

Traffic Optimization Profile Configuration Mode Commands

The Traffic Optimization Profile Configuration Mode allows you to configure and manage properties of Cisco Ultra Traffic Optimization solution.

Command Modes

Exec > ACS Configuration > Traffic Optimization Profile Configuration

active-charging service *service_name* > **traffic-optimization-profile**

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-traffic-optim)#
```

Important The commands or keywords/variables that are available are dependent on platform type, product version, and installed license(s).

- data-record, on page 1
- efd-flow-cleanup-interval, on page 2
- end, on page 3
- exit, on page 3
- heavy-session detection-threshold, on page 3
- mode, on page 4
- stats-interval, on page 5
- stats-options, on page 5

data-record

This command enables Traffic Optimization Data Record (TODR) generation.

Product

P-GW

Privilege

Security Administrator, Administrator

Command Modes

Exec > ACS Configuration > Traffic Optimization Profile Configuration

active-charging service *service_name* > **traffic-optimization-profile**

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-traffic-optim)#
```

Syntax Description

```
data-record [ large-flows-only | managed-large-flows-only ]
no data record
```

no

If previously configured, disables generation of TODR.

data-record

Enables the Traffic Optimization Data Record (TODR) generation

- **large-flows-only**: Enables the traffic optimization data record generation for large flows.

  managed-large-flows-only: Enables the traffic optimization data record generation for managed large flows.

  The keywords - **large-flows-only** and **managed-large-flows-only** when configured along with **data-record** enables the CUTO library to stream the respective statistics as part of the **stats-options** command, to the external server. The user can configure a combination of the **stats-options** keywords **flow-trace** and **flow-analyst** and the **data-record** command to notify the CUTO library accordingly.

Note One of the above the two keywords can be configured as part of the data-record, which will enable the CUTO library to stream the respective statistics.

The default behavior of the **data-record** command is not affected with the above implementation . If it is configured without any of the options, then TODR's will be generated for all standard and large flows, which is the existing behavior.

Usage Guidelines Use this command to generate TODR.

efd-flow-cleanup-interval

This configures EFD flow command cleanup interval.

Product P-GW

Privilege Security Administrator, Administrator

Command Modes Exec > ACS Configuration > Traffic Optimization Profile Configuration

active-charging service *service_name* **> traffic-optimization-profile**

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-traffic-optim)#
```

Syntax Description

```
[ no ] efd-flow-cleanup-interval
```

no

If previously configured, disables EFD flow cleanup interval.

efd-flow-cleanup-interval

Configures EFD flow cleanup interval. The interval value is an integer that ranges from 10 to 5000 milliseconds.

Usage Guidelines Use this command to configure EFD flow cleanup interval.

end

Exits the current configuration mode and returns to the Exec mode.

Product All

Privilege Security Administrator, Administrator

Syntax Description **`end`**

Usage Guidelines Use this command to return to the Exec mode.

exit

Exits the current mode and returns to the parent configuration mode.

Product All

Privilege Security Administrator, Administrator

Syntax Description **`exit`**

Usage Guidelines Use this command to return to the parent configuration mode.

heavy-session detection-threshold

Configures the threshold value for the TCP flow to be considered for the Traffic Optimization.

Product P-GW

Privilege Security Administrator, Administrator

Command Modes Exec > ACS Configuration > Traffic Optimization Profile Configuration

active-charging service *service_name* **> traffic-optimization-profile**

Entering the above command sequence results in the following prompt:

`[local]`*`host_name`*`(config-traffic-optim)#`

Syntax Description **heavy-session detection-threshold** *bytes*

heavy-session

Specifies the heavy session configuration for the Traffic Optimization.

detection-threshold *bytes*

Specifies the detection threshold, in bytes. Beyond which, it is considered as heavy session. The *bytes* must be an integer from 1 to 4294967295.

To get optimum Traffic Optimization benefit, it is recommended to not set it less than 3 MB.

Usage Guidelines Use this command to set the threshold value for the TCP flow.

Example

The following command sets the threshold value to *3145728* bytes:

heavy-session detection-threshold 3145728

mode

Configures the operating mode for the Cisco Ultra Traffic Optimization engine.

Product P-GW

Privilege Security Administrator, Administrator

Command Modes Exec > ACS Configuration > Traffic Optimization Profile Configuration

active-charging service *service_name* **> traffic-optimization-profile**

Entering the above command sequence results in the following prompt:

`[local]host_name(config-traffic-optim)#`

Syntax Description **mode [active | passive]**

mode

Sets the mode of operation for Traffic Optimization.

trial-mode

Enables the Crowd Sourcing Optimation feature in the Trial Mode.

Syntax

trial-mode start-time
YYYYMMDDHHMM **end-time** *YYYYMMDDHHMM* **mode-toggle-interval** *mode_toggle_interval*
initial-mode *initial_active | initial_passive*

active

The mode where both Traffic Optimization and flow monitoring is done on the packet.

passive

The mode where no flow-control is performed but monitoring is done on the packet.

Usage Guidelines Use this command to set the operating mode for the Cisco Ultra Traffic Optimization engine.

Example

The following command sets the operating mode to **active**:

```
mode active
```

stats-interval

This command configures the flow statistics collection and reporting interval.

Product P-GW

Privilege Security Administrator, Administrator

Command Modes Exec > ACS Configuration > Traffic Optimization Profile Configuration

active-charging service *service_name* **> traffic-optimization-profile**

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-traffic-optim)#
```

Syntax Description **`[ no ] stats-interval`**

no

If previously configured, disables collection of flow statistics.

stats-interval

Configures the flow statistics collection and reporting interval in seconds. The interval value is an integer that ranges from 1 to 60 seconds.

Usage Guidelines Use this command to collect and report flow statistics.

stats-options

This command configures options to collect the flow statistics.

Product P-GW

Privilege

Security Administrator, Administrator

Command Modes

Exec > ACS Configuration > Traffic Optimization Profile Configuration

active-charging service *service_name* **> traffic-optimization-profile**

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-traffic-optim)#
```

Syntax Description

`[ no ] stats-options { flow-analyst [ flow-trace ] | flow-trace [ flow-analyst ] }`

no

If previously configured, disables trace collection and reporting.

flow-analyst

Enables flow analysis, and large trace collection and reporting.

flow-trace

Enables flow trace collection and reporting.

Usage Guidelines

Use this command to enable trace collectiona and reporting.