



The bridge to possible

Cisco Community Support Talks

Expand your Tool Belt with TAC Knowledge Through the Cisco CLI Analyzer

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Nick Oliver, Technical Leader, CCIE #21782

December 17th, 2020

News & Upcoming events



Ask Me Anything following the event

Now through Tuesday
December 22nd, 2020

With
Nick Oliver & Magnus Mortensen

https://bit.ly/ama-cli_dec2020



Magnus Mortensen
Principal Engineer
CCIE #28219



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Have a look to other Support Talks events

Collaboration Solutions Analyzer
With Kristof Van Coillie

Watch the recording: <https://bit.ly/csa-tool>

Say Hi! to TAC Connect Bot
With Arun Arunachalam, Paul Anholt
And Michael A. Whitaker

Watch the recording:
<http://cs.co/TACconnectBot>



**A
Support Talks
Series**

New TAC Tools Explained!
A set of series that will walk you through the different Cisco support tools and their features.

[Learn more!](#)

Become an event Top Contributor!

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Technical
Events and much more

<http://bit.ly/EventTopContributors>



A screenshot of the Cisco Community website's "Events Top Contributors" page. The page header includes the Cisco logo and "Cisco Community". Below the header is a search bar and navigation tabs for "Technology & Support", "For Partners", "Customer Connection", "Events", and "Members & Recognition". The main content area shows the "Events Top Contributors" title, a description of the program, and a list of contributors for the years 2014 and 2013. Contributors listed include Julio Carvajal and Ryota Takao. A small video thumbnail is visible on the right side of the contributor list.

Cisco Designated VIPs

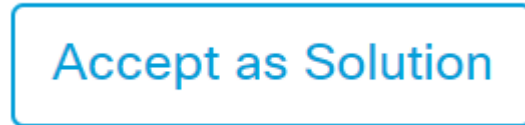
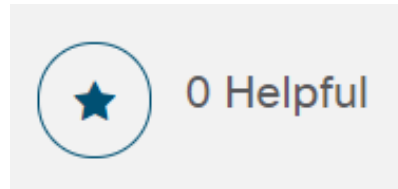


The Cisco Designated VIP program recognizes the top external individual contributors in Cisco's online communities, including the Cisco Support Community (CSC), Cisco Learning Network (CLN) and the Cisco Developers Network (CDN). Cisco Designated VIPs are recognized by their peers for their expertise and tireless contributions, and their abundant participation is vital to community success. With this program, Cisco formally recognizes the positive, valuable influence our top individual members exert on the communities overall. [FAQs](#)

Rate content at the Cisco Community

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Rate documents,
Videos & blogs!



Encourage and acknowledge people who
generously share their
time and expertise



Cisco Community Experts



Magnus Mortensen
Principal Engineer
CCIE #28219



Nick Oliver
Technical Leader
CCIE #21782

Cisco Community – Question Managers



Scott Saltsgaver
Technical Leader



Dave Dube
Technical Leader

Thank You For
Joining Us Today!



Download Today's Presentation
<https://bit.ly/CLlanalyzer-slides>

Submit Your Questions Now!

Use the **Q&A** panel to submit your questions and the panel of experts will respond.

They will be answered eventually



Please take a moment to complete the survey at the end of the event



Cisco CLI Analyzer

Expand your Tool Belt
with TAC Knowledge

DOWNLOAD HERE:

<https://cway.cisco.com/cli/>



Agenda



Overview



Features



Tools



Q&A

Polling Question 1

1. Have you used the Cisco CLI Analyzer before?

- A. Yes
- B. No

Why would Cisco create a Terminal Emulator?

- A Brief history
 - Started with a focus on the ASA Product line in 2015
 - Branched out to IOS and other platforms shortly after (2016)
- But why do it?
 - Cisco TAC (now CX) has the competitive differentiator of *our people*
 - We have 100s of engineers who are digitizing their knowledge
 - Bring that best-in-class analytics to your fingertips, help you self solve.



