PCC-Condition-Group Configuration Mode Commands

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Important This configuration mode is supported from StarOS Release 12.1 onward.

Command Modes The PCC-Condition-Group Configuration Mode is used to configure the various rating parameters under a logical identifier name in the PCC-Service. A PCC-Condition-Group is a collection of conditions that identify a network or state constraint represented as a logical expression. A maximum of 128 conditions can be configured in one PCC-Condition-Group.

Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

`[`*context_name*`]`*host_name*`(config-pcc-condition-group)#`

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

af-application-id

This command defines a condition based on the application id of an Application Function service through the **Rx** interface over which the IPCF receives media information for the application usage in an IP-CAN session.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pcc-condition-group)#
```

Syntax Description

```
[ no ] af-application-id operator value af_app_id
[ no ] af-application-id operator profile-attribute spr_attr_value
[ no ] af-application-id operator subscription-attribute subs_prof_attr_value
```

no

Removes the specified condition definition.

operator

Specifies how to logically match the AF-Application id.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

af_app_id

Specifies the identity string for AF-Application identifier over **Rx** interface.

af_app_id must be an alphanumeric string of 1 to 256 characters.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with application id of an Application Function service condition validation in an IP-CAN session.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with application id of an Application Function service condition validation in an IP-CAN session.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines   Use this command to define a condition based on the application id of an Application Function service through the **Rx** interface over which the IPCF receives media information for the application usage in an IP-CAN session.

Example

The following command creates a condition definition to analyze the PCC service user traffic for the AF Application id is not equal to *pcc_af_1*:

af-application-id != *pcc_af_1*

af-media-codec

This command defines a condition based on the media Codec used by AF application in an IP-CAN session.

Product   IPCF

Privilege   Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

[*context_name*]*host_name*(config-pcc-condition-group)#

Syntax Description

```
[ no ] af-media-coded operator value {g722 | g726 | ilbc | pcma | pcmu}
[ no ] af-media-coded operator profile-attribute spr_attr_value
[ no ] af-media-coded operator subscription-attribute subs_prof_attr_value
```

no

Removes the specified condition definition.

operator

Specifies how to logically match the AF-media Codec.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

g722

Specifies the media Codec as G.722 used for user traffic from AF server over **Rx** interface.

G.722 is a ITU-T standard 7 kHz wideband speech codec operating at 48, 56 and 64 kbit/s.

g726

Specifies the media codec as G.726 used for user traffic from AF server over **Rx** interface.

G.726 is an ITU-T ADPCM speech codec standard covering the transmission of voice at rates of 16, 24, 32, and 40 kbit/s.

ilbc

Specifies the media codec as Internet Low Bitrate Codec (iLBC) used for user traffic from AF server over **Rx** interface.

iLBC is a narrowband speech codec suitable for VoIP applications, streaming audio, archival and messaging. The encoded blocks encapsulated in Real-time Transport Protocol (RTP) protocol for transport.

pcma

Specifies the media codec as Pulse Code Modulation A-law scaling (PCMA) used for user traffic from AF server over **Rx** interface.

PCMA is an ITU-T Recommendation G.711 audio data encoding in eight bits per sample, after A-law logarithmic scaling.

pcmu

Specifies the media codec as Pulse Code Modulation mu-law scaling (PCMU) used for user traffic from AF server over **Rx** interface.

PCMU is an ITU-T Recommendation G.711 audio data encoding in eight bits per sample, after mu-law logarithmic scaling.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with application media codec of an Application Function service condition validation in an IP-CAN session.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with application media codec of an Application Function service condition validation in an IP-CAN session.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines	Use this command to define a condition based on the media codecs used by AF service through the **Rx** interface over which the IPCF receives media information for the application usage in an IP-CAN session.

Example

The following command creates a condition definition to analyze the PCC service user traffic for the AF Media codec is equal to PCMA:

```
af-media-codec = pcma
```

af-media-type

This command defines a condition based on the media type used by AF application in an IP-CAN session.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration
	configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*
	Entering the above command sequence results in the following prompt:
	[*context_name*]*host_name*(config-pcc-condition-group)#
Syntax Description	**[no] af-media-type** *operator* **value** {**application** | **audio** | **control** | **data** | **message** | **other** | **text** | **video**} **[no] af-media-type** *operator* **profile-attribute** *spr_attr_value* **[no] af-media-type** *operator* **subscription-attribute** *subs_prof_attr_value*

no

Removes the specified condition definition.

operator

Specifies how to logically match the media type in user traffic.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

application

Specifies the media type as Application in user traffic from AF server over **Rx** interface.

audio

Specifies the media type as Audio in user traffic from AF server over **Rx** interface.

control

Specifies the media type as Control in user traffic from AF server over **Rx** interface.

data

Specifies the media type as Data in user traffic from AF server over **Rx** interface.

message

Specifies the media type as Message in user traffic from AF server over **Rx** interface.

text

Specifies the media type as Text in user traffic from AF server over **Rx** interface.

video

Specifies the media type as Video in user traffic from AF server over **Rx** interface.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with application media type of an Application Function service condition validation in an IP-CAN session.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with application media type of an Application Function service condition validation in an IP-CAN session.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines Use this command to define a condition based on the media type used by AF service through the **Rx** interface over which the IPCF receives media information for the application usage in an IP-CAN session.

Example

The following command creates a condition definition to analyze the PCC service user traffic for the AF Media type is equal to Video:

```
af-media-type = video
```

af-service-urn

This command defines a condition based on the service Uniform Resource Names (URNs) used by AF application in an IP-CAN session.

Product IPCF

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

[*context_name*]*host_name*(config-pcc-condition-group)#

Syntax Description
```
[ no ] af-service-urn operator value urn_string
[ no ] af-service-urn operator profile-attribute spr_attr_value
[ no ] af-service-urn operator subscription-attribute subs_prof_attr_value
```

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **<=**: Lesser than or equals

- **=**: Equals

- **>=**: Greater than or equals

urn_string

Specifies the URN in user traffic from AF server over **Rx** interface.

urn_string must be an alphanumeric string of 1 through 256 characters.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with URN used by AF service condition validation in an IP-CAN session.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with URN used by AF service condition validation in an IP-CAN session.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines   Use this command to define a condition based on the URN used by AF service through the **Rx** interface over which the IPCF receives media information for the application usage in an IP-CAN session.

Uniform Resource Names (URNs) serves as persistent, location-independent resource identifiers and are designed to make it easy to map other namespaces into URN-space.

Example

The following command creates a condition definition to analyze the PCC service user traffic for the AF service URN is equal to *ietf:rfc:4003*:

