

Configuring Cisco Mediatrace

This chapter contains information about and instructions for configuring Cisco Mediatrace.

Cisco Mediatrace enables you to isolate and troubleshoot network degradation problems for data streams. Although it can be used to monitor any type of flow, it is primary used with video flows. It can also be used for non-flow related monitoring along a media flow path.

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Information About Configuring Cisco Mediatrace

Overview of Cisco Mediatrace

Note Mediatrace is no longer supported on M&T train. For performance monitoring, see Configuring Cisco Performance Monitor chapter.

Cisco Mediatrace helps to isolate and troubleshoot network degradation problems by enabling a network administrator to discover an IP flow's path, dynamically enable monitoring capabilities on the nodes along the path, and collect information on a hop-by-hop basis. This information includes, among other things, flow statistics, and utilization information for incoming and outgoing interfaces, CPUs, and memory, as well as any changes to IP routes or the Cisco Mediatrace monitoring state.

This information can be retrieved in either of two ways:

- By issuing an exec command to perform an on-demand collection of statistics from the hops along a media flow. During this one-shot operation, the hops along the media flow are discovered and shown to you, along with a set of other specified information.
- By configuring Cisco Mediatrace to start a recurring monitoring session at a specific time and on specific days. The session can be configured to specify which metrics to collect, and how frequently they are collected. The hops along the path are automatically discovered as part of the operation.

After collecting the metrics you specified, you can view a report on the metrics.

Cisco Mediatrace is part of the Cisco Medianet family of products. For more information about the design, configuration, and troubleshooting of Mediatrace when used in conjunction with other Cisco products, including a Quick Start Guide and Deployment Guide, see the Cisco Medianet Knowledge Base Portal, located at http://www.cisco.com/web/solutions/medianet/knowledgebase/index.html.

Metrics That You Can Collect Using Cisco Mediatrace

You can collect the following categories of metrics using Mediatrace:

- Common Metrics for Each Responder
- System Metrics: TCP Profile
- System Metrics: RTP Profile
- System Metrics: INTF Profile
- System Metrics: CPU Profile
- System Metrics: MEMORY Profile
- App-Health Metrics: MEDIATRACE-HEALTH Profile
- Metrics for the Mediatrace Request Summary from Initiator

The individual metrics under each of these categories are listed the appropriate section below.

Metics for Mediatrace Request Summary from Initiator

- Request Timestamp
- Request Status
- Number of Hops Responded
- Number of Hops with Valid Data
- Number of Hops with Error
- Number of hops with no data record
- Last Route Change Timestamp
- Route Index

Common Metrics for Each Responder

- Metrics Collection Status
- Reachability address
- Ingress Interface
- Egress Interface
- Mediatrace IP TTL

- Hostname
- Mediatrace Hop Count

Perf-Monitor Metrics: TCP Profile

- Flow Sampling Start Timestamp
- Loss of measurement confidence
- Media Stop Event Occurred
- IP Packet Drop Count
- IP Byte Count
- IP Packet Count
- IP Byte Rate
- IP DSCP
- IP TTL
- IP Protocol
- Media Byte Count
- TCP Connect Round Trip Delay
- TCP Lost Event Count

Perf-Monitor Metrics: RTP Profile

- Flow Sampling Start Timestamp
- Loss of measurement confidence
- Media Stop Event Occurred
- IP Packet Drop Count
- IP Byte Count
- IP Packet Count
- IP Byte Rate
- Packet Drop Reason
- IP DSCP
- IP TTL
- IP Protocol
- Media Byte Rate Average
- Media Byte Count
- Media Packet Count

- RTP Interarrival Jitter Average
- RTP Packets Lost
- RTP Packets Expected (pkts):
- RTP Packet Lost Event Count:
- RTP Loss Percent

System Metrics: INTF Profile

- Collection timestamp
- Octet input at Ingress
- Octet output at Egress
- Packets received with errors at Ingress
- Packets with errors at Egress
- Packets discarded at Ingress
- Packets discarded at Egress
- Ingress interface speed
- Egress interface speed

System Metrics: CPU Profile

- CPU Utilization (1min)
- CPU Utilization (5min)
- Collection timestamp

System Metrics: MEMORY Profile

- Processor memory utilization %
- Collection timestamp

App-Health Metrics: MEDIATRACE-HEALTH Profile

- Requests Received
- Time Last Request Received
- Initiator of Last Request
- Requests Dropped
- Max Concurrent Sessions supported
- Sessions currently active

- Sessions Teared down
- Sessions Timed out
- Hop Info Requests Received
- Performance Monitor Requests Received
- Performance Monitor Requests failed
- Static Policy Requests Received
- Static Policy Requests Failed
- System Data Requests Received
- System Data Requests Failed
- Application Health Requests Received
- Local route change events
- Time of last route change event
- Number of unknown requests received

Overview of Configuring Cisco Mediatrace

Information can be retrieved from Mediatrace by using in either:

- A pre-scheduled, recurring monitoring session.
- An one-shot, on-demand collection of statistics, known as a Mediatrace poll.

Before you can implement a Mediatrace session or poll, you enable Mediatrace on each network node that you want to collect flow information from. You must enable the Mediatrace Initiator on the network node that you will use to configure, initiate, and control the Mediatrace sessions or polls. On each of the network nodes that you want top collect information from, you must enable the Mediatrace Responder.

To configure a Cisco Mediatrace session, you can set session parameters by associating either of two types of pre-packaged profiles with the session:

- video-monitoring profiles
- system-data profiles

You can also configure your own parameters for a Cisco Mediatrace session by configuring the following types of profiles and associating them with the session:

- Path-specifier profile
- Flow-specifier profile
- Sessions-parameters profile

Therefore, the next section describes how to perform the following tasks in order to configure a Cisco Mediatrace session:

1. Enable mediatrace

2. Setup a video-monitoring profile
3. Setup a system-data profile
4. Setup a path-specifier profile
5. Setup a flow-specifier profile
6. Setup a sessions-params profile
7. Associate profiles with a mediatrace session
8. Schedule a mediatrace session

The next section also describes how to execute a mediatrace poll, which is an on-demand fetch of data from the hops on a specific path.

In addition, the next section describes how to manage mediatrace sessions by performing the following tasks:

- Clear incomplete Cisco Mediatrace sessions
- Troubleshoot a Cisco Mediatrace session

Limitations

- Mediatrace does not support IPv6.
- Resource Reservation Protocol (RSVP) does not forward an incoming Path message on the same interface (i.e., through the interface from where it receives the path message). It displays an error some message on the console, “ingress interface = egress interface”. But the Path is sent out on the incoming interface in case of an Performance Routing (PfR) border router.