Multi-Platform Support

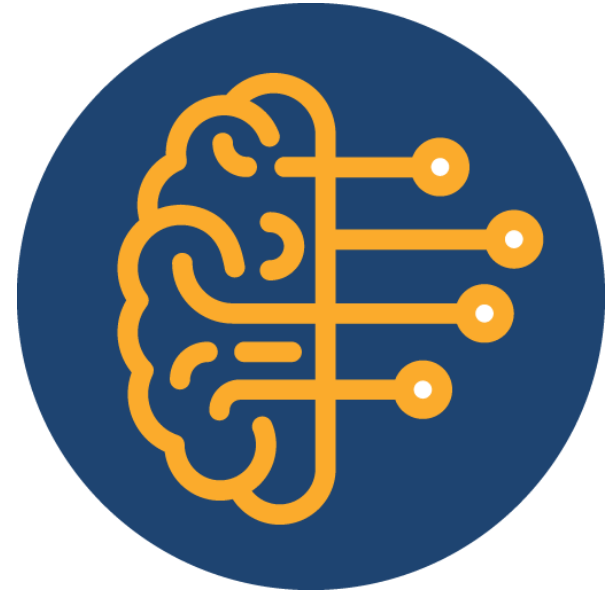
- IOS/IOS-XE Devices
- UCS B & C Series
- ASA
- NX-OS
- AireOS
- StarOS
- ACI-OS
- AP-COS
- APIC
- ISE
- VXWorks
- DNAC
- Hyperflex

Features in the CLI Analyzer

Features to Augment & Accelerate:

Make your job easier

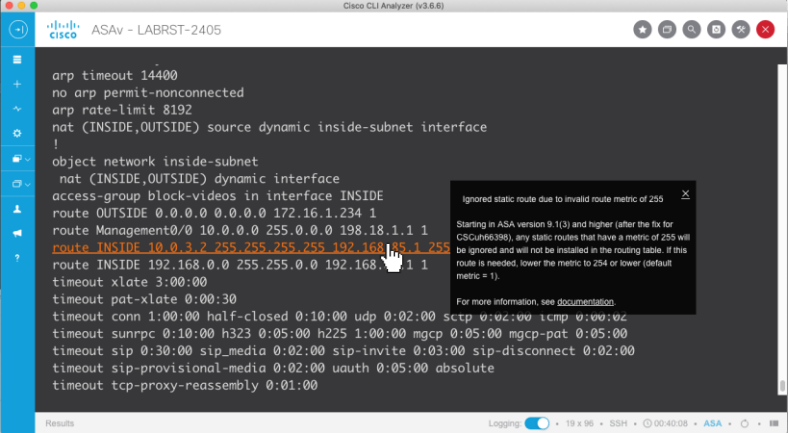
- Session Sharing
- Contextual Help and Highlighting
- Multi-Search Highlighting
- Session Logging
- Coverage Validation
- Contextual Menus
- Case Open & Attach Options
- Device Tagging



Contextual Help & Highlighting

Inline contextual highlights to show additional information about counters, configurations and output.

- Available on IOS/IOS-XE, NX-OS, ASA, StarOS, and UCS
- Thousands of inline elements
- Best practices, error remediation, troubleshooting pointers and links to documents
- Configuration, Show Commands, and Logging Resources



```
ASAV - LABRST-2405
arp timeout 14400
no arp permit-nonconnected
arp rate-limit 8192
nat (INSIDE,OUTSIDE) source dynamic inside-subnet interface
!
object network inside-subnet
 nat (INSIDE,OUTSIDE) dynamic interface
access-group block-videos in interface INSIDE
route OUTSIDE 0.0.0.0 0.0.0.0 172.16.1.234 1
route Management0/0 10.0.0.0 255.0.0.0 198.18.1.1 1
route INSIDE 10.0.3.2 255.255.255.255 192.168.1.1 255
route INSIDE 192.168.0.0 255.255.0.0 192.168.1.1 1
timeout xlate 3:00:00
timeout pat-xlate 0:00:30
timeout conn 1:00:00 half-closed 0:10:00 udp 0:02:00 sctp 0:04:00 icmp 0:00:00
timeout sunrpc 0:10:00 h323 0:05:00 h225 1:00:00 mgcp 0:05:00 mgcp-pat 0:05:00
timeout sip 0:30:00 sip_media 0:02:00 sip-invite 0:03:00 sip-disconnect 0:02:00
timeout sip-provisional-media 0:02:00 uauth 0:05:00 absolute
timeout tcp-proxy-reassembly 0:01:00
```