```
af-service-urn = ietf:rfc:4003
```

an-gw-address

This command defines a condition based on the IP address of Access Node Gateway (AN-GW) on which subscriber is attached in an IP-CAN session.

Product   IPCF

Privilege   Security Administrator, Administrator

Command Modes   Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

[*context_name*]*host_name*(config-pcc-condition-group)#

Syntax Description   **[no] an-gw-address** {*operator* **value** *angw_ip/mask* | {**in-range** | **!in-range**} *range_start_ip* **to** *range_end_ip*}
[no] an-gw-address *operator* **profile-attribute** *spr_attr_value*
[no] an-gw-address *operator* **subscription-attribute** *subs_prof_attr_value*

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

in-range

Specifies the condition to accept the IP address which are in range as argument to define the Access Node Gateway address which is used by subscriber in IP-CAN session.

!in-range

Specifies the condition to accept the IP address which are NOT in range as argument to define the Access Node Gateway address which is used by subscriber in IP-CAN session.

range_start_ip

Specifies the starting IP address which is used for defining the range of AN-GW IP addresses which is used by subscriber in IP-CAN session.

range_start_ip is an IP address and must be lesser than *end_start_ip* address.

range_end_ip

Specifies the ending IP address which is used for defining the range of AN-GW IP addresses which is used by subscriber in IP-CAN session.

range_end_ip is an IP address and must be greater than *end_start_ip* address.

angw_ip/mask

Specifies the IP address of the Access Node Gateway which is used by subscriber in IP-CAN session along with IP mask as well.

angw_ip must be an IP address in IPv4 or IPv6 notation.

mask Specifies the IP address mask bits to determine the number of IP addresses of AN-GW in condition. *mask* must be specified using the standard IPv4 dotted decimal notation.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with AN gateway IP address condition validation in an IP-CAN session.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with AN gateway IP address condition validation in an IP-CAN session.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines   Use this command to define a condition based on the AN-GW IP address used by subscriber in an IP-CAN session.

Example

The following command creates a condition definition to analyze the condition based on AN-GW IP address *1.2.3.4* in an IP-CAN session:

an-gw-address = *1.2.3.4*

authorized-qci

This command defines a condition based on the authorized QoS Class Identifier used in an IP-CAN session.

Product   IPCF

Privilege   Security Administrator, Administrator

Command Modes   Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > **context** *context_name* > **pcc-service** *service_name* > **condition group** *group_name*

Entering the above command sequence results in the following prompt:

[*context_name*]*host_name*(config-pcc-condition-group)#

Syntax Description
```
[ no ] authorized-qci operator value qci
[ no ] authorized-qci operator profile-attribute spr_attr_value
[ no ] authorized-qci operator subscription-attribute subs_prof_attr_value
```

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **<=**: Lesser than or equals

- **=**: Equals

- **>=**: Greater than or equals

qci

Specifies the authorized QoS class identifier in user traffic for condition validation.

qci must be an integer between 1 through 255.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with authorized QoS class identifier condition validation in an IP-CAN session.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with authorized QoS class identifier condition validation in an IP-CAN session.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines	Use this command to define a condition based on the authorized QCI used by the subscriber in an IP-CAN session.

The condition evaluates to TRUE, if Bearer Control Mode is UE and network (PCEF bearer binding) and IPCF has authorized the specified QCI earlier.

QCI is a number which describes the error rate and delay that are associated with the service. It includes bearer parameters including scheduling weights and queue management thresholds.

Example

The following command creates a condition definition to analyze the PCC service user traffic for the authorized QCI is greater than or equal to *4*:

```
authorized-qci >= 4
```

base-station-id

This command defines a condition based on the various parameters used in base-station id by subscriber in an IP-CAN session between PCEF (PDSN) and IPCF over **Gx** interface.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pcc-condition-group)#
```

Syntax Description

[**no**] **base-station-id** {[**sid** *operator sys_identifier*] | **range** *start_range* **to** *end_range*]] [**nid** *operator netwrk_identifier*] | **range** *start_range* **to** *end_range*]] [**cellid** *operator cell_identifier*] | **range** *start_range* **to** *end_range*]]}

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **<**: Lesser than

- **<=**: Lesser than or equals

- **=**: Equals

- **>**: Greater than

- **>=**: Greater than or equals

sid *operator sys_identifier*

Specifies the system identifier in base-station id of subscriber for condition validation in an IP-CAN session.

sys_identifier must be an integer between 0 through 65535.

nid *operator netwrk_identifier*

Specifies the network identifier in base-station id, which is used by subscriber, for condition validation in an IP-CAN session.

netwrk_identifier must be an integer between 0 through 65535.

cellid *operator cell_identifier*

Specifies the cell identifier in base-station id, which is used by subscriber, for condition validation in an IP-CAN session.

cell_identifier must be an integer between 0 through 65535.

range *start_range* to *end_range*

This optional keyword specifies range of the identifiers (SID, Cell id, Network Id) to be used for condition validation in an IP-CAN session.

start_range is the start value of range having integer between 0 through 65535 and it must be lesser than *end_range*.

end_range is the end value of range having integer between 0 through 65535 and it must be greater than *start_range*.

Usage Guidelines   User this command to define a condition based on the parameters used in base-station id of subscriber, which is composition of SID, Cell Id, and/or Network Id, in an IP-CAN session between PCEF (PDSN) and IPCF over **Gx** interface.

This condition is defined for PCC functionality support to CDMA users over **Gx** interface.

Example

The following command creates a condition definition to analyze the condition based on base-station id of subscriber where SID is *1001* and cell id is in range of *2001* to *2069* in an IP-CAN session between PDSN and IPCF having network id as *3989*:

base-station-id sid *= 1001* **nid** *= 3989* **cellid** *= * **range** *2001* **to** *2069*

bearer-count

This command defines a condition based on the number of bearers allowed in a subscriber session on IPCF to accept bearer-count in an IP-CAN session.

Product   IPCF

Privilege   Security Administrator, Administrator

Command Modes   Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

[*context_name*]*host_name*(config-pcc-condition-group)#

Syntax Description
```
[ no ] bearer-count operator value num_bearer
[ no ] bearer-count operator profile-attribute spr_attr_value
[ no ] bearer-count operator subscription-attribute subs_prof_attr_value
```

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **<=**: Lesser than or equals

- **=**: Equals

- **>=**: Greater than or equals

num_bearer

Specifies the number of bearers in user traffic for condition validation.

num_bearer indicates a condition based on the number of bearer established in a IP-CAN session and must be an integer between 1 through 11.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with number of bearers allowed for a subscriber in an IP-CAN session as condition.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with number of bearers allowed for a subscriber in an IP-CAN session as condition.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines	Use this command to define a condition based on the number of bearers allowed for a subscriber in an IP-CAN session.