How to Configure Cisco Mediatrace

Enabling Cisco Mediatrace

For each node you want to monitor using Cisco Mediatrace, you must enable at least the Cisco Mediatrace Responder. You must also enable the Cisco Mediatrace Initiator for all nodes that you want to initiate Mediatrace sessions or polls.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **mediatrace initiator** {**source-ip** ip-address | **source-interface** *interface-name*} [**force**] **[max-sessions** *number* **]**
4. **mediatrace responder [max-sessions** *number* **]**
5. **end**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**mediatrace initiator** {**source-ip** ip-address | **source-interface** *interface-name*} [**force**] **[max-sessions** *number* **]** **Example:** `Router(config)# mediatrace initiator source-ip 10.10.1.1 max-sessions 4`	Enables the Cisco Mediatrace or initiator. You can also use the following keywords: • *ip-address* --Any reachable IP address. • *interface-name* --Any local interface that connects to the initiator. • **max-sessions** --Sets the number of Cisco Mediatrace sessions.
Step 4	**mediatrace responder [max-sessions** *number* **]** **Example:** `Router(config)# mediatrace responder max-sessions 4`	Enables the Cisco Mediatrace responder. You can also use the following keywords: • **max-sessions** --Sets the number of Cisco Mediatrace sessions.
Step 5	**end** **Example:** `Router(config)# end`	Exits the current configuration mode and returns to privileged EXEC mode.

Troubleshooting Tips

Use the **show mediatrace responder app-health**command to verify whether the responder is collecting events, requests, and other Cisco Mediatrace related statistics properly.

For more information about this command, see the How to Troubleshoot and Monitor a Cisco Mediatrace Session, on page 23.

Configuring a Cisco Mediatrace Video Profile on the Mediatrace Initiator

Cisco Mediatrace provides pre-packaged video-monitoring profiles that contain all of the parameter settings you need to start a video media monitoring session. You can also configure your own video-monitoring profiles on the Mediatrace Initiator.

To initiate a new video media monitoring session, you can associate one of these profiles with a Cisco Mediatrace session when you configure it.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **mediatrace profile perf-monitor** *name*
4. admin-params
5. **sampling-interval** *seconds*
6. **exit**
7. **metric-list** {**tcp** | **rtp**}
8. **clock-rate** {*type-number* | *type-name*} *rate*
9. **max-dropout** *number*
10. **max-reorder** *number*
11. **min-sequential** *number*
12. **end**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**mediatrace profile perf-monitor** *name* **Example:** `Router(config)# mediatrace profile perf-monitor vprofile-2`	Enters perf-prof configuration mode so that you can configure parameters for a Cisco Mediatrace pre-packaged video-monitoring profile.
Step 4	admin-params **Example:** `Router(config-mt-prof-perf)# admin-params`	Enters admin parameters configuration mode so that you can configure video-monitoring admin parameters.
Step 5	**sampling-interval** *seconds* **Example:**	Specifies the interval, in seconds, between samples taken of video-monitoring metrics.

	Command or Action	Purpose
	`Router(config-mt-prof-perf-params)# sampling-interval 40`	
Step 6	**exit** **Example:** `Router(config-mt-prof-perf-params)# exit`	Exits the current configuration mode and returns to perf-prof configuration mode.
Step 7	**metric-list** {**tcp** | **rtp**} **Example:** `Router(config-mt-prof-perf)# metric-list rtp`	Specifies whether the metrics being monitored are for TCP or RTP.
Step 8	**clock-rate** {*type-number* | *type-name*} *rate* **Example:** `Router(config-mt-prof-perf-rtp-params)# clock-rate 64`	(Optional) Specifies the clock rate used to sample RTP video-monitoring metrics. Each payload type has a specific clock rate associated with it and is can specified with either a type number or type name. For the available values of the payload type name, see the Cisco Media Monitoring Command Reference .
Step 9	**max-dropout** *number* **Example:** `Router(config-mt-prof-perf-rtp-params)# max-dropout 2`	(Optional) Specifies the maximum number of dropouts allowed when sampling RTP video-monitoring metrics. Dropouts are the number of packets to ignore ahead the current packet in terms of sequence number.
Step 10	**max-reorder** *number* **Example:** `Router(config-mt-prof-perf-rtp-params)# max-reorder 4`	(Optional) Specifies the maximum number of reorders allowed when sampling RTP video-monitoring metrics. Reorders are the number of packets to ignore behind the current packet in terms of sequence number.
Step 11	**min-sequential** *number* **Example:** `Router(config-mt-prof-perf-rtp-params)# min-sequential 2`	(Optional) Specifies the minimum number of packets in a sequence used to classify a RTP flow .
Step 12	**end** **Example:** `Router(config-mt-prof-perf-rtp-params)# end`	Exits the current configuration mode and returns to privileged EXEC mode.

Troubleshooting Tips

Use the **show mediatrace profile perf-monitor** command to verify that the parameter values for your pre-packaged video-monitoring profiles are set correctly.

For more information about this command, see the How to Troubleshoot and Monitor a Cisco Mediatrace Session, on page 23.

Configuring a Cisco Mediatrace System Profile

Cisco Mediatrace provides pre-packaged system-data monitoring profiles that contain all of the parameter settings you need to start a system-data monitoring session. You can also configure your own system-data monitoring profiles. To initiate a new system-data monitoring session, you can associate one of these profiles with a Cisco Mediatrace session when you configure it.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **mediatrace profile system** *name*
4. **metric-list** {**intf** | **cpu** | **memory**}
5. **end**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**mediatrace profile system** *name* **Example:** `Router(config)# mediatrace profile system system-2`	Enters system profile configuration mode so that you can configure parameters for a Cisco Mediatrace system profile.
Step 4	**metric-list** {**intf**	**cpu**	**memory**} **Example:** `Router(config-sys)# metric-list memory`	Specifies whether the metrics being monitored are for interfaces, the CPU, or the memory.
Step 5	**end** **Example:** `Router(config-sys)# end`	Exits the current configuration mode and returns to privileged EXEC mode.

Troubleshooting Tips

Use the **show mediatrace profile system**commandto verify that the parameter values for your pre-packaged system-data profiles are set correctly.

For more information about this command, see the How to Troubleshoot and Monitor a Cisco Mediatrace Session, on page 23.

