



Tech-Support Commands

This module describes commands used to collect the **show** command outputs using Cisco IOS XR software.

The **show tech-support** commands collect common data from commands such as **show version**. Each **show tech-support** command also generates and gathers relevant data for a specific area. This data includes trace output to collect debugging information available in the specific area of interest.

To use commands of this module, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using any command, contact your AAA administrator for assistance.

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show tech-support custom

To generate and gather tech-support information related to a specific area such as network traffic, control-plane, and the system, use the **show tech-support custom** command in EXEC mode.

show tech-support custom { **traffic** | **control-plane** | **system** | **sysadmin** }

Syntax Description		
	traffic	Generates tech-support information related to network traffic.
	control-plane	Generates tech-support information related to the control-plane.
	system	Generates tech-support information related to the system.
	sysadmin	Generates tech-support information related to the system-admin profile.

Command Default None

Command Modes EXEC mode
Config mode

Command History	Release	Modification
	Release 7.3.6	The sysadmin option was introduced.
	Release 7.3.5	This command was introduced.

Usage Guidelines This command generates tech-support information that is useful for Cisco Technical Support representatives when troubleshooting a router. By default, the output of this command is saved on the router's hard disk in a file with *.tgz* extension. You can share this file with Cisco Technical Support. To share, use the **copy** command to copy the *.tgz* file to a server or local machine. For example, **copy harddisk:/showtech/name.tgz tftp://server_path**.

For Cisco Technical Support contact information, see the 'Obtaining Documentation and Submitting a Service Request' section in the Preface.

Table 1: List of Commands collected by each custom option

Custom Option	Release	List of commands outputs collected
Control-plane	Release 7.3.6	

Custom Option	Release	List of commands outputs collected
		show tech-support aib show tech-support ipv6 nd show tech-support arp show tech-support service-layer show tech-support routing bgp show tech-support routing isis show tech-support routing bfd show tech-support bfdhwoff show tech-support mpls ldp show tech-support bcdlv2 show tech-support rib show tech-support mpls lsd show tech-support cef show tech-support cef platform show tech-support gsp show tech-support l2rib show tech-support l2vpn show tech-support lpts show tech-support spp show tech-support clns show tech-support fabric show tech-support l2vpn evpn show tech-support tunnel-ip show tech-support grpc show tech-support appmgr show tech-support netconf show tech-support yserver show tech-support access-lists ipv4 show tech-support access-lists ipv6 show tech-support bcdl show tech-support bundles show tech-support dhcp ipv4 base show tech-support dhcp ipv4 client

Custom Option	Release	List of commands outputs collected
		show tech-support dhcp ipv4 proxy show tech-support dhcp ipv4 relay show tech-support dhcp ipv4 server show tech-support dhcp ipv4 snoop show tech-support dhcp ipv6 base show tech-support dhcp ipv6 client show tech-support dhcp ipv6 proxy show tech-support dhcp ipv6 relay show tech-support dhcp ipv6 server show tech-support flowspec show tech-support ipinfra show tech-support pbr show tech-support placed show tech-support raw show tech-support rsi show tech-support spio show tech-support static show tech-support sysdb show tech-support tcp nsr show tech-support udp show tech-support pfi show tech-support cfgmgr show tech-support tty show tech-support rdsfs

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Custom Option	Release	List of commands outputs collected
Traffic	Release 7.3.6	

Custom Option	Release	List of commands outputs collected
		show tech-support access-lists ethernet-services show tech-support access-lists ipv4 show tech-support access-lists ipv6 show tech-support aib show tech-support arp show tech-support bcdl show tech-support bcdlv2 show tech-support bfdhwoff show tech-support bundles show tech-support cef show tech-support cef platform show tech-support cfgmgr show tech-support dhcp ipv4 base show tech-support dhcp ipv4 client show tech-support dhcp ipv4 proxy show tech-support dhcp ipv4 relay show tech-support dhcp ipv4 server show tech-support dhcp ipv4 snoop show tech-support dhcp ipv6 base show tech-support dhcp ipv6 client show tech-support dhcp ipv6 proxy show tech-support dhcp ipv6 relay show tech-support dhcp ipv6 server show tech-support ethernet cfm pd show tech-support ethernet interfaces show tech-support ethernet platform show tech-support ethernet protocols oam show tech-support ethernet service-activation-test show tech-support fabric show tech-support flowspec show tech-support grid show tech-support gsp show tech-support ipinfra