Example

The following command creates a condition definition to analyze the PCC service user traffic for bearers allowed in a subscriber session is equal to *4*:

```
bearer-count = 4
```

connectivity-access-network

This command defines a condition based on the access network type used by subscriber in an IP-CAN session.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration
	configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*
	Entering the above command sequence results in the following prompt:
	[*context_name*]*host_name*(config-pcc-condition-group)#
Syntax Description	`[ no ] connectivity-access-network` *operator* `value {3gpp-gprs	3gpp2	3gpp2-eps	docsis	non-3gpp-eps	wimax	xdsl }` `[no] connectivity-access-network` *operator* `profile-attribute` *spr_attr_value* `[no] connectivity-access-network` *operator* `subscription-attribute` *subs_prof_attr_value*

no

Removes the specified condition definition.

operator

Specifies how to logically match the media type in user traffic.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

3gpp-gprs

Specifies the network access connectivity type as 3GPP-GPRS for user traffic in condition definition.

3gpp2

Specifies the network access connectivity type as 3GPP2 (CDMA) for user traffic in condition definition.

3gpp2-eps

Specifies the network access connectivity type as 3GPP2-EPS for user traffic in condition definition.

docsis

Specifies the network access connectivity type as Data Over Cable Service Interface Specification (DOCSIS) for user traffic in condition definition.

non-3gpp-eps

Specifies the network access connectivity type as non-3GPP-EPS to connect with Gxa based HSGW for user traffic in condition definition.

wimax

Specifies the network access connectivity type as Wi-MAX for user traffic in condition definition.

xdsl

Specifies the network access connectivity type as xDSL (ADSL/SDSL) or user traffic in condition definition.

profile-attribute_spr_attr_value_

Specifies the profile attribute value in SPR to match with type of connectivity used for network access by subscriber in an IP-CAN session as condition.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute _subs_prof_attr_value_

Specifies the subscriber profile attribute parameter value to match with type of connectivity used for network access by subscriber in an IP-CAN session as condition.

■ **end**

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines	Use this command to define a condition based on the type of connectivity used for network access by subscriber in an IP-CAN session.

Example

The following command creates a condition definition to analyze the PCC service user traffic for the network type is equal to Wi-MAX:

```
connectivity-access-network = wimax
```

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.

eval-condition-group

This command defines a condition based on the TRUE or FALSE setting of a configured PCC-Condition-Group for subscriber in an IP-CAN session.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration
	configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*
	Entering the above command sequence results in the following prompt:
	`[`*context_name*`]`*host_name*`(config-pcc-condition-group)#`
Syntax Description	`[`**no**`] eval-condition-group` *cond_grp_name operator* `{`**FALSE** `|` **TRUE**`}`

no

Removes the specified condition definition.

cond_grp_name

Specifies the name of the configured PCC-Condition-Group which is used for evaluation with in this PCC-Condition-Group for user traffic.

cond_grp_name must be a pre-configured PCC-Condition-Group in this configuration mode.

operator

Specifies how to logically match the media type in user traffic.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

FALSE

Sets the evaluation condition for specified PCC-Condition-Group to FALSE.

With this keyword system rejects all conditions defined in specific PCC-Condition-Group and match the same in user traffic.

TRUE

Sets the evaluation condition for specified PCC-Condition-Group to TRUE.

With this keyword system accepts all conditions defined in specific PCC-Condition-Group and match the same in user traffic.

Usage Guidelines

Use this command to define a condition based on the acceptance or rejection of specific pre-configured PCC-Condition-Group for user traffic in an IP-CAN session.

This command allows the operator to use configured PCC-Condition-Group in another PCC-Condition-Group as subset of PCC-Condition-Group.

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Important   A maximum of 3 level of recursion depth is allowed for PCC-Condition-Group evaluation in a PCC-Condition-Group.

Example

The following command creates a condition definition to accept the all conditions defined in PCC-Condition-Group named *af_1*:

eval-condition-group af_1 = TRUE

event-time

This command defines a condition based on the event-trigger time as per the time specified by the named Time definition (Timedef) configured for subscriber session in an IP-CAN session.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration
	configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*
	Entering the above command sequence results in the following prompt:
	`[`*context_name*`]`*host_name*`(config-pcc-condition-group)#`
Syntax Description	[**no**] **event-time** *operator timedef_name*

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal
- **<=**: Lesser than or equals
- **=**: Equals
- **>=**: Greater than or equals

timedef_name

Specifies the name of the configured time definition (start and end timer of session) which is used for evaluation with this PCC-Condition-Group for user traffic.

timedef_name must be a pre-configured Time definition in *PCC-Service Configuration Mode*.

Usage Guidelines	Use this command to define a condition based on the start and end time defined in a Time Definition configuration in *PCC-Service Configuration Mode* for user traffic in an IP-CAN session.

Event trigger in this command indicates a condition when the event-trigger time was as per the time specified by the named Time Definition.

This command allows the operator to use configured time period as event trigger for this PCC-Condition-Group.

Example

The following command creates a condition definition to trigger the condition based on the start and end time defined in Timedef named *timedef_night*:

event-time = *timedef_night*

event-trigger

This command defines a condition based on the event triggers due to various conditions for subscriber in an IP-CAN session.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pcc-condition-group)#
```

Syntax Description	[**no**] **event-trigger** *operator event_trigger*

no

Removes the specified condition definition.

operator

Specifies how to logically match the media type in user traffic.

operator must be one of the following:

- **!=**: Does not equal
- **=**: Equals

event_trigger

Specifies the network events as condition definition for user traffic in an IP-CAN session.

Following event triggers are supported with this command:

- **an-gw-change**
- **bearer-qos-change**
- **bearer-setup**
- **bearer-termination**
- **default-eps-bearer-qos-change**
- **ip-can-change**
- **loss-of-bearer**
- **out-of-credit**
- **pgw-trace-control**
- **plmn-change**
- **qos-change**
- **qos-change-exceeding-authorization**

- **rai-change**
- **rat-change**
- **reallocation-of-credit**
- **recover-of-bearer**
- **resource-modification-request**
- **revalidation-timeout**
- **session-setup**
- **session-termination**
- **sgsn-change**
- **successful-resource-allocation**
- **tft-change**
- **ue-ip-address-allocate**
- **ue-ip-address-release**
- **ue-time-zone-change**
- **user-location-change**

Usage Guidelines   Use this command to define a condition based on the event triggered in network for user traffic.

Example

The following command creates a condition definition when there is a change in traffic flow template for subscriber:

```
event-trigger = tft-change
```

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.

imsi

This command defines a condition based on the International Mobile Station Identification number (IMSI) of a subscriber in an IP-CAN session.

Product   IPCF

Privilege   Security Administrator, Administrator

Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pcc-condition-group)#
```

Syntax Description	**[no] imsi** *operator* **value** *imsi*

[no] imsi *operator* **profile-attribute** *spr_attr_value*
[no] imsi *operator* **subscription-attribute** *subs_prof_attr_value*

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

imsi

Specifies the IMSI of subscriber to be used for condition validation in an IP-CAN session.

imsi must be a string of between 8 to 15 digits which starts with 3 digit of MCC then 2 to 3 digit of MNC.