Configuring a Cisco Mediatrace Path-Specifier Profile

A Cisco Mediatrace session configuration requires a path-specifier profile which defines the parameters that are used to discover the network hops that will be monitored for troubleshooting. The RSVP transport protocol, specified by optional **disc-proto** keyword, is used to do this hop discovery. The parameter values for the flow-specifier should match the values for the media flow that will be traced.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **mediatrace path-specifier** *name* [**disc-proto rsvp**] {**gsid** *gsid* | **destination ip** *ip-address* **port** *nnnn* }
4. **source ip** *ip-address* **port** *nnnn*
5. **l2-params gateway** *ip-address* **vlan** *vlan-id*
6. **gsid** *gsid*
7. **end**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**mediatrace path-specifier** *name* [**disc-proto rsvp**] {**gsid** *gsid*	**destination ip** *ip-address* **port** *nnnn* } **Example:** `Router(config)# mediatrace path-specifier path-4 disc-proto rsvp destination ip 10.1.1.1 port 400`	Enters path-specifier configuration mode so that you can configure parameters for a Cisco Mediatrace path-specifier profile. This command requires the name, destination address, and port of the path.

	Command or Action	Purpose
Step 4	**source ip** *ip-address* **port** *nnnn* **Example:** `Router(config-mt-path)# source ip 10.1.1.2 port 600`	Specifies the IP address of the source of the metrics being monitored.
Step 5	**l2-params gateway** *ip-address* **vlan** *vlan-id* **Example:** `Router(config-mt-path)# l2-params gateway 10.10.10.4 vlan 22`	Specifies the IP address and ID of the virtual LAN of the level-2 gateway. **Note** This command is available only on Catalyst platforms.
Step 6	**gsid** *gsid* **Example:** `Router(config-mt-path)# gsid 60606060`	Specifies the metadata global session ID of the flow being monitored.
Step 7	**end** **Example:** `Router(config-mt-path)# end`	Exits the current configuration mode and returns to privileged EXEC mode.

Troubleshooting Tips

Use the **show mediatrace path-specifier** command to verify that the parameter values for your path-specifier profiles are set correctly.

For more information about this command, see the How to Troubleshoot and Monitor a Cisco Mediatrace Session, on page 23.

Configuring a Cisco Mediatrace Flow-Specifier Profile

A Cisco Mediatrace session configuration requires a flow-specifier profile which defines the source IP address, destination IP address, source port, destination port, and protocol that identifies a flow. You can associate a profile with an actual Cisco Mediatrace session later when you configure it

For RTP media flows, select UDP as protocol.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **mediatrace flow-specifier** *name*
4. **source-ip** *ip-address* [**source-port** *port*]
5. **dest-ip** *ip-address* [**dest-port** *port*]
6. **gsid** *gsid*
7. **ip-protocol** {**tcp** | **udp**}
8. **end**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**mediatrace flow-specifier** *name* **Example:** `Router(config)# mediatrace flow-specifier flow-6`	Enters flow-specifier configuration mode so that you can configure parameters for a Cisco Mediatrace flow-specifier profile.
Step 4	**source-ip** *ip-address* [**source-port** *port*] **Example:** `Router(config-mt-flowspec)# source-ip 10.1.1.2 source-port 600`	(Optional) Specifies the IP address of the source of the metrics being monitored.
Step 5	**dest-ip** *ip-address* [**dest-port** *port*] **Example:** `Router(config-mt-flowspec)# dest-ip 10.1.1.2 dest-port 600`	Specifies the IP address of the destination of the metrics being monitored.
Step 6	**gsid** *gsid* **Example:** `Router(config-mt-flowspec)# gsid 60606060`	Specifies the metadata global session ID of the flow being monitored.
Step 7	**ip-protocol** {**tcp** | **udp**} **Example:** `Router(config-mt-flowspec)# ip-protocol tcp`	Specifies whether the metrics being monitored are for TCP or UDP.
Step 8	**end** **Example:** `Router(config-mt-flowspec)# end`	Exits the current configuration mode and returns to privileged EXEC mode.

Troubleshooting Tips

Use the **show mediatrace flow-specifier** command to verify that the parameter values for your flow-specifier profiles are set correctly.

For more information about this command, see the How to Troubleshoot and Monitor a Cisco Mediatrace Session, on page 23.

Configuring a Cisco Mediatrace Session Parameters Profile

A Cisco Mediatrace session configuration requires a session-params profile, which defines the characteristics of a Cisco Mediatrace session and help it to operate smoothly. You can associate a profile with an actual Cisco Mediatrace session later when you configure it

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **mediatrace session-params** *name*
4. **response-timeout** *seconds*
5. **frequency** {*frequency* | **on-demand**} **inactivity-timeout** *seconds*
6. **history** *buckets*
7. **route-change reaction-time** *seconds*
8. **end**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**mediatrace session-params** *name* **Example:** `Router(config-mt-sesparam)# mediatrace session-params qos-2`	Enters session-params configuration mode so that you can configure parameters for a Cisco Mediatrace session-params profile.
Step 4	**response-timeout** *seconds* **Example:**	Specifies the amount of time, in seconds, the initiator will wait for a response from the responder.

	Command or Action	Purpose
	`Router(config-mt-sesparam)# response-timeout 8`	
Step 5	**frequency** {*frequency* | **on-demand**} **inactivity-timeout** *seconds* **Example:** `Router(config-mt-sesparam)# frequency 4 inactivity-timeout 2`	Specifies the interval, in seconds, between samples taken of session-params metrics and the amount of time, in seconds, the initiator will remain active without any activity from the responder.
Step 6	**history** *buckets* **Example:** `Router(config-mt-sesparam)# history 2`	Specifies the number of historical data sets kept, up to a maximum of ten.
Step 7	**route-change reaction-time** *seconds* **Example:** `Router(config-mt-sesparam)# route-change reaction-time 8`	Specifies the amount of time, in seconds, the initiator will wait for the responder to react to its additional route changes. The range is seconds.
Step 8	**end** **Example:** `Router(config-mt-sesparam)# end`	Exits the current configuration mode and returns to privileged EXEC mode.

Troubleshooting Tips

Use the **show mediatrace session-param**command to verify that the parameter values for your session-parameters profiles are set correctly.

For more information about this command, see the How to Troubleshoot and Monitor a Cisco Mediatrace Session, on page 23.

