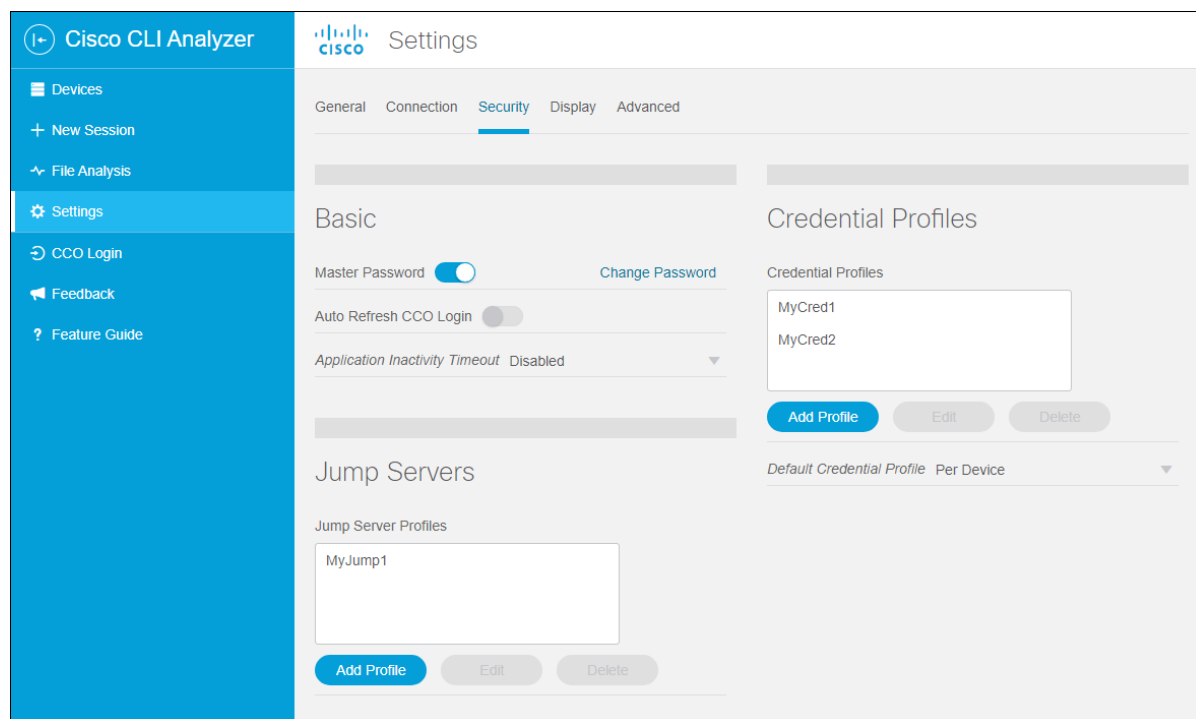
Ignore SSH-KeyScan Failures

Note: This override has no effect on devices with a Jump Server Profile.

- **Enabled:** Click the toggle button to ignore SSH-KeyScan failures for all devices. This option globally disables the prompt that is displayed when the Cisco CLI Analyzer application cannot retrieve the RSA Host Key for a device.

Configure the Security Tab

These settings affect the credentials that are used to connect to devices.



Basic

- **Master Password:** Click the toggle button to allow the Cisco CLI Analyzer to save a master password. The master password allows you to store credentials for individual devices so that you do not have to enter them every time. The application uses Secure Hash Algorithm 3 (SHA-3) to securely store the password as a hash value in the database.

If this feature is enabled, when you open the Cisco CLI Analyzer, the application prompts you to enter the master password. If you do not enter the master password, you must enter credentials for each individual device session.

To change the password, click **Change Password**. Enter the old master password and the new one.

- **Auto Refresh CCO Login:** When this setting is enabled, the Cisco CLI Analyzer encrypts and stores CCO login information for 30 days. During that time, the application does not prompt you to enter your CCO login to access features that require it.

Note: This feature requires that the Master Password is enabled.

- **Application Inactivity Timeout:** Choose the duration of inactivity before which the application will enter locked mode, or choose **Disabled** to disable the timeout feature. When the application is locked, you must enter the master password to unlock it. If you do not have the master password, you can close the application and reopen it, and then clear the master password.

Note: This feature requires that the Master Password is enabled.

Jump Servers

Jump server profiles contain the credentials needed to connect to a jump server and the commands to run on the server after connection. You can create and edit profiles based on your devices and needs.

1. To create a profile, click the **Add Profile** button in the Jump Servers area.
2. Enter the jump server's name and IP address, the port number and connection type to use, and the username and password.
3. In the Commands area, enter the commands that you want to run.

Note: Versions 3.5 and later support regex values in the expect string.

- Use **-r** to indicate that the value is a regular expression.
- Use **-i** to indicate case insensitivity.

4. Click the **Add Profile** button.

Add Jump Server Profile

The fields below refer to the initial jump server connection.
Once connected, the list of commands will be invoked.

Name *

IP / Hostname *

Port 22 *

Type SSH TELNET

Credential Profile ▼

Username

Password

Enable/SUDO Password

Keyboard Interactive Login

Commands `expect "~$"` *

```
send "ssh $username@$hostname -p $port\r"
expect -i "Password:"
send "$password\r"
```

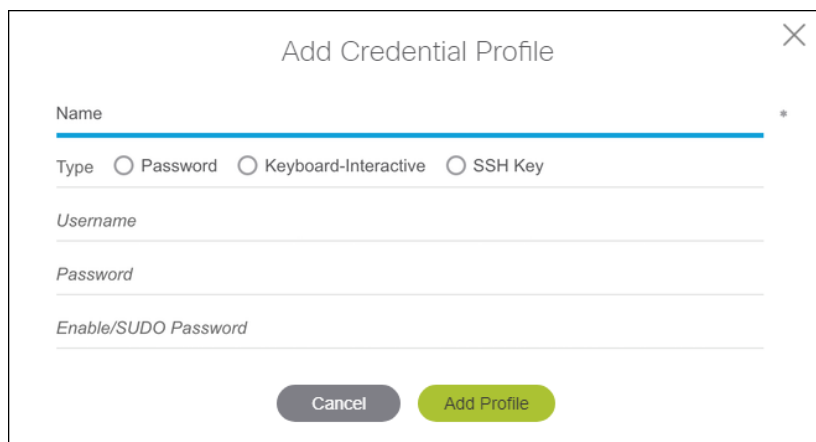
94 / 1000

Cancel Add Profile

Note: For most devices and connections, the Keyboard Interactive feature should be off. Please check the [Frequently Asked Questions](#) for more information.

Credential Profiles

- **Credential Profiles:** Create and manage user profiles that you can use to initiate device sessions. To create a profile, click **Add Profile** in the Credential Profiles section, then enter a name for the profile and choose the type of credentials used to access the device.

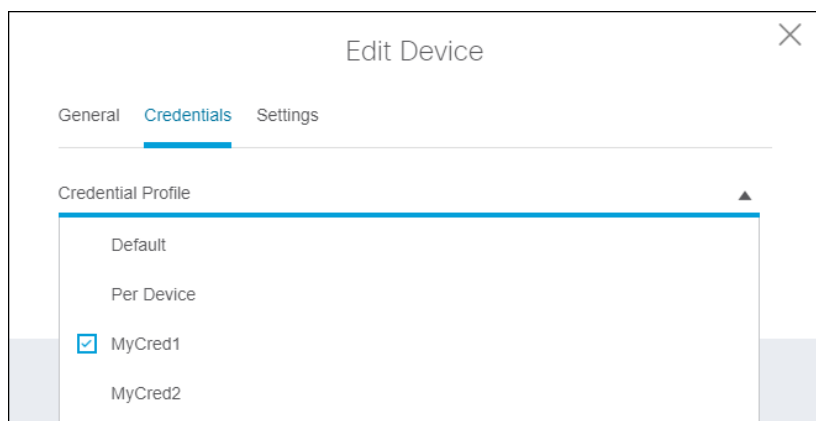


The screenshot shows a dialog box titled "Add Credential Profile" with a close button (X) in the top right corner. The form contains the following fields and options:

- Name:** A text input field with a red asterisk indicating it is required.
- Type:** A radio button selection with three options: Password, Keyboard-Interactive, and SSH Key.
- Username:** A text input field.
- Password:** A text input field.
- Enable/SUDO Password:** A text input field.
- Buttons:** A grey "Cancel" button and a green "Add Profile" button.

Note: For most devices and connections, the Keyboard Interactive feature should be off. Please check the [Frequently Asked Questions](#) for more information.

To apply a credential profile to a device, edit the device and choose the credential profile that the device accepts.



The screenshot shows the "Edit Device" dialog box with the "Credentials" tab selected. The "Credential Profile" section contains a list of profiles:

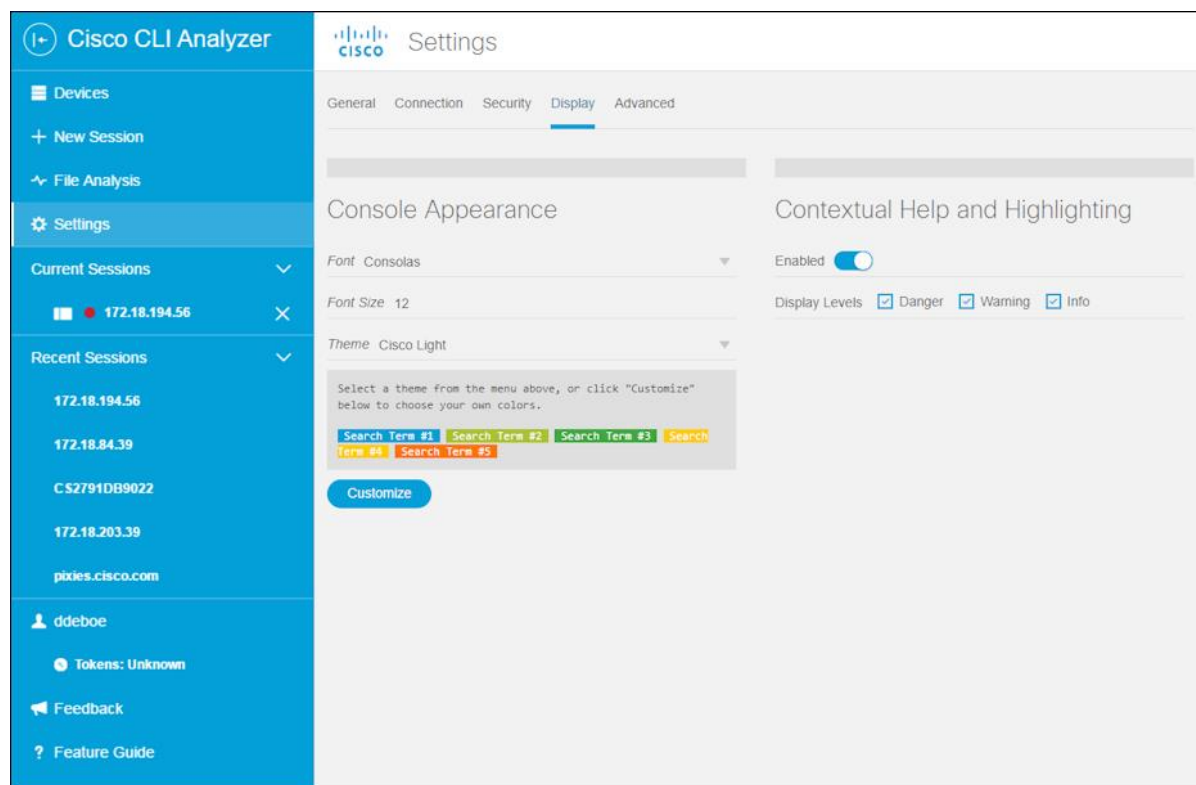
- Default
- Per Device
- MyCred1
- MyCred2

Note: You can also use the Bulk Actions feature to assign credential profiles to multiple devices. In the Devices window, select the devices, click the **Bulk Actions** button, and choose **Apply Credential Profile**.

- **Default Credential Profile:** You can set a credential profile to use as the default profile for sessions. To set a default profile, click the **Default Credential Profile** drop-down listing and choose the appropriate profile. If you choose Per Device, there is no default profile, and devices configured to accept the default profile will accept only their own individual credentials instead.

Configure the Display Tab

These settings affect the appearance of text, background colors, and highlights.



Console Appearance

- **Font:** Choose the font type that you prefer from the drop-down list.
- **Font Size:** Click inside the field and enter a font size between 8 and 20, or click the up and down arrows to change the font size.
- **Theme:** Choose a predefined color theme, or click **Customize** to choose your own colors.

If you choose **Customize**, a set of Text and Background color buttons appears. Click a color button to display the color palette, from which you can choose a color. A preview of your current theme or color selection is displayed in the Preview window.

(See demonstration videos showing how to [select a theme](#) and [create a custom theme](#).)

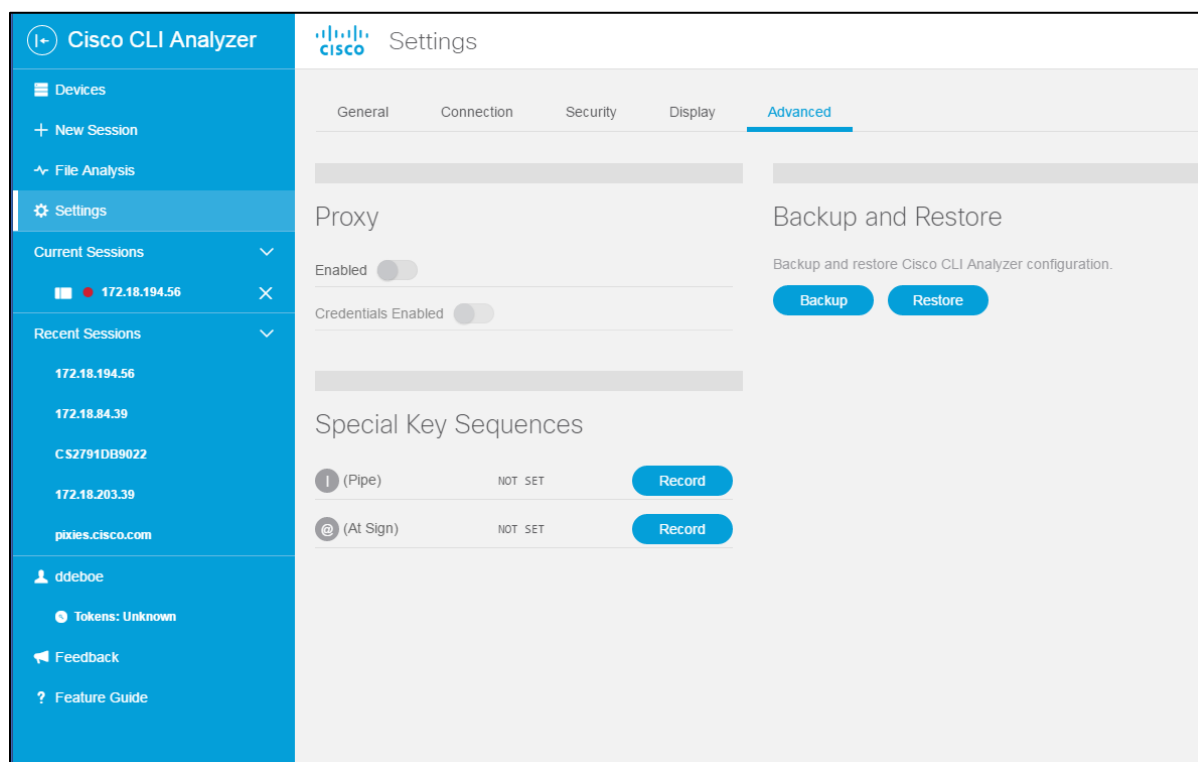
- **Note:** Search terms use their own text and background colors. For more information, see how to [search command output](#).

Contextual Help and Highlighting

- **Enabled:** Click the toggle button to enable or disable contextual help and highlights. This feature is enabled by default. For more information, see how to [use contextual help and highlights](#).
- **Display Levels:** Check the check boxes for the notification types (Danger, Warning, and Info) that you want to display. Uncheck the check boxes for the notification types that you want to disable.

Configure the Advanced Tab

These settings apply to proxy servers and special key sequences.



Proxy

- **Enabled:** Click the toggle button to enable the use of a proxy server for outbound web connections.

Complete these fields in the Enable Proxy Settings dialog, then click the **Enable Settings** button.

- **Protocol:** Click inside the field and choose a protocol from the drop-down list. The supported protocols include HTTP, HTTPS, Socks, and Socks5.
- **Host:** Enter the IP address of the proxy server.
- **Port:** Enter the port number to use.

Note: You must restart the application before Proxy settings become active.

- **Credentials Enabled:** Click the toggle button, enter the username and password for the proxy server, then click the **Enable Credentials** button.

See a [demonstration video](#) of this feature.

Special Key Sequences

You can specify key combinations to insert special characters in the terminal window: the "pipe" (|) character and the "at" (@) character.

To set a key sequence, click the **Record** button, press the desired sequence of keys, and then click **Set**. To delete a recorded key sequence, click the **X** beside the sequence.

Backup and Restore

You can create a backup copy of the settings, devices, and tool results as a compressed file (in .tgz format). You can also restore a backup created on this Cisco CLI Analyzer installation or another one. When you restore the backed-up information, it overwrites the existing configuration.

Click the **Backup** button to save a backup copy. When prompted to confirm the backup, click the **Backup** button. Navigate to the folder where you want to save the file, type a name for the file, and click the **Save** button.

Click the **Restore** button to restore the information contained in a backup file. Either drag the backup file onto the indicated area or click the area and browse to select the file. Click **Restore**. The Cisco CLI Analyzer will restart automatically after the configuration is restored.


Manage Your Devices

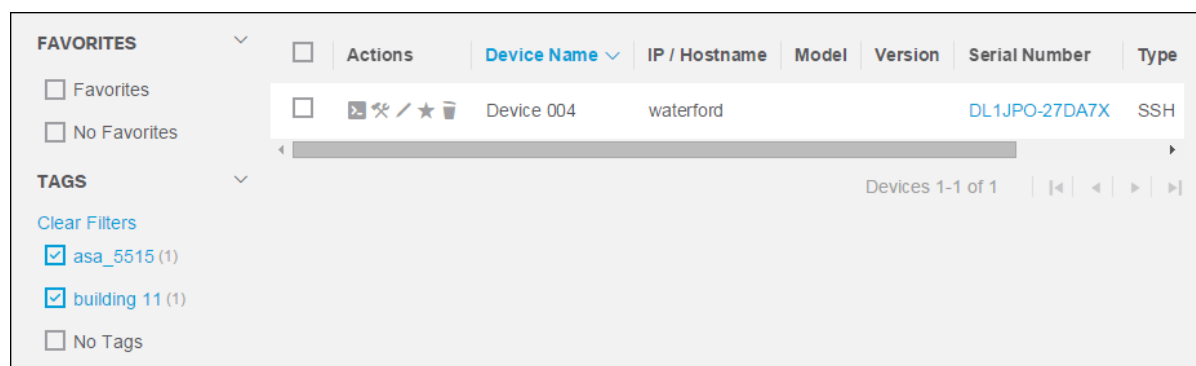
Locate Devices

Use filters and searches to locate specific devices in the device list.