Wildcard characters $ and * are allowed. The * wildcard matches multiple characters and the $ wildcard matches a single character. If you do not want the wildcard characters interpreted as a wildcard enclose them in single quotes ('). For example; '$'.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with IMSI in an IP-CAN session as condition.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with IMSI in an IP-CAN session as condition.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines	Use this command to define a condition based on the IMSI of a subscriber used in an IP-CAN session.

Example

The following command creates a condition definition to analyze the condition based on subscriber IMSI as *12334566434* in an IP-CAN session:

imsi = *12334566434*

msisdn

This command defines a condition based on the Mobile Station International Subscriber Directory Number (MSISDN) of a subscriber in an IP-CAN session.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pcc-condition-group)#
```

Syntax Description
```
[ no ] msisdn operator value msisdn
[ no ] msisdn operator profile-attribute spr_attr_value
[ no ] msisdn operator subscription-attribute subs_prof_attr_value
```

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

imsi

Specifies the MSISDN of subscriber to be used for condition validation in an IP-CAN session.

msisdn must be a string of between 1 to 16 digits which contains CC + NDC/NPA + SN.

Wildcard characters $ and * are allowed. The * wildcard matches multiple characters and the $ wildcard matches a single character. If you do not want the wildcard characters interpreted as a wildcard enclose them in single quotes ('). For example; '$'.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with MSISDN in an IP-CAN session as condition.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with MSISDN in an IP-CAN session as condition.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines	Use this command to define a condition based on the MS ISDN of a subscriber used in an IP-CAN session.

Example

The following command creates a condition definition to analyze the condition based on subscriber MSISDN as *380561234567* in an IP-CAN session:

msisdn = *380561234567*

multi-line-or

This command enables/disables the "OR" relation across all conditions exist in PCC-Condition-Group Configuration Mode.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration
	configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*
	Entering the above command sequence results in the following prompt:
	[*context_name*]*host_name*(config-pcc-condition-group)#
Syntax Description	[**no**] **multi-line-or**
	no
	Sets the PCC-Condition-Group to "AND" relation across all conditions exist in a PCC-Condition-Group Configuration Mode.
Usage Guidelines	Use this command to enable the "OR" relation across all conditions exist in PCC-Condition-Group Configuration Mode.
	In absence of this command the default relation of "AND" applies across all conditions exist in PCC-Condition-Group Configuration Mode.

Example

The following command enables the "OR" relation across all conditions exist in *PCC-Condition-Group Configuration Mode*:

multi-line-or

The following command enables the default "AND" relation across all conditions exist in *PCC-Condition-Group Configuration Mode*:

```
no multi-line-or
```

nai

This command defines a condition based on the Network Access Identifier (NAI) of a subscriber in an IP-CAN session between PCEF (PDSN) and IPCF over **Gx** interface.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pcc-condition-group)#
```

Syntax Description
```
[ no ] nai operator {username user_name [domain domain] | domain domain}
[ no ] nai operator profile-attribute spr_attr_value
[ no ] nai operator subscription-attribute subs_prof_attr_value
```

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

username *user_name*

Specifies the subscriber user name to be used for condition validation in an IP-CAN session.

user_name must be an alpha and/or numeric string of 1 through 128 characters in length. The user name can contain all special characters.

domain *domain*

Specifies the domain (Realm) of subscriber to be used for condition validation in an IP-CAN session.

domain must be an alpha and/or numeric string of 1 through 128 characters in length. The domain name can contain all special characters.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with NAI in an IP-CAN session as condition.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with NAI in an IP-CAN session as condition.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines

User this command to define a condition based on the NAI, which contains of user name and domain name, of a subscriber in an IP-CAN session between PCEF (PDSN) and IPCF over **Gx** interface.

This condition is defined for PCC functionality support to CDMA users over **Gx** interface.

Example

The following command creates a condition definition to analyze the condition based on subscriber user name as *cdma2000_subs1* in an IP-CAN session between PDSN and IPCF having *xyz.com* as domain:

nai = username *cdma2000_subs1* **domain** *xyz.com*

out-of-credit rulename

This command defines a condition based on the exhaustion of credit for subscriber Rulename at PCEF in an IP-CAN session.

Product

IPCF

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

[*context_name*]*host_name*(config-pcc-condition-group)#

Syntax Description

[**no**] **out-of-credit rulename** *operator rule_name*

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

rule_name

Specifies the name of the Rulename for which out of credit condition is to match in an IP-CAN session.

rule_name is a pre-configured Rulename on PCEF and must be an alphanumeric string of from 1 through 63 characters.

Usage Guidelines   Use this command to define a condition based on the exhaustion of credit for subscriber Rulename at PCEF in an IP-CAN session.

Example

The following command creates a condition definition to analyze the condition based on the exhaustion of credit for subscriber Rulename *rule_101* at PCEF in an IP-CAN session:

out-of-credit rulename = *rule_101*

out-of-credit rulebase-name

This command defines a condition based on the exhaustion of credit for subscriber Rulebase name at PCEF in an IP-CAN session.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

[*context_name*]*host_name*(config-pcc-condition-group)#

Syntax Description   [**no**] **out-of-credit rulebase-name** *operator rulebase_name*

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

rulebase_name

Specifies the name of the Rulebase for which out of credit condition is to match in an IP-CAN session.

rulebase_name is a pre-configured Rulebase on PCEF and must be an alphanumeric string of from 1 through 63 characters.

Usage Guidelines   Use this command to define a condition based on the exhaustion of credit for subscriber Rulebase name at PCEF in an IP-CAN session.

Example

The following command creates a condition definition to analyze the condition based on the exhaustion of credit for subscriber Rulebase name *rulebase_101* at PCEF in an IP-CAN session:

out-of-credit rulebase-name = *rulebase_101*

pcef-address

This command defines a condition based on the IP address of Policy and Charging Enforcement Function (PCEF) which is served by IPCF and through which subscriber is attached to an IP-CAN session.

Product   IPCF

Privilege   Security Administrator, Administrator

Command Modes   Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

[*context_name*]*host_name*(config-pcc-condition-group)#

Syntax Description   **[no] pcef-address** {*operator* **value** *pcef_ip/mask* | {**in-range** | **!in-range**} **value** *range_start_ip* **to** *range_end_ip*}
[no] pcef-address *operator* **profile-attribute** *spr_attr_value*
[no] pcef-address *operator* **subscription-attribute** *subs_prof_attr_value*

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

in-range

Specifies the condition to accept the IP address which are in range as argument to define the PCEF address which is used by subscriber in IP-CAN session.