Custom Option	Release	List of commands outputs collected
		show tech-support ipv6 nd show tech-support l2rib show tech-support l2vpn show tech-support l2vpn evpn show tech-support l2vpn platform show tech-support lpts show tech-support mirror show tech-support mpls lsd show tech-support mpls oam show tech-support mpls rsvp show tech-support mpls static show tech-support mpls traffic-eng show tech-support netflow show tech-support ofa show tech-support optics show tech-support pbr show tech-support pfi show tech-support placed show tech-support platform-pfc show tech-support protection-notif show tech-support qos pi show tech-support qos platform show tech-support qos tm show tech-support raw show tech-support resmon show tech-support rib show tech-support routing bfd show tech-support rsi show tech-support secy show tech-support segment-routing traffic-eng show tech-support snmp ifmib show tech-support span show tech-support spio

Custom Option	Release	List of commands outputs collected
		show tech-support spp show tech-support static show tech-support statsd show tech-support statsd show tech-support sysdb show tech-support tcp nsr show tech-support tunnel-ip show tech-support udp

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Custom Option	Release	List of commands outputs collected
System	Release 7.3.6	

Custom Option	Release	List of commands outputs collected
		show tech-support spi show tech-support ofa show tech-support optics show tech-support gsp show tech-support platform timing show tech-support gnss platform show tech-support ptp show tech-support frequency synchronization show tech-support ethernet controllers show tech-support ethernet interfaces show tech-support pfi show tech-support protection-notif show tech-support cfgmgr show tech-support sysdb show tech-support processmgr show tech-support grpc show tech-support telemetry model-driven show tech-support parser show tech-support fabric show tech-support secy show tech-support macsec show tech-support keychain show tech-support kim show tech-support ntp show tech-support placed show tech-support pmengine show tech-support pool show tech-support rdsfs show tech-support resmon show tech-support sdr-invmgr show tech-support sdr-mgbl-proxy show tech-support shmwin show tech-support snmp

Custom Option	Release	List of commands outputs collected
		show tech-support ssh show tech-support system-recovery show tech-support tacacs show tech-support tty show tech-support type6 show tech-support ztp show tech-support alarm-mgr show tech-support cepki show tech-support statsd show tech-support bundles show tech-support snmp ifmib show tech-support ipinfra show tech-support cef show tech-support cef platform show tech-support rsi

Custom Option	Release	List of commands outputs collected
Sysadmin	Release 7.3.6	admin show tech-support HBloss admin show tech-support aaa admin show tech-support alarm_mgr admin show tech-support card-mgr admin show tech-support cm admin show tech-support confd admin show tech-support control-ethernet admin show tech-support ctrace admin show tech-support ds admin show tech-support envmon admin show tech-support fabric admin show tech-support fpd admin show tech-support install admin show tech-support obfl admin show tech-support os admin show tech-support pm admin show tech-support sdr_mgr admin show tech-support shelf_mgr admin show tech-support syslog admin show tech-support tacacs-server admin show tech-support tam



Note This command is not required during normal use of the router.

Task ID	Task ID	Operations
	basic-services or cisco-support	read

The following example shows the output of the **show tech-support custom traffic** command:

```

Router# show tech-support custom traffic
++ Show tech start time: 2023-Jun-16.195852.UTC ++
Fri Jun 16 19:58:52 UTC 2023 Waiting for gathering to complete
.....
Fri Jun 16 20:05:45 UTC 2023 Compressing show tech output
Show tech output available at 0/RP0/CPU0 :
/harddisk:/showtech/showtech-custom-traffic-2023-Jun-16.195852.UTC.tgz
++ Show tech end time: 2023-Jun-16.200546.UTC ++

```

The following example shows the output of the **show tech-support custom control-plane** command:

```
Router# show tech-support custom control-plane
++ Show tech start time: 2023-Jun-16.194006.UTC ++
Fri Jun 16 19:40:06 UTC 2023 Waiting for gathering to complete
.....
Fri Jun 16 19:44:59 UTC 2023 Compressing show tech output
Show tech output available at 0/RP0/CPU0 :
/harddisk:/showtech/showtech-custom-control-2023-Jun-16.194006.UTC.tgz
++ Show tech end time: 2023-Jun-16.194459.UTC ++
```