Use Filters

Filters are based on tags and favorites. Check the filter boxes on the left side of the device list to display only devices with the selected tags or the selected favorite status (either favorites or non-favorites). To remove all the active filters, click the **Clear All Filters** button below the filter check boxes.

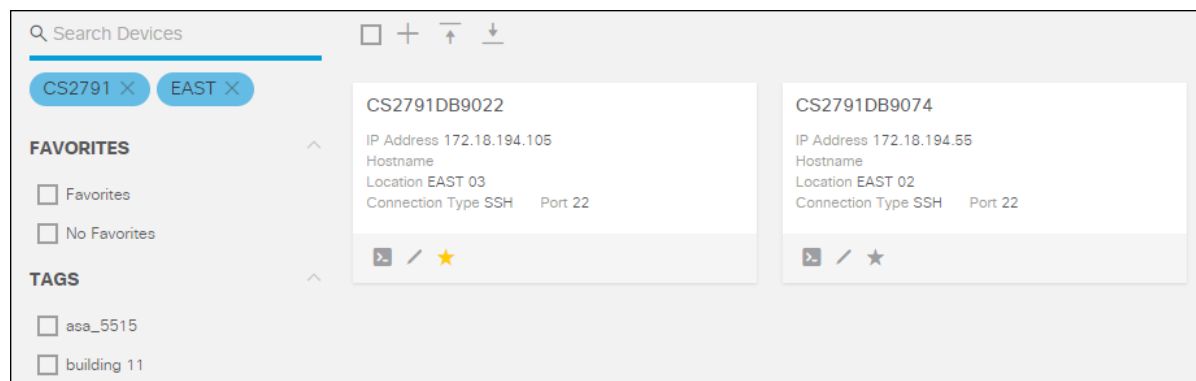
Note: If filter boxes do not appear in the Devices window, click the **Filter** button ( Filter) to show the Filters area.



Use Search

Type a keyword in the Search box and press **Enter** to filter the device list in order by devices whose properties include the keyword.

The keyword is displayed below the Search box and remains an active filter that can be combined with other filter selections. To remove the keyword as an active filter, click the **X** next to the keyword.



Sort Devices

In List View, click a column header to sort the list by that property. Click the column header again to switch between ascending and descending order.

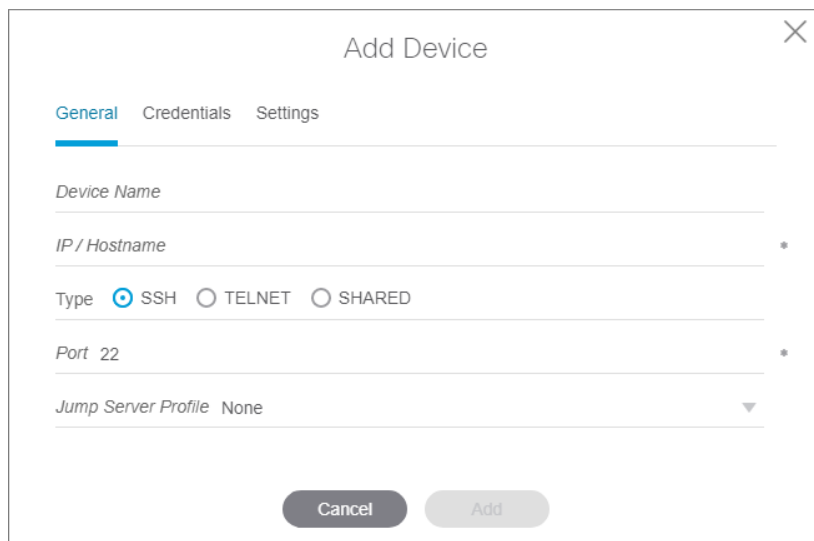
In List View or Grid View, click the sorting menu in the upper right (Device Name ▾) and choose a property from the drop-down list.

Click the sorting icons to toggle between descending sort order (📉) and ascending sort order (📈).

Add a Device to the Device List

Complete these steps to add a device to your device list.

1. In the Devices window, click the **Add Device** icon (+) on the toolbar.



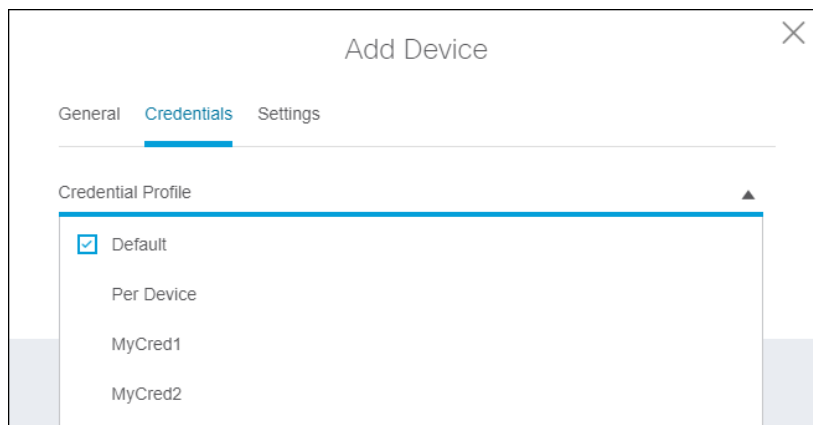
2. On the General tab, enter a name for the device in the Device Name field.

3. Enter the IP address or host name in the IP/Hostname field.
4. Click the radio button for the protocol that you want to use (SSH, TELNET, or SHARED).
5. If you use a nonstandard port number, enter it in the Port field.
6. If you would like to connect to this device through a jump server, select the appropriate profile in the Jump Server Profile field.

Note: This field is visible only if you have added at least one jump server profile to the Cisco CLI Analyzer. See the [Security tab](#) of the Settings window for more information.

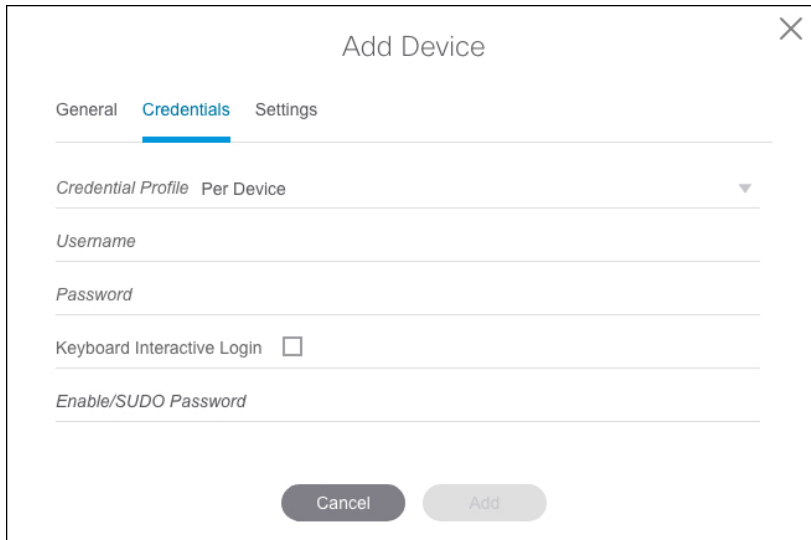
7. Click the **Credentials** tab and select a credential profile to connect to this device.
 - a. If you want to specify the credentials individually for this device, choose **Per Device** and fill in the information in steps 8-10.
 - b. If you want to use the default profile specified on the [Security tab](#), choose **Default** and skip to step 11.
 - c. If you want to use one of the credential profiles you set up on the [Security tab](#), choose the desired profile and skip to step 11.

Note: This field is visible only if you have added at least one credential profile to the Cisco CLI Analyzer. See the [Security tab](#) of the Settings window for more information.



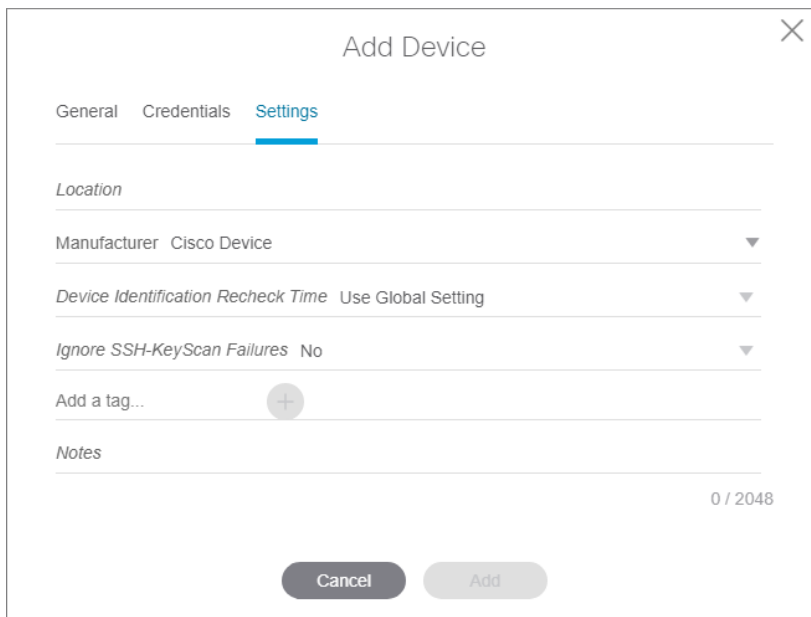
- Enter the username and password to use when connecting to the device.
- If your device has an Enable or SUDO password, enter it in the Enable/SUDO Password field.

Note: For most devices and connections, the Keyboard Interactive feature should be off. Please check the [Frequently Asked Questions](#) for more information.



The screenshot shows the 'Add Device' dialog box with the 'Credentials' tab selected. The 'General' tab is also visible. The 'Credentials' tab contains the following fields: 'Credential Profile' (set to 'Per Device'), 'Username', 'Password', 'Keyboard Interactive Login' (checkbox), and 'Enable/SUDO Password'. At the bottom, there are 'Cancel' and 'Add' buttons.

- Click the **Settings** tab.



The screenshot shows the 'Add Device' dialog box with the 'Settings' tab selected. The 'General' and 'Credentials' tabs are also visible. The 'Settings' tab contains the following fields: 'Location', 'Manufacturer' (set to 'Cisco Device'), 'Device Identification Recheck Time' (set to 'Use Global Setting'), 'Ignore SSH-KeyScan Failures' (set to 'No'), 'Add a tag...' (with a plus icon), and 'Notes' (with a character count of '0 / 2048'). At the bottom, there are 'Cancel' and 'Add' buttons.

- In the Location field, enter the physical location of the device.
- In the Manufacturer field, choose **Cisco Device** or **Non-Cisco Device**.
- In the Device Identification Recheck Time field, choose how frequently the **show version** command should run upon connection to the device. You can choose to use the global setting defined on the General tab of the Settings window, or you can choose an individual value for this device.

14. In the Ignore SSH-KeyScan Failures field, choose whether Cisco CLI Analyzer should display a prompt if it cannot retrieve the RSA Host Key when connecting to a device via SSH.

Note: This field is disabled if the global Ignore SSH-KeyScan Failures option is enabled on the [Connection tab](#) of the Settings window or if a jump server profile is added to the device.

15. To assign tags to your device, click the **Add a tag...** line, type the desired tag, then press **Enter** or click the **Add** icon (+).
16. If desired, enter additional information about the device in the Notes field.
17. Click the **Add** button to add the new device to your device list.

Import Devices from a CSV File

You can import devices to your device list from a CSV file.

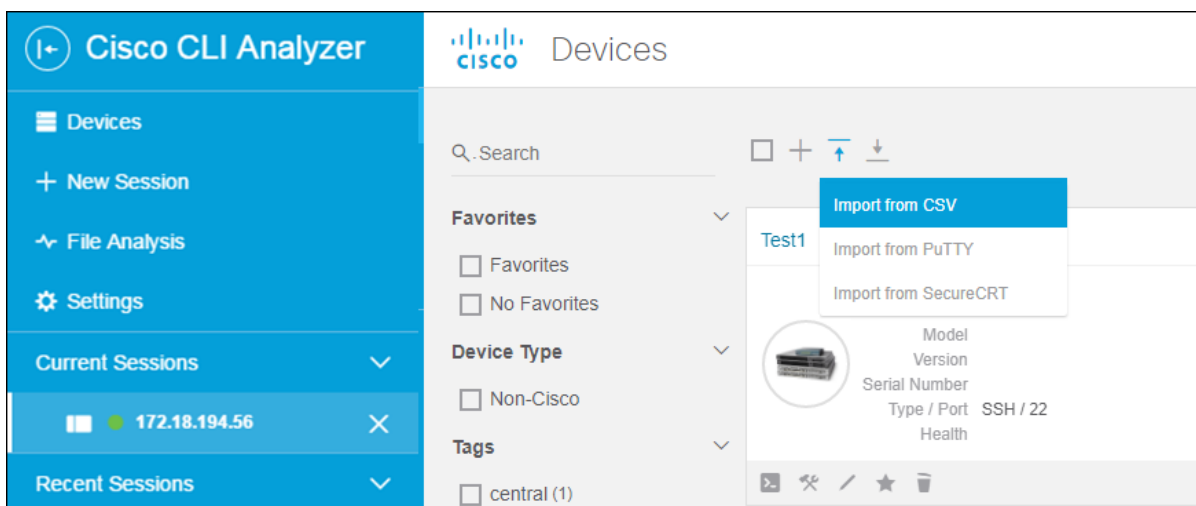
Note: Imported devices are configured to accept the default credential profile that is selected on the Security tab of the Settings window. If the default credential profile setting is Per Device, the imported devices will accept only their own credentials.

Complete the steps below to create a CSV file of devices and to upload the file to your device list.

Create a CSV File of Devices

You can create a CSV file with device information that can be imported to the Cisco CLI Analyzer on any workstation.

1. In the Devices window of the Cisco CLI Analyzer, click the **Import Devices** icon (↑) on the Device List toolbar. From the drop-down menu, choose **Import from CSV**.



2. Click the **Download Template** button to download a CSV template that shows recommended information and includes example data.
3. Open the CSV file in your preferred application, such as Microsoft Excel.

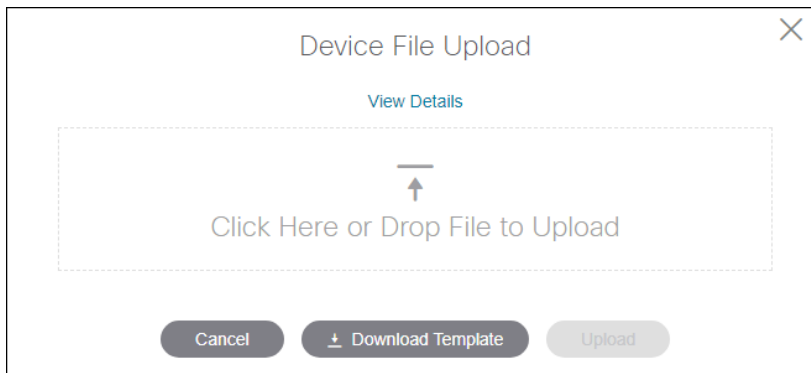
4. Enter information for each device on a separate row.
 - IP address **or** hostname (DNS) is required.
 - Protocol is required.
 - Other device information is optional and can be added from within the Cisco CLI Analyzer.

	A	B	C	D	E	F	G	H	I	J
1	Device Name	Detected Device Name	Serial Number	Location	IP Address / Hostname	Protocol	Port	Favorite	Tags	Manufacturer
2	SB-Branch-891		FTX160781E1	Santa Barbara	company-host	ssh	22	yes	SB 891 critical	Cisco
3	SJ-Branch-998		NJX160781F3	San Jose	192.169.37.5	telnet	23	no	testing	Cisco
4	SJ-Branch-997		NJX160781F2	San Jose	192.169.37.4	ssh	22	no	testing	Non-Cisco
5		SJ-Branch-996	NJX160781F1	San Jose	192.169.37.3	ssh	22	no	testing	Cisco

5. Save the completed template as a CSV file.

Upload a CSV File of Devices

1. In the Device File Upload dialog, complete one of these steps.
 - Click the **Click Here or Drop File to Upload** area. In the Open dialog, navigate to the CSV file you want to import, select it, and click **Open**.
 - Drag the CSV file from a separate window onto the drop area. Be sure that the icon below the pointer indicates that the file will be moved before you release the mouse button to drop the file.



2. Click **Upload** to import the devices from the CSV file into your device list.

Import Devices from PuTTY

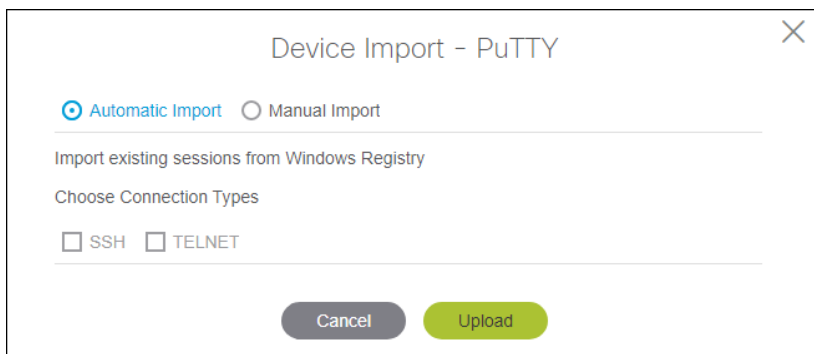
You can import devices to your device list from a PuTTY export file. There are two options: to import automatically with settings from the Windows Registry, or to import manually with a configuration file that you create.

Note: Imported devices are configured to accept the default credential profile that is selected on the Security tab of the Settings window. If the default credential profile setting is Per Device, the imported devices will accept only their own credentials.

In the Devices window of the Cisco CLI Analyzer, click the **Import Devices** icon (↑) and choose **Import from PuTTY** from the drop-down menu. Complete the steps for the automatic or manual import process.