Configuring a Cisco Mediatrace Session

The Cisco Mediatrace session configuration links the various profiles to a session. Only one of each type of profile can be associated with a Cisco Mediatrace session.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **mediatrace** *session-number*
4. **trace-route**
5. **path-specifier** {[**forward**] *path-name* | **reverse** *path-name* }
6. **session-params** *name*
7. **profile system** *name*

8. **profile perf-monitor** *name* **flow-specifier** *flow-specifier-name*
9. **profile snmp** *name*
10. **profile custom** *name*
11. **last-node** { **auto** | **address** *address* }
12. **end**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**mediatrace** *session-number* **Example:** `Router(config)# mediatrace 157`	Enters session configuration mode.
Step 4	**trace-route** **Example:** `Router(config-mt-session)# trace-route`	Enables the running of trace route for the Cisco Mediatrace session. By default trace route is enabled. To stop running trace route, use the **no** form of this command.
Step 5	**path-specifier** {[**forward**] *path-name* | **reverse** *path-name* } **Example:** `Router(config-mt-session)# path-specifier path-4`	Associates a path-specifier profile with the Cisco Mediatrace session.
Step 6	**session-params** *name* **Example:** `Router(config-mt-session)# session-params session-6`	Associates a session-parameters profile with the Cisco Mediatrace session.
Step 7	**profile system** *name* **Example:** `Router(config-mt-session)# profile system sys-2`	Associates a system profile with the Cisco Mediatrace session.

	Command or Action	Purpose
Step 8	**profile perf-monitor** *name* **flow-specifier** *flow-specifier-name* **Example:** `Router(config-mt-session)# profile perf-monitor monitor-6 flow-specifier flow-4`	Associates a perf-monitor profile and flow-specifier with the Cisco Mediatrace session.
Step 9	**profile snmp** *name* **Example:** `Router(config-mt-session)# profile snmp snmp-2`	Associates an SNMP profile with the Cisco Mediatrace session.
Step 10	**profile custom** *name* **Example:** `Router(config-mt-session)# profile custom cp-2`	Associates an SNMP profile with the Cisco Mediatrace session.
Step 11	**last-node** { **auto** | **address** *address* } **Example:** `Router(config-mt-session)# last-node address 10.1.1.1`	Configures the last node for the Cisco Mediatrace session.
Step 12	**end** **Example:** `Router(config-mt-session)# end`	Exits the current configuration mode and returns to privileged EXEC mode.

Troubleshooting Tips

Use the **show mediatrace session**command to display the parameter settings for a specific session or all sessions.

Use the **show mediatrace responder app-health** command and the **show mediatrace responder sessions**command to determine the status of the nodes being monitored.

If Cisco Mediatrace is not collecting all of the data that you want, use the **debug mediatrace**command.

For more information about these commands, see the How to Troubleshoot and Monitor a Cisco Mediatrace Session, on page 23.

Scheduling a Cisco Mediatrace Session

Once you have configured a Cisco Mediatrace session, you can schedule it to begin when you want to start collecting the data. If the Cisco Mediatrace session is designed to collect performance monitoring metrics, it goes out to enable the Performance Monitor when the session begins.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **mediatrace schedule** *session ID* [*life* {**forever** | *secs*}] [**start-time** {*hh*:*mm*:[:*ss*][*month day*| *day month*] | **pending** | **now** | **after** *hh*:*mm*:*ss*}] [**ageout** *secs*] [**recurring**]
4. **end**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**mediatrace schedule** *session ID* [*life* {**forever**	*secs*}] [**start-time** {*hh*:*mm*:[:*ss*][*month day*| *day month*]	**pending**	**now**	**after** *hh*:*mm*:*ss*}] [**ageout** *secs*] [**recurring**] **Example:** `Router(config)# mediatrace schedule 22 life 40 start-time 10:00:00 AUG 20 recurring`	Specifcies when the session will occur. Use these settings: • *session ID* --Which session to run. • **life** --Amount of time the session lasts, either the number of seconds or forever. • **start-time** --When the session starts, whether it is at a specified time and date, pending an event, immediately, or after a specified time and date. • **ageout** --Timeout before removing the session configuration on the initiator. • **recurring** --Session reoccurs at the specified time.
Step 4	**end** **Example:** `Router(config-mt-sched)# end`	Exits the current configuration mode and returns to privileged EXEC mode.

Troubleshooting Tips

Use the **show mediatrace session**command to verify that the intended values are set for the parameters for a specific session or all sessions.

Use the **show mediatrace responder app-health** command and the **show mediatrace responder sessions**command to determine the status of the nodes being monitored.

If Cisco Mediatrace is not collecting all of the data that you want, use the **debug mediatrace**command.

For more information about these commands, see the How to Troubleshoot and Monitor a Cisco Mediatrace Session, on page 23.

Clearing a Cisco Mediatrace Session

You can clear incomplete mediatrace sessions on the Initiator by using the **clear mediatrace incomplete-sessions**command as described below. This coammand also cleans up all Performance Monitor settings that were configured by Cisco Mediatrace. For sessions created by the config commands, use the **no mediatrace schedule**command. The cleanup triggers a "session teardown" message to RSVP followed by a cleanup of the local mediatrace sessions database.

SUMMARY STEPS

1. **enable**
2. **clear mediatrace incomplete-sessions**
3. **end**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**clear mediatrace incomplete-sessions** **Example:** `Router# clear mediatrace incomplete-sessions`	Clears incomplete mediatrace sessions.
Step 3	**end** **Example:** `Router# end`	Exits the current configuration mode and returns to privileged EXEC mode.

Troubleshooting Tips

To check the status of your Cisco Mediatrace session, use the **show mediatrace responder sessions**command.

For more information about these commands, see the How to Troubleshoot and Monitor a Cisco Mediatrace Session, on page 23.

Executing a Cisco Mediatrace Poll

Cisco Mediatrace polls are used to perform an on-demand fetch of data from the hops on a specific path. Some examples of how it can be used are:

- To retrieve data using a pre-configured session. In this case, no other parameters have to be specified inline. The pre-configured session must be have the frequency type set to on-demand.
- To retrieve the system data, hop or video monitoring information from hops along the specified path. You can specify the path as a pre-configured path-specifier or an inline path specification, in case you do not have config mode privileges. Note that by default, Cisco Mediatrace tries to configure nodes along the path to report passive monitoring metrics, and then waits for a configurable amount of time before going out again to collect the data.
- The **configless** keyword can be used to fetch data from the nodes along a media path, which already have Performance Monitor policies configured using the Performance Monitor commands. Some key things to keep in mind when fetching data using this method are that:
  - The default perf-monitor profile or associated perf-monitor profile will have a sampling interval. If the sampling interval of the static policy does not match the one in the associated perf-monitor profile, no data is returned.
  - If there is no Performance Monitor policy configured on a Responder node, the Cisco Mediatrace responder does not try to configure Performance Monitor and simply reports error to the initiator.