!in-range

Specifies the condition to accept the IP address which are NOT in range as argument to define the PCEF address which is used by subscriber in IP-CAN session.

range_start_ip

Specifies the starting IP address which is used for defining the range of PCEF IP addresses which is used by subscriber in IP-CAN session.

range_start_ip is an IP address and must be lesser than *end_start_ip* address.

range_end_ip

Specifies the ending IP address which is used for defining the range of PCEF IP addresses which is used by subscriber in IP-CAN session.

range_end_ip is an IP address and must be greater than *end_start_ip* address.

pcef_ip/*mask*

Specifies the IP address of the PCEF which is used by subscriber in IP-CAN session along with IP mask as well.

pcef_ip must be an IP address in IPv4 or IPv6 notation.

mask Specifies the IP address mask bits to determine the number of IP addresses of PCEF in condition. *mask* must be specified using the standard IPv4 dotted decimal notation.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with PCEF address in an IP-CAN session as condition.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with PCEF address in an IP-CAN session as condition.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines Use this command to define a condition based on the PCEF IP address used by subscriber in an IP-CAN session.

Example

The following command creates a condition definition to analyze the condition based on PCEF P address *1.2.3.4* in an IP-CAN session:

```
pcef-address = 1.2.3.4
```

pdn-id

This command defines a condition based on the PDN or calling station id in an IP-CAN session.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pcc-condition-group)#
```

Syntax Description
```
[ no ] pdn-id [case-insensitive] operator value pdn_id
[ no ] pdn-id [case-insensitive] operator profile-attribute spr_attr_value
[ no ] pdn-id [case-insensitive] operator subscription-attribute
subs_prof_attr_value
```

no

Removes the specified condition definition.

case-insensitive

This optional keyword sets the condition to not to consider the case of argument phrase for condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal
- **=**: Equals
- **contains**: Contains
- **!contains**: Does not contain
- **starts-with**: Starts with
- **!starts-with**: Does not start with
- **ends-with**: Ends with
- **!ends-with**: Does not end with

pdn_id

Specifies the PDN or calling station id to be used for condition validation in an IP-CAN session.

pdn_id must be an alphanumeric string of between 1 to 128 characters.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with PDN id in an IP-CAN session as condition.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with PDN id in an IP-CAN session as condition.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines Use this command to define a condition based on the PDN or calling station id used in an IP-CAN session.

Example

The following command creates a condition definition to analyze the condition based on calling station id *ggsn_all_102* in an IP-CAN session:

pdn-id = *ggsn_all_102*

profile-attribute

This command defines a condition based on the matching between subscriber profile attribute value and SPR attribute value in an IP-CAN session.

Product IPCF

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

[*context_name*]*host_name*(config-pcc-condition-group)#

Syntax Description [**no**] **profile-attribute parameter** *subs_prof_attr_value operator spr_attr_value*

no

Removes the specified condition definition.

parameter *subs_prof_attr_value*

Specifies the attribute parameter value to match with SPR attribute for condition validation in an IP-CAN session.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

☞

Important   This keyword deprecated in StarOS Release 14.0 and onward.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

spr_attr_value

Specifies the attribute value in SPR to match with Subscriber profile attribute for condition validation in an IP-CAN session.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

Usage Guidelines   Use this command to define a condition based on the matching parameters between subscriber profile attribute and SPR attribute parameters used in an IP-CAN session and provides a generic way of specifying and triggering actions based on any of the subscriber profile attribute received from SPR interactions.

Example

The following command creates a condition definition to analyze the condition based on matching of subscriber profile attribute value *subs_gold_102* with SPR attribute value *spr_gold_102* in an IP-CAN session:

profile-attribute parameter *subs_gold_102* **=** *spr_gold_102*

radio-access-technology

This command defines a condition based on the radio access technology used by subscriber in an IP-CAN session.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

[*context_name*]*host_name*(config-pcc-condition-group)#

Syntax Description

```
[ no ] radio-access-technology operator value RAT
[ no ] radio-access-technology operator profile-attribute spr_attr_value
[ no ] radio-access-technology operator subscription-attribute
subs_prof_attr_value
```

no

Removes the specified condition definition.

operator

Specifies how to logically match the media type in user traffic.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

RAT

Specifies the radio access technology used by subscriber to access the network as condition definition for user traffic in an IP-CAN session.

Following RAT are supported with this command:

- **cdma2000-1x**: 3GPP2 CDMA 2000 - 1x RTT
- **eutran**: Evolved Universal Terrestrial Radio Access Network (eUTRAN)
- **gan**: Generic Access Network (GAN)
- **geran**: GSM Edge Radio Access Network (GERAN)
- **hrpd**: High Rate Packet Data (CDMA 2000 1xEV-DO)
- **hspa-evolution**: Evolved High-Speed Packet Access (eHSPA/HSPA+)
- **umb**: Ultra-Mobile Broadband
- **utran**: Universal Terrestrial Radio Access Network (UTRAN)
- **wlan**: Wireless Local Area Network (WLAN/xDSL)

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with type of RAT in an IP-CAN session as condition.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with type of RAT in an IP-CAN session as condition.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines

Use this command to define a condition based on the type of radio technology used for network access by subscriber in an IP-CAN session.

Example

The following command creates a condition definition to analyze the PCC service user traffic for the radio access technology type as WLAN:

```
radio-access-technology = wlan
```

sgsn-ip

This command defines a condition based on the IP address of SGSN on which subscriber is attached in an IP-CAN session.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration
	configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*
	Entering the above command sequence results in the following prompt:
	[*context_name*]*host_name*(config-pcc-condition-group)#
Syntax Description	**[no] sgsn-ip** {*operator* **value** *sgsn_ip*/*mask* | {**in-range** | **!in-range**} *range_start_ip* **to** *range_end_ip*} **[no] sgsn-ip** *operator* **profile-attribute** *spr_attr_value* **[no] sgsn-ip** *operator* **subscription-attribute** *subs_prof_attr_value*

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

in-range

Specifies the condition to accept the IP address which are in range as argument to define the SGSN address which is used by subscriber in IP-CAN session.

!in-range

Specifies the condition to accept the IP address which are NOT in range as argument to define the SGSN address which is used by subscriber in IP-CAN session.

range_start_ip

Specifies the starting IP address which is used for defining the range of SGSN IP addresses which is used by subscriber in IP-CAN session.

range_start_ip is an IP address and must be lesser than *end_start_ip* address.

range_end_ip

Specifies the ending IP address which is used for defining the range of SGSN IP addresses which is used by subscriber in IP-CAN session.

range_end_ip is an IP address and must be greater than *end_start_ip* address.

sgsn_ip/mask

Specifies the IP address of the SGSN which is used by subscriber in IP-CAN session along with IP mask as well.

sgsn_ip must be an IP address in IPv4 or IPv6 notation.

mask Specifies the IP address mask bits to determine the number of IP addresses of SGSN in condition. *mask* must be specified using the standard IPv4 dotted decimal notation.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with SGSN IP address in an IP-CAN session as condition.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with SGSN IP address in an IP-CAN session as condition.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines Use this command to define a condition based on the SGSN IP address used by subscriber in an IP-CAN session.

Example

The following command creates a condition definition to analyze the condition based on SGSN IP address *1.2.3.4* in an IP-CAN session:

```
sgsn-ip = 1.2.3.4
```

sgsn-mcc-mnc

This command defines a condition based on the PLMN (MCC+MNC) of SGSN on which subscriber is attached in an IP-CAN session.

Product IPCF

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

[*context_name*]*host_name*(config-pcc-condition-group)#

Syntax Description	**[no] sgsn-mcc-mnc** *operator* {**mcc** *mcc_value* [**mnc** *mnc_value*] | [**mcc** *mcc_value*] **mnc** *mnc_value*} **[no] sgsn-mcc-mnc** *operator* **profile-attribute** *spr_attr_value* **[no] sgsn-mcc-mnc** *operator* **subscription-attribute** *subs_prof_attr_value*

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

mcc *mcc_value*

Specifies the Mobile Country Code in PLMN of SGSN which is used by subscriber in IP-CAN session.

mcc_value must be an integer between 101 and 998.

mnc *mnc_value*

Specifies the Mobile Network Code in PLMN of SGSN which is used by subscriber in IP-CAN session.

mnc_value must be an integer between 1 and 998.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with PLMN of SGSN used by subscriber in an IP-CAN session as condition.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with PLMN of SGSN used by subscriber in an IP-CAN session as condition.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines	Use this command to define a condition based on the PLMN of SGSN used by subscriber in an IP-CAN session.

Example

The following command creates a condition definition to analyze the condition based on PLMN of SGSN with MCC as *102* and MNC as *99*in an IP-CAN session:

sgsn-mcc-mnc = **mcc** *102* **mnc** *99*

subscription-attribute

This command defines a condition based on the matching between subscriber subscription attribute value and SPR attribute value in an IP-CAN session.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

[*context_name*]*host_name*(config-pcc-condition-group)#

Syntax Description   [**no**] **subscription-attribute** *subsription_attr_value operator spr_attr_value*

no

Removes the specified condition definition.

subsription_attr_value

Specifies the subscriber subscription attribute value to match with SPR attribute for condition validation in an IP-CAN session.

subsription_attr_value must be an alphanumeric string of from 1 through 31 characters.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal
- **=**: Equals

spr_attr_value

Specifies the attribute value in SPR to match with subscriber subscription attribute for condition validation in an IP-CAN session.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

Usage Guidelines	Use this command to define a condition based on the matching parameters between subscriber subscription attribute and SPR attribute value used in an IP-CAN session.

Example

The following command creates a condition definition to analyze the condition based on matching of subscriber subscription attribute value *subs_gold_102* with SPR attribute value *spr_gold_101*in an IP-CAN session:

subscription-attribute *subscribe_gold_102* **=** *spr_gold_101*

spr-profile-not-found

This command defines a condition based on the availability of SPR profile for s subscriber in an IP-CAN session.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration
	configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*
	Entering the above command sequence results in the following prompt:
	[*context_name*]*host_name*(config-pcc-condition-group)#
Syntax Description	[**no**] **spr-profile-not-found**
	no
	Removes the specified condition definition.
Usage Guidelines	Use this command to define a condition based on the availability of SPR profile for a subscriber in an IP-CAN session.

Example

The following command creates a condition definition to analyze the condition if SPR profile is not available for a subscriber in an IP-CAN session:

spr-profile-not-found

threshold-condition usage-monitor

This command defines a condition based on the threshold conditions in usage of traffic by subscriber session in an IP-CAN session. It is used to support usage tracking and dynamic Policy control based on subscriber usage.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

`[`*context_name*`]`*host_name*`(config-pcc-condition-group)#`

Syntax Description   **[no] threshold-condition usage-monitor** *usage_mon_name* **{ time | vol-or-time | volume } usage** *operator* **{ absolute value** *volume* **| subscription-limit | subscription-threshold** *subs_thres_limit***}**

no

Removes the specified condition definition.

usage_mon_name

Specifies a unique name for configured usage monitor condition which is used for evaluation with this condition group for user traffic in IP-CAN session.

usage_mon_name must be an alphanumeric string of 1 through 63 characters.

usage

This keyword specifies the condition as usage for threshold condition which is used for evaluation with this condition group for user traffic in IP-CAN session.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal
- **<=**: Lesser than or equals
- **=**: Equals
- **>=**: Greater than or equals

{time | vol-or-time | volume }

This keywords sets the type of thresold; time or volume or both as condition definition for user traffic in IP-CAN session.

- **time**: This keyword sets the threshold condition to use time as condition definition for a user traffic in IP-CAN session.
- **vol-or-time**: This keyword sets the threshold condition to use time or volume as condition definition for a user traffic in IP-CAN session. The condition is matched if either of the two usage values fulfills the condition.

- **volume**: This keyword sets the threshold condition to use volume as condition definition for a user traffic in IP-CAN session.

absolute value *volume*

Specifies the threshold limit condition definition based on absolute usage volume *volume* in Kilo Bytes which is used for evaluation with this condition group for user traffic in IP-CAN session.

volume must be an integer between 1 through 4294967295.

subscription-limit

Specifies the threshold limit condition based on Subscriber's subscription limit which is used for evaluation with this condition group for user traffic in IP-CAN session.

In this condition the system takes Subscriber's subscription limit as defined in subscriber subscription policy for threshold limit monitoring.

subscription-threshold *subs_thres_limit*

Specifies the condition definition for threshold limit based on a configured usage monitor threshold named *subs_thres_limit* in IP-CAN session.

subs_thres_limit is a pre-configured subscription limit in this configuration mode.

This command allows the operator to use configured subscription limit as subset of a threshold condition.

Usage Guidelines   Use this command to define a condition based on the duration of usage of service in seconds or volume usage in Bytes for user traffic in an IP-CAN session. This usage monitor is used to support usage tracking and dynamic Policy control based on subscriber usage.

IPCF supports the concept of Monitoring Key. PCEF, when instructed by PCRF, keeps track of usage per Monitoring Key. PCEF reports the usage when thresholds are reached or requested by PCRF.

To allow operator to have dynamic Policy control, IPCF uses Usage Monitor. This Usage Monitor has attribute of volume-limit, time-limit or both. Operator can "associate" different Monitoring Keys to these usage monitors. It can be a Many-To-Many relationship between Usage-Monitor and Monitoring-Key. Operator can use Usage conditions on Usage Monitors instead of Monitoring Keys directly.

IPCF tracks usage per usage-monitor. Different monitoring keys associated to a Usage-Monitor. When monitoring key is associated to a Usage-Monitor, the usage reported for that particular monitoring key is added to all the usage monitoring to which it is associated.

IPCF supports 2 types of usage monitors; it can be defined on IPCF or SSC supplied usage monitors. The name *usage_mon_name* identifies an usage-monitor, which is locally defined or received from SSC. The **absolute** value applies to both types of usage monitors.

This command allows the operator to use configured threshold condition with another threshold condition as subset.

A maximum of 8 thresholds can be configured per usage monitor.

Example

The following command creates a threshold condition with usage monitor name *threshold1* as usage monitor to trigger the condition based on the **subscription limit** as provide in Subscriber policy:

```
threshold-condition usage-monitor threshold1 usage = subscription-limit
```

user-access-network

This command defines a condition based on the access location type of the subscriber in an IP-CAN session as received on **Gx** interface.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration
	configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*
	Entering the above command sequence results in the following prompt:
	[*context_name*]*host_name*(config-pcc-condition-group)#
Syntax Description	**[no] user-access-network** *operator* **value { home | roaming | visiting }**
	[no] user-access-network *operator* **profile-attribute** *spr_attr_value*
	[no] user-access-network *operator* **subscription-attribute** *subs_prof_attr_value*

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

value home

Specifies the subscriber network access type as Home for condition validation in an IP-CAN session.

This condition contains all subscribers active in Home networks in this condition.

value roaming

Specifies the subscriber network access type as Roaming for condition validation in an IP-CAN session.

This condition contains all subscribers active in Roaming networks in this condition.

value visiting

Specifies the subscriber network access type as Visiting for condition validation in an IP-CAN session.

This condition contains all subscribers active in Visiting networks in this condition.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with user access network condition validation in an IP-CAN session.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with user access network condition validation in an IP-CAN session.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines	Use this command to define a condition based on the location of the user as defined in SPR attribute or subscriber profile attribut or location of user in Home, Roaming, Visiting in an IP-CAN session as received on **Gx** interface.

This configuration compares ULI and other location information from Gx data with the Home/roaming/visiting location as received from SSC. IPCF will also use global data as received from SSC in determining user access network through Subscriber profile attribute or SPR attribute in profile attribute. |

Example

The following command creates a condition definition to analyze the condition based on location of the subscribes as **roaming** in an IP-CAN session:

```
user-access-network = value roaming
```

user-equipment-info esn

This command defines a condition based on the Electronic Serial Number (ESN) used for the identification of mobile device (UE) in a Non-3GPP IP-CAN session received over **Gx** interface between PDSN and IPCF.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

[*context_name*]*host_name*(config-pcc-condition-group)# |
| **Syntax Description** | ```
[ no ] user-equipment-info esn  operator value esn
[ no ] user-equipment-info esn operator profile-attribute spr_attr_value
[ no ] user-equipment-info esn operator subscription-attribute
subs_prof_attr_value
``` |

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

esn

Specifies the Electronic Serial Number used for the identification of UE in 64 bit format as condition value for UE information received over **Gx** interface in a Non-3GPP IP-CAN session.

esn must be a 15 character long string of Hexadecimal numbers only.

profile-attribute *spr_attr_value*

Specifies the profile attribute value in SPR to match with ESN of the UE in an IP-CAN session as condition.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with ESN of the UE in an IP-CAN session as condition.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines   Use this command to define a condition based on the ESN of the UE received over **Gx** interface in a Non-3GPP IP-CAN session between PDSN and IPCF.

Example

The following command creates a condition definition to analyze the condition based on the ESN of the UE as *1234567890120AF* in a Non-3GPP IP-CAN session:

user-equipment-info esn *= 1234567890120AF*

user-equipment-info eui64

This command defines a condition based on the Extended Unique Identifier in 64 bit (EUI-64) used for the identification of mobile device (UE) in an IP-CAN session received over **Gx** interface.

Product   IPCF

Privilege   Security Administrator, Administrator

Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pcc-condition-group)#
```

| **Syntax Description** | ```
[ no ] user-equipment-info eui64 operator value eui64
[ no ] user-equipment-info eui64 operator profile-attribute spr_attr_value
[ no ] user-equipment-info eui64 operator subscription-attribute
subs_prof_attr_value
``` |

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

eui64

Specifies the Extended Unique Identifier in 64 bit format as a condition value for UE information received over **Gx** interface in an IP-CAN session.

eui64 is a 16 character long string of Hexadecimal numbers only.

profile-attribute *spr_attr_value*

Specifies the profile attribute value in SPR to match with EUI-64 value of the UE in an IP-CAN session as condition.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with EUI-64 value of the UE in an IP-CAN session as condition.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines	Use this command to define a condition based on the EUI-64 value of the UE received over **Gx** interface in an IP-CAN session between PCEF and IPCF.

Example

The following command creates a condition definition to analyze the condition based on the EUI-64 of the UE as *0012989099832345* in an IP-CAN session:

```
user-equipment-info eui64 = 0012989099832345
```

user-equipment-info imeisv

This command defines a condition based on the International Mobile Equipment Identity Software Version (IMEI-SV) used for the identification of mobile device (UE) in an IP-CAN session received over **Gx** interface.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pcc-condition-group)#
```

Syntax Description
```
[ no ] user-equipment-info imeisv  operator value imei_sv
[ no ] user-equipment-info imeisv operator profile-attribute spr_attr_value
[ no ] user-equipment-info imeisv operator subscription-attribute
subs_prof_attr_value
```

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

imei_sv

Specifies the International Mobile Equipment Identity Software Version (IMEI-SV) as a condition value for UE information received over **Gx** interface in an IP-CAN session.

imei_sv is a 16 digit long string of decimal numbers only.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with IMEI-SV value of the UE in an IP-CAN session as condition.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with IMEI-SV value of the UE in an IP-CAN session as condition.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines   Use this command to define a condition based on the IMEI-SV value of the UE received over **Gx** interface in an IP-CAN session between PCEF and IPCF.

Example

The following command creates a condition definition to analyze the condition based on the IMEI-SV of the UE as *0012989099832345* in an IP-CAN session:

user-equipment-info eui64 *= 0012989099832345*

user-equipment-info mac

This command defines a condition based on the Media Access Control (MAC) address used for the UE information in an IP-CAN session as received over **Gx** interface.

Product   IPCF

Privilege   Security Administrator, Administrator

Command Modes   Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

[*context_name*]*host_name*(config-pcc-condition-group)#

Syntax Description   **[no] user-equipment-info mac** *operator* **value** *mac_value*
[no] user-equipment-info mac *operator* **profile-attribute** *spr_attr_value*
[no] user-equipment-info mac *operator* **subscription-attribute**
subs_prof_attr_value

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

mac_value

Specifies the Media Access Control (MAC) address as condition value for UE information received over **Gx** interface in an IP-CAN session.

mac_value is a 17 character long string of Hexadecimal numbers in *xx:xx:xx:xx:xx:xx* format only.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with MAC value of the UE in an IP-CAN session as condition.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with MAC value of the UE in an IP-CAN session as condition.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines Use this command to define a condition based on the MAC address value as UE information received over **Gx** interface in an IP-CAN session.

Example

The following command creates a condition definition to analyze the condition based on the MAC value of the UE as *00:12:98:90:99:83* in an IP-CAN session:

```
user-equipment-info mac = 00:12:98:90:99:83
```

user-equipment-info meid

This command defines a condition based on the Mobile Equipment Id (MEID) used for the identification of CDMA mobile device (UE) in a Non-3GPP IP-CAN session received over **Gx** interface between PDSN and IPCF.

Product IPCF

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pcc-condition-group)#
```

Syntax Description
```
[ no ] user-equipment-info meid operator value me_id
[ no ] user-equipment-info meid operator profile-attribute spr_attr_value
[ no ] user-equipment-info meid operator subscription-attribute
subs_prof_attr_value
```

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

me_id

Specifies the Mobile Equipment identifier used for the identification of UE in 64 bit format as condition value for UE information received over **Gx** interface in a Non-3GPP IP-CAN session.

me_id must be a 14 character long string of Hexadecimal numbers only.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with Mobile Equipement id of the UE in an IP-CAN session as condition.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with Mobile Equipement id of the UE in an IP-CAN session as condition.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines   Use this command to define a condition based on the MEID of the CDMAUE received over **Gx** interface in a Non-3GPP IP-CAN session between PDSN and IPCF.

Example

The following command creates a condition definition to analyze the condition based on the MEID of the CDMA UE as *123456780120AF* in a Non-3GPP IP-CAN session:

user-equipment-info meid *= 123456780120AF*

user-equipment-info modified-eui64

This command defines a condition based on the modified-Extended Unique Identifier in 64 bit (EUI-64) used for the identification of mobile device (UE) in an IP-CAN session received over **Gx** interface.

Product   IPCF

Privilege   Security Administrator, Administrator

Command Modes   Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pcc-condition-group)#
```

Syntax Description   **[no] user-equipment-info modified-eui64** *operator* **value** *meui64*
[no] user-equipment-info modified-eui64 *operator* **profile-attribute**
spr_attr_value
[no] user-equipment-info modified-eui64 *operator* **subscription-attribute**
subs_prof_attr_value

no

Removes the specified condition definition.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

meui64

Specifies the modified Extended Unique Identifier (EUI) in 64 bit format as condition value for UE information received over **Gx** interface in an IP-CAN session.

meui64 is a 16 character long string of Hexadecimal numbers only.

profile-attribute*spr_attr_value*

Specifies the profile attribute value in SPR to match with modified EUI-64 value of the UE in an IP-CAN session as condition.

spr_attr_value must be an alphanumeric string of from 1 through 63 characters.

subscription-attribute *subs_prof_attr_value*

Specifies the subscriber profile attribute parameter value to match with modified EUI-64 value of the UE in an IP-CAN session as condition.

subs_prof_attr_value must be an alphanumeric string of from 1 through 31 characters.

Usage Guidelines   Use this command to define a condition based on the modified EUI-64 value of the UE received over **Gx** interface in an IP-CAN session between PCEF and IPCF.

Example

The following command creates a condition definition to analyze the condition based on the EUI-64 of the UE as *0012989099832345* in an IP-CAN session:

```
user-equipment-info modified-eui64 = 0012989099832345
```

user-location-info

This command defines a condition based on the UE location used in an IP-CAN session as received on **Gx** interface.

Product	IPCF
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC Condition Group Configuration

configure > context *context_name* **> pcc-service** *service_name* **> condition group** *group_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pcc-condition-group)#
```

Syntax Description   [**no**] **user-location-info** {**cgi** *operator* **mcc** *mcc_value* **mnc** *mnc_value* **lac** *lac_value* **ci** *ci_value* | **ecgi** *operator* **mcc** *mcc_value* **mnc** *mnc_value* **ecgi** *ecgi_value* | **rai** *operator* **mcc** *mcc_value* **mnc** *mnc_value* **lac** *lac_value* **rai** *rai_value*| **sai** *operator* **mcc** *mcc_value* **mnc** *mnc_value* **lac** *lac_value* **sac** *sac_value*| **tai** *operator* **mcc** *mcc_value* **mnc** *mnc_value* **tai** *tai_value*}

no

Removes the specified condition definition.

cgi

Specifies the Cell Global Identifier in UE location received over **Gx** interface in an IP-CAN session.

ecgi

Specifies the E-UTRAN Cell Global Identifier in UE location received over **Gx** interface in an IP-CAN session.

rai

Specifies the Routing Area Identifier in UE location received over **Gx** interface in an IP-CAN session.

sai

Specifies the Service Area Identifier in UE location received over **Gx** interface in an IP-CAN session.

tai

Specifies the Tracking Area Identifier in UE location received over **Gx** interface in an IP-CAN session.

operator

Specifies how to logically match the information in the analyzed field.

operator must be one of the following:

- **!=**: Does not equal

- **=**: Equals

mcc ***mcc_value***

Specifies the Mobile Country Code used in UE location information received over **Gx** interface in IP-CAN session.

mcc_value must be an integer between 101 through 998.

mnc ***mnc_value***

Specifies the Mobile Network Code used in UE location information received over **Gx** interface in IP-CAN session.

mnc_value must be an integer between 1 through 998.

lac ***lac_value***

Specifies the Location Area Code used in UE location information received over **Gx** interface in IP-CAN session.

lac_value must be an integer between 1 through 65535.

ci ***ci_value***

Specifies the Cell Identifier used in UE location information received over **Gx** interface in IP-CAN session.

ci_value must be an integer between 1 through 65535.

ecgi ***ecgi_value***

Specifies the E-UTRAN Cell Global Identifier used in UE location information received over **Gx** interface in IP-CAN session.

ecgi_value must be an integer between 1 through 1048575.

rai ***rai_value***

Specifies the Routing Area Identifier used in UE location information received over **Gx** interface in IP-CAN session.

rai_value must be an integer between 1 through 65535.

sac ***sac_value***

Specifies the Service Area Code used in UE location information received over **Gx** interface in IP-CAN session.

sac_value must be an integer between 1 through 65535.

tai *tai_value*

Specifies the Tracking Area Code used in UE location information received over **Gx** interface in IP-CAN session.

tai_value must be an integer between 1 through 65535.

Usage Guidelines

Use this command to define a condition based on the UE location information received over **Gx** interface in an IP-CAN session.

Example

The following command creates a condition definition to analyze the condition based on the RAI received for UE location in an IP-CAN session:

user-location-info rai = mcc *102* **mnc** *99* **lac** *1003* **rai** *3521*