



# Accounting Policy Configuration Mode Commands

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The Accounting Policy Configuration Mode is used to define the accounting method, mode, and event trigger responses for the accounting policy supporting the Rf (off-line charging) interface.

## Command Modes

Exec > Global Configuration > Context Configuration > Accounting Policy Configuration

**configure** > **context** *context\_name* > **policy accounting** *policy\_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-accounting-policy)#
```



---

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

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# accounting-event-trigger

Configures the response to specific event triggers for this policy. Multiple event instances can be configured.

## Product

HSGW  
P-GW  
S-GW  
SAEGW

## Privilege

Administrator

## Command Modes

Exec > Global Configuration > Context Configuration > Accounting Policy Configuration

**configure** > **context** *context\_name* > **policy accounting** *policy\_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-accounting-policy)#
```

## Syntax Description

```
accounting-event-trigger { cgi-sai-change | ecgi-change |
flow-information-change | interim-timeout | location-change | rai-change
| tai-change } action { interim | stop-start }
{ default | no } accounting-event-trigger { cgi-sai-change | ecgi-change
| flow-information-change | interim-timeout | location-change | rai-change
| tai-change }
```

### default

Returns the command to its default setting of interim for the **action** keyword (for all events).

### no

Removes the specified event trigger configuration from this policy.

### cgi-sai-change

Specifies that the action is initiated upon indication of a Cell Global Identification-Service Area Identification (CGI-SAI) change.

### ecgi-change

Specifies that the action is initiated upon indication of an E-UTRAN Cell Global Identifier (ECGI) change.

### flow-information-change

Specifies that the action is initiated upon indication of a change in the flow information.

### interim-timeout

Specifies that the action is initiated upon expiration of the interim interval.

**location-change**

Specifies that the action is initiated upon indication of a location change.

**rai-change**

Specifies that the action is initiated upon indication of an Routing Area Identifier (RAI) change.

**tai-change**

Specifies that the action is initiated upon indication of a Tracking Area Identity (TAI) change.

**action { interim | stop-start }**

Default: interim

Specifies the action initiated upon the occurrence of an event.

**interim**: Specifies that an interim ACR (Accounting Request) is sent.

**stop-start**: Specifies that a Stop-Start ACR is sent.

**Usage Guidelines**

Use this command to configure that action taken upon the occurrence of an accounting event trigger.

**Example**

The following command configures the policy to send a Stop-Start ACR upon indication of an interim timeout:

```
accounting-event-trigger interim-timeout action stop-start
```

## accounting-keys

Aggregates the accounting information, using the configurable keys (QCI) along with default keys.

**Product**

HSGW

P-GW

S-GW

SAEGW

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > Context Configuration > Accounting Policy Configuration

```
configure > context context_name > policy accounting policy_name
```

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-accounting-policy)#
```

**Syntax Description**

```
accounting-keys qci
default accounting-keys
```

**default**

Aggregates the accounting information using QoS Class Identifier (QCI) as the additional key.

**qci**

Aggregates the accounting information using QCI as the additional key.

**Usage Guidelines**

Use this command to aggregate the accounting information using the configurable keys (QCI) along with default keys.

In Service Data Flow (SDF) level accounting, buckets are created and maintained using the Reporting-Level AVP value present in Gx message. The following are the accounting keys currently supported:

- Rating-group
- Rating-group and Service-Identifier
- Rating-group and QCI
- Rating-group, Service-Identifier, and QCI

**Example**

The following command aggregates the accounting information using QCI as the additional key:

```
accounting-keys qci
```

## accounting-level

Configures the type of accounting performed by this profile.

**Product**

HSGW  
P-GW  
S-GW  
SAEGW

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > Context Configuration > Accounting Policy Configuration

```
configure > context context_name > policy accounting policy_name
```

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-accounting-policy)#
```

**Syntax Description**

```
accounting-level { flow | pdn | pdn-qci | qci | sdf | subscriber }  
default accounting-level
```

**default**

Returns the command to the default setting of subscriber-based accounting.