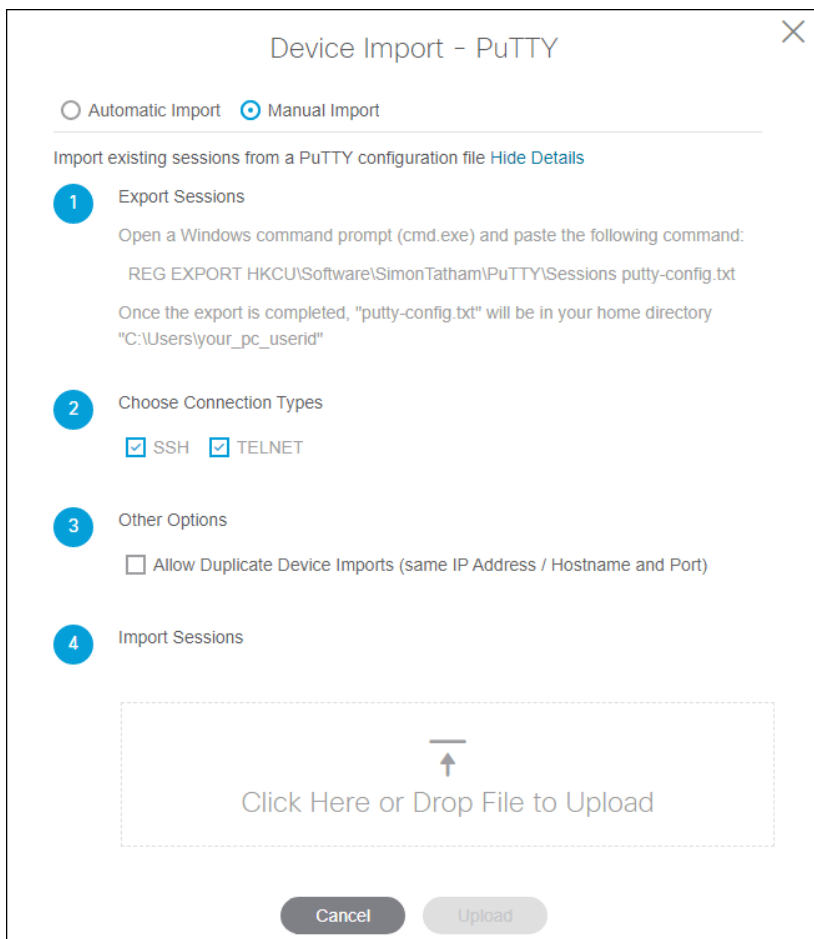
Use Automatic Import

1. Click the **Automatic Import** radio button.
2. Check the check box(es) for the connection type(s) to import: SSH and/or Telnet.
3. Click **Upload** and wait for the upload process to complete. Any errors during the upload are displayed in the bottom right corner of the application.



Use Manual Import

1. Select the **Manual Import** radio button.
2. Click **View Details** to expand the window and show step-by-step instructions.




-
3. Open a command shell window. At the command prompt, type (or copy and paste) this text:
REG EXPORT HKCU\Software\SimonTatham\PuTTY\Sessions putty-config.txt
 4. Press **Enter** to create the putty-config.txt file in your home user directory (such as C:\Users*your_user_name*).
 5. In the Device Import - PuTTY dialog, choose the connection type(s) to import: SSH and/or Telnet. Both check boxes are checked by default.
 6. Upload the PuTTY export file by one of these methods:
 - In Windows Explorer, open the folder that contains the PuTTY export file. Drag the file from Windows Explorer onto the drop area in the Device Import dialog.
 - Click the **Click here or drag & drop the file to upload** area in the Device Import dialog. Browse to the folder that contains the PuTTY export file, choose the file, and click **Open**.
 7. Click **Upload** and wait for the upload process to complete. Any errors during the upload are displayed in the bottom right corner of the application.

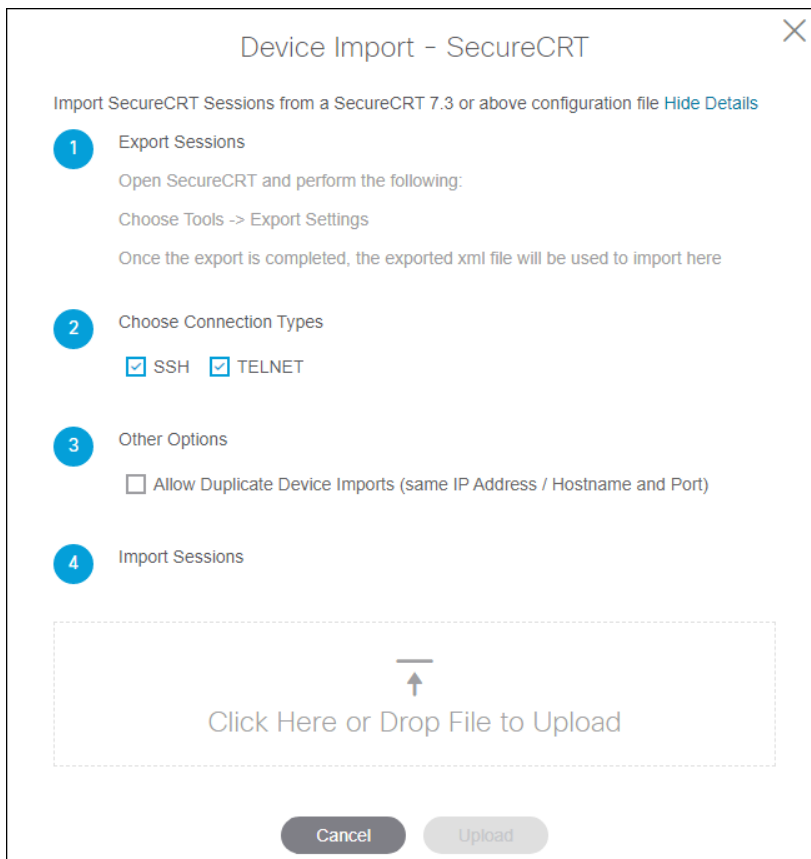
Import Devices from SecureCRT

You can import devices to the Device List from a SecureCRT export file.

Note: Imported devices are configured to accept the default credential profile that is selected on the Security tab of the Settings window. If the default credential profile setting is Per Device, the imported devices will accept only their own credentials.

1. In the Devices window of the Cisco CLI Analyzer, click the **Import Devices** icon () and choose **Import from SecureCRT** from the drop-down menu. Complete the steps for the automatic or manual import process.

2. Click **View Details** to expand the window and show step-by-step instructions.



3. Open SecureCRT. On the Tools menu, choose **Export Settings**. Complete the export process and note the location of the export file.
4. In the Device Import - SecureCRT dialog, choose the connection type(s) to import: SSH and/or Telnet. Both check boxes are checked by default.
5. Upload the SecureCRT export file by one of the following methods.
 - o In Windows Explorer, open the folder that contains the SecureCRT export file. Drag the file from Windows Explorer onto the drop area in the Device Import dialog.
 - o Click the **Click here or drag & drop the file to upload** area in the Device Import dialog. Browse to the folder that contains the SecureCRT export file, choose the file, and click **Open**.
6. Click **Upload** and wait for the upload process to complete. Any errors during the upload are displayed in the bottom right corner of the application.

Export Devices

You can export information about the devices in your device list to a CSV file. This allows you to transfer the information to another workstation.

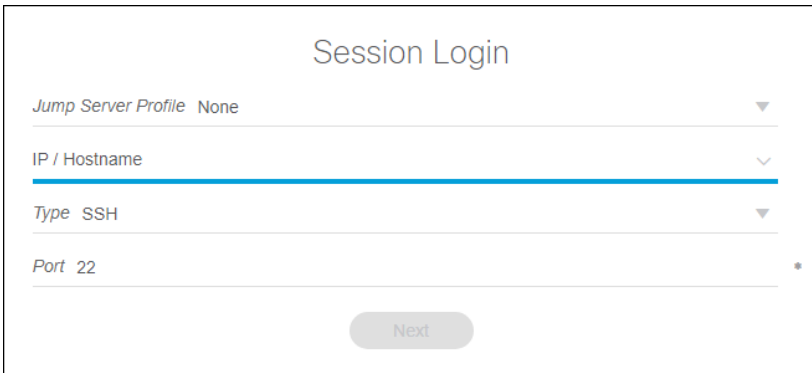
In the Devices window, click the **Export Devices** icon (↓) to save the CSV file to your computer.

Connect to a Device (SSH or Telnet)

Complete these steps to use the SSH or Telnet connection type to connect to a device.

1. In the Devices window, complete one of these actions to start a new session.
 - Click **New Session** in the left panel.
 - Click a device in the Recent Sessions list.
 - Click the **Connect** icon (▶) on the device card of a chosen device.
2. If you are prompted for basic connectivity information for the device, enter the requested information in the Session Login dialog and click **Next**. Otherwise, skip to step 3.
 - If you want to use a jump server, choose the desired profile from the **Jump Server Profile** drop-down list.

Note: This field is visible only if you have added at least one jump server profile to the Cisco CLI Analyzer. See the [Security tab](#) of the Settings window for more information.
 - Enter the IP address or hostname of the device in the IP/Hostname field. You can also click the arrow beside the field and choose a device from a recent session.
 - Choose the connection type (SSH or TELNET) that you want to use.
 - Enter the appropriate port number in the Port field.



The screenshot shows a 'Session Login' dialog box with the following fields and values:

- Jump Server Profile:** None
- IP / Hostname:** (empty)
- Type:** SSH
- Port:** 22

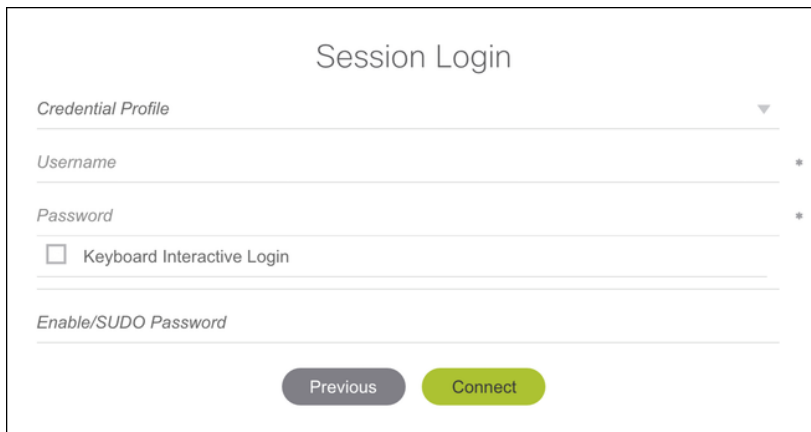
A 'Next' button is visible at the bottom of the dialog.

The Cisco CLI Analyzer checks for a connection to the device. If the device is found, the screen changes to accept login information.

3. From the Credential Profile drop-down menu, choose the desired profile to connect to the device.
 - To specify the device credentials individually, choose **Per Device** and fill in the information.
 - To use the default profile specified on the [Security tab](#), choose **Default** and skip to step 7.
 - To use one of the credential profiles you set up on the [Security tab](#), choose the desired profile and skip to step 7.

Note: This field is visible only if you have added at least one credential profile to the Cisco CLI Analyzer. See the [Security tab](#) of the Settings window for more information.

4. In the Username field, enter the username to use when connecting to the device.
5. In the Password field, enter the password to use when connecting to the device.
6. If your device has an enable or SUDO password, enter it in the Enable/SUDO Password field. If you leave this field empty, you will be required to enter the **enable** command and the password manually at the command prompt before you run scripts that require enable access.



The screenshot shows the 'Session Login' form. It includes a 'Credential Profile' dropdown menu, 'Username' and 'Password' text input fields with asterisks indicating they are required. Below these is a checkbox for 'Keyboard Interactive Login'. At the bottom is an 'Enable/SUDO Password' text input field. Two buttons, 'Previous' and 'Connect', are located at the bottom center of the form.

Note: For most devices and connections, the Keyboard Interactive feature should be off. Please check the [Frequently Asked Questions](#) for more information.

7. Click the **Connect** button to view the session window. The list of Current Sessions shows the newly established connection, with a green indicator confirming that the session is active.



Note: The status bar at the bottom of the window displays row and column count, as well as connection protocol, start time, and elapsed time.

By default, the **show version** (or appropriate) command runs automatically at every session. You can change how frequently this command runs on the General tab of the Settings window. You can also edit the frequency on individual devices.

After you are connected, you can perform the following actions.

- [Log your current session](#)
- [Work with shared device sessions](#)
- [Create a backup copy of the running configuration](#)
- [Run CLI commands](#)
- [Run Cisco CLI Analyzer scripts](#)
- [Search the command output](#)

Note: Click **Disconnect** to disconnect from the device. If your session times out and you are automatically disconnected, click **Reconnect**. You can also double-click the session in the Current Sessions list in the Devices window to reconnect.

Initiate an SSH Session from the Command Line

When you open the Cisco CLI Analyzer from the command line, you can add arguments to initiate an SSH device session immediately when the application opens.

Note: Ensure that no other instances of the Cisco CLI Analyzer are open before you proceed.

Use the command appropriate to your operating system.

- **Windows:** `C:\Program Files\Cisco Systems, Inc\Cisco CLI Analyzer\nw.exe "--ssh <username>@<deviceIP>"`
- **Mac OS:** `open "/Applications/Cisco CLI Analyzer.app" --args "--ssh <username>@<deviceIP>"`

Note: The <username> value is the account to use to log in to the device, and the <deviceIP> value is the IP address of the device.

Connect to a Device (Serial)

You can connect a PC to a COM port on the device. (Bluetooth wireless serial adapters are not supported.)

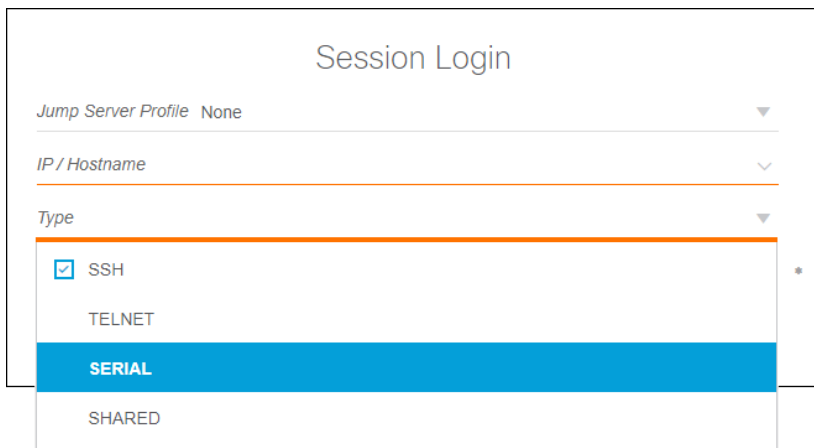
Serial connections differ from SSH/Telnet connections in several ways.

- Serial connections do not create entries in the Devices list for the connected devices.
- Serial connections do not support device identification, system diagnostic tools, or hardware flow control.

Complete these steps to connect to a device using a serial connection type.

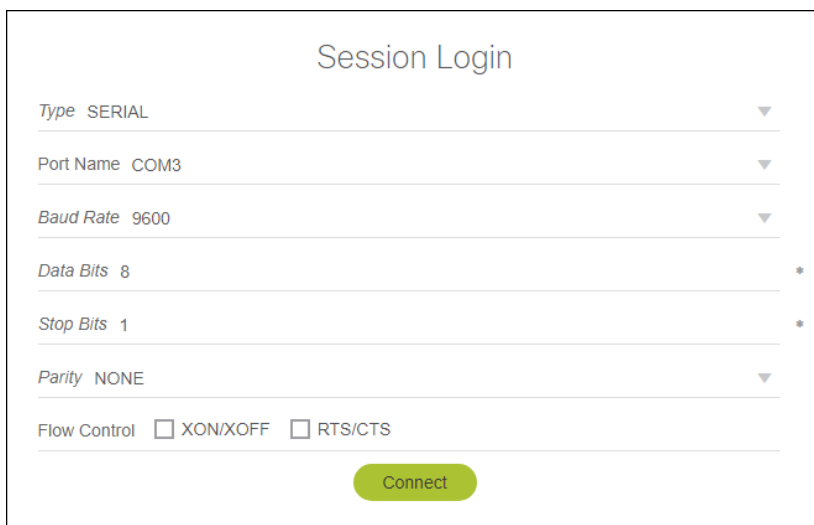
1. In the Devices window, complete one of these actions to open the Session Login dialog.
 - Click **New Session** in the left panel.
 - Click a device in the Recent Sessions list.

- In the Type field, choose **SERIAL** from the drop-down list.



The screenshot shows the 'Session Login' form. The 'Type' dropdown menu is open, displaying options: SSH (checked), TELNET, SERIAL (highlighted in blue), and SHARED. Other fields like 'Jump Server Profile' (None) and 'IP / Hostname' are visible but not selected.

- Choose the COM port to use for the connection, then enter information in the remaining fields.



The screenshot shows the 'Session Login' form with the following fields filled: Type: SERIAL, Port Name: COM3, Baud Rate: 9600, Data Bits: 8, Stop Bits: 1, Parity: NONE. The Flow Control section has checkboxes for XON/XOFF and RTS/CTS, both of which are unchecked. A green 'Connect' button is located at the bottom center.

- Click the **Connect** button to launch the session.
- Enter your user credentials at the command prompt.

Note: These credentials are not stored; you must enter them every time you open a serial device connection.

Send Break

While the serial connection is active, you can enter a "send break" command by either of the following methods.

- Press **Ctrl+Shift+S**.
- Right-click inside the console window and choose **Send BREAK** from the context menu.

Note: This functionality requires a USB/serial adapter and a Cisco device that both support Send Break. You must also trigger a Send Break at the correct time during the reboot of a Cisco device.

View a Device Session in a Separate Window

See a [demonstration video](#) of this feature.

On the [General tab](#) of the Settings window, you can enable the option to open every device session in a separate window by default.

You can also manually detach an existing session from the main window or reattach a session to the main application window.

To change a window from attached to detached or vice versa, click the icon on the right end of the session status bar.

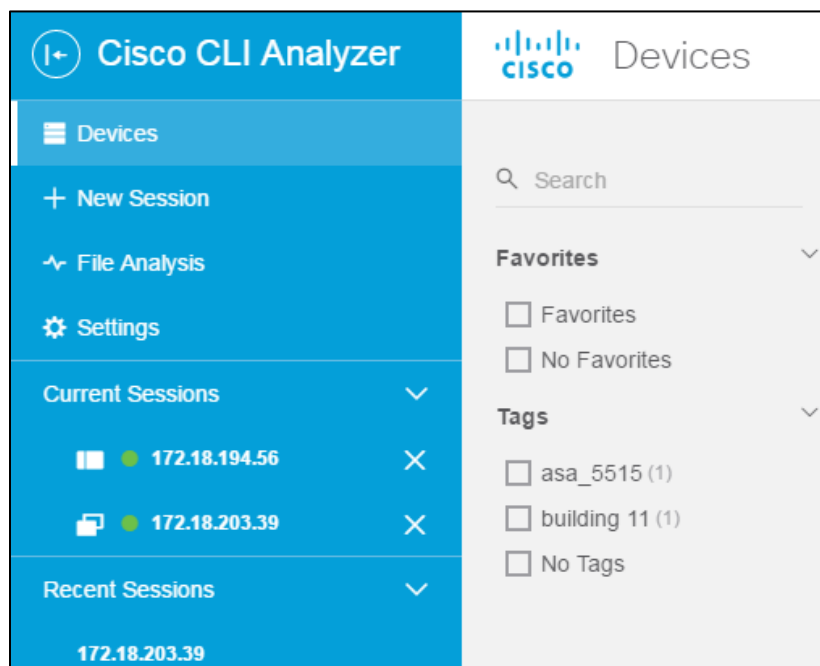
- Window is currently detached



- Window is currently attached



On the sidebar, the list of current sessions displays an icon that indicates whether the session is attached to the main application window or in a separate window.

