



# 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

|                           |  |
|---------------------------|--|
| <b>Command Modes</b>      | Exec > ACS Configuration > ACS Trigger Action Configuration<br><b>active-charging service</b> <i>service_name</i> > <b>trigger-action</b> <i>trigger_action_name</i><br>Entering the above command sequence results in the following prompt:<br>[local] <i>host_name</i> (config-acs-trig-action)# |
| <b>Syntax Description</b> | <b>[ no ] activate-predef-rule</b><br><br><b>no</b><br>Disables predefined rules or group of rules for a trigger-action.<br><br><b>activate-predef-rule</b><br>Activates predefine rule or group of rules for a trigger action.  |
| <b>Usage Guidelines</b>   | 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).

|                           |   |
|---------------------------|---|
| <b>Product</b>            | All   |
| <b>Privilege</b>          | Security Administrator, Administrator   |
| <b>Command Modes</b>      | Exec > ACS Configuration > ACS Trigger Action Configuration<br><b>active-charging service</b> <i>service_name</i> > <b>trigger-action</b> <i>trigger_action_name</i><br>Entering the above command sequence results in the following prompt:<br>[local] <i>host_name</i> (config-acs-trig-action)#  |
| <b>Syntax Description</b> | <b>[ no ] charge-request-to-response http { all   connect   delete   get   head   options   post   put   trace }</b><br><br><b>no</b><br>Disables the response-based charging feature in the trigger-action.<br><br><b>all   connect   delete   get   head   options   post   put   trace</b><br>Specifies the HTTP methods applicable to delay charging for a flow.<br>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. <ul style="list-style-type: none"> <li>• <b>all</b>: Applies to all HTTP methods</li> <li>• <b>connect</b>: HTTP Connect method</li> <li>• <b>delete</b>: HTTP Delete method</li> </ul> |

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

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### 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*.

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### 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.

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### Product

All

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### Privilege

Security Administrator, Administrator

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### Syntax Description

**end**

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### 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

|                           |  |
|---------------------------|--|
| <b>Privilege</b>          | Security Administrator, Administrator                        |
| <b>Syntax Description</b> | <b>exit</b>  |
| <b>Usage Guidelines</b>   | Use this command to return to the parent configuration mode. |

## flow-recovery

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

|                           |  |
|---------------------------|--|
| <b>Product</b>            | All  |
| <b>Privilege</b>          | Security Administrator, Administrator  |
| <b>Command Modes</b>      | Exec > ACS Configuration > ACS Trigger Action Configuration<br><b>active-charging service</b> <i>service_name</i> > <b>trigger-action</b> <i>trigger_action_name</i><br>Entering the above command sequence results in the following prompt:<br><pre>[local]host_name(config-acs-trig-action)#</pre> |
| <b>Syntax Description</b> | <b>[ no ] flow-recovery</b><br><br><b>no</b><br>Disables flow recovery for a trigger-action.   |
| <b>Usage Guidelines</b>   | When this CLI command is configured, the flows for the rule will be checkpointed as per session level and call level limit.  |

## service-chain

This command associates a service chain to a trigger action.

|                           |  |
|---------------------------|--|
| <b>Product</b>            | P-GW   |
| <b>Privilege</b>          | Security Administrator, Administrator  |
| <b>Command Modes</b>      | Exec > ACS Configuration > ACS Trigger Action Configuration<br><b>active-charging service</b> <i>service_name</i> > <b>trigger-action</b> <i>trigger_action_name</i><br>Entering the above command sequence results in the following prompt:<br><pre>[local]host_name(config-acs-trig-action)#</pre> |
| <b>Syntax Description</b> | <b>[ no ] service-chain</b> <i>service_chain_name</i><br><br><b>no</b><br>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  
SAEGW

|                           |   |
|---------------------------|---|
| <b>Privilege</b>          | Security Administrator, Administrator   |
| <b>Command Modes</b>      | Exec > ACS Configuration > ACS Trigger Action Configuration<br><b>active-charging service</b> <i>service_name</i> > <b>trigger-action</b> <i>trigger_action_name</i><br>Entering the above command sequence results in the following prompt:<br><pre>[local]host_name(config-acs-trig-action)#</pre>  |
| <b>Syntax Description</b> | <b>[ no ] step-up committed-data-rate</b> < <i>negotiated_value</i> ><br><br><b>no</b><br>If previously configured, deletes the specified configuration.<br><br><b>step-up</b><br>Steps up the value of committed data rate.<br><br><b>committed-data-rate</b><br>Defines the committed data rate.<br><br><b>negotiated_value</b><br>Specifies the percentage of initial configured committed-data-rate value. This is an integer value of 0 through 100. |
| <b>Usage Guidelines</b>   | The following command steps up the committed data rate by 20% of initial configured committed-data-rate value.<br><pre>step-up committed-data-rate 20</pre>   |

## tcp-acceleration

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

|                           |  |
|---------------------------|--|
| <b>Product</b>            | P-GW   |
| <b>Privilege</b>          | Security Administrator, Administrator  |
| <b>Command Modes</b>      | Exec > ACS Configuration > ACS Trigger Action Configuration<br><b>active-charging service</b> <i>service_name</i> > <b>trigger-action</b> <i>trigger_action_name</i><br>Entering the above command sequence results in the following prompt:<br><pre>[local]host_name(config-acs-trig-action)#</pre> |
| <b>Syntax Description</b> | <b>tcp-acceleration { profile</b> <i>profile_name</i> <b>flow-length threshold</b> <i>threshold_value</i><br><b>no tcp-acceleration flow-length threshold</b>  |

**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**

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** ] **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

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### 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.



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### 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
```