**flow**

Specifies that flow-based accounting is to be used for this accounting profile. Accounting Request (ACR) Start messages include an AVP with the following Evolved Packet System (EPS) information:

- PDN identifier
- QCI for which accounting is done
- Charging rule name for which accounting is being done
- AF charging identifier (included if PCRF has provided a charging identifier to correlate AF generated information)
- Flow description for the flows
- User Equipment information if available (ESN/MEID)
- Address of HSGW/S-GW
- Address of the P-GW (if available), one or more instances

**pdn**

Specifies that PDN-based accounting is to be used for this accounting profile. ACR Start messages include an AVP with the following EPS information:

- Addresses allocated to the UE in this PDN
- PDN identifier
- User Equipment information if available (ESN/MEID)
- Address of HSGW/S-GW
- Address of the P-GW (if available), one or more instances

**pdn-qci**

Specifies that PDN-QCI accounting is to be used for this accounting profile. ACR Start messages include an AVP with the following EPS information:

- Addresses allocated to the UE in this PDN
- PDN identifier
- QCI for which accounting is done
- User Equipment information if available (ESN/MEID)
- Address of HSGW/S-GW
- Address of the P-GW (if available), one or more instances

**qci**

Specifies that QCI-based accounting is to be used for this accounting profile. ACR Start messages include an AVP with the following EPS information:

- QCI for which accounting is done
- User Equipment information if available (ESN/MEID)
- Address of HSGW/S-GW
- Address of the P-GW (if available), one or more instances

**sdf**

Specifies that service data flow accounting is to be used for this accounting profile. ACR Start messages include an AVP with the following EPS information:

**subscriber**

Specifies that subscriber-based accounting is to be used for this accounting profile. ACR Start messages include an AVP with the following EPS information:

- User Equipment information if available (ESN/MEID)
- Address of HSGW/S-GW
- Address of the P-GW (if available), one or more instances

**Usage Guidelines**

Use this command to specify the type of accounting performed by this profile.

**Example**

The following command sets the accounting type for this profile to flow-based:

```
accounting-level flow
```

# accounting-mode

Configures the accounting mode for this profile.

**Product**

HSGW  
P-GW  
S-GW  
SAEGW

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > Context Configuration > Accounting Policy Configuration  
**configure > context** *context\_name* > **policy accounting** *policy\_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-accounting-policy)#
```

---

**Syntax Description**

```
accounting-mode normal
default accounting-mode
```

**default**

Returns the accounting mode for this profile to its default setting of "normal".

**normal**

Specifies that "normal" (start/interim/stop) accounting will be performed for this profile.

---

**Usage Guidelines**

Use this command to set the accounting mode for this profile.

## apn-name-to-be-included

This command configures whether the virtual or real Access Point Name (APN) is sent in Rf accounting message.

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**Product**

GGSN  
P-GW

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**Privilege**

Security Administrator, Administrator

---

**Command Modes**

Exec > Global Configuration > Context Configuration > Accounting Policy Configuration

```
configure > context context_name > policy accounting policy_name
```

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-accounting-policy)#
```

---

**Syntax Description**

```
apn-name-to-be-included { gn | virtual } [ secondary-group { gn | virtual } ]
default apn-name-to-be-included
```

**default**

Configures this command with the default setting.

Default: **gn**

In release 21 and beyond, by default, the apn name to be included in Called-Station-ID AVP is Gn-APN for both primary and secondary Rf server groups. If the secondary group configuration is not available, the default behavior is to have Gn APN for secondary Rf group duplicate records.

**apn-name-to-be-included**

Configures the APN name to be included in the Rf messages for primary server group.

**secondary-group { gn | virtual }**

Configures the APN name to be included in the Rf messages for secondary server group.

**gn**

Sends the Gn APN name in the Rf accounting messages.

**virtual**

Sends the virtual APN name, if configured in the APN Configuration Mode, in the Rf accounting messages.

**Usage Guidelines**

Use this command to configure the APN name to be included in Rf accounting messages. Virtual APN name can be set to be sent in Rf accounting messages if it is configured in the APN Configuration Mode.

In Release 21, the **apn-name-to-be-included** CLI command is extended to enable actual APN (Gn-APN) or virtual APN (S6b returned virtual APN) name to be included in Called-Station-ID AVP in the secondary Rf accounting records (secondary server group) under policy accounting configuration. In releases prior to 21, policy accounting configuration supports sending the Gn-APN/S6b-VAPN in Called-Station-ID for primary Rf server. With the new **secondary-group { gn | virtual }** keyword, this functionality is extended for the secondary Rf server.