A screenshot of the Cisco CLI Analyzer sidebar. The sidebar is divided into two main sections. The left section is a blue sidebar with the following items: 'Cisco CLI Analyzer' (with a back arrow icon), 'Devices', '+ New Session', 'File Analysis', 'Settings', 'Current Sessions' (with a dropdown arrow), and 'Recent Sessions' (with a dropdown arrow). Under 'Current Sessions', there are two entries: one with a window icon and IP '172.18.194.56', and another with a window icon and IP '172.18.203.39'. The right section is a light gray sidebar with the following items: 'Cisco Devices', a search bar, 'Favorites' (with a dropdown arrow), 'Tags' (with a dropdown arrow), and a list of tags: 'asa_5515 (1)', 'building 11 (1)', and 'No Tags'. Each tag has a checkbox next to it.

Work With Shared Device Sessions

You can use shared device sessions to train users and help troubleshoot problems when peer-to-peer connections are available.

The session initiator retains control of the session and can grant read/write permissions to one remote user at a time. Other remote users are limited to read-only access.

Note: Shared sessions are only supported on internal networks. Shared session connections via the Internet or through NATs and firewalls are not yet supported.


Note: Shared sessions use AES-256 encryption.

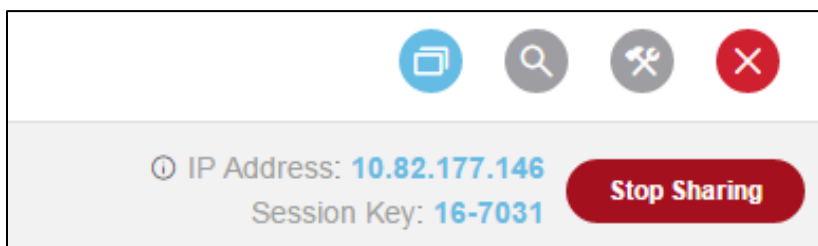
See a [demonstration video](#) of this feature.

Create and Manage a Shared Session

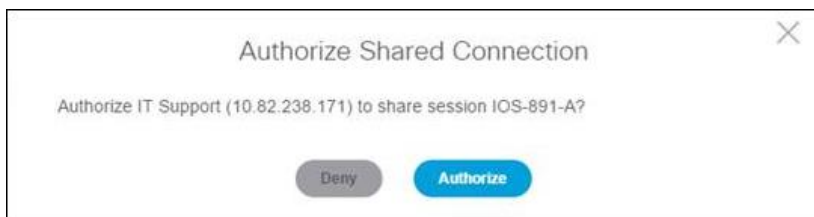
Complete these steps to use the SSH or Telnet connection type to connect to a device.

Note: Ensure that session sharing is enabled on the [Advanced tab](#) of the Settings window.

1. Connect to a device normally. Choose the **SSH** or **TELNET** connection type.
2. In the session window, click the Share icon () to show the Shared Session toolbar.
3. Click **Share Session**.
4. Provide information from the toolbar to remote users who want to join.
 - o IP address of the PC on which you have initiated the shared session
 - o Port number
 - o Session key



5. When a remote user joins the session, a confirmation dialog prompts you to authorize the connection. Click the **Authorize** button.



6. The remote user's name appears in a button on the toolbar. Click the button to access session options for the remote user.

While the shared session is active, you can perform these actions.

- **Give write permissions to a remote user:** Click the user's button and choose **Give Write Permissions**. If another user already has this permission level, it is transferred to the new user.
- **Revoke write permissions:** This option only appears for a remote user with write permission. Click the user's button and choose **Revoke Write Permissions**.
- **Disconnect a remote user:** Click the user's button and choose **Disconnect User**.
- **Stop sharing the session:** Click the **Stop Sharing** button on the toolbar. If you subsequently share the same session again, a new session key is generated that you must provide to remote users.
- **Work in other device sessions:** You can leave the shared session open and switch to a different session. A remote user with write permissions can continue to work in the shared session. The Current Sessions list displays **[Shared]** beside each active shared session.

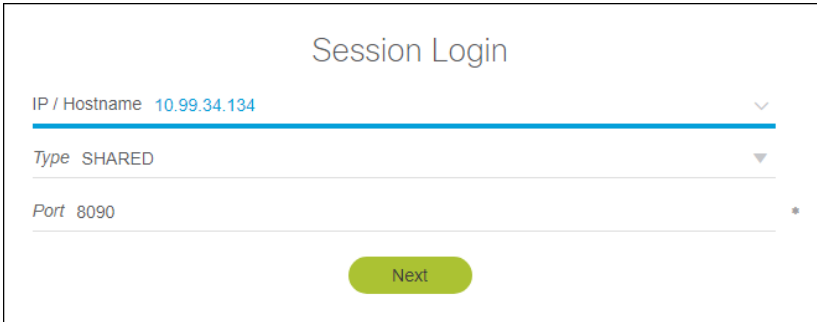
Join a Shared Session

To join a shared session, you must have this information (provided by the session initiator):

- IP address of the device
- Port number
- Session key

Complete these steps to create a shared device session.

1. In the Devices window, complete one of these actions to start a new session.
 - Click **New Session** in the left panel.
 - Click a device in the Recent Sessions list.
 - Click the **Connect** icon (➤) on the device card of a chosen device.
2. If you are prompted for basic connectivity information for the device, enter the requested information and click **Next**. Otherwise, skip this step and continue to step 3.
 - Enter the IP address or hostname of the device in the IP/Hostname field. You can also click the arrow beside the field and choose a device to which you have connected in a recent session.
 - From the Type drop-down menu, choose **SHARED**.
 - Enter the port number that the session initiator provided.



The screenshot shows a 'Session Login' form with three input fields and a 'Next' button. The first field is labeled 'IP / Hostname' and contains the value '10.99.34.134'. The second field is labeled 'Type' and has a dropdown menu showing 'SHARED'. The third field is labeled 'Port' and contains the value '8090'. A green 'Next' button is located at the bottom center of the form.

3. Click the **Next** button.
4. Enter a name by which to identify yourself in the shared session.
5. Enter the session key that the session initiator provided.
6. Click the **Connect** button.

After the session initiator authorizes your connection, the session window opens.

If the session initiator gives you write permissions, you can run commands and use analysis tools in the shared session. Results for the analysis tools that you run appear only on your client; the session initiator does not see them.

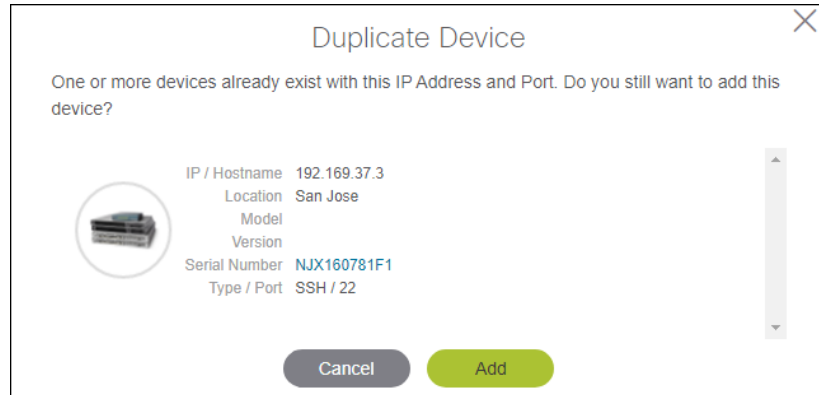
Work with Duplicate Devices

The Cisco CLI Analyzer lets you add devices that reside on different networks but use the same IP address or hostname and the same port.

Add a Device on a Different Network

When you add a new device to the Cisco CLI Analyzer, if the IP address or hostname and the port are identical to a device that is already in the database, the Duplicate Device window opens and displays information about the existing device.

If the existing device is the same as the one you are adding, click **Cancel** to avoid creating a duplicate entry. If it is a different device with the same IP address and port but on a different network, click **Add**.



Import Devices on a Different Network

When you import devices from a file, check the **Allow Duplicate Device Imports** check box to create a new entry for a device that has the same IP address or hostname and port as an existing device.

Before using this option, ensure that the imported devices are on different networks and are not duplicates.

Start Device Session

The Cisco CLI Analyzer assumes that you will use the New Session feature to connect to a device that is not in the database. When you click **New Session** and enter the IP/hostname and port of a device that is in the database, the Pick Session Device window opens and displays information about the existing device.

Click **Use Device** to create a session with the existing device. Alternatively, click **New Device** to create a new entry for a device with an identical IP address or hostname and port on a separate network.

Use Application Features

Use Keyboard Shortcuts

The table below shows the keyboard shortcuts that are supported on the Windows and OS X platforms. If no operating system is specified, the shortcut works on all supported platforms. Some functions have a shortcut that works on all platforms as well as additional shortcuts for specific operating systems.

Function	Shortcut
Start new session	Alt+Q
Copy selected item to clipboard	<ul style="list-style-type: none">Windows: Ctrl+COS X: Cmd+C
Search console	<ul style="list-style-type: none">Windows: Ctrl+FOS X: Cmd+F
Select all text	<ul style="list-style-type: none">Windows: Ctrl+AOS X: Cmd+A
Copy and paste	Ctrl+B
Open Favorite Commands list in console	Alt+F
Switch to previous tab	Ctrl+Shift+Tab
Switch to next tab	Ctrl+Tab
Paste clipboard contents	<ul style="list-style-type: none">Windows: Ctrl+VOS X: Cmd+V
Scroll down one page	Page Down
Scroll up one page	Page Up
Toggle full screen	<ul style="list-style-type: none">All platforms: Shift+FWindows: F11OS X: Cmd+F

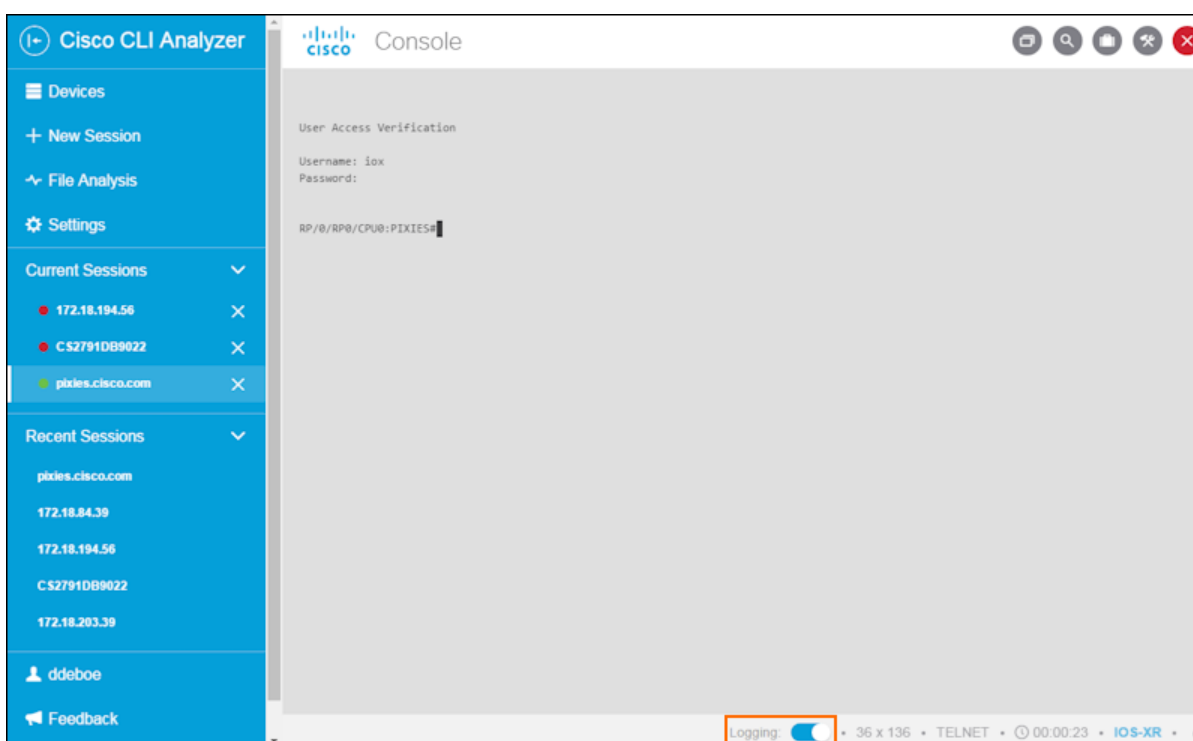
Log Your Current Session

The Cisco CLI Analyzer allows you to capture your current console session and save the output to your local computer.

Note: An option on the [General tab](#) of the Settings window lets you log session activity automatically when you connect to a device and save the log file automatically when you disconnect. For more information, see how to [automatically enable session logging](#).

Complete these steps to log your current session.

1. Connect to a device as described in [Connect to a Device](#).
2. If the Logging toggle button is in the left (off) position, click the button to activate the feature and start the session log.



3. When you complete the session, click the **Logging** toggle button to save the log.
4. In the Save As dialog window, navigate to a location on your computer and click the **Save** button. By default, the Cisco CLI Analyzer saves log files to these locations.
 - o **Windows:** C:\Users\\Cisco-CLI-Analyzer_Session_Logs
 - o **Mac OS X:** /Users/<userid>/Cisco-CLI-Analyzer_Session_Logs

Work With Tags for Your Devices


(See a [demonstration video](#) of this feature.)

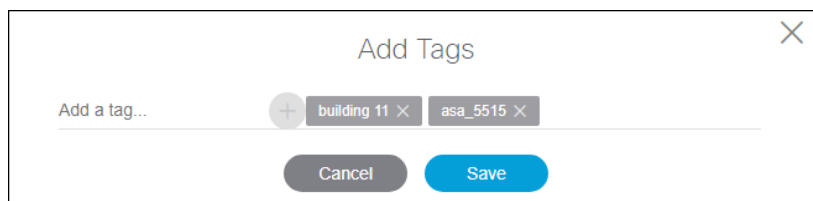
Tags can help you organize devices and filter your device list quickly. Assign tags to your devices to locate them easily without needing to navigate hierarchical trees.

Tags can include these types of characters:

- Lowercase letters (uppercase letters are automatically converted to lowercase)
- Numbers
- Spaces
- Hyphens (-)and underscores (_)


Complete these steps to add tags to a group of devices.

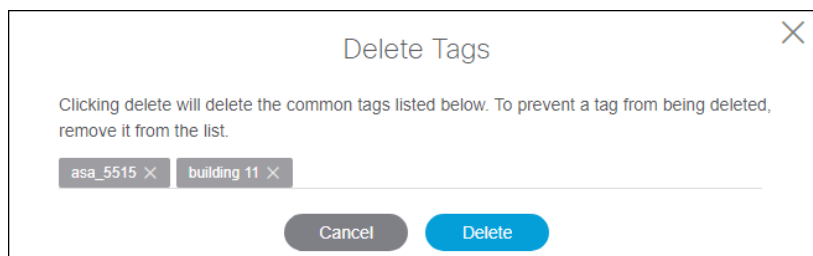
1. In the Devices window, click the check mark (☑) or check box (☐) the devices you want to tag.
2. Click the **Bulk Actions** button (), then choose **Add Tags** from the drop-down menu.
3. In the Add Tags dialog, click **Add a tag...** and type the desired tag. Press **Enter** or click the **Add** icon (⊕). Repeat this step for each tag that you want to add.



4. Click the **Save** button to add the tags to the selected devices.

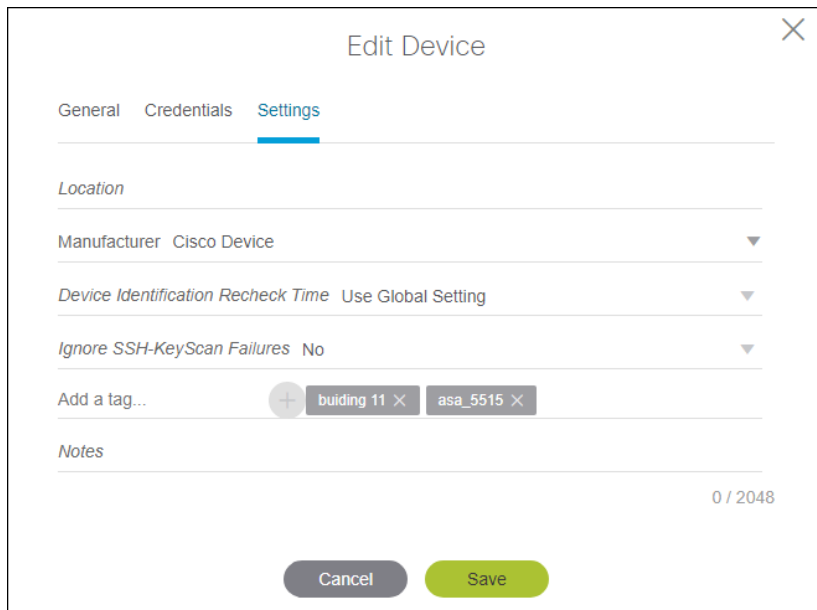
Complete these steps to remove device tags from a group of devices.

1. In the Devices window, click the check mark (☑) or check box (☐) the devices you want to tag.
2. Click the **Bulk Actions** button (), then choose **Delete Tags** from the drop-down menu.
3. In the Delete Tags dialog, click the **X** on any tags that you want to keep.