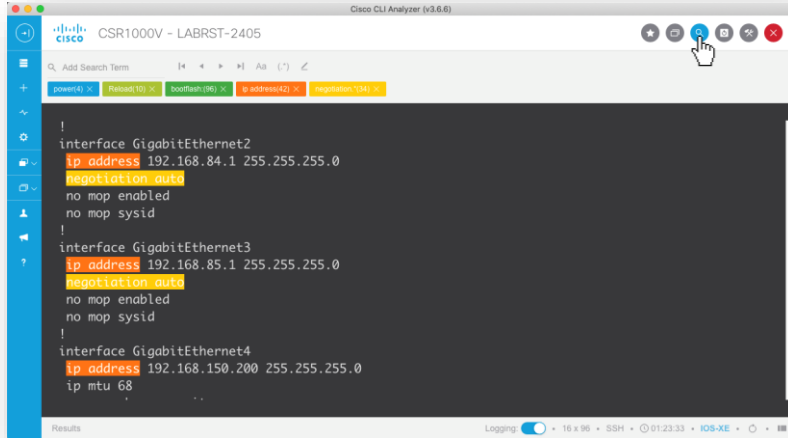
Ignored static route due to invalid route metric of 255

Starting in ASA version 9.1(3) and higher (after the fix for CSCub66398), any static routes that have a metric of 255 will be ignored and will not be installed in the routing table. If this route is needed, lower the metric to 234 or lower (default metric = 1).

For more information, see [documentation](#)

Multi-Search Highlighting

Ability to search for multiple terms simultaneously within the terminal while you are troubleshooting.

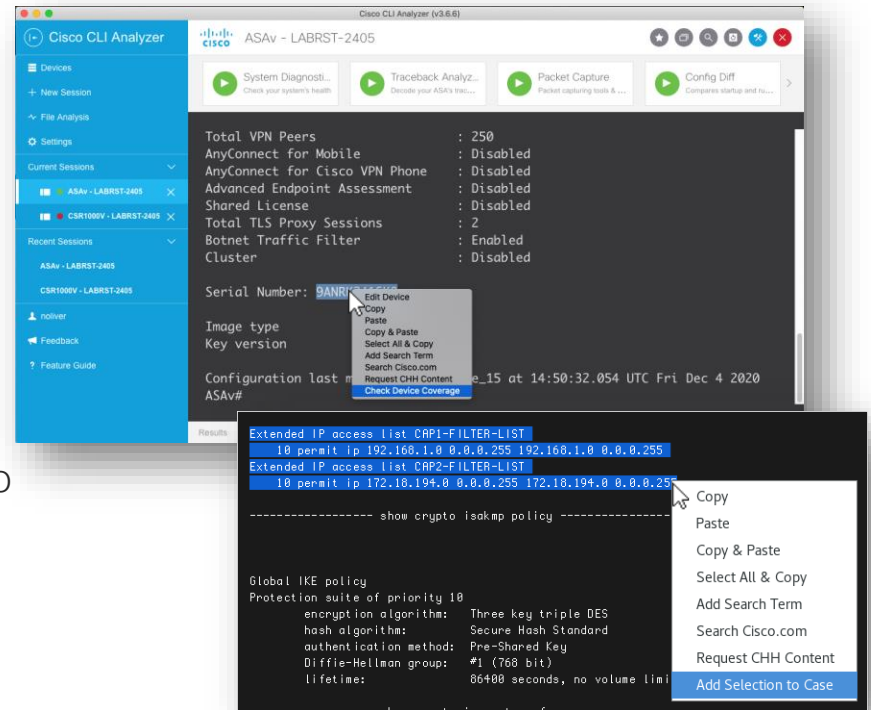


- Support for 5 simultaneous terms
- Support for regex matching
- Ability to match with case sensitivity

Contextual Menus

Highlight and right click to reveal specialized menu options for use while troubleshooting to validate connectivity, connect to devices, etc.

- Serial Number:
 - Validate device coverage
- IP Addresses:
 - Ping and traceroute functionality
 - SSH/Telnet to a device
- Any Selection:
 - Add search term, search Cisco.com, or add to case
 - Add to a support case
- Favorite Commands



Session Sharing

Collaborative tool that allows multiple people to share a single session without being physically together. Requires connectivity to the same network.