SUMMARY STEPS

1. **enable**
2. **mediatrace poll** {**no-traceroute** | **session** *number* | [**timeout** *value*] **path-specifier**{**name** *path-name* | **gsid** *gsid* | {[**disc-proto rsvp**] **destination ip** *ip-address* [**port** *nnnnn*] | **source ip** *ip-address* [**port** *nnnnn*] **destination ip** *ip-address* [**port** *nnnn*] [**ip-protocol**{**tcp** | **udp**}]} {**app-health** | **hops** | **l2-params gateway** *ip-address* | **system** [**profile** *system-profile-name*] | [**configless**] **perf-monitor** [**profile** *profile-name*]} {**flow-specifier** *name* | **source-ip** *ipaddress* [**source-port** *nnnnn*] **dest-ip** *ipaddress* [**dest-port** *nnnnn*] **ip-protocol** {**tcp** | **udp**}}}}
3. **end**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**mediatrace poll** {**no-traceroute** | **session** *number* | [**timeout** *value*] **path-specifier**{**name** *path-name* | **gsid** *gsid* | {[**disc-proto rsvp**] **destination ip** *ip-address* [**port** *nnnnn*] | **source ip** *ip-address* [**port** *nnnnn*] **destination ip** *ip-address* [**port** *nnnn*] [**ip-protocol**{**tcp** | **udp**}]}	Performs an on-demand fetch of data from the hops on a specific path. You can specify the hops using one of the following types of information: • A session definition or its constituent parameters

	Command or Action	Purpose
	{**app-health** | **hops** | **l2-params gateway** *ip-address* | **system** [**profile** *system-profile-name*] | [**configless**] **perf-monitor** [**profile** *profile-name*]} {**flow-specifier** *name* | **source-ip** *ipaddress* [**source-port** *nnnnn*] **dest-ip** *ipaddress* [**dest-port** *nnnnn*] **ip-protocol** {**tcp** | **udp**}}}} **Example:** **Example:** `Router# mediatrace poll session 22`	• A system profile definition or its constituent parameters • A combination of a path-specifier profile definition and a perf-monitor profile definition or their constituent parameters **Note** The **l2-params gateway** keyword is available only on Catalyst platforms.
Step 3	**end** **Example:** `Router# end`	Exits the current configuration mode and returns to privileged EXEC mode.

Troubleshooting Tips

If Cisco Mediatrace is not collecting all of the data that you want:

- Use the **show mediatrace session**command to verify that the intended values are set for the parameters for a specific session or all sessions.
- Use the **show mediatrace responder app-health** command and the **show mediatrace responder sessions**command to determine the status of the nodes being monitored.
- Use the **debug mediatrace**command to view error messages.

Examples



Tip For examples of poll output, see Configuration Examples for Cisco Mediatrace, on page 30.

The following example shows how to fetch the default system metrics when the source IP address, source port, and destination port are not known. Cisco Mediatrace uses the best local IP address as source IP address to find which hops are using RSVP.

mediatrace poll path dest *ip-address* **system**

The following example shows how to fetch the default system metrics when the source and destination port numbers are not known. RSVP finds the hop between the specified source and destination.

mediatrace poll path source *ip-address* **dest** *ip-address* **system**

The following example shows how to fetch the default system metrics when the source and destination port numbers are known. RSVP finds the hop using this information.

mediatrace poll path source-ip *ip-address* **source - port** *nnnn* **dest-ip** *ip-address* **dest - port** *nnnn* **ip-protocol udp system**

The following example shows how to fetch the default set of RTP metrics when the source and destination port numbers are not known. Cisco Mediatrace uses the path source and destination IP addresses to find the hops as well as filter the Performance Monitor data.

mediatrace poll path source *ip-address* **dest** *ip-address* **perf-monitor**

The following example shows how to fetch the default set of RTP metrics. Cisco Mediatrace uses the path parameters to discover hops and uses the inline flow specifier profile as a filter for Performance Monitor data.

mediatrace poll path source *ip-address* **dest** *ip-address* **perf-monitor source-ip** *ip-address* **source - port** *nnnn* **dest-ip** *ip-address* **dest - port** *nnnn* **ip-protocol udp**

The following example shows how to fetch the default set of TCP metrics. Cisco Mediatrace uses the path parameters to discover hops and uses the inline flow-specifier profile as a filter for Performance Monitor data.

mediatrace poll path source *ip-address* **dest** *ip-address* **perf-monitor source-ip** *ip-address* **source - port** *nnnn* **dest-ip** *ip-address* **dest - port** *nnnn* **ip-protocol tcp**

The following example shows how to fetch the default set of RTP metrics. Cisco Mediatrace uses the best local IP address as source IP address for finding hops on the path and uses the inline flow specifier profile as a filter for Performance Monitor data.

mediatrace poll path dest *ip-address* **perf-monitor source-ip** *ip-address* **source - port** *nnnn* **dest-ip** *ip-address* **dest - port** *nnnn* **ip-protocol udp**

The following example shows how to fetch the default set of TCP metrics. Cisco Mediatrace uses the best local IP address as source IP address for finding hops on the path and uses the inline flow-specifier profile as a filter for Performance Monitor data.

mediatrace poll path dest *ip-address* **perf-monitor source-ip** *ip-address* **source - port** *nnnn* **dest-ip** *ip-address* **dest - port** *nnnn* **ip-protocol tcp**

The following example shows how to fetch the default set of RTP metrics from the static policy that is already configured on the hops. The command does not configure the Performance Monitor. Cisco Mediatrace uses the path parameters to discover hops and use the inline flow specifier profile as a filter for Performance Monitor data.

mediatrace poll path source *ip-address* **dest** *ip-address* **configless perf-monitor flow-specifier source** *ip-address* **port** *nnnn* **dest** *ip-address* **port** *nnnn* **ip-protocol udp**

Poll Output Example

This example shows the output is produced by the following hops poll command:

```
mediatrace poll path-specifier source 10.10.130.2 destination 10.10.132.2 hops
Started the data fetch operation.
Waiting for data from hops.
This may take several seconds to complete...
Data received for hop 1
Data received for hop 2
Data fetch complete.
Results:
Data Collection Summary:
  Request Timestamp: 22:47:56.788 PST Fri Oct 29 2010
  Request Status: Completed
  Number of hops responded (includes success/error/no-record): 2
  Number of hops with valid data report: 2
  Number of hops with error report: 0
  Number of hops with no data record: 0
Detailed Report of collected data:
```

```
Number of Mediatrace hops in the path: 2
Mediatrace Hop Number: 1 (host=responder1, ttl=254)
  Reachability Address: 10.10.12.3
  Ingress Interface: Gi0/1
  Egress Interface: Gi0/2
Mediatrace Hop Number: 2 (host=responder2, ttl=253)
  Reachability Address: 10.10.34.3
  Ingress Interface: Gi0/1
  Egress Interface: Gi0/2
```

How to Troubleshoot and Monitor a Cisco Mediatrace Session

Use the **show** commands described in this section to troubleshoot to monitor a Cisco Mediatrace session.