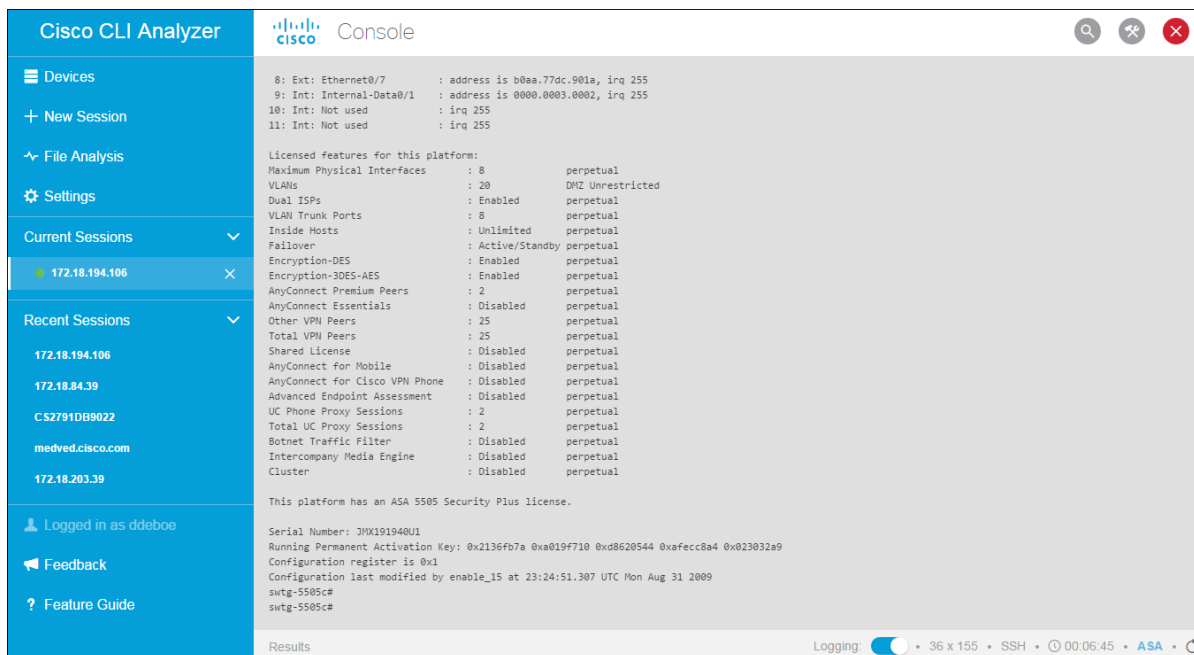
5. Click the **Delete** button to delete all the tags shown.

To add or delete tags for a single device, click the **Edit** icon (✎) for the device and click the **Settings** tab. Add or delete tags, then click the **Save** button.



Run CLI Commands

To run CLI commands, connect to a device as described in [Connect to a Device](#), enter a command at the command prompt, and press **Enter**.

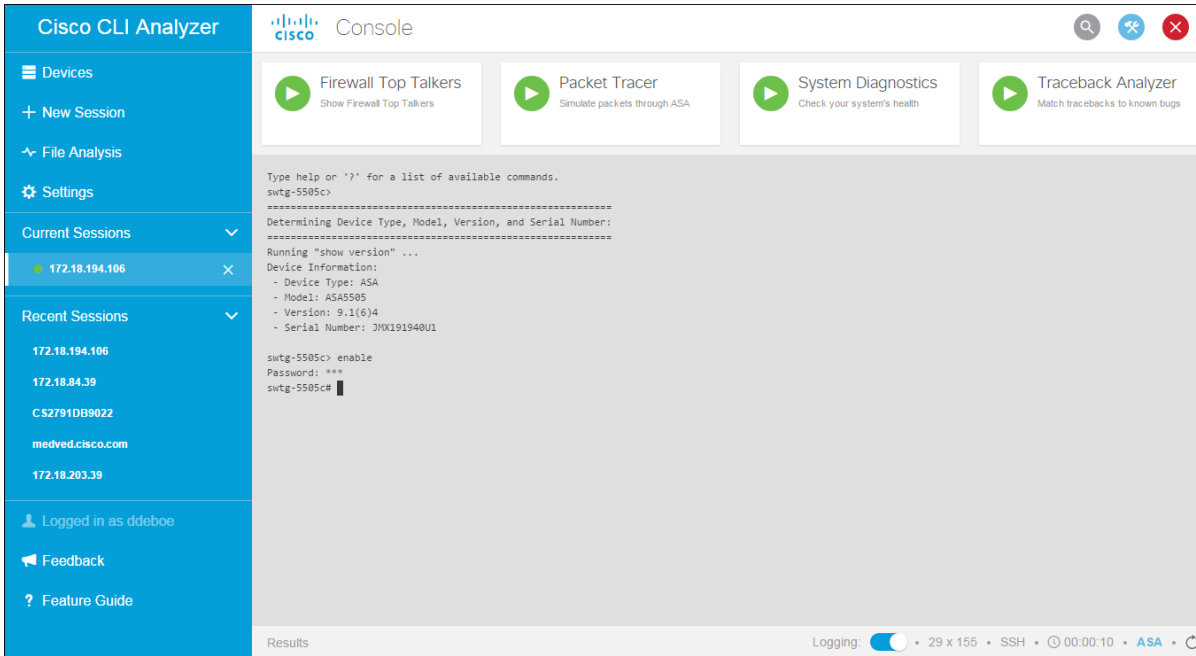


Run Cisco CLI Analyzer Scripts

The Cisco CLI Analyzer allows you to run scripts to help identify, troubleshoot, and resolve problems that you might experience in support of your ASA, IOS, IOS-XE, or IOS-XR device. These scripts appear in the Tools panel of a device’s session window.

Complete these steps to run a Cisco CLI Analyzer script.

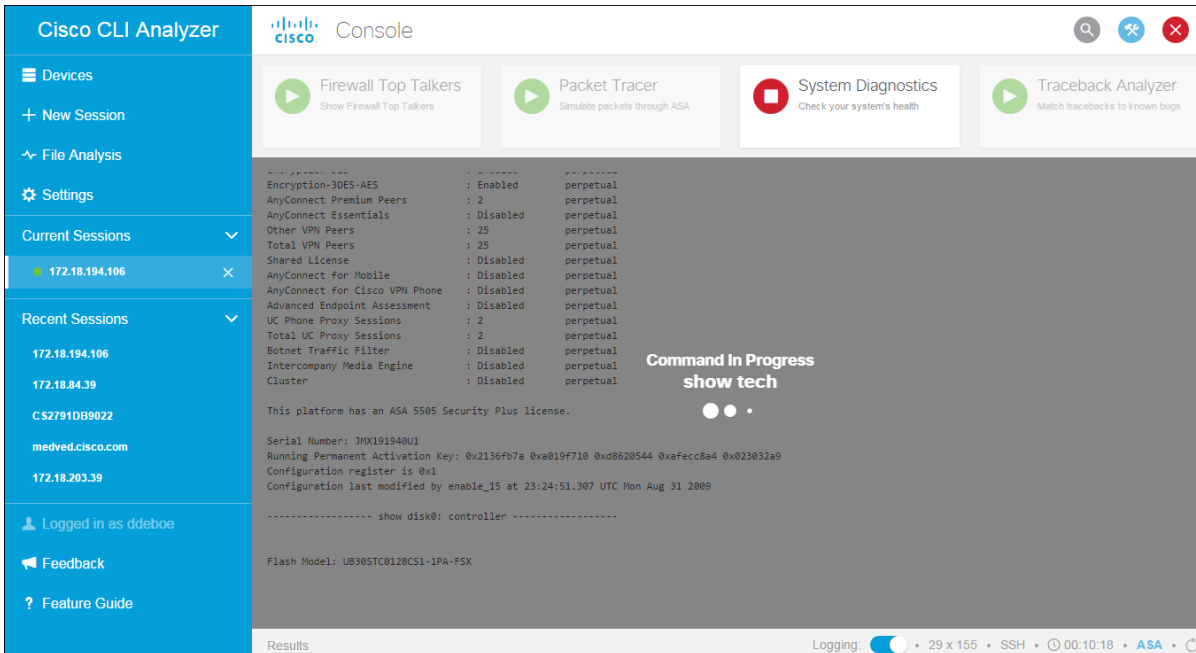
1. Connect to a device as described in [Connect to a Device](#). If the Tools panel is hidden, click the Tools icon (🔧) to display the panel.



2. Click the **Run** icon (▶) for the script that you want to run.
3. If prompted, enter additional settings for the tool.

Note: If Enable access is required, the Cisco CLI Analyzer will prompt you for credentials before the script runs.

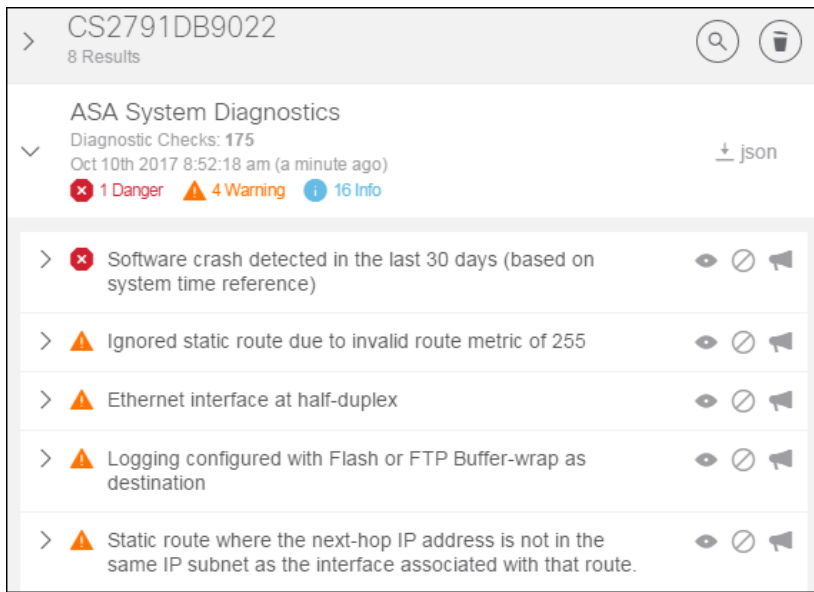
4. Wait for the script to complete or click the Halt icon (■) to stop the script.





- When the script completes, the Tool Results window opens with information from the session.

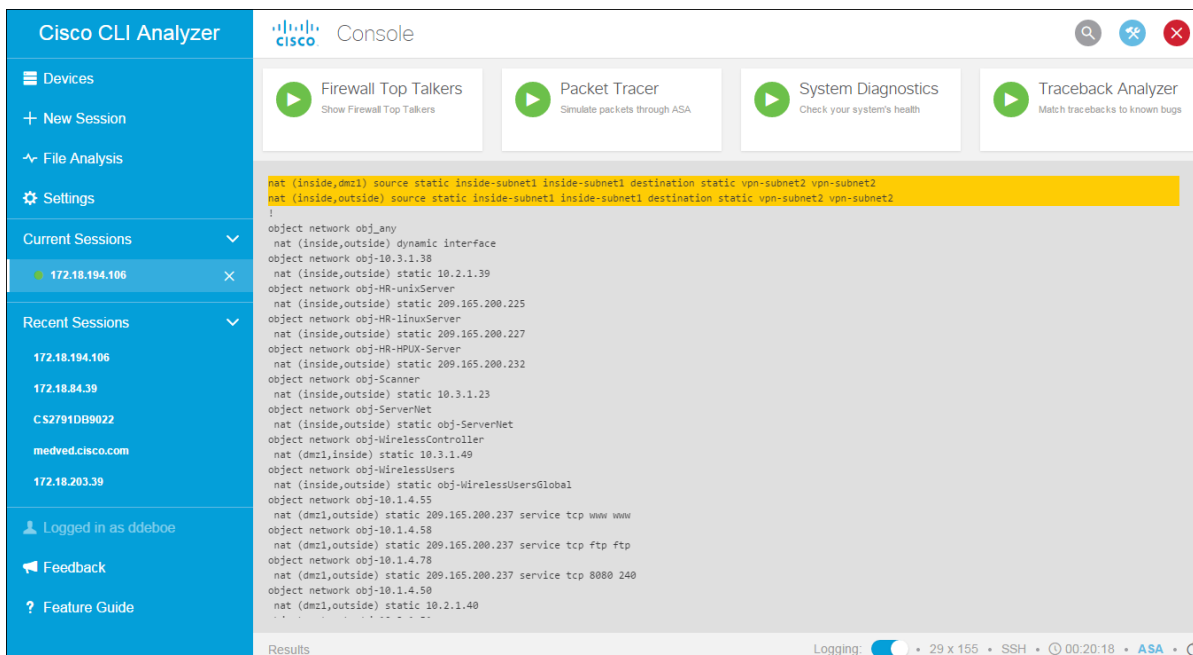
Note: If the Tool Results window does not open, click **Results** in the bottom left corner of the session window.

- Click an item in the Tool Results window to view additional details. The Tool Results window displays the most recent 25 results per device and retains this information even if you close the window or the Cisco CLI Analyzer application. (See a [demonstration video](#) of this feature.)



- Click the **View**  icon beside an item in the Results list to highlight and display the associated text in the session window.

Note: This feature applies only to System Diagnostic tools. If you are connected to an IOS-XR device, the text highlighting feature is not available and the  icon is not present.

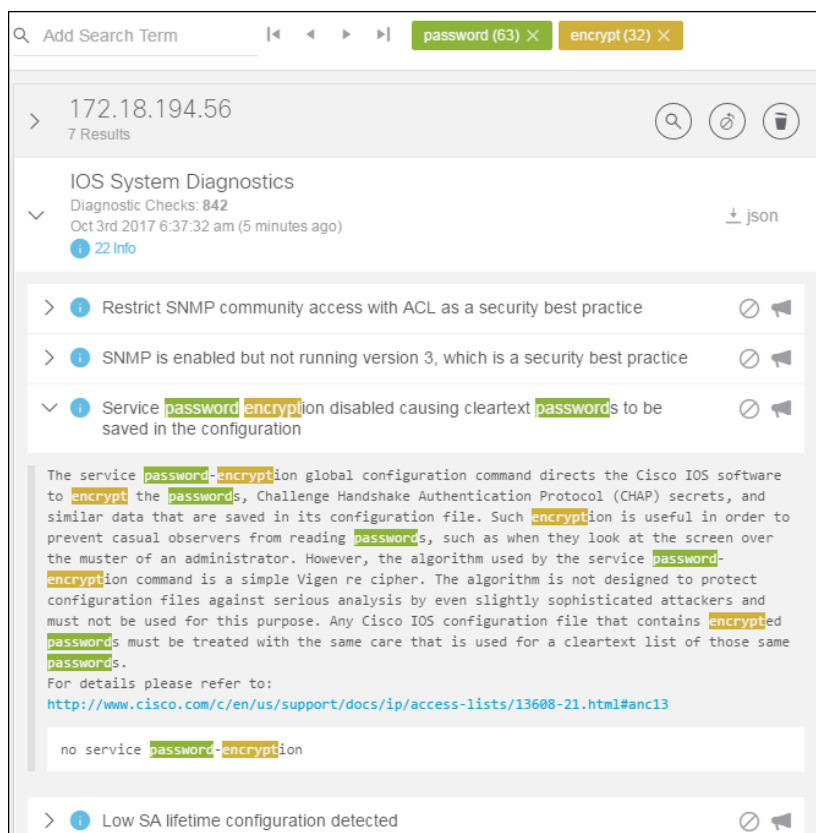


- Click **json** in the top right corner of the Results area to export the results to a .json file.

Search the Tool Results Window

A large amount of information can appear in the Tool Results window. Use the search feature to help locate information that is of interest.

1. Click the **Search** icon (🔍) to open the Search bar at the top of the Tool Results window.
2. Type a search term in the box and press **Enter**. Sections of the Tool Results window that contain the search term expand automatically and highlight the term. The search term appears in a box on the Search bar, along with the number of times the term occurs. Up to five search terms can be active at the same time. To remove a search term, click the **X** beside it on the Search bar.
3. Use the arrow buttons beside the search box to jump to the first, previous, next, or last occurrence of the search term in the Tool Results window.



Filter Diagnostic Events

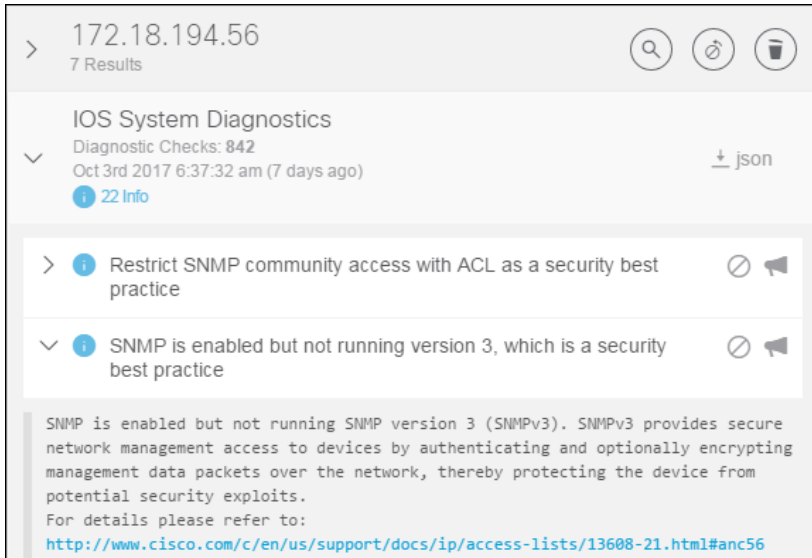
Some events that appear in the Tool Results window might be acceptable for your environment. You can filter the list to hide events that are not relevant to your network.

The following tools support event filtering.

- ASA System Diagnostics
- IOS System Diagnostics
- IOS-XE System Diagnostics
- IOS-XR System Diagnostics

- NX-OS System Diagnostics
- WLC Show Run Diagnostics
- WLC Show Tech Diagnostics

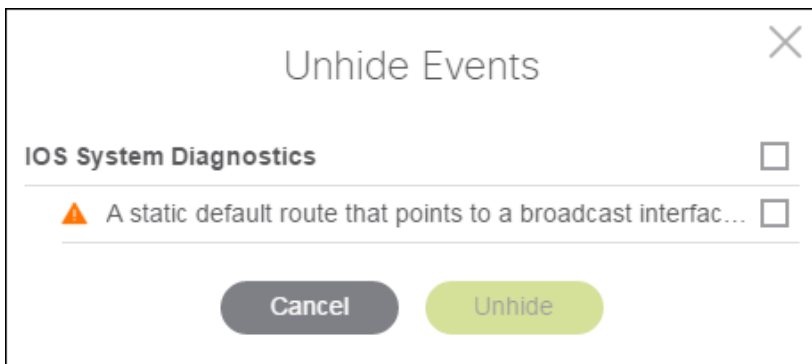
To hide an event in the Tool Results window, click the **Hide** icon (🔇) beside that event.



To stop hiding an event, click the **Unhide** icon (🔊) at the top of the window to see a list of hidden events.



Select the event(s) that you want to show and click the **Unhide** button.



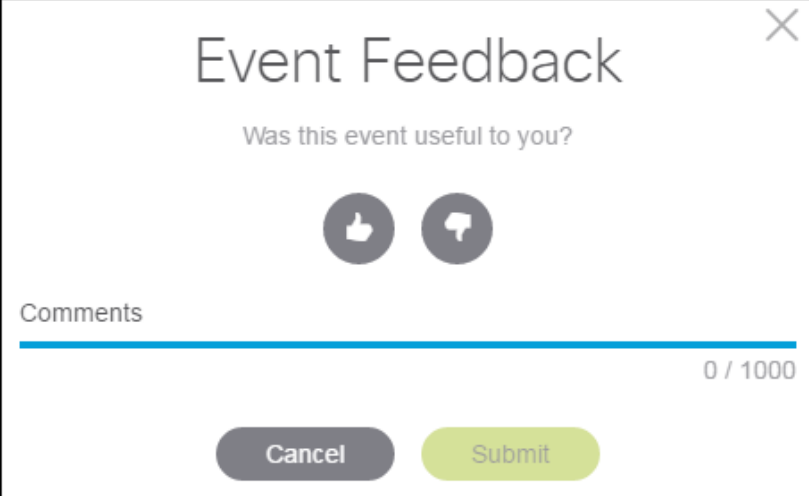
Send Feedback About Diagnostic Events

If your contract permits it, you can send feedback about the events the diagnostic tools report. This feedback helps Cisco improve the usefulness of the information the diagnostic tools provide.