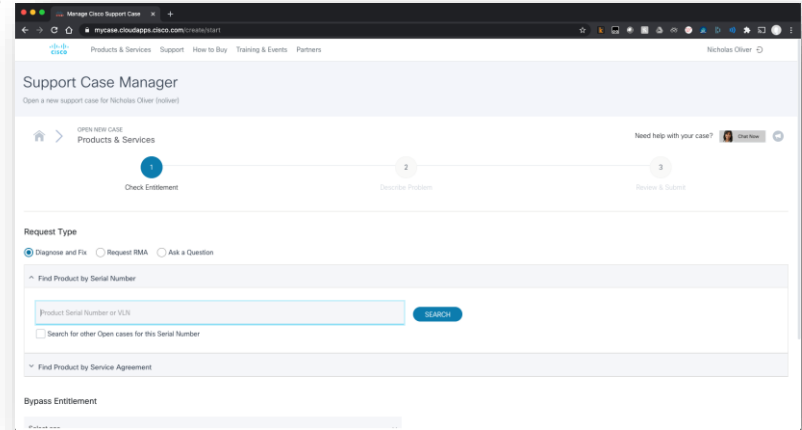


- **Multiple viewers** on a single shared session.
- Great **troubleshooting** tool
- Applications in a **teaching/learning** environment.
- Ability to allow another user to control the session.

Case Open & Attach Tools

Troubleshooting and the case open and file attachment process merged into a single tool directly into your terminal.

- Quickly open cases for the devices saved in the CLI Analyzer
- Attach selected outputs, collect commands and directly upload to open cases.
- Save valuable time by placing important tasks in your workflow.



Demo: CLI Analyzer Features

Polling Question 2

2. What feature that we've covered in the CLI Analyzer will be most helpful in your day-to-day job?

- A. Contextual Help & Highlighting
- B. Multi-Search Highlighting
- C. Contextual Menus
- D. Session Sharing
- E. Case Open & Attach Tools

Tools:

Expand your Tool Belt

Tools

Who wouldn't want more tools?

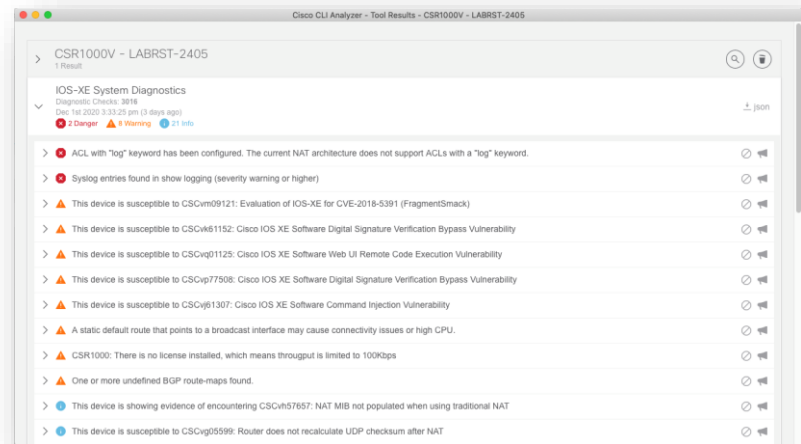


- **System Diagnostics**
- **File Analysis**
- **Zone-Based Firewall Visualizer**
- **Packet Tracing & Capturing**
- **TAC Data Collection**
- Traceback & Crash Analyzers
- IP Route & Multicast Analysis
- ASA Unused Policy Detection
- L2VPN Service Check

System Diagnostics

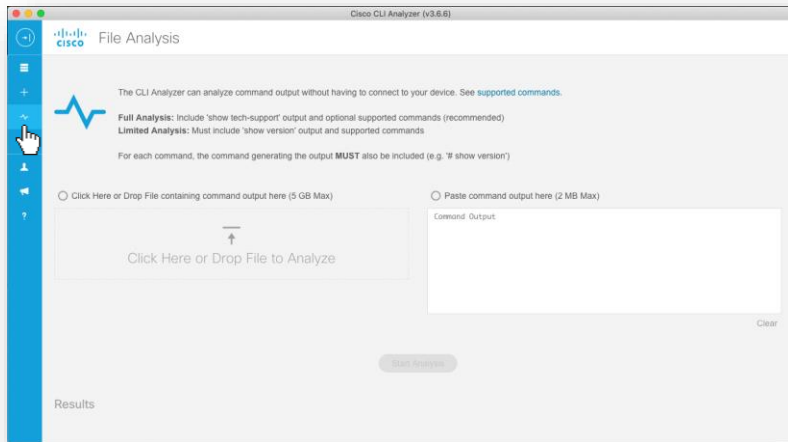
Analyze your live device for known configuration issues, system problems, overall system health, and best practices.

- Thousands of checks performed
- Immediate results to verify exposure & resolution
- Wide range of supported feature checks
- Validation of best practices
- Ability to re-run on the same device to verify that issues are resolved



File Analysis

Applies the same signatures that are available through the System Diagnostics tool, but on a previously saved output.