Tip For sample outputs, see the Examples section, in this chapter.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **show mediatrace profile perf-monitor** [*name*]
4. **show mediatrace profile system** [*name*]
5. **show mediatrace flow-specifier** [*name*]
6. **show mediatrace path-specifier** [*name*]
7. **show mediatrace initiator**
8. **show mediatrace session-params** [*name*]
9. **show mediatrace session** [**config**| **data**| **stats**| **hops**] [**brief**| *ID*]
10. **show mediatrace responder app-health**
11. **show mediatrace responder sessions [** *global-session-id* **| brief | details]**
12. **debug mediatrace** {**event** | **trace** | **error**} [**initiator** | **responder**| *session-id*]
13. **end**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.

	Command or Action	Purpose
Step 3	**show mediatrace profile perf-monitor** [*name*] **Example:** `Router(config)# show mediatrace profile perf-monitor vprofile-4`	Displays the parameters configured for all pre-packaged video-monitoring profiles or the specified profile.
Step 4	**show mediatrace profile system** [*name*] **Example:** `Router(config)# show mediatrace profile system system-8`	Displays the parameters configured for all pre-packaged system-data monitoring profiles or the specified profile.
Step 5	**show mediatrace flow-specifier** [*name*] **Example:** `Router(config)# show mediatrace flow-specifier flow-2`	Displays the parameters configured for all flow-specifier profiles or the specified flow-specifier profile.
Step 6	**show mediatrace path-specifier** [*name*] **Example:** `Router(config)# show mediatrace path-specifier path-6`	Displays the parameters configured for all path-specifier profiles or the specified path-specifier profile.
Step 7	**show mediatrace initiator** **Example:** `Router(config)# show mediatrace initiator`	Displays the parameters configured for the initiator profile.
Step 8	**show mediatrace session-params** [*name*] **Example:** `Router(config)# show mediatrace session-params sysparams-2`	Displays the monitoring parameters for the session like frequency, response timeout, ands so on. the parameters configured for all pre-packaged system-data monitoring profiles or the specified profile.
Step 9	**show mediatrace session** [**config**| **data**| **stats**| **hops**] [**brief**| *ID*] **Example:** `Router(config)# show mediatrace session data 1002`	Displays the parameters configured for all session profiles or the specified session profile. Use the following keywords to display the corresponding information: • **config** --Configuration of the session. • **data** --All data records collected and still cached at the Initiator. • **stats** --Statistics for this service path or session. • **hops** --Prior service paths (if available) and current service paths discovered. Also shows where and when the last route change happened.

	Command or Action	Purpose
		• **brief** -- Only a list of sessions with ID, destination/source address/port, and their role association as Initiator or Responder. • *ID* -- Session ID and some state information.
Step 10	**show mediatrace responder app-health** **Example:** `Router(config)# show mediatrace responder app-health`	Displays the current status of the responder.
Step 11	**show mediatrace responder sessions [** *global-session-id* **| brief | details]** **Example:** `Router(config)# show mediatrace responder sessions`	Displays the information about all or specific active sessions on local responder. Use the following keywords to display the corresponding information • *global-session-id* -- ID of the session for which information is displayed. • **brief** --Displays only the destination and source address/port of the path, their role as either Initiator or Responder, and some state information. • **details** --Displays all information.
Step 12	**debug mediatrace** {**event** | **trace** | **error**} [**initiator** | **responder**| *session-id*] **Example:** `Router(config)# debug mediatrace event 24`	Enables debugging for a particular path, or a particular session, or for all Initiator and Responder functions. You can use the following options: • **event** -- Displays only event information. • **trace** -- Displays only trace information. • **error** -- Displays only errors. • **initiator** -- Displays information for only the initiator. • **responder** -- Displays information for only the responder. • *session-id* -- Displays information for only the session.
Step 13	**end** **Example:** `Router(config)# end`	Exits the current configuration mode and returns to privileged EXEC mode.

Examples

Note For a complete description of the output for the following show commands, see the *Cisco Media Monitoring Command Reference*.

The following example displays video-monitoring profiles:

```
Router# show mediatrace profile perf-monitor
Perf-monitor Profile: vprof-4
Metric List: rtp
RTP Admin Parameter:
  Max Dropout: 5
  Max Reorder: 5
  Min Sequential: 5
Admin Parameter:
  Sampling Interval (sec): 30
```

The following example displays system-data profiles:

```
Router# show mediatrace profile
system

System Profile: sys-1
Metric List: intf
```

The following example displays flow-specifier profiles:

```
Router# show mediatrace
 flow-specifier flow-1
Flow Specifier: flow-1
    Source address/port:
    Destination address/port:
    Protocol: udp
```

The following example displays path-specifier profiles:

```
Router# show mediatrace
 path-specifier flow-1
Path Configuration: ps1
    Destination address/port: 10.10.10.1
    Source address/port: 10.10.10.4
    Gateway address/vlan:
    Discovery protocol: rsvp
```

The following example displays the initiator profile:

```
Router# show mediatrace
 initiator
Version: Mediatrace 1.0
Mediatrace Initiator status: enabled
Source IP: 1.1.1.1
Number of Maximum Allowed Active Session: 127
Number of Configured Session: 1
Number of Active Session    : 0
Number of Pending Session   : 0
Number of Inactive Session  : 1
```

```
Note: the number of active session may be higher than max active session
      because the max active session count was changed recently.
```

The following example displays session profiles:

```
Router# show mediatrace session-params
Session Parameters: s-1
    Response timeout (sec): 60
    Frequency: On Demand
    Inactivity timeout (sec): 300
    History statistics:
       Number of history buckets kept: 3
    Route change:
       Reaction time (sec): 5
```