The following tools support feedback.

- ASA System Diagnostics
- IOS System Diagnostics
- IOS-XE System Diagnostics
- IOS-XR System Diagnostics
- NX-OS System Diagnostics
- WLC Show Run Diagnostics
- WLC Show Tech Diagnostics

To send feedback for an event in the Tool Results window, click the Feedback icon (🗨️) beside that event. Type your feedback and click the **Submit** button.

A screenshot of a dialog box titled "Event Feedback" with a close button (X) in the top right corner. The main text asks "Was this event useful to you?". Below this are two circular buttons: a thumbs-up icon and a thumbs-down icon. Underneath is a text input field labeled "Comments" with a blue underline and a character count "0 / 1000" on the right. At the bottom are two buttons: "Cancel" (grey) and "Submit" (green).

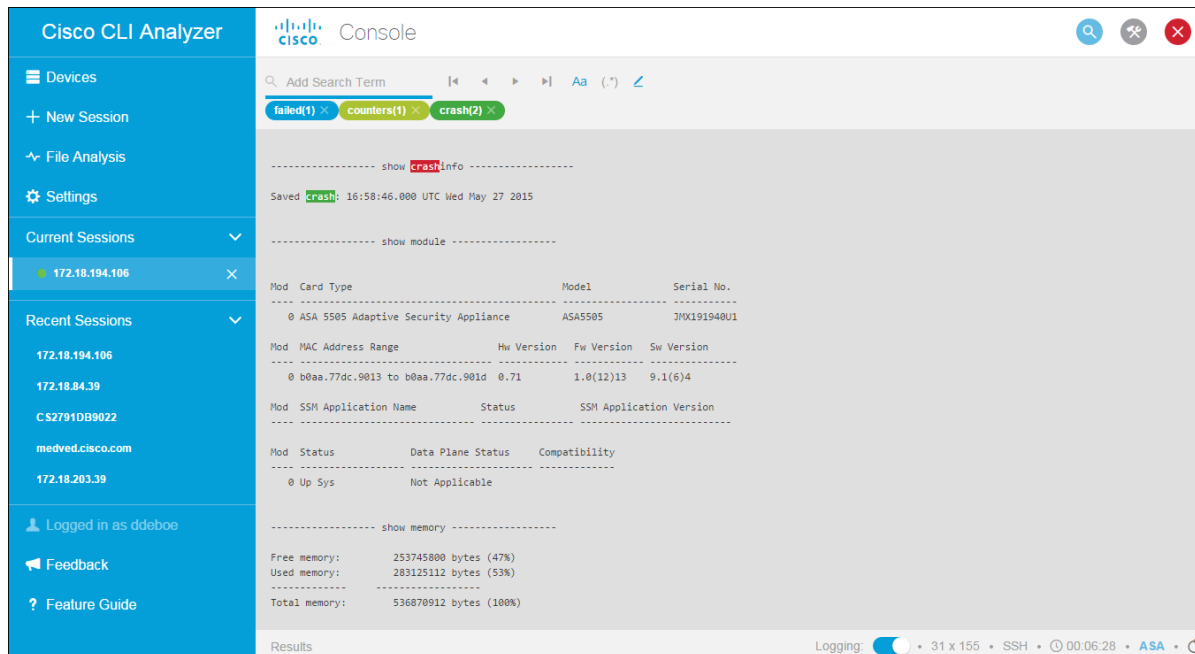
Search the Command Output

The Cisco CLI Analyzer includes a highlight feature that enables real-time search capabilities in the console window to search command output. (See a [demonstration video](#) of this feature.)

Complete these steps to search the command output.

1. Hover over the Highlight icon (🔍) and check the tooltip to ensure that search result highlights are enabled. If highlights are disabled, click the icon to enable highlights.
2. Enter a term in the search field, then press **Enter** or **Tab**. You can add up to five terms for a search query.

The specified search terms appear beside the search field along with the number of results for each term. Search results appear highlighted in the command window.




Note: Results are highlighted according to the colors assigned to each search term on the [Display tab](#) of the Settings window. The search term that is currently selected is highlighted in red.

3. Use the arrow buttons beside the search box to jump to the first, previous, next, or last occurrence of the search term in the Tool Results window.
4. To restrict search results to case-sensitive matches, click the **Case Sensitive** icon (**Aa**).
5. To enable or disable regular expressions, click the **RegEx** icon (**(.*)**).
6. **Note:** RegEx is used to create wildcards or substitutions in your searches. This feature [supports a specific set of expressions and characters](#).
7. To remove a search term, click the **X** for the search term in the search field.


Create a Backup Copy of the Running Configuration

From within a device session, you can save a text file that contains a copy of the device's running configuration. This feature is available on ASA, IOS, IOS-XE, IOS-XR, NX-OS, and WLC platforms.

On the toolbar of the device session window, click the **Back Up** icon (). The device executes the **show running-config** command. Navigate to the folder where you want to save the backup file and click **Save**.

Create and Update Support Cases

You can open a support case for an eligible device on the Devices list. (See demonstration videos showing how to [create a support case](#) and how to [attach a file to a support case](#).)

Devices with support coverage have a Support Cases icon () displayed in the Actions column (List view) or the Actions bar of the device tile (Grid view). A dark gray icon indicates that the device has support coverage. A light gray icon indicates that the device is not covered or that your user account does not have permission to perform support case actions for the device.

Complete these steps to create a new support case for a device.

1. Click the Support Cases icon (📁) for the device, then choose **Open a new Case** from the drop-down menu.

Open a Case

S/N FTX16148509

Fix my Problem Answer my Question Request an RMA

Technology* Sub-Technology* Problem*

* This will help expedite your case by routing it to the appropriate support team

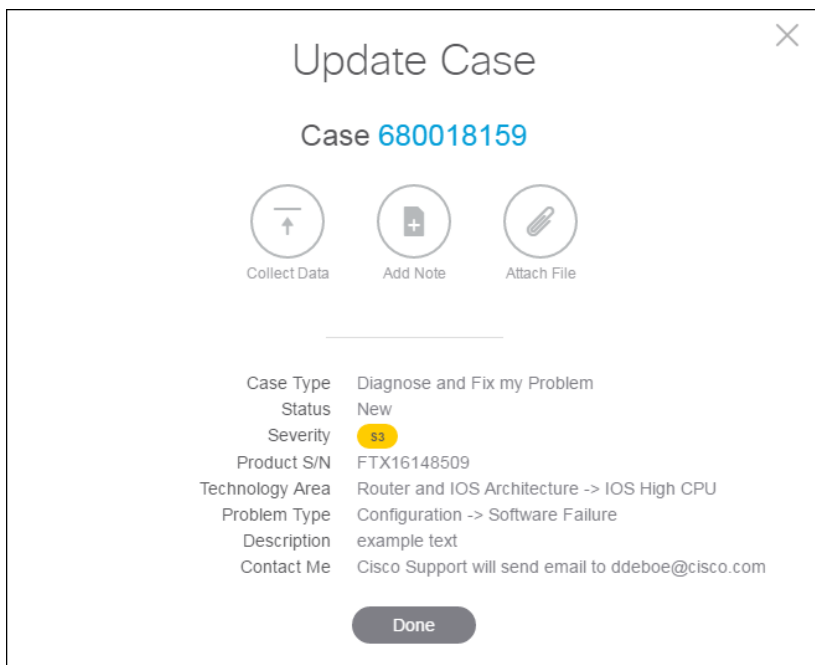
Description 0 / 240

Cancel Submit

2. Click the icon for the type of support you need: Fix my Problem, Answer my Question, or Request an RMA.
3. From the Technology drop-down menu, choose the category of technology for the case.
4. From the Sub-Technology drop-down menu, choose the sub-category of technology for the case.
5. From the Problem drop-down menu, choose the category that best describes the type of problem.
6. On the Description line, enter a short description of the issue. (If you selected Answer my Question, enter your question in this box.)
7. Click the **Submit** button to see a summary of the case, including a case number. You can click the case number to view the case on the Cisco Support Website.

Complete these steps to review or update a support case.

1. Click the Support Cases icon (📁) for the device, then choose the case number that you want to review or update.



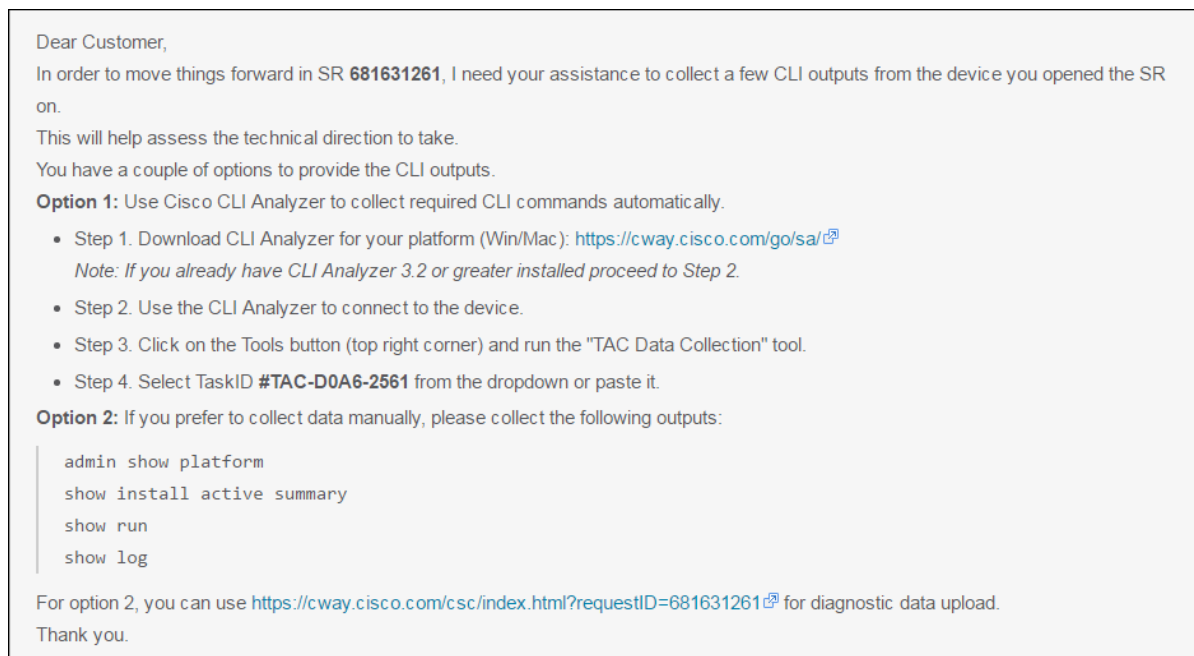
2. Click the icon for the action that you want to perform: Collect Data, Add Note, or Attach File.
 - **Collect Data:** If you are creating a new case, you should perform this step if the device platform supports it. If you are updating a case, perform this action if a TAC engineer instructs you to do so. Click **Continue** on the Collect Data dialog and then follow the normal procedure to connect to a device session.
 - **Add Note:** Enter a short description of the note in the Title box, and enter the body of the note in the Details box. Click the **Submit** button to create the note.
 - **Attach File:** Drag a file from Windows Explorer onto the drop area of the Attach Files dialog, or click inside the area and use the Open dialog to select a file to attach. Click the **Submit** button to attach the file.
3. Click the **Done** button when you are finished.

Collect TAC Data

The TAC Data Collection tool allows a TAC engineer to specify one or more diagnostic commands to run on a device. The tool runs the commands and uploads the results to the support case. (See a [demonstration video](#) of this feature.)

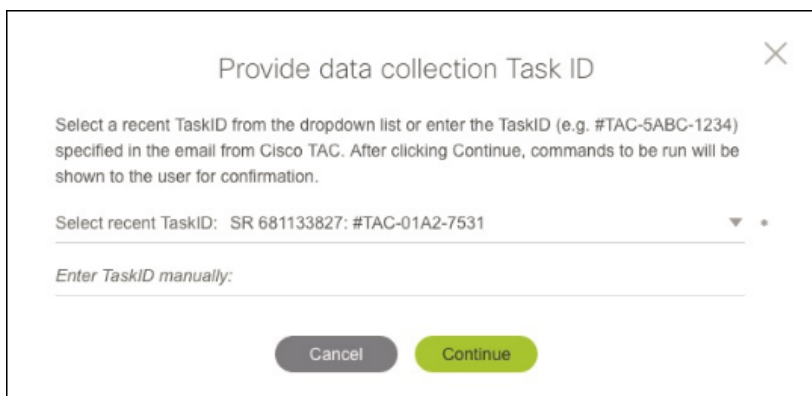
The TAC engineer sends an email to you that contains a TaskID. The TaskID appears in the subject line of the email and takes the format of **#TAC-X1Y2-3456**.

The image below shows an example email:



After you receive the email, complete the following steps to collect the required data.

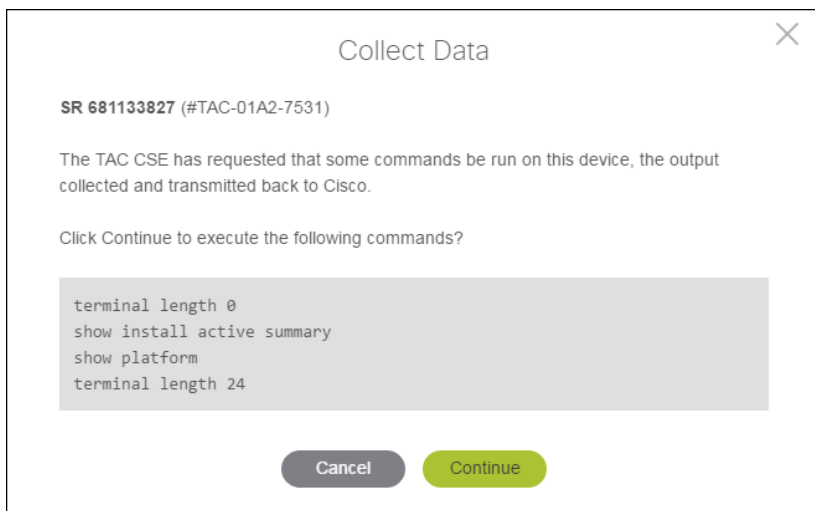
1. Connect to the device that the TAC engineer specified. If the Tools panel is hidden, click the Tools icon (🔧) to display the panel.
2. Click the **Run** icon (▶) for the TAC Data Collection tool to open the data collection dialog.



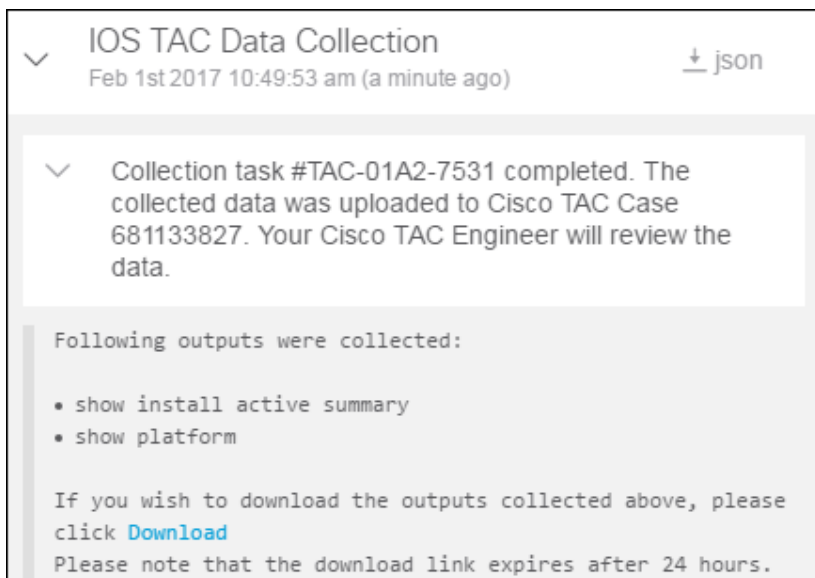
3. Enter the TaskID from the TAC email.
 - If your CCO ID is the case contact, choose the TaskID from the drop-down menu.
 - If you are not the case contact, then your username is not associated with the service request. Enter the TaskID manually by typing or pasting it.

Note: A TaskID entered manually takes priority over one chosen from the drop-down menu.
4. Click **Continue**.

- The Cisco CLI Analyzer retrieves the list of commands and displays them. The first command always sets the terminal length to zero, and the last command always restores the original length. The other commands collect the data required by the TAC engineer.



- Click **Continue** to execute the listed commands and upload the output to the TAC case.
- The Tool Results window displays the TaskID, the case number, and a link to download the collected outputs. The TAC engineer is notified of the collection and will communicate the analysis and action plan to you.



Analyze Offline Files

The Cisco CLI Analyzer can analyze a text file (with an extension of .text or .txt) that contains the command output from a previous device session. The text file can also be compressed with supported compression formats that include ZIP (.zip), GZIP (.gz), 7-ZIP (.7z), and RAR (.rar). (See a [demonstration video](#) of this feature.)

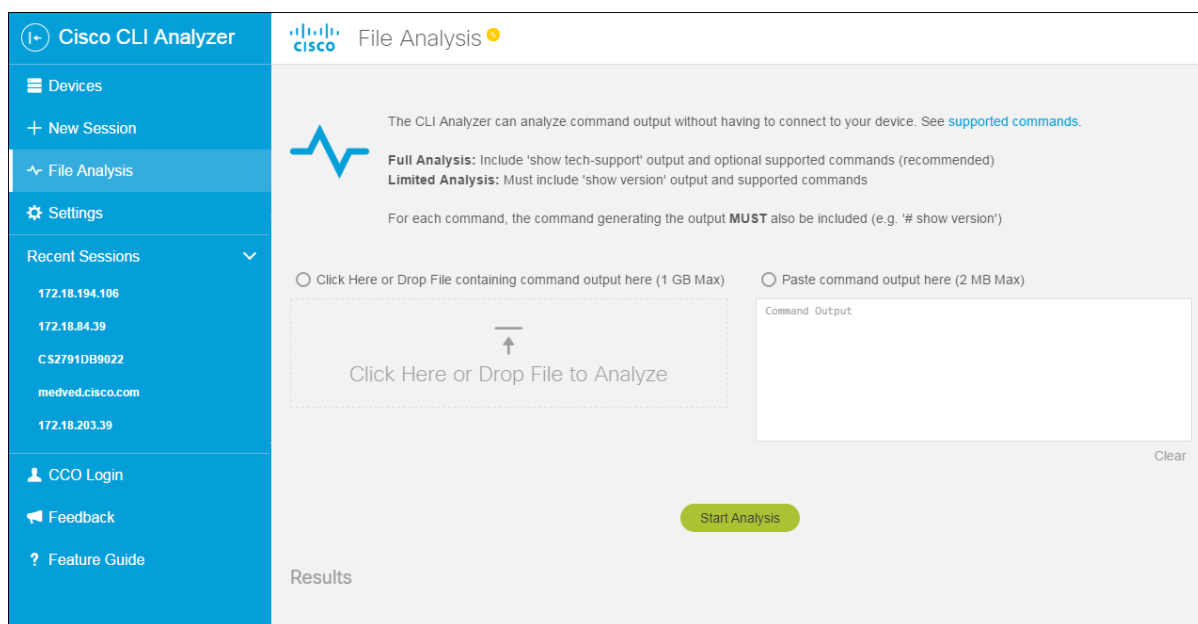
Note: The maximum file size you can upload, whether compressed or uncompressed, is 1 GB.