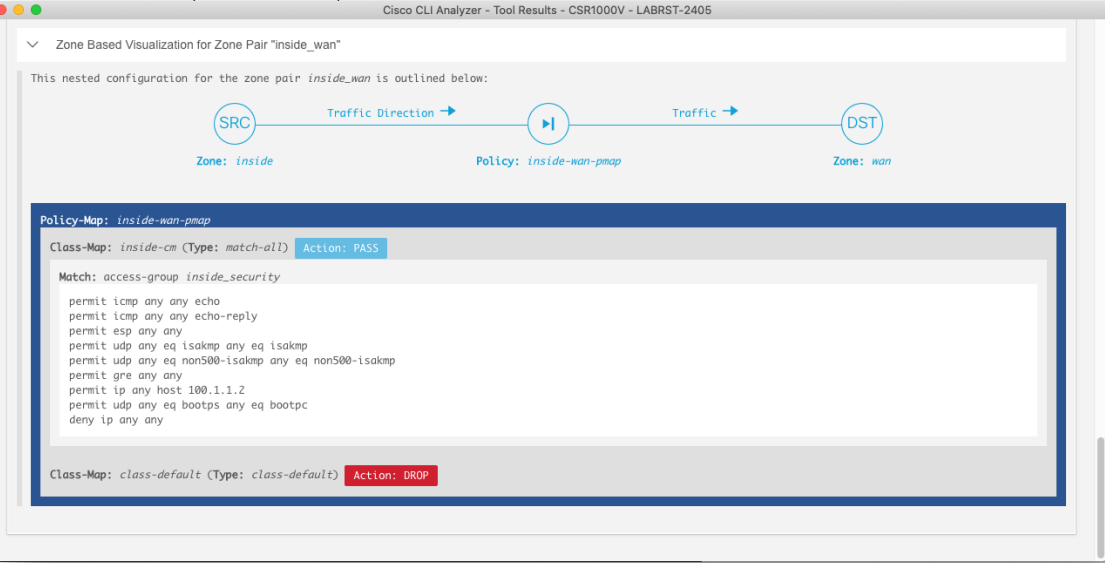
- Analyze the device without an active connection
- Provides options for a copy/paste or file upload
- Support for zip, gzip, rar, and 7z compression.
- Limited to 5 GB file size

Zone-Based Firewall Visualizer

Place complex ZBFW configurations in a visual format that easily summarizes the policies, matches, and actions taken with each policy.

```
zone security wan
Z
Z
```

```
ip access-list ext
 permit icmp any a
 permit icmp any a
 permit esp any ar
 permit udp any eq
 permit udp any eq
 permit gre any ar
 permit ip any hos
 permit udp any eq
 deny ip any any
```



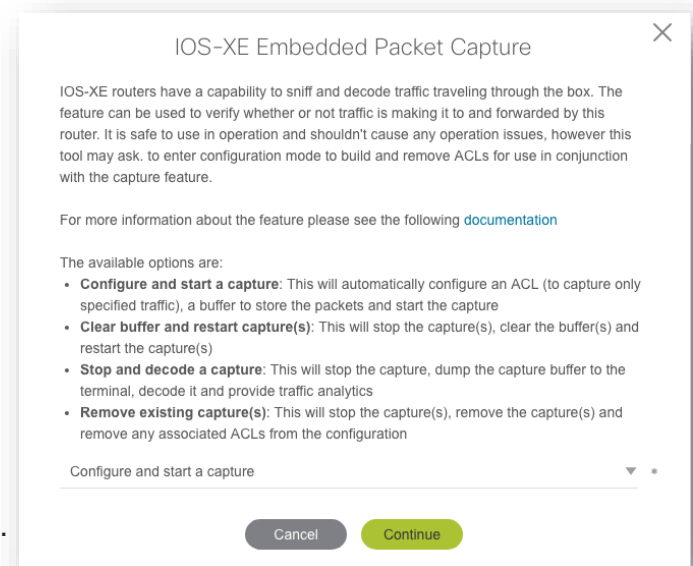
```
e-wan-pmap
```

```
all inside-cm
le_security
```