The following example displays Mediatrace session statistics:

```
Router# show mediatrace session stats 2
Session Index: 2
Global Session Id: 86197709
Session Operation State: Active
Operation time to live: Forever
Data Collection Summary:
  Request Timestamp: 23:55:04.228 PST Fri Oct 29 2010
  Request Status: Completed
  Number of hops responded (includes success/error/no-record): 2
  Number of Non Mediatrace hops responded: 0
  Number of hops with valid data report: 2
  Number of hops with error report: 0
  Number of hops with no data record: 0
Detailed Report of collected data:
  Last Route Change Timestamp:
  Route Index: 0
    Number of Mediatrace hops in the path: 2
    Mediatrace Hop Number: 1 (host=responder1, ttl=254)
      Metrics Collection Status: Success
      Reachability Address: 10.10.12.3
      Ingress Interface: Gi0/1
      Egress Interface: Gi0/2
      Traceroute data:
        Address List: 1.2.2.3
        Round Trip Time List (msec): 12 msec
```



Note The rest of the data for hop 1 is similar to the data for hop 2, as shown below.

```
Mediatrace Hop Number: 2 (host=responder2, ttl=253)
      Metrics Collection Status: Success
      Reachability Address: 10.10.34.3
      Ingress Interface: Gi0/1
      Egress Interface: Gi0/2
      Metrics Collected:
        Collection timestamp: 23:55:04.237 PST Fri Oct 29 2010
        Octet input at Ingress (KB): 929381.572
        Octet output at Egress (MB): 1541.008502
        Pkts rcvd with err at Ingress (pkts): 0
        Pkts errored at Egress (pkts): 0
        Pkts discarded at Ingress (pkts): 0
        Pkts discarded at Egress (pkts): 0
```

```
        Ingress i/f speed (mbps): 1000.000000
        Egress i/f speed (mbps): 1000.000000
```

The following example displays Mediatrace session configuration information:

```
Router# show mediatrace session config 2
Global Session Id: 93642270
---------------------------
Session Details:
    Path-Specifier: ps1
    Session Params: sp1
    Collectable Metrics Profile: intf1
    Flow Specifier:
Schedule:
   Operation frequency (seconds): 30  (not considered if randomly scheduled)
   Next Scheduled Start Time: Start Time already passed
   Group Scheduled : FALSE
   Randomly Scheduled : FALSE
   Life (seconds): Forever
   Entry Ageout (seconds): never
   Recurring (Starting Everyday): FALSE
   Status of entry (SNMP RowStatus): Active
History Statistics:
   Number of history Buckets kept: 10
```

The following example displays Mediatrace session hops:

```
show mediatrace session hops 2
Session Index: 2
Global Session Id: 93642270
Session Operation State: Active
Data Collection Summary:
  Request Timestamp: 13:40:32.515 PST Fri Jun 18 2010
  Request Status: Completed
  Number of hops responded (includes success/error/no-record): 3
  Number of hops with valid data report: 3
  Number of hops with error report: 0
  Number of hops with no data record: 0
Detailed Report of collected data:
  Last Route Change Timestamp:
  Route Index: 0
    Number of Mediatrace hops in the path: 3
    Mediatrace Hop Number: 1 (host=responder1, ttl=254)
      Ingress Interface: Gi0/1
      Egress Interface: Gi1/0
    Mediatrace Hop Number: 2 (host=responder2, ttl=253)
      Ingress Interface: Gi0/1
      Egress Interface: Gi1/0
    Mediatrace Hop Number: 3 (host=responder3, ttl=252)
      Ingress Interface: Gi0/1
      Egress Interface: Gi0/2
```

The following example displays Mediatrace session data:

```
Router# show mediatrace session data 2
Session Index: 2
Global Session Id: 35325453
Session Operation State: Active
Bucket index: 1
Data Collection Summary:
  Request Timestamp: 13:02:47.969 PST Fri Jun 18 2010
  Request Status: Completed
  Number of hops responded (includes success/error/no-record): 3
```

```
  Number of hops with valid data report: 3
  Number of hops with error report: 0
  Number of hops with no data record: 0
Detailed Report of collected data:
  Last Route Change Timestamp:
  Route Index: 0
    Number of Mediatrace hops in the path: 3
    Mediatrace Hop Number: 1 (host=responder1, ttl=254)
      Metrics Collection Status: Success
      Ingress Interface: Gi0/1
      Egress Interface: Gi1/0
      Metrics Collected:
        Collection timestamp: 13:04:57.781 PST Fri Jun 18 2010
        Octet input at Ingress (KB): 10982.720
        Octet output at Egress (KB): 11189.176
    Pkts rcvd with err at Ingress (pkts): 0
        Pkts errored at Egress (pkts): 0
        Pkts discarded at Ingress (pkts): 0
        Pkts discarded at Egress (pkts): 0
        Ingress i/f speed (mbps): 1000.000000
        Egress i/f speed (mbps): 1000.000000
    Mediatrace Hop Number: 2 (host=responder2, ttl=253)
      Metrics Collection Status: Success
      Ingress Interface: Gi0/1
      Egress Interface: Gi1/0
      Metrics Collected:
        Collection timestamp: 13:04:57.792 PST Fri Jun 18 2010
        Octet input at Ingress (MB): 1805.552836
        Octet output at Egress (MB): 1788.468650
        Pkts rcvd with err at Ingress (pkts): 0
        Pkts errored at Egress (pkts): 0
        Pkts discarded at Ingress (pkts): 0
        Pkts discarded at Egress (pkts): 0
        Ingress i/f speed (mbps): 1000.000000
        Egress i/f speed (mbps): 1000.000000
```

The following example displays application health information for the Mediatrace responder:

```
Router# show mediatrace responder app-health
Mediatrace App-Health Stats:
   Number of all requests received: 0
   Time of the last request received:
   Initiator ID of the last request received:  0
   Requests dropped due to queue full: 0
   Responder current max sessions: 45
   Responder current active sessions: 0
   Session down or tear down requests received: 0
   Session timed out and removed: 0
   HOPS requests received: 0
   VM dynamic polling requests received: 0
   VM dynamic polling failed: 0
   VM configless polling requests received: 0
   VM configless polling failed: 0
   SYSTEM data polling requests received: 0
   SYSTEM data polling requests failed: 0
   APP-HEALTH polling requests received: 0
   Route Change or Interface Change notices received: 0
   Last time Route Change or Interface Change:
   Unknown requests received: 0
```

The following example displays brief session information for the Mediatrace responder:

```
Router# show mediatrace responder sessions brief
```

```
Local Responder configured session list:
Current configured max sessions: 45
Current number of active sessions: 0
session-id initiator-name       src-ip          src-port   dst-ip          dst-port det-l
  2   host-18     10.10.10.2     200   10.10.10.8     200
```

Configuration Examples for Cisco Mediatrace

Example Basic Mediatrace Configuration

The topology for this example includes:

- One mediatrace initiator (10.10.12.2)
- Two mediatrace responders between:
  - A media source (10.10.130.2)
  - A destination (10.10.132.2)

In this example, there is an RTP traffic stream from the source (address=10.10.130.2, port=1000, to the destination (address=10.10.132.2, port=2000).