**Example**

The following command sets the virtual APN name to be sent in Rf accounting message:

```
apn-name-to-be-included virtual
```

# attribute

This command configures the attributes to be reported in Rf accounting.

**Product**

P-GW

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > Context Configuration > Accounting Policy Configuration  
**configure > context** *context\_name* > **policy accounting** *policy\_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-accounting-policy)#
```

**Syntax Description**

```
[ default | no ] attribute csg
```

```
[ default | no ]
```

Specifies to disable reporting of attributes in Rf accounting.



**csg**

Specifies to enable reporting of Closed Subscriber Group (CSG) related IEs received during the initial attach (Create Session Request) for Rf accounting purpose.

**Usage Guidelines**

Use this command to enable or disable the reporting of attributes received during the initial attach (Create Session Request) for Rf billing purpose.

**CC**

Configures a charging characteristics (CC) profile, within the accounting profile configuration, for CDR generation.

**Product**

ePDG  
GGSN  
HSGW  
P-GW  
S-GW  
SAEGW

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > Context Configuration > Accounting Policy Configuration

**configure > context** *context\_name* > **policy accounting** *policy\_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-accounting-policy)#
```

**Syntax Description**

```
cc profile index { buckets num | interval seconds | sdf-interval seconds | sdf-volume { downlink octets { uplink octets } | total octets | uplink octets { downlink octets } } | serving-nodes num | tariff time1 min hrs [ time2 min hrs...time4 min hrs ] | volume { downlink octets { uplink octets } | total octets | uplink octets { downlink octets } } }
```

**default cc profile** *index*

```
no cc profile index { buckets | interval | sdf-interval | sdf-volume | serving-nodes | tariff | volume }
```

**default**

Returns all profile features, for the specified profile index, to their default settings.

**no**

Returns the specified feature to its default setting.

**profile** *index*

Specifies a billing type to be applied to this profile. *index* must be one of the following:

- 1: Hot billing
- 2: Flat billing
- 4: Prepaid billing
- 8: Normal billing

### **buckets num**

Default: 4

Specifies the number of container changes in the S-GW CDR due to QoS changes or tariff times. If an accounting policy is not configured, this value is 4. GTPP accounting will use the default value if the configured value is beyond 4.

In 12.1 and earlier releases, *num* must be an integer value from 1 through 4.

In release 12.2, *num* must be an integer value from 1 through 10.

In 12.3 and later releases, *num* must be an integer value from 1 through 20.



### **Important**

Please note that the maximum value for the CC profile buckets is extended to support up to 10 for Diameter Rf accounting only. However, in the case of GTPP accounting, this CLI command allows configuring only up to 4 buckets.

### **interval seconds**

Default: disabled

Specifies a time interval for closing the charging record if the minimum volume thresholds are satisfied. *seconds* must be an integer value from 60 through 4000000.

### **sdf-interval seconds**

Default: disabled

Specifies a time interval for closing the charging record for a specific flow if the minimum volume thresholds are satisfied. *seconds* must be an integer value from 60 through 4000000.

### **sdf-volume { downlink octets { uplink octets } | total octets | uplink octets { downlink octets } }**

Specifies octet volume thresholds for the generation of interim CDRs for a specific flow.

**downlink octets:** Sets the threshold limit for the number of downlink octets that must be reached before the charging record for a specific flow is closed. *octets* must be an integer value from 100000 through 400000000.

**total octets:** Sets the threshold limit for the total number of octets that must be reached before the charging record for a specific flow is closed. *octets* must be an integer value from 100000 through 400000000.

**uplink octets:** Sets the threshold limit for the number of uplink octets that must be reached before the charging record for a specific flow is closed. *octets* must be an integer value from 100000 through 400000000.

### **serving-nodes num**

Default: 4

Specifies the number of serving node changes (inter-serving node switchovers) after which the interim CDR is generated. In P-GW and S-GW, a partial record needs to be generated whenever there is a serving node address list overflow. Serving node is added to the CDR list during handover scenarios. *num* must be an integer value from 1 through 15. If an accounting policy is not configured, this value is 4.

