

ACS Trigger Action Configuration Mode Commands

The ACS Trigger Action Configuration Mode is used to configure Active Charging Service (ACS) trigger actions.

Command Modes

Exec > ACS Configuration > ACS Trigger Action Configuration

active-charging service *service_name* > **trigger-action** *trigger_action_name*

Entering the above command sequence results in the following prompt:

`[local]host_name(config-acs-trig-action)#`

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

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activate-predef-rule

This command allows you to enable predefined rules or group of rules for a trigger-action.

Product

All

Privilege

Security Administrator, Administrator

Command Modes

Exec > ACS Configuration > ACS Trigger Action Configuration

active-charging service *service_name* **> trigger-action** *trigger_action_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-acs-trig-action)#
```

Syntax Description

[no] activate-predef-rule

no

Disables predefined rules or group of rules for a trigger-action.

activate-predef-rule

Activates predefine rule or group of rules for a trigger action.

Usage Guidelines

When this CLI command is configured, the dedicated bearer is created by service flow at a specific location.

charge-request-to-response

This command allows you to delay charging till the HTTP response for the configured HTTP request method(s).

Product

All

Privilege

Security Administrator, Administrator

Command Modes

Exec > ACS Configuration > ACS Trigger Action Configuration

active-charging service *service_name* **> trigger-action** *trigger_action_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-acs-trig-action)#
```

Syntax Description

[no] charge-request-to-response http { all | connect | delete | get | head | options | post | put | trace }

no

Disables the response-based charging feature in the trigger-action.

all | connect | delete | get | head | options | post | put | trace

Specifies the HTTP methods applicable to delay charging for a flow.

The Response-based Charging feature supports pipelined HTTP requests (both concatenated and non-concatenated). For pipelined HTTP requests and persistent connections of different HTTP methods, this feature is applied only to those HTTP methods for which it is configured.

- **all**: Applies to all HTTP methods
- **connect**: HTTP Connect method

- **delete**: HTTP Delete method
- **get**: HTTP Get method
- **head**: HTTP Head method
- **options**: HTTP Options method
- **post**: HTTP Post method
- **put**: HTTP Put method
- **trace**: HTTP Trace method

Usage Guidelines Use this command to delay charging until HTTP response for the configured HTTP request method(s). This CLI command is introduced in support of the Response-based Charging feature. This feature is limited to specified HTTP methods.



Important Response-based charging is supported only for the HTTP protocol.

The Service Scheme configuration is required to configure and enable this feature for a subscriber. For more information on the Response-based TRM feature, see the *ECS Administration Guide*.

Example

The following command is configured to delay charging for only HTTP Get requests:

```
charge-request-to-response http get
```

The following command is configured to delay charging for HTTP Get and Connect requests:

```
charge-request-to-response http get connect
```

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.

flow-recovery

This command allows you to enable flow recovery for a trigger-action.

Product All

Privilege Security Administrator, Administrator

Command Modes Exec > ACS Configuration > ACS Trigger Action Configuration

active-charging service *service_name* **> trigger-action** *trigger_action_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-acs-trig-action)#
```

Syntax Description **[no] flow-recovery**

no

Disables flow recovery for a trigger-action.

Usage Guidelines When this CLI command is configured, the flows for the rule will be checkpointed as per session level and call level limit.

map charging-action

This command applies the rating group, content ID, online and offline charging based on the rule set for video shaping.

Product P-GW

Privilege Security Administrator, Administrator

Command Modes Exec > ACS Configuration > ACS Trigger Action Configuration

active-charging service *service_name* **> trigger-action** *trigger_action_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-acs-trig-action)#
```

Syntax

[no] map charging-action*charging_action_name* **attribute charging**

no

Disables the rating group, content ID, online and offline charging based on the rule set for video shaping.

map charging-action *charging_action_name* attribute charging

Applies the rating group, content ID, online and offline charging based on the rule set for video shaping.

Usage Guidelines Use this command to apply charging based on the video shaping rule set.

Example

The following command is configured to apply charging for the charging action named *test123*:

map charging-action test123 attribute charging

service-chain

This command associates a service chain to a trigger action.

Product P-GW

Privilege Security Administrator, Administrator

Command Modes Exec > ACS Configuration > ACS Trigger Action Configuration

active-charging service *service_name* **> trigger-action** *trigger_action_name*

Entering the above command sequence results in the following prompt:

`[local]host_name(config-acs-trig-action)#`

Syntax Description **[no] service-chain** *service_chain_name*

no

Removes the service-chain association from the assigned trigger-action.

Usage Guidelines Use this command to associate a service chain with a trigger action.

step-down

This command allows you to step down the initial configured value of committed data rate.

Product P-GW

SAEGW

Privilege

Security Administrator, Administrator

Command Modes

Exec > ACS Configuration > ACS Trigger Action Configuration

active-charging service *service_name* **> trigger-action** *trigger_action_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-acs-trig-action)#
```

Syntax Description

[no] step-down committed-data-rate *<negotiated_value>*

no

If previously configured, deletes the specified configuration.

step-down

Steps down the value of committed data rate.

committed-data-rate

Defines the committed data rate.

negotiated_value

Specifies the percentage of initial configured committed-data-rate value. This is an integer value of 0 through 100.

Usage Guidelines

The following command steps down the committed data rate by 30% of initial configured committed-data-rate value.