The following example shows the output of the **show tech-support custom system** command:

```
Router# show tech-support custom system
++ Show tech start time: 2023-Jun-16.194549.UTC ++
Fri Jun 16 19:45:50 UTC 2023 Waiting for gathering to complete
.....
Fri Jun 16 19:54:24 UTC 2023 Compressing show tech output
Show tech output available at 0/RP0/CPU0 :
/harddisk:/showtech/showtech-custom-system-2023-Jun-16.194549.UTC.tgz
++ Show tech end time: 2023-Jun-16.195425.UTC ++
```

The following example shows the output of the **show tech-support custom sysadmin** command:

```
Router# show tech-support custom sysadmin
Thu Jan 11 17:45:46.429 PST
++ Show tech start time: 2024-Jan-11.174606.PST ++
Thu Jan 11 17:46:07 PST 2024 Waiting for gathering to complete
.Thu Jan 11 17:46:10 PST 2024 Waiting for Sysadmin show tech-support collection
.....Thu Jan 11 18:17:11 PST 2024 Please collect Admin show
tech-support ctrace in addition to any sysadmin show-tech-support collection

Thu Jan 11 18:17:11 PST 2024 Compressing show tech output
Show tech output available at 0/RP0/CPU0 :
/harddisk:/showtech/showtech-F9-custom-sys-admin-2024-Jan-11.174606.PST.tgz
++ Show tech end time: 2024-Jan-11.181723.PST ++
```

show tech-support mgbl

To collect the logs or traces for gRPC module, Network Configuration Protocol (NETCONF) module, and telemetry, use the **show tech-support mgbl** command in the XR EXEC mode.

show tech-support mgbl {file | grpc | list-CLIs | location | netconf | rack | telemetry | time-out}

Syntax	Description
mgbl	Executes the commands for manageability components.
file	<p>Specifies a file name with or without a file path where the output is stored. You can either specify the filename or the path of the file.</p> <ul style="list-style-type: none"> To specify only the name of the file, use this command: show tech-support mgbl file <i>filename</i> To specify the file path, use this command: show tech-support mgbl file <i>filepath</i> <p>Valid file path options are:</p> <ul style="list-style-type: none"> apphost: <i>filename</i> config: <i>filename</i> disk0: <i>filename</i> ftp: <i>filename</i> harddisk: <i>filename</i> rootfs: <i>filename</i> tftp: <i>filename</i>
show tech-support mgbl grpc	Collects the logs or traces for gRPC module.
list-CLIs	Lists the CLIs related to the manageability components.
location	Specifies the node location.
show tech-support mgbl netconf	Collects the logs or traces for Network Configuration Protocol (NETCONF) module.
rack	Specifies the rack (0/1/2).
show tech-support mgbl telemetry	Collects the logs or traces for telemetry.
time-out	Specifies the timeout configuration for each show command in seconds. The default value is 900 seconds and its ranges between 120-3600 seconds.
Command Default	<ul style="list-style-type: none"> The command output is compressed.

- The command does not support location-based collection.

Command Modes XR EXEC mode

Command History	Release	Modification
	Release 24.1.1	This command was introduced.

Usage Guidelines This command generates tech-support information that is useful for Cisco Technical Support representatives when troubleshooting a router. By default, the output of this command is saved on the router's hard disk in a file with *.tgz* extension. You can share this file with Cisco Technical Support. To share, use the **copy** command to copy the *.tgz* file to a server or local machine. For example, **copy harddisk:/showtech/name.tgz tftp://server_path**.

For Cisco Technical Support contact information, see the 'Obtaining Documentation and Submitting a Service Request' section in the Preface.