The basic configuration of the mediatrace responder is as follows:

```
mediatrace responder
snmp-server community public RO
```

The basic configuration of the mediatrace initiator is as follows:

```
mediatrace initiator source-ip 10.10.12.2
mediatrace profile system intf1
mediatrace profile perf-monitor rtp1
mediatrace path-specifier path1 destination ip 10.10.132.2 port 2000
 source ip 10.10.130.2 port 1000
mediatrace flow-specifier flow1
 source-ip 10.10.130.2 source-port 1000
 dest-ip 10.10.132.2 dest-port 2000
mediatrace session-params sp1
 response-timeout 10
 frequency 60 inactivity-timeout 180
mediatrace 1
 path-specifier path1
 session-params sp1
 profile perf-monitor rtp1 flow-specifier flow1
mediatrace schedule 1 life forever start-time now
mediatrace 2
 path-specifier path1
 session-params sp1
 profile system intf1
mediatrace schedule 2 life forever start-time now
```

A sample reverse mediatrace configuration is given below.

```
Device# show mediatrace initiator
Mediatrace Initiator Software Version: 3.0
Mediatrace Protocol Version: 1
```

```
Mediatrace Initiator status: enabled

Source IP: 10.10.1.1
Source IPv6:

Number of Maximum Allowed Active Session: 8
Number of Configured Session: 3
Number of Active Session    : 2
Number of Pending Session   : 0
Number of Inactive Session  : 1
Number of Total Proxy Session     : 1
Number of Active Proxy Session    : 1
Number of Pending Proxy Session   : 0
Number of Inactive Proxy Session  : 0

Note: the number of active session may be higher than max active session
      because the max active session count was changed recently.

Device# show run
Device# show running-config | show mediatrace
mediatrace responder
mediatrace initiator source-ip 10.10.1.1
mediatrace profile perf-monitor MT_PERF_RTP
mediatrace path-specifier MT_PATH destination ip 10.11.1.10 port 21064
 source ip 10.10.1.11 port 28938
mediatrace path-specifier MT_PATH2 destination ip 10.10.10.10 port 16514
 source ip 10.10.1.10 port 16558
mediatrace flow-specifier MT_FLOW
 source-ip 10.10.1.11 source-port 28938
 dest-ip 10.10.1.50 dest-port 21064
mediatrace flow-specifier MT_FLOW2
 source-ip 10.1.1.50 source-port 21064
 dest-ip 10.1.1.11 dest-port 28938
mediatrace session-params MT_PARAMS
 response-timeout 50
 frequency 60 inactivity-timeout 180
 history data-sets-kept 10
mediatrace reverse 155
 path-specifier forward/reverse MT_PATH/MT_PATH2
 session-params MT_PARAMS
 profile perf-monitor MT_PERF_RTP flow-specifier MT_FLOW2
mediatrace schedule 155 life forever start-time now
mediatrace 157
 path-specifier MT_PATH
 session-params MT_PARAMS
 profile perf-monitor MT_PERF_RTP flow-specifier MT_FLOW
mediatrace schedule 157 life forever start-time now
```

Where to Go Next

For more information about configuring the products in the Medianet product family, see the other chapter in this guide or see the *Cisco Media Monitoring Configuration Guide*.

Additional References

Related Documents

Related Topic	Document Title
Design, configuration, and troubleshooting resources for Cisco Mediatrace and other Cisco Medianet products, including a Quick Start Guide and Deployment Guide.	See the Cisco Medianet Knowledge Base Portal, located at http://www.cisco.com/web/solutions/medianet/knowledgebase/index.html.
IP addressing commands: complete command syntax, command mode, command history, defaults, usage guidelines, and examples	*Cisco Media Montoring Command Reference*

Standards

Standard	Title
No new or modified standards are supported, and support for existing standards has not been modified	--

MIBs

MIB	MIBs Link
No new or modified MIBs are supported, and support for existing MIBs has not been modified	--

RFCs

RFC[1]	Title
RFC 2205	*RSVP: Resource ReSerVation Protocol* http://www.ietf.org/rfc/rfc2205.txt

[1] These references are only a sample of the many RFCs available on subjects related to IP addressing and IP routing. Refer to the IETF RFC site at http://www.ietf.org/rfc.html for a full list of RFCs.

Technical Assistance

Description	Link
The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies. To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds. Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.	http://www.cisco.com/techsupport

Feature Information for Cisco Mediatrace

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to www.cisco.com/go/cfn. An account on Cisco.com is not required.

Table 1: Feature Information for Cisco Mediatrace

Feature Name	Releases	Feature Information
Cisco Mediatrace 1.0	15.1(3)T 12.2(58)SE 15.1(4)M1 15.0(1)SY 15.1(1)SY 15.1(1)SY1 15.2(1)S Cisco IOS XE Release 3.5S 15.1(2)SY	This feature enables you to isolate and troubleshoot network degradation problems for data streams. The following commands were introduced or modified by this feature: **admin-params**, **clear mediatrace**, **incomplete-sessions**, **clock-rate** (RTP parameters), **dest-ip** (flow), **frequency** (session parameters), **history** (session parameters), **ip-protocol** (flow), **max-dropout**, **max-reorder**, **mediatrace**, **mediatrace initiator**, **mediatrace responder**, **mediatrace path-specifier**, **mediatrace poll**, **mediatrace profile perf-monitor**, **mediatrace profile system**, **mediatrace schedule**, **mediatrace session-params**, **metric-list** (monitoring profile), **metric-list** (system profile), **min-sequential**, **path-specifier**, **profile perf-monitor**, **profile system**, **response-timeout** (session parameters), **route-change reaction-time**, **sampling-interval**, **session-params**, **show mediatrace flow-specifier**, **show mediatrace initiator**, **show mediatrace path-specifier**, **show mediatrace profile system**, **show mediatrace profile perf-monitor**, **show mediatrace responder app-health**, **show mediatrace responder sessions**, **show mediatrace session**, **show mediatrace session-params**, **source-ip** (flow), and **source ip** (path).