**tariff time1 min hrs [ time2 min hrs...time4 min hrs ]**

Specifies time-of-day values used to determine when a container is closed in the charging records.

**time1 min hrs:** Specifies the first time-of-day value used to close the current container in the charging record. *min* must be an integer value from 0 through 59. *hrs* must be an integer value from 0 through 23.

**time2 min hrs...time4 minutes hours:** Specifies the second, third and fourth time-of-day values used to close containers in the charging record. *min* must be an integer value from 0 through 59. *hrs* must be an integer value from 0 through 23.

**volume { downlink octets { uplink octets } | total octets | uplink octets { downlink octets } }**

Specifies octet volume thresholds for the generation of interim CDRs.

**downlink octets:** Sets the threshold limit for the number of downlink octets that must be reached before the charging record is closed.

In 12.1 and earlier releases, the *downlink octets* must be an integer value from 100000 to 1345294336.

In 12.2 and later releases, the *downlink octets* must be an integer value from 100000 to 4000000000.

**total octets:** Sets the threshold limit for the total number of octets that must be reached before the charging record is closed.

In 12.1 and earlier releases, the *total octets* must be an integer value from 100000 to 4000000000.

In 12.2 and later releases, the *total octets* must be an integer value from 100000 to 4000000000.

**uplink octets:** Sets the threshold limit for the number of uplink octets that must be reached before the charging record is closed.

In 12.1 and earlier releases, the *uplink octets* must be an integer value from 100000 to 4000000000.

In 12.2 and later releases, the *uplink octets* must be an integer value from 100000 to 4000000000.

### Usage Guidelines

Use this command to set charging characteristics that directly affect the CDR generation on the HSGW, P-GW, or S-GW.

### Example

The following command creates a hot billing profile with a total octet volume threshold set to 500000:

```
cc profile 1 volume total 500000
```

## end

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

### Product

All

<b>Privilege</b>	Security Administrator, Administrator
<b>Syntax Description</b>	<b>end</b>
<b>Usage Guidelines</b>	Use this command to return to the Exec mode.

## exit

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

<b>Product</b>	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.

## max-containers

Control the number of containers in an ACR message.

<b>Product</b>	GGSN HSGW P-GW S-GW SAEGW
<b>Privilege</b>	Administrator
<b>Command Modes</b>	Exec > Global Configuration > Context Configuration > Accounting Policy Configuration <b>configure &gt; context</b> <i>context_name</i> > <b>policy accounting</b> <i>policy_name</i> Entering the above command sequence results in the following prompt: <i>[context_name]host_name</i> (config-accounting-policy)#
<b>Syntax Description</b>	<b>max-containers</b> { <i>containers</i>   <b>fill-buffer</b> } <b>default max-containers</b>  <b>default</b> Cache containers until buffer is filled.

**containers**

System can send any value equal or less than the maximum number of containers selected. The number of containers that can be sent can be dynamically selected by the system, but it should not cross the limit of containers in any message.

*containers* must be in integer from 1 to 30.

**fill-buffer**

Cache containers until buffer is filled.

**Usage Guidelines**

Use this command to control the number of containers before an interim ACR message is triggered.

**Example**

The following command sets a maximum of 20 containers in an ACR message:

```
max-containers 20
```

## operator-string

Configures a text string to be included with accounting messages sent by this policy.

**Product**

HSGW  
P-GW  
S-GW  
SAEGW

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > Context Configuration > Accounting Policy Configuration

```
configure > context context_name > policy accounting policy_name
```

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-accounting-policy)#
```

**Syntax Description**

```
operator-string string  
no operator-string
```

**no**

Removes the operator string from this policy.

**string**

Specifies a text string that is included with accounting messages originating from this policy. *string* must be from 1 to 63 alphanumeric characters.

**Usage Guidelines**

Use this command to create a text string to be included with accounting messages originating from this policy.

**Example**

The following command creates the text string *pgw\_local* to be included with accounting messages originating from this policy:

```
operator-string pgw_local
```

**rf**

This command controls the reporting of subscriber traffic data for Rating Groups (RGs) based on the generation of Interim Record (IR).

**Product**

GGSN  
HSGW  
P-GW  
S-GW  
SAEGW

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > Context Configuration > Accounting Policy Configuration

```
configure > context context_name > policy accounting policy_name
```

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-accounting-policy) #
```

**Syntax Description**

```
rf report-all-active-rgs  
{ default | no } rf report-all-active-rgs
```

**default | no**

The default behavior is to disable traffic data reporting in Service Data Container (SDC) for all active Rating Groups (RGs) whenever an interim is sent.