```
step-down committed-data-rate 30
```

step-up

This command allows you to step up the initial configured value of committed data rate.

Product

P-GW

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Privilege

Security Administrator, Administrator

Command Modes

Exec > ACS Configuration > ACS Trigger Action Configuration

active-charging service *service_name* **> trigger-action** *trigger_action_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-acs-trig-action)#
```

Syntax Description

[no] step-up committed-data-rate *<negotiated_value>*

no

If previously configured, deletes the specified configuration.

step-up

Steps up the value of committed data rate.

committed-data-rate

Defines the committed data rate.

negotiated_value

Specifies the percentage of initial configured committed-data-rate value. This is an integer value of 0 through 100.

Usage Guidelines

The following command steps up the committed data rate by 20% of initial configured committed-data-rate value.

```
step-up committed-data-rate 20
```

tcp-acceleration

This command enables the TCP Acceleration feature for a trigger action.

Product

P-GW

Privilege

Security Administrator, Administrator

Command Modes

Exec > ACS Configuration > ACS Trigger Action Configuration

active-charging service *service_name* **> trigger-action** *trigger_action_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-acs-trig-action)#
```

Syntax Description

tcp-acceleration { profile *profile_name* **flow-length threshold** *threshold_value*
no tcp-acceleration flow-length threshold

no

Disables flow recovery for a trigger-action.

profile

Identifies the TCP acceleration profile. The *profile_name* is a string ranging from 1 to 63 characters

flow-length

Specifies the flow length action for a TCP flow.

threshold *threshold_value*

Specifies the threshold value of the flow length in bytes, for a TCP flow. The threshold value is an integer ranging from 1 to 10000 bytes.

Usage Guidelines

Use this command to enable TCP Acceleration for a trigger action.

The flow length threshold of a TCP flow is configured using Trigger Action under the service-scheme framework. The threshold value of the flow length is used to engage the TCP Acceleration module dynamically.

throttle-suppress

This command allows you to enable throttle suppression based on trigger condition matched.

Product

GGSN

P-GW

Privilege

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Command Modes

Exec > ACS Configuration > ACS Trigger Action Configuration

active-charging service *service_name* **> trigger-action** *trigger_action_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-acs-trig-action)#
```

Syntax Description

`[ no ] throttle-suppress`

no

Disables the Location based QoS Override feature for the subscriber.

throttle-suppress

This keyword allows the operators to suppress the throttling when the subscriber is in a particular LAC or TAC location.

Usage Guidelines

Use this command to perform throttle suppression to provide unlimited bandwidth based on the subscriber location. This CLI command is introduced to support Location based QoS Override feature.

To enable this feature for the subscriber, both local-policy and service-scheme framework must be configured. For redundancy support, the corresponding ICSR configuration must also be present.

The service-scheme framework helps in overriding feature behavior specific to a subscriber or a set of subscribers. The user can update the policies specific to subscribers based on pre-configured events. For more information on the service-scheme framework, see the *ECS Administration Guide*.



Important This feature requires the license to configure local-policy. For more information on the licensing requirements, contact Cisco account representative.

The previous implementation limits the subscriber bandwidth based on QoS provided by PCRF in order to comply with 3GPP standards. In release 20.2 and beyond, subscriber is provided with unlimited bandwidth by allowing QoS override based on LAC and/or TAC (individual or range) configured in a local-policy (LP) rule on the gateway. If the subscriber is in the LAC or TAC region and hits the LP rule, the gateway ignores the QoS limits imposed by PCRF and allows the subscriber to have unlimited bandwidth.

For more information on this feature, see the *ECS Administration Guide*.

Example

The following command enables throttle suppression for the subscriber:

```
throttle-suppress
```

transactional-rule-matching

This command allows you to delay engagement of TRM till the specified HTTP response method(s) for the flow received.

Product

All

Privilege

Security Administrator, Administrator

Command Modes

Exec > ACS Configuration > ACS Trigger Action Configuration

active-charging service *service_name* > **trigger-action** *trigger_action_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-acs-trig-action)#
```

Syntax Description

```
[ no ] transactional-rule-matching response http { all | connect | delete
 | get | head | options | post | put | trace }
```

no

Disables the response-based TRM feature for the subscriber.

all | connect | delete | get | head | options | post | put | trace

Specifies the HTTP methods applicable to delay engagement of TRM for a flow.

The Response-based TRM feature supports pipelined HTTP requests (both concatenated and non-concatenated). For HTTP requests of different HTTP methods, this feature is applied only to those HTTP methods for which it is configured.

- **all**: Applies to all HTTP methods
- **connect**: HTTP Connect method
- **delete**: HTTP Delete method
- **get**: HTTP Get method
- **head**: HTTP Head method

- **options**: HTTP Options method
- **post**: HTTP Post method
- **put**: HTTP Put method
- **trace**: HTTP Trace method

Usage Guidelines

Use this command to delay engagement of TRM till the HTTP response for the configured HTTP request method(s). This CLI command is introduced in support of the Response-based TRM feature. This feature is applicable to all HTTP transactions of a method type for the subscriber, when an HTTP method is configured.



Important Response-based TRM is supported only for the HTTP protocol.

The Service Scheme configuration is required to configure and enable this feature for a subscriber. For more information on the Response-based charging feature, see the *ECS Administration Guide*.

Example

The following command is configured to delay engagement of TRM till HTTP Connect response:

```
transactional-rule-matching response http connect
```