Include the following content in the text file.

- The command (such as **# show version**) that generated each output in the file
- Output from the **show version** command
- Optional: Output from the **show tech-support** command (This is required to perform a full analysis.)
- Optional: Output from other supported commands

Complete these steps to analyze a command output file.

1. Ensure that you are logged in using your Cisco account.
2. Click **File Analysis** on the sidebar.
3. Perform one of the following steps to provide the text to analyze:
 - Click **Click Here or Drop File to Analyze**. In the Open dialog, navigate to the text file you want to import, select it, and click **Open**.
 - Drag the CSV file from a separate window onto the drop area. Be sure that the icon below the pointer indicates that the file will be moved before you release the mouse button to drop the file.
 - Copy the command output text and paste inside the Command Output area.

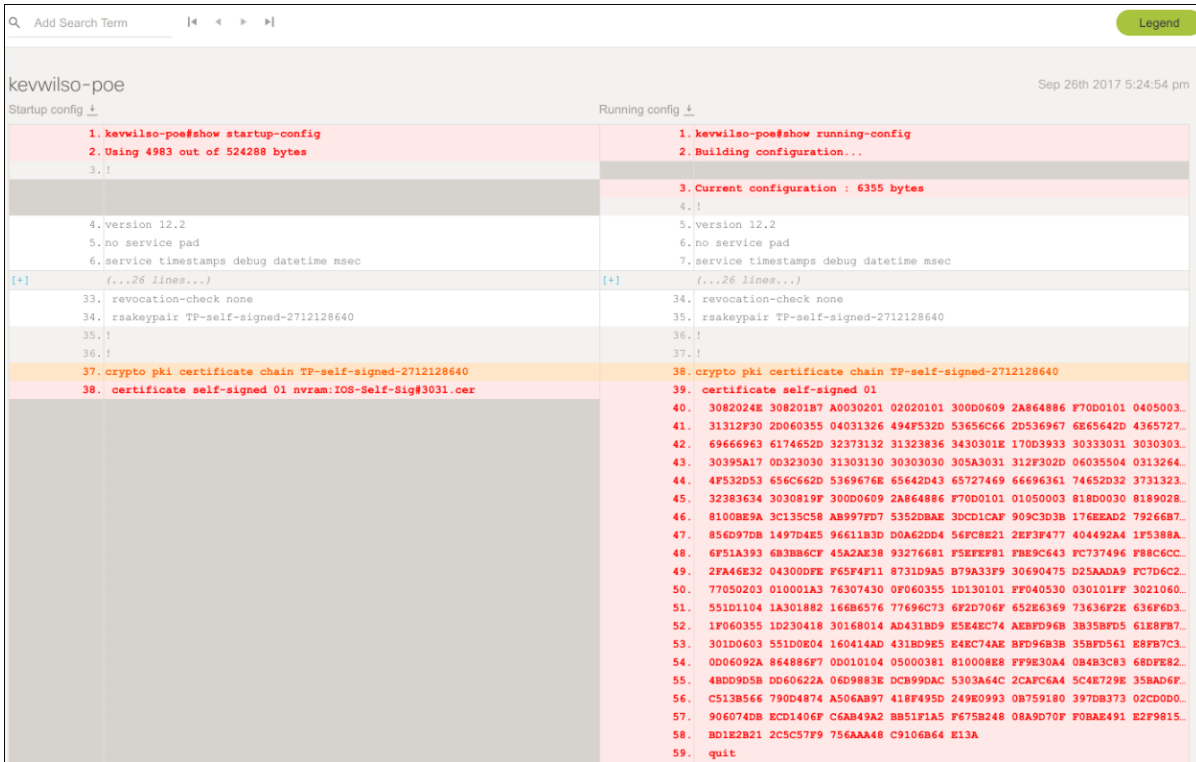


4. Click the **Start Analysis** button.
5. Analysis results appear in the Tool Results window.

Compare Configuration Differences

Use the Config Diff tool to identify differences between the startup and running configurations of a device.

1. Open a session with a supported device (ASA, IOS, or IOS-XR).
2. Click the **Config Diff** tool in the device session window.
3. In the Tool Results window, expand the entry for the Config Diff tool and click **View Config Diff** to open the Configuration Diff window.



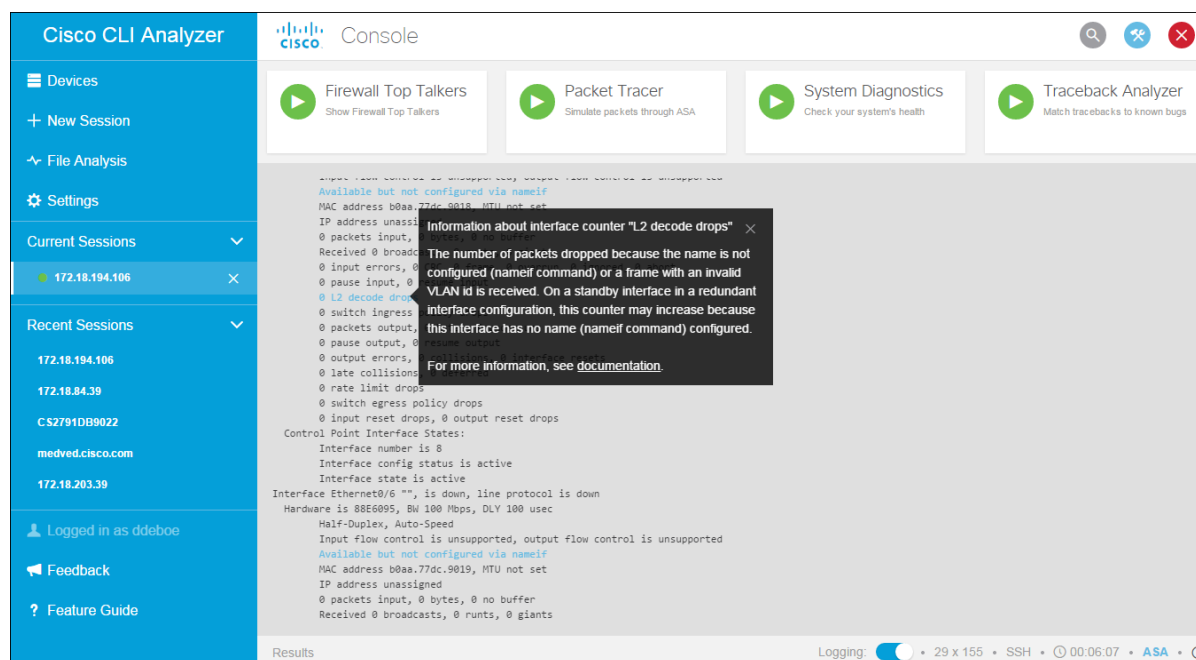
The startup configuration and running configuration appear side by side with their differences highlighted.

- Red text indicates a line that is missing or different in the other file.
- Orange text indicates the context in which differences appear: the header or footer of a section that contains red lines. When you open the configuration file to reconcile differences, search for text in the header or footer to locate the relevant area of the file quickly.
- Blue icons indicate that lines within a section have been reordered. In most cases, the order of lines within a section does not matter, but there are exceptions, such as old IOS access lists or IOS-XR route policies.

Use Contextual Help and Highlighting

The Cisco CLI Analyzer provides contextual help and highlighting for certain commands. This feature highlights certain text in the CLI output and provides additional information about that text. To view contextual help, click the link that corresponds to the text for which you want to view additional information.

See a [demonstration video](#) of this feature.



For supported commands on various platforms, refer to the following types.

- [ASA Commands](#)
- [IOS Commands](#)
- [IOS-XE Commands](#)
- [IOS-XR Commands](#)
- [NX-OS Commands](#)
- [UCS Commands](#)

ASA Commands

The Cisco CLI Analyzer supports contextual help and highlighting for the following ASA commands.

packet-tracer	show crypto ipsec sa	show nat
show access-list	show crypto isakmp sa	show nat detail
show asp drop	show crypto isakmp stats	show process
show blocks	show failover	show process cpu-hog
show capture	show failover history	show process cpu-usage
show conn	show interface	show running-config
show console-output	show kernel cgroup-controller detail	show scansafe statistics
show counters	show logging	show tech-support
show cpu detailed	show memory	show version
show cpu usage	show memory detail	write memory
show crypto ikev2 stats		write standby

IOS Commands

The Cisco CLI Analyzer supports contextual help and highlighting for the following IOS commands.

show aaa servers	show crypto (gdoi gkm) gm acl	show ip eigrp neighbors	show ospfv3 neighbor
show access-session	show crypto call admission statistics	show ip eigrp topology	show ospfv3 neighbor detail
show ap capwap summary	show crypto eli	show ip eigrp traffic	show ospfv3 statistic
show ap config general	show crypto gdoi	show ip interface	show ospfv3 statistic detail
show ap dot11 24ghz coverage	show crypto gdoi gm	show ip interface brief	show otv
show ap dot11 24ghz network	show crypto gdoi ks coop	show ip nat statistics	show otv isis rib redistribution mac
show ap dot11 24ghz summary	show crypto gdoi ks policy	show ip nat translations	show OTV VLAN
show ap dot11 24ghz txpower	show crypto ikev2 sa	show ip nat translations verbose	show platform
show ap dot11 5ghz coverage	show crypto ikev2 stats	show ip ospf database	show policy-firewall config
show ap dot11 5ghz network	show crypto ipsec sa	show ip ospf database asbr-summary	show policy-firewall session
show ap dot11 5ghz summary	show crypto isakmp sa	show ip database external	show policy-map interface
show ap dot11 5ghz txpower	show crypto key mypubkey (rsa ec all)	show ip database network	show policy-map type inspect zone-pair sessions
show ap groups	show crypto session	show ip database nssa-external	show ppp multilink
show ap join stats summary	show diagnostic events	show ip database opaque-area	show processes cpu
	show diagnostic results	show ip database router	show processes memory
		show ip database summary	show redundancy

show ap mac-address H.H.H join stats detailed	show dial-peer voice summary	show ip ospf interface show ip ospf neighbors	show redundancy states
show ap summary	show dialer	show ip ospf statistics	show route-map
show arp	show domain (name) (master border) site- prefix	show ip ospf statistics detail	show run interface cellular
show async status	show domain (name) (vrf (vrf name)) (master border) status	show ip route summary	show running-config
show atm interface atm	show dot11 association all	show ip traffic	show sccp connections
show atm pvc	show dot1x	show ip wccp	show sip-ua calls
show atm traffic	show dspfarm all	show ip(v6) eigrp traffic	show sip-ua status
show atm vc	show eigrp address- family ipv4 events	show ip(v6) ospf interface	show spanning-tree
show authentication sessions	show eigrp address- family ipv4 topology	show ip(v6) ospf neighbor detail	show spanning-tree summary
show bgp	show eigrp address- family ipv6 events	show ip(v6) protocols	show stacks
show bgp () X	show environment	show ip(v6) route	show standby
show bgp (*) (vrf vrf- name)?	show environment status	show ipv6 eigrp events	show staccp device summary
show bgp a.b.c.d	show etherchannel summary	show ipv6 eigrp interfaces	show switch
show bgp internal	show fabric	show ipv6 eigrp neighbors	show switch stack- ports summary
show bgp neighbors	show fex	show ipv6 ospf neighbor	show tech-support
show bgp summary	show fex detail	show ipv6 ospf statistic	show tech-support wireless
show bridge-domain	show frame-relay lmi	show ipv6 ospf statistic detail	show telephony- service
show buffers	show frame-relay map	show isdn service	show telephony- service all
show call active voice	show frame-relay pvc	show isdn status	show version
show call active voice brief	show interface atm	show issu state	show vlan
show call-manager- fallback	show interface multilink	show line	show voice call status
show capwap client rcb	show interface status	show lisp dynamic-eid	show voice dsp group all
show ccm-manager	show interfaces	show logging	show voice port summary
show ccm-manager music-on-hold	show interfaces counters	show mab	show voice register global
show cdp neighbors detail	show interfaces counters error	show mac address- table	show voip rtp connections
show cellular	show interfaces INT counters	show mac-address- table	show vpdn tunnel
show cellular intf num radio			show vslp lmp neighbors
show cellular profile			show vtp password
show cem circuit			show vtp status
show clock (detail)			
show controllers			

show controllers cellular	show interfaces switching	show macsec	show wireless client mac-address H.H.H detail
show controllers dot11Radio 0	show ip bgp	show memory	show wireless client summary
show controllers e1	show ip bgp ?	show memory statistics	show wireless country configured
show controllers e3	show ip bgp a.b.c.d	show mgcp	show wireless detail
show controllers ethernet- controller(fastethernet gigabitethernet)	show ip bgp internal	show mls cef exception status	show wireless mobility summary
show controllers pos	show ip bgp neighbors	show module	show wireless multicast
show controllers serial	show ip bgp summary	show netdr captured- packets	show wireless wps summary
show controllers SHDSL	show ip cef	show network-clocks sync	show wireless zone-pair security
show controllers t1	show ip device tracking	show ntp associations detail	
show controllers t3	show ip eigrp accounting	show ospfv3 interface	
show controllers vdsl	show ip eigrp events		
	show ip eigrp interfaces		
	show ip eigrp interfaces detail		

IOS-XE Commands

The Cisco CLI Analyzer supports contextual help and highlighting for the following IOX-XE commands.

show aaa servers	show crypto gdoi ks coop	show ip database network	show platform hardware qfp active statistics drop
show access-session	show crypto gdoi ks policy	show ip database nssa-external	show platform hardware qfp active tcam resource- manager usage
show ap capwap summary	show crypto ikev2 sa stats	show ip database opaque-area	show platform hardware slot (#) serdes statistics
show ap config general	show crypto ipsec sa	show ip database router	show platform health
show ap dot11 24ghz coverage	show crypto isakmp sa	show ip database summary	show platform ptp all
show ap dot11 24ghz network	show crypto key mypubkey (rsa ec all)	show ip ospf interface	show platform punt client
show ap dot11 24ghz summary	show crypto session	show ip ospf neighbors	show platform software status
show ap dot11 24ghz txpower	show diagnostic	show ip ospf statistics	show platform control-processor brief
show ap dot11 5ghz coverage	show diagnostic events	show ip ospf statistics detail	show policy-firewall config
show ap dot11 5ghz network	show diagnostic results	show ip route summary	show policy-firewall session
show ap dot11 5ghz summary	show dial-peer voice summary	show ip traffic	
show ap dot11 5ghz txpower	show dialer	show ip wccp	
		show ip(v6) eigrp traffic	

show ap groups	show domain (name)	show ip(v6) ospf	show policy-map
show ap join stats	(master border) site-	interface	interface
summary	prefix	show ip(v6) ospf	show policy-map type
show ap mac-address	show domain (name)	neighbor detail	inspect zone-pair
H.H.H join stats	(vrf (vrf name))	show ip(v6) protocols	sessions
detailed	(master border) status	show ip(v6) route	show ppp multilink
show ap summary	show dot11	show ipv6 eigrp events	show processes cpu
show arp	association all	show ipv6 eigrp	show processes
show async status	show dot1x	interfaces	memory
show atm interface	show dspfarm all	show ipv6 eigrp	show redundancy
atm	show eigrp address-	neighbors	show redundancy
show atm pvc	family ipv4 events	show ipv6 eigrp	states
show atm traffic	show eigrp address-	topology	show route-map
show atm vc	family ipv4 topology	show ipv6 interface	show run interface
show authentication	show eigrp address-	show ipv6 ospf	cellular
sessions	family ipv6 events	neighbor	show running-config
show bgp	show eigrp address-	show ipv6 ospf	show sccp
show bgp () X	family ipv6 topology	statistic	connections
show bgp (*) (vrf vrf-	show environment	show ipv6 ospf	show sip-ua calls
name)?	show environment	statistic detail	show sip-ua status
show bgp a.b.c.d	status	show isdn service	show spanning-tree
show bgp internal	show etherchannel	show isdn status	show spanning-tree
show bgp neighbors	summary	show issu state	summary
show bgp summary	show fabric	show line	show stacks
show bridge-domain	show fex	show lisp dynamic-eid	show standby
show buffers	show fex detail	show logging	show stcapp device
show call active voice	show frame-relay lmi	show mab	summary
show call active voice	show frame-relay map	show mac address-	show switch
brief	show frame-relay pvc	table	show switch stack-
show call-manager-	show interface atm	show mac-address-	ports summary
fallback	show interface	table	show tech-support
show capwap client	multilink	show macsec	show tech-support
rcb	show interface status	show memory	wireless
show ccm-manager	show interfaces	show memory	show telephony-
show ccm-manager	show interfaces	statistics	service
music-on-hold	counters	show mgcp	show telephony-
show cdp neighbors	show interfaces	show mls cef	service all
detail	counters error	exception status	show version
show cellular	show interfaces INT	show module	show vlan
show cellular intf num	counters	show netdr captured-	show voice call status
radio	show interfaces	packets	show voice dsp group
show cellular profile	switching	show network-clocks	all
show cem circuit	show ip bgp	sync	
	show ip bgp ?		