**report-all-active-rgs**

This keyword enables to report the traffic data in the SDC for all the active RGs whenever an IR is sent. By default, this feature is enabled.

**Usage Guidelines**

There are several change conditions where a partial Service Data Container (SDC) is not cut for a particular RG but ACR-Interim is generated due to maximum change conditions. There are many triggers like time limit, volume limit, etc., that will lead to maximum change condition. Because of this some RGs SDC may not be generated for a longer period of time.

In releases prior to 18.0, when a Maximum Change Condition event was triggered, only those RGs that have hit one of the Change Conditions that require a caching of data as opposed to cutting an IR, used to have their

data in the generated IR. In 18.0 and later releases, when the Maximum Change Condition happens, the current Rf implementation is changed to make sure all RGs that have not been cached have a snapshot of their usage taken.

This CLI configuration will enable Rf to take a snapshot of all the active Rating Groups (RGs) whenever an Interim Record (IR) is generated. That means, the Rf will be enabled to report the subscriber traffic data in SDC whenever an IR is generated.

This feature is introduced mainly to ensure that the snapshot is available for all active RGs including the default bearer's RG so that all the traffic data is accounted during the billing cycle.

### Example

The following command specifies to report the traffic data for all active RGs when an IR is sent:

```
rf report-all-active-rgs
```

## service-context-id

Configures the value to be sent in the Service-Context-Id AVP, which defines the context in which Rf is used.

<b>Product</b>	GGSN HSGW P-GW S-GW SAEGW
<b>Privilege</b>	Administrator
<b>Command Modes</b>	Exec > Global Configuration > Context Configuration > Accounting Policy Configuration <b>configure &gt; context</b> <i>context_name</i> > <b>policy accounting</b> <i>policy_name</i> Entering the above command sequence results in the following prompt: <code>[context_name]host_name(config-accounting-policy)#</code>
<b>Syntax Description</b>	<b>service-context-id</b> <i>service_context_id</i> <b>default service-context-id</b>  <b>default</b> Configures this command with the default setting. Currently, the default value is encoded based on the dictionary wherever applicable; when not applicable, it is not encoded.  <b>service_context_id</b> Specifies the service context as an alphanumeric string of 1 through 63 characters that can contain punctuation characters.

**Usage Guidelines**

If Service-Context-Id is applicable and configured using this command, it will be sent in the AVP Service-Context-Id in the Rf ACR message.

**Example**

The following command specifies the value *version@customer.com* to be sent in the Service-Context-Id AVP in the Rf ACR message:

```
service-context-id version@customer.com
```

## session

This command controls the behavior of whether to send or suppress the ACR-Interim records when the UE is idle.

**Product**

P-GW

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > Context Configuration > Accounting Policy Configuration

```
configure > context context_name > policy accounting policy_name
```

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-accounting-policy) #
```

**Syntax Description**

```
[ default | no ] session idle-mode suppress-interim
```

**default**

The default behavior is to send accounting interim records even when the UE is in idle state and when there is no data to report.

**no**

Specifies to send the accounting interim records even when the UE is in idle state and when there is no data to report.

**suppress-interim**

Suppresses the ACR-I records when there is no data to report or the UE is in idle mode.

**Usage Guidelines**

This CLI configuration is used to control sending of ACR-I records when the UE is in idle mode and when there is no data to report.

In a scenario where there is no data to report, upon configuring the CLI command "**session idle-mode suppress-interim**", a call is established, AII timer (or any other event for which an Interim needs to be generated) happens, and ACR-I will be suppressed.

When there is data to report, on configuring the CLI command "**session idle-mode suppress-interim**", a call is established, AII timer (or any other event for which an Interim needs to be generated) happens, and ACR-I will be sent out.



When there is data to report for the previous events, the following behavior is observed:

1. the CLI command "**session idle-mode suppress-interim**" is configured and a call is established.
2. QoS-Change happens (or any other event for which the container needs to be cached) happens, containers are cached.
3. All timer (or any other event for which an Interim needs to be generated) happens, but there is no data to report with this event.
4. ACR-I will be sent with the previously cached containers (QoS-Change in this case).

### Example

The following command suppresses sending of ACR-Interim message when the UE is idle or when there is no data to report:

```
session idle-mode suppress-interim
```

## trigger-type

This command enables/disables the event triggers for Rf-Gy interaction.

### Product

GGSN  
HSGW  
P-GW  
S-GW  
SAEGW

### Privilege

Administrator

### Command Modes

Exec > Global Configuration > Context Configuration > Accounting Policy Configuration

```
configure > context context_name > policy accounting policy_name
```

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-accounting-policy)#
```

### Syntax Description

```
trigger-type { gy-sdf-time-limit { cache | immediate } | gy-sdf-unit-limit
  { cache | immediate } | gy-sdf-volume-limit { cache | immediate } } +
  { default | no } trigger-type
```

#### default

The default behavior is to disable all the configured event triggers. The interims will be dropped if the event triggers are received from Gy.

#### no

Specifies to disable all the configured event triggers. The interims will be dropped if the event triggers are received from Gy.

**gy-sdf-time-limit { cache | immediate }**

Enables the SDF time-limit trigger for Rf-Gy interaction.

**cache:** If this keyword option is configured then upon receipt of time-limit event trigger from Gy, the container record will be cached for reporting in a future transaction.

**immediate:** If this keyword option is configured then upon receipt of time-limit event trigger from Gy, Rf will send out an interim record immediately.

**gy-sdf-unit-limit { cache | immediate }**

Enables the SDF unit-limit trigger for Rf-Gy interaction in Assume Positive scenario. Upon configuration of the CLI command **trigger-type gy-sdf-unit-limit { cache | immediate }**, when the session gets terminated during assume-positive case, ACR-Stop is sent with the container-level change-condition as SERVICE-SPECIFIC-UNIT-LIMIT.

**gy-sdf-volume-limit { cache | immediate }**

Enables the SDF volume-limit trigger for Rf-Gy interaction.

**cache:** If this keyword option is configured then upon receipt of volume-limit event trigger from Gy, the container record will be cached for reporting in a future transaction.

**immediate:** If this keyword option is configured then upon receipt of volume-limit event trigger from Gy, Rf will send out an interim record immediately.

+

Indicates that more than one of the keywords can be entered in a single command.

**Usage Guidelines**

In Release 15.0 when time/volume quota on the Gy interface gets exhausted, Gy will trigger SERVICE\_DATA\_VOLUME/TIME\_LIMIT. Release 16.0 and beyond, this behavior is CLI controlled.

This CLI configuration will either enable PCEF to send an ACR-Interim immediately or cache the container records for reporting in a future transaction. If there is no such configuration for that event-trigger, then the ACR-Interims will be dropped.

When the subscriber disconnects while in Assume Positive mode, then the CLI configuration enables the PCEF to send an ACR-Stop with PS-level change condition "Normal Release" and container level "Service Specific Unit Limit". The presence of the "Service Specific Unit Limit" change condition at the container level indicates to the OFCS that data has gone unreported on Gy. The change-condition at container level is only present if the keyword option **gy-sdf-unit-limit** is configured.

The gateway provides a configuration option to enable/disable the functionality at the ACR level to control which of the triggers are enabled – Service Specific Unit Limit, Service Data Volume Limit and Service Data Time Limit. The gateway provides configuration options to control the various Rf messages triggered for sync on this feature.

**Gy Quota Update - Volume Limit** - CLI options are:

- Disabled
- Enabled, container with SDF Volume limit queued and sent at next ACR trigger.
- Enabled, container with SDF Volume limit created and ACR sent immediately with PS info level of Volume Limit

**Gy Quota Update – Validity Timer Expires** - CLI options are:

- Disabled
- Enabled, container with SDF Time Limit queued and sent at next ACR trigger.
- Enabled, container with SDF Time limit created and ACR sent immediately with PS info level of Time Limit

**Example**

The following command specifies to send ACR-Interim message immediately when the time quota on the Gy interface expires:

```
trigger-type gy-sdf-time-limit immediate
```

trigger-type