Task ID	Task ID	Operations
	cisco-support	read

This example shows the output of the **show tech-support mgbl** command.

```
RP/0/RP0/CPU0:R0#show tech-support mgbl ?
file          Specify a valid file name (e.g. disk0:tmp.log)
grpc          Collect showtech for grpc(cisco-support)
list-CLIs    list the commands that would be run (don't execute) (cisco-support)
location      Specify a location(cisco-support)
netconf      Collect showtech for netconf(cisco-support)
rack          Specify a rack(cisco-support)
telemetry    Collect showtech for telemetry(cisco-support)
time-out     per show command timeout configuration(cisco-support)
<cr>
```



Note The **show tech-support mgbl** command does not support location-based collection.

```
RP/0/RP0/CPU0:R0#show tech-support mgbl location 0/RP0/CPU0
Mon Feb 19 02:37:03.652 UTC
++ Show tech start time: 2024-Feb-19.023703.UTC ++
This show tech-support doesn't support location based collection. Exiting.
++ Show tech end time: 2024-Feb-19.023703.UTC ++
```

show tech-support mgbl grpc

To collect the logs or traces for gRPC module, use the **show tech-support mgbl grpc** command in the XR EXEC mode.

show tech-support mgbl grpc file *{filename | filepath}*

Syntax Description	
mgbl	Executes the commands for manageability components.
grpc	Collects the logs or traces for gRPC module.
file	Specifies a file name with or without a file path where the output is stored.
<i>filename</i>	Specifies the name of the file. show tech-support mgbl grpc file filename
<i>filepath</i>	Specifies the file path with the file name. show tech-support mgbl grpc file filepath Valid file path options are: <ul style="list-style-type: none"> • apphost: <i>filename</i> • config: <i>filename</i> • disk0: <i>filename</i> • ftp: <i>filename</i> • harddisk: <i>filename</i> • rootfs: <i>filename</i> • tftp: <i>filename</i>

Command Default	
	<ul style="list-style-type: none"> • The command output is compressed. • The command does not support location-based collection.

Command Modes	
	XR EXEC mode

Command History	Release	Modification
	Release 24.1.1	This command was introduced.

Usage Guidelines	
	This command generates tech-support information that is useful for Cisco Technical Support representatives when troubleshooting a router. By default, the output of this command is saved on the router's hard disk in a file with <i>.tgz</i> extension. You can share this file with Cisco Technical Support. To share, use the copy command to copy the <i>.tgz</i> file to a server or local machine. For example, copy harddisk:/showtech/name.tgz tftp://server_path .

For Cisco Technical Support contact information, see the 'Obtaining Documentation and Submitting a Service Request' section in the Preface.

Task ID	Task ID	Operations
	cisco-support	read

This example shows the output of the **show tech-support mgbl grpc file** command.

```
RP/0/RP0/CPU0:R0#show tech-support mgbl grpc file disk0:tmp.log
Fri Feb  2 06:12:15.098 UTC
++ Show tech start time: 2024-Feb-02.061215.UTC ++
Fri Feb  2 06:12:16 UTC 2024 Waiting for gathering to complete
.....
Fri Feb  2 06:12:53 UTC 2024 Compressing show tech output
Show tech output available at 0/RP0/CPU0 : /disk0:/tmp.log.tgz
++ Show tech end time: 2024-Feb-02.061254.UTC ++
```



Note The **show tech-support mgbl grpc** command does not support location-based collection.

```
RP/0/RP0/CPU0:R0#show tech-support mgbl grpc location 0/RP0/CPU0
Fri Feb  2 06:13:34.590 UTC
++ Show tech start time: 2024-Feb-02.061334.UTC ++
This show tech-support doesn't support location based collection. Exiting.
++ Show tech end time: 2024-Feb-02.061335.UTC ++
```

show tech-support mgbl netconf

To collect the logs or traces for Network Configuration Protocol (NETCONF) module, use the **show tech-support mgbl netconf** command in the XR EXEC mode.

show tech-support mgbl netconf file *{filename | filepath}*

Syntax Description	
mgbl	Executes the commands for manageability components.
netconf	Collects the logs or traces for Network Configuration Protocol (NETCONF) module.
file	Specifies a file name with or without a file path where the output is stored.
<i>filename</i>	Specifies the name of the file. show tech-support mgbl netconf file filename
<i>filepath</i>	Specifies the file path with the file name. show tech-support mgbl netconf file filepath Valid file path options are: <ul style="list-style-type: none"> • apphost: <i>filename</i> • config: <i>filename</i> • disk0: <i>filename</i> • ftp: <i>filename</i> • harddisk: <i>filename</i> • rootfs: <i>filename</i> • tftp: <i>filename</i>

Command Default	
	<ul style="list-style-type: none"> • The command output is compressed. • The command does not support location-based collection.