show clock (detail)	show ip bgp a.b.c.d	show ntp associations detail	show voice port summary
show controllers	show ip bgp internal	show ospfv3 interface	show voice register global
show controllers cellular	show ip bgp neighbors	show ospfv3 neighbor	show voip rtp connections
show controllers dot11Radio 0	show ip bgp summary	show ospfv3 neighbor detail	show vpdn tunnel
show controllers e1	show ip cef	show ospfv3 statistic	show vsrp lmp neighbors
show controllers e3	show ip device tracking	show ospfv3 statistic detail	show vtp password
show controllers ethernet-controller(fastethernet gigabitethernet)	show ip eigrp accounting	show otv	show vtp status
show controllers pos	show ip eigrp events	show otv isis rib redistribution mac	show wireless client mac-address H.H.H detail
show controllers serial	show ip eigrp interfaces	show OTV VLAN	show wireless client summary
show controllers SHDSL	show ip eigrp interfaces detail	show platform	show wireless country configured
show controllers t1	show ip eigrp neighbors show ip eigrp topology	show platform hardware qfp active feature firewall drop	show wireless detail
show controllers t3	show ip eigrp traffic	show platform hardware qfp active feature ipsec datapath drops	show wireless mobility summary
show controllers vdsl	show ip interface	show platform hardware qfp active feature nat datapath stats	show wireless multicast
show crypto (gdoi gkm) gm acl	show ip interface brief	show platform hardware qfp active infrastructure exmem statistics	show wireless summary
show crypto call admission statistics	show ip nat statistics		show wireless wps summary
show crypto eli	show ip nat translations		show zone-pair security
show crypto gdoi	show ip nat translations verbose		
show crypto gdoi gm	show ip ospf database		
show crypto gdoi ks	show ip ospf database asbr-summary		
	show ip database external		

IOS-XR Commands

The Cisco CLI Analyzer supports contextual help and highlighting for the following IOS-XR commands.

admin show install	show controllers FortyGigE	show install
admin show version	show controllers GigabitEthernet	show interfaces
show bgp all all summary	show controllers SONET	show logging
show bgp ipv4 unicast summary	show controllers TenGigE	show platform
show bgp ipv4 unicast summary	show controllers fabric fia stats	show processes
show bgp ipv6 unicast summary	show controllers hundredGigE	show processes blocked
		show redundancy
		show snmp
		show snmp

show bgp summary	show controllers np counters	show snmp request drop summary
show bgp vpnv4 unicast summary	show controllers pse statistics	show version
show bgp vpnv6 unicast summary		

NX-OS Commands

The Cisco CLI Analyzer supports contextual help and highlighting for the following NX-OS commands.

show accounting log	show interface counters errors	show policy-map interface control-plane
show copp status	show interface counters storm-control	show policy-map interface type queuing
show diagnostic content module	show interface ethernet	show port-channel database
show diagnostic content module all	show interface fc	show port-channel summary
show diagnostic result module	show interface fex-fabric	show processes cpu
show diagnostic result module all	show interface status err-disabled	show processes log
show environment	show interface trunk	show redundancy status
show errdisable detect	show interface vfc	show spanning-tree
show errdisable recovery	show ip igmp groups	show spanning-tree detail
show fabricpath isis adjacency	show ip igmp route	show switching-mode
show fabricpath isis route	show ip traffic	show system internal forwarding ipv4 route summary
show fcoe	show license usage	show system internal l2fm l2dbg macdb
show fex	show logging log	show system internal l2fm l2dbg portdb
show hardware internal forwarding rate-limiter usage	show logging logfile	show system redundancy status
show hardware internal interface indiscard-stats front-port	show module	show system reset-reason
show hardware ip verify	show monitor	show user-account
show hardware profile forwarding-mode	show monitor session	show vdc
show hardware rate-limiter	show otv	show version
show hsrp	show otv isis adjacency	show version
show hsrp brief	show otv site	show vpc
show interface	show platform fwm info asic-errors	show vrrp
	show platform fwm info pif	show vtp status
	show platform software fcoe_mgr event-history errors	
	show policy-map interface	

UCS Commands

The Cisco CLI Analyzer supports contextual help and highlighting for the following UCS commands.

Command	Context	Scope
show fault	UCSM	monitoring
show diagnostic result module	NX-OS	
show ip igmp groups	NX-OS	
show interface trunk	NX-OS	
show interface ethernet	NX-OS	
show interface counters errors	NX-OS	
show running-config	NX-OS	
show interface status err-disabled	NX-OS	
show processes cpu	NX-OS	
show cluster extended-state	local-mgmt	
show interface	NX-OS	
show version	NX-OS	
show fault detail	UCSM	monitoring
show diagnostic result module all	NX-OS	
show processes log	NX-OS	
show logging logfile	NX-OS	
show diagnostic content module all	NX-OS	
show system reset-reason	NX-OS	
show ip igmp route	NX-OS	
show module	NX-OS	
show pmon state	local-mgmt	
show diagnostic content module	NX-OS	
show system internal flash	NX-OS	
show system internal mts buffers details	NX-OS	

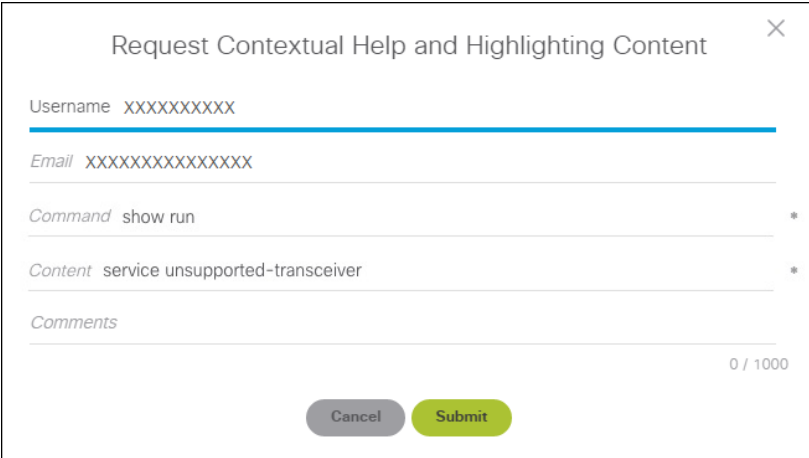
Set Context Menu Options

(See demonstration videos for features on [search](#), [ping](#), and [SSH](#).)

The Cisco CLI Analyzer provides right-click menu options appropriate to the console text you highlight.

These options are available when you highlight and right-click any text in the console:

- **Copy:** Copies the selected text to the clipboard.
- **Paste:** Pastes text copied to the clipboard at the command prompt.
- **Copy & Paste:** Copies the selected text and pastes it into the command prompt as a single action.
- **Select All & Copy:** Copies all the text in the console window.
- **Add Search Term:** Adds the selected text as a search term and highlights it.
- **Search Cisco.com:** Searches the Cisco.com web site for information about the highlighted text.
- **Check Device Coverage:** Opens the Cisco Device Coverage Checker tool in a browser window after you select a valid serial number.
- **Request CHH Content:** Opens the *Request Contextual Help and Highlighting Content* dialog window, which you can use to submit a request for additional CHH content.

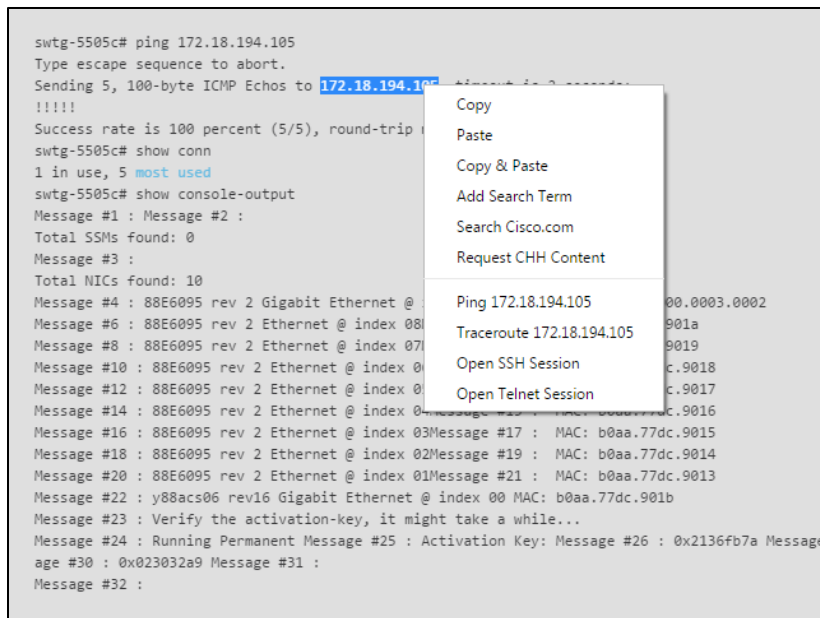


- **Add Selection to Case:** If a case is open against the device, you can highlight text in the console window and select this menu option to add to the case an attachment that contains the highlighted text.

These additional options are available when you highlight and right-click an IP address.

- **Ping:** Runs the ping command on the selected IP address.
- **Traceroute:** Runs the traceroute command on the selected IP address.
- **Open SSH Session:** Creates a new connection to the selected IP address with the SSH protocol.
- **Open Telnet Session:** Creates a new connection to the selected IP address with the Telnet protocol.

Note: You can double-click a term or IP address in the console to select it quickly, so you do not have to drag the cursor across the text you want to highlight.



Frequently Asked Questions

Q. Why do I need to log in with my Cisco.com account to use some features of the Cisco CLI Analyzer?

A. To use features that require Cisco access (such as File Analysis, System Diagnostics, and Case Management), you must have a valid Cisco.com account, and your profile must be associated with an active customer or partner contract. If you do not have a Cisco.com account, [register](#) on Cisco.com and then [associate a service contract](#) to your profile.

When you use these features, the Cisco CLI Analyzer prompts you for your Cisco account credentials. To log in at any time, click the CCO Login icon (🔑) in the sidebar and enter your email address and password.

Q. Why am I still unable to access the Cisco CLI Analyzer after I have entered my CCO account information?

A. Ensure your username and password are correct and that you have an active support contract associated with your Cisco.com account.

If you have verified these items and you are still unable to access the Cisco CLI Analyzer, use the [feedback form](#).

Q. Why am I unable to log in to my CCO account?

A. If you are unable to log in, use this information to help diagnose and resolve the issue.

- Your account might not have sufficient privileges. Contact Cisco Support if you are unsure what level of access your account has.

- Try to log in through the Cisco CLI Analyzer on an open Internet connection. If you are able to log in, the issue might be related to proxy settings on your network. If your network has a proxy server (such as Cisco WSA), you must add the following hosts.

- id.cisco.com
- sso.cisco.com
- apix.cisco.com
- cway.cisco.com

After adding these hosts to the proxy server, try again to log in to the Cisco CLI Analyzer and use the tools.

Q. Do I need to allow specific traffic through my firewall or proxy server?

A. Yes, please ensure that you permit the following hosts.

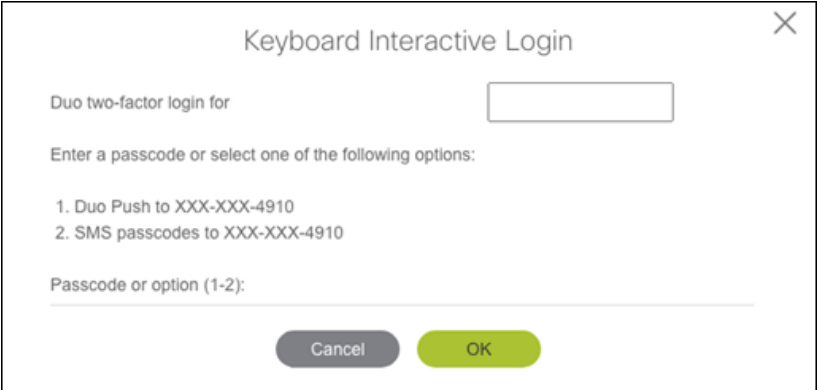
- apix.cisco.com
- apx.cisco.com
- id.cisco.com
- cway.cisco.com
- software.cisco.com
- sso.cisco.com
- storageconnect-prd.cisco.com

Q. When should I use the Keyboard Interactive feature?

A. For most devices and connections, this feature should be off. If you enable Keyboard Interactive for an SSH session that does not support this connection type, the session will fail.

This feature primarily helps manage connections that require a verification code for multifactor authentication (such as Cisco Duo or Google Authenticator). For example, you could enable the Keyboard Interactive feature for a connection using a jump server with Cisco Duo authentication.

When the Keyboard Interactive feature is enabled, you can establish a session with a device that uses multifactor authentication (MFA) by entering the appropriate information and clicking OK to connect to the device.



Keyboard Interactive Login

Duo two-factor login for

Enter a passcode or select one of the following options:

1. Duo Push to XXX-XXX-4910
2. SMS passcodes to XXX-XXX-4910

Passcode or option (1-2): _____

Cancel OK

Q. Which version of the Cisco CLI Analyzer should I use?

A. For the best experience, we recommend running the latest version of the Cisco CLI Analyzer. Check the [Software Download area](#) to ensure that you have installed the current version.

- Starting with version 3.7.1, the Cisco CLI Analyzer uses a new authentication method. All other functionality remains the same, so we recommend discontinuing use of any previous versions.
 - You can still install and run earlier versions, but functionality will be limited.
 - You will be able to connect directly to a device via SSH.
 - You won't be able to use the diagnostic or analytical tools, or any other feature that requires you to log in (such as File Analysis, System Diagnostics, or Case Management).
 - To ensure proper functionality, [check the settings](#) for your firewall or proxy server to confirm that the correct hosts are permitted.
- Check the [version information](#) to ensure that you install the version of the application that works with your system hardware.

Q. Why does ASA Traceback Decoder state that the crash.txt file cannot be found?

A. If your ASA appears to have crashed and rebooted, ASA Traceback Decoder might state that the crash.txt file cannot be found.

By default, an ASA saves crash information to the flash memory unless **crashinfo save disable** is part of the ASA config file. The file cannot be saved if this command is in the config file. To resolve this issue, ensure that this command is not enabled.

Note: To set the default behavior, add the **no crashinfo save disable** command. If a crash file is present, it will be stored in the local flash as crash.txt.

Q. Which operating systems, terminal emulation, and protocols does the Cisco CLI Analyzer support?

A. See [System Requirements](#) for information on operating systems that the Cisco CLI Analyzer supports.

The Cisco CLI Analyzer supports terminal emulator VT100.

The Cisco CLI Analyzer supports Telnet and SSH version 2.

Q. Why did File Analysis report no results or state that it was unable to determine the output provided?

A. Please ensure that the text file you want to analyze includes the following content.

- The command (such as **# show version**) that generated each output in the file
- Output from the **show version** command
- Output from the **show tech-support** command (optional, but required to perform a full analysis)
- Output from other supported commands (optional)

Q. I installed the Cisco CLI Analyzer but can't launch the application. What should I do?

A. Some versions of Windows 10 contain a bug that prevents the Cisco CLI Analyzer from launching. To address this issue, [install Visual Studio 2015-2022](#), restart your computer, then launch the Cisco CLI Analyzer.

Q. Which expressions and characters are supported in the Cisco CLI Analyzer RegEx search feature?

A. The RegEx search feature supports JavaScript RegExp brackets, metacharacters, and quantifiers.

Brackets	Description
[abc]	Find any character that is specified between the brackets
[^abc]	Find any character that is NOT specified between the brackets
[0-9]	Find any digit within the range specified between the brackets
[^0-9]	Find any digit NOT within the range specified between the brackets
(x y)	Find the specified characters

Metacharacter	Description
.	Find a single character (except newline or line terminator)
\w	Find a word character
\W	Find a non-word character
\d	Find a digit
\D	Find a non-digit character
\s	Find a whitespace character
\S	Find a non-whitespace character
\b	Find a match at the beginning/end of a word
\B	Find a match not at the beginning/end of a word
\0	Find a NUL character
\n	Find a new line character
\f	Find a form feed character
\r	Find a carriage return character
\t	Find a tab character
\v	Find a vertical tab character
\xxx	Find the character specified by an octal number xxx
\xdd	Find the character specified by a hexadecimal number dd
\uxxxx	Find the Unicode character specified by a hexadecimal number xxxx

Quantifier	Description
n+	Matches any string that contains at least one n
n*	Matches any string that contains zero or more occurrences of n
n?	Matches any string that contains zero or one occurrences of n
n{X}	Matches any string that contains a sequence of X n's
n{X,Y}	Matches any string that contains a sequence of X to Y n's
n{X,}	Matches any string that contains a sequence of at least X n's
n\$	Matches any string with n at the end of it
^n	Matches any string with n at the beginning of it
?=n	Matches any string that is followed by a specific string n
!=n	Matches any string that is not followed by a specific string n

Q. Can I make a backup copy of my application settings and results?

A. You can [back up and restore](#) from a compressed file including the settings, devices, and tool results for your Cisco CLI Analyzer installation.

Q. How do I request features or provide product feedback?

A. To request additional features or provide product feedback, use the [feedback form](#).

Additional Resources

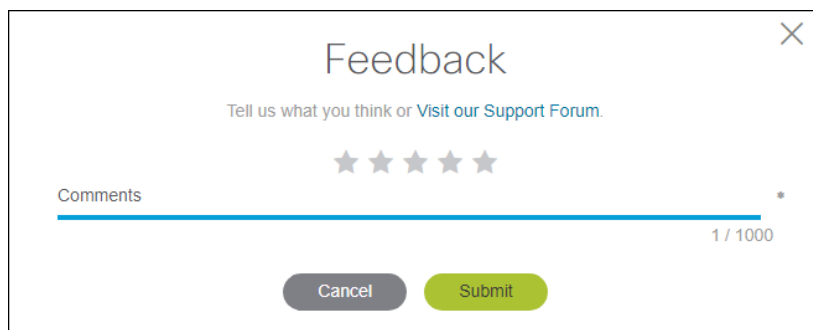
These demonstration videos provide more information about features of the Cisco CLI Analyzer. Each video opens in a separate browser window.

- [Console Themes](#)
- [Console Themes: Customizing](#)
- [Contextual Help and Highlighting](#)
- [Contextual Menu \(Ping\)](#)
- [Contextual Menu \(Search\)](#)
- [Contextual Menu \(SSH\)](#)
- [Credential Profiles](#)
- [Credential Profiles: Default Profile](#)
- [Device Coverage Checker](#)
- [Device Determination](#)
- [Device Tagging](#)
- [Favorite Commands](#)
- [File Analysis](#)
- [Font and Font Sizes](#)
- [IOS-XR Tools](#)
- [Jump Server Profiles](#)
- [Multiple Device Session Windows](#)
- [Multi-Search Highlighting](#)
- [Proxy Authentication](#)
- [Serial Connection](#)
- [Serial Connection: Send Break](#)
- [Shared Device Session](#)
- [Support Case Creation](#)
- [Support Case: Attach File](#)
- [TAC Data Collection](#)
- [Tool Results Window](#)

Submit Comments and Questions

To submit comments and questions about the Cisco CLI Analyzer, click **Feedback** in the left panel of the application. Enter your comments in the field provided, and select a star rating if you wish. Click the **Submit** button to send your feedback.

You can also visit the [Cisco CLI Analyzer Community](#) to ask questions and see comments from other users.



The screenshot shows a 'Feedback' dialog box with a close button (X) in the top right corner. Below the title, there is a prompt: 'Tell us what you think or Visit our Support Forum.' Underneath the prompt is a star rating system consisting of five stars. Below the stars is a text input field labeled 'Comments' with a character count of '1 / 1000'. At the bottom of the dialog are two buttons: 'Cancel' and 'Submit'.