Packet Capture Tool

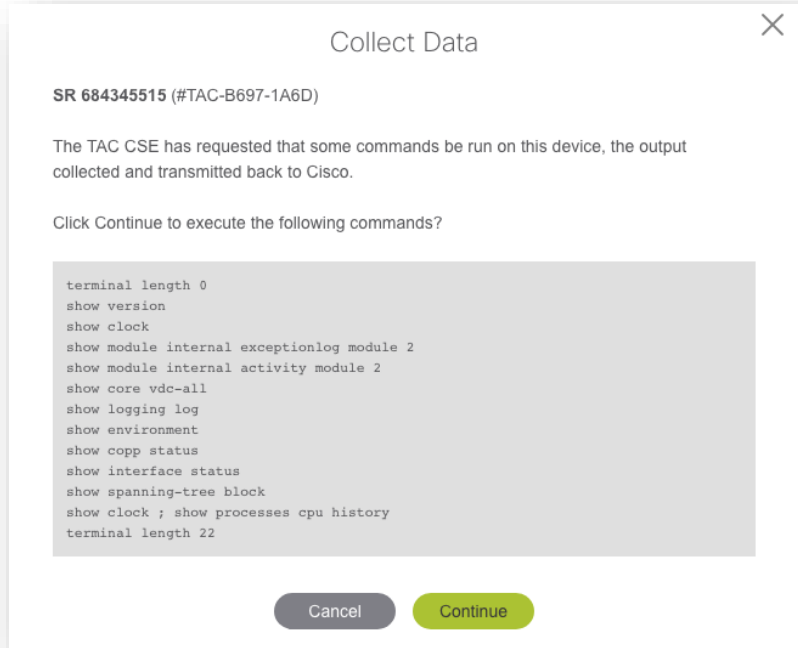
Simplified packet capturing across many platforms.

- Support for the following CLI Based Capture tools:
 - Embedded Packet Capture (IOS & IOS-XE Routers & Switches)
 - ASA Packet Capture
 - CPU Queue Debugging (4500 Switches)
 - Ethalyzer (NX-OS)
 - ELAM (Nexus7000)
- **Uniform Capture Interface** provides quick and easy captures without having to validate command syntax.
- **Analytics & Downloadable PCAP** right through your terminal.



TAC Data Collection

Automatic collection of outputs for your support cases with immediate file attachment to the case.



- Engineer requested commands provided through an automated email
- Commands collected from the device through a simple process
- Outputs are automatically uploaded to the case from which they were requested.
- Output can be downloaded for 24 hours from the results window

TAC Data Collection (example email)

Dear Customer,

In order to move things forward in SR **684345515**, I need your assistance to collect a few CLI outputs from the device you opened the SR on.

This will help assess the technical direction to take.

You have a couple of options to provide the CLI outputs.

Option 1: Use Cisco CLI Analyzer to collect required CLI commands automatically.

- Step 1. Download CLI Analyzer for your platform (Win/Mac): <https://cway.cisco.com/cli>

Note: If you already have CLI Analyzer 3.2 or greater installed proceed to Step 2.

- Step 2. Use the CLI Analyzer to connect to the device.

- Step 3. Click on the Tools button (top right corner) and run the "TAC Data Collection" tool.

- Step 4. Select TaskID **#TAC-B697-1A6D** from the dropdown or paste it.

Step by step instructions with demo:

<https://supportforums.cisco.com/document/13215116/using-tac-data-collection-tool>

Option 2: If you prefer to collect data manually, please collect the following outputs:

show version

show clock

show module internal exceptionlog module 2

show module internal activity module 2

For option 2, you can use <https://cway.cisco.com/csc/index.html?requestID=684345515> for diagnostic data upload.

Thank you.

Demo: CLI Analyzer Tools

Polling Question 3

By using the CLI Analyzer, how much time do you believe you will be saving?

- A. 0-15 minutes per day
- B. 15-30 minutes per day
- C. 30-45 minutes per day
- D. > 1 hour per day

Submit Your
Questions Now!



Use the Q&A panel to submit your
questions, our expert will respond.

Ask Me Anything following the event

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Collaborate within our Social Media



Twitter

- @Cisco_Support
- <http://bit.ly/csc-twitter>

Facebook

- Cisco Community
- <http://bit.ly/csc-facebook>

Learn About Upcoming Events

We invite you to review our Social Media Channels

YouTube

- Cisco Community
- <http://bit.ly/csc-youtube>



App

- Cisco Technical Support



LinkedIn

- Cisco Community
- <http://bit.ly/csc-linked-in>





Find further events and sessions on the Cisco Community

Check the events calendar here:

<https://community.cisco.com/t5/custom/page/page-id/Events?categoryId=technology-support>

Thank you for Your
Time!

Please take a moment to complete
the survey



Thanks For Joining today!



The bridge to possible