Command Modes	
	XR EXEC mode

Command History	Release	Modification
	Release 24.1.1	This command was introduced.

Usage Guidelines	
	This command generates tech-support information that is useful for Cisco Technical Support representatives when troubleshooting a router. By default, the output of this command is saved on the router's hard disk in a file with <i>.tgz</i> extension. You can share this file with Cisco Technical Support. To share, use the copy command to copy the <i>.tgz</i> file to a server or local machine. For example, copy harddisk:/showtech/name.tgz tftp://server_path .

For Cisco Technical Support contact information, see the 'Obtaining Documentation and Submitting a Service Request' section in the Preface.

Task ID	Task ID	Operations
	cisco-support	read

This example shows the output of the **show tech-support mgbl netconf file** command.

```
RP/0/RP0/CPU0:R0#show tech-support mgbl netconf file disk0:tmp.log
Fri Feb  2 06:12:15.098 UTC
++ Show tech start time: 2024-Feb-02.061215.UTC ++
Fri Feb  2 06:12:16 UTC 2024 Waiting for gathering to complete
.....
Fri Feb  2 06:12:53 UTC 2024 Compressing show tech output
Show tech output available at 0/RP0/CPU0 : /disk0:/tmp.log.tgz
++ Show tech end time: 2024-Feb-02.061254.UTC ++
```



Note The **show tech-support mgbl netconf** command does not support location-based collection.

```
RP/0/RP0/CPU0:R0#show tech-support mgbl netconf location 0/RP0/CPU0
Fri Feb  2 06:13:34.590 UTC
++ Show tech start time: 2024-Feb-02.061334.UTC ++
This show tech-support doesn't support location based collection. Exiting.
++ Show tech end time: 2024-Feb-02.061335.UTC ++
```

show tech-support mgbl telemetry

To collect the logs or traces for telemetry, use the **show tech-support mgbl telemetry** command in the XR EXEC mode.

show tech-support mgbl telemetry file *{filename | filepath}*

Syntax Description

mgbl Executes the commands for manageability components.

telemetry Collects the logs or traces for telemetry.

file Specifies a file name with or without a file path where the output is stored.

filename Specifies the name of the file.

show tech-support mgbl telemetry file *filename*

filepath Specifies the file path with the file name.

show tech-support mgbl telemetry file *filepath*

Valid file path options are:

- **apphost:** *filename*
- **config:** *filename*
- **disk0:** *filename*
- **ftp:** *filename*
- **harddisk:** *filename*
- **rootfs:** *filename*
- **tftp:** *filename*

Command Default

- The command output is compressed.
- The command does not support location-based collection.

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 24.1.1	This command was introduced.

Usage Guidelines

This command generates tech-support information that is useful for Cisco Technical Support representatives when troubleshooting a router. By default, the output of this command is saved on the router's hard disk in a file with *.tgz* extension. You can share this file with Cisco Technical Support. To share, use the **copy** command to copy the *.tgz* file to a server or local machine. For example, **copy harddisk:/showtech/name.tgz tftp://server_path**.

For Cisco Technical Support contact information, see the 'Obtaining Documentation and Submitting a Service Request' section in the Preface.

Task ID	Task ID	Operations
	cisco-support	read

This example shows the output of the **show tech-support mgbl telemetry file** command.

```
RP/0/RP0/CPU0:R0#show tech-support mgbl telemetry file disk0:tmp.log
Fri Feb  2 06:12:15.098 UTC
++ Show tech start time: 2024-Feb-02.061215.UTC ++
Fri Feb  2 06:12:16 UTC 2024 Waiting for gathering to complete
.....
Fri Feb  2 06:12:53 UTC 2024 Compressing show tech output
Show tech output available at 0/RP0/CPU0 : /disk0:/tmp.log.tgz
++ Show tech end time: 2024-Feb-02.061254.UTC ++
```



Note The **show tech-support mgbl telemetry** command does not support location-based collection.

```
RP/0/RP0/CPU0:R0#show tech-support mgbl telemetry location 0/RP0/CPU0
Fri Feb  2 06:13:34.590 UTC
++ Show tech start time: 2024-Feb-02.061334.UTC ++
This show tech-support doesn't support location based collection. Exiting.
++ Show tech end time: 2024-Feb-02.061335.UTC ++
```