



SMF Active Charging Service CLI Commands

- [apn-profile](#), on page 5
- [apn-profile accounting mode](#), on page 5
- [apn-profile timeout bearer-inactivity](#), on page 6
- [apn-profile timeout bearer-inactivity gbr](#), on page 6
- [apn-profile timeout bearer-inactivity gbr volume-threshold](#), on page 6
- [call-control-profile](#), on page 7
- [call-control-profile accounting mode](#), on page 7
- [content-filtering category database directory](#), on page 8
- [context](#), on page 8
- [context aaa group](#), on page 8
- [context aaa group diameter authentication dictionary](#), on page 9
- [context aaa group diameter authentication endpoint](#), on page 10
- [context aaa group diameter authentication server](#), on page 11
- [context aaa group radius accounting interim](#), on page 11
- [context aaa group radius accounting interim volume](#), on page 11
- [context aaa group radius algorithm](#), on page 12
- [context aaa group radius attribute nas-ip-address address](#), on page 12
- [context aaa group radius dictionary](#), on page 13
- [context aaa group radius mediation-device](#), on page 15
- [context aaa group radius server](#), on page 16
- [context aaa group radius server encrypted key](#), on page 16
- [context aaa group radius server key](#), on page 17
- [context aaa group redundancy-group](#), on page 17
- [context aaa group redundancy-group host](#), on page 17
- [context aaa group redundancy-group host diameter authentication dictionary](#), on page 18
- [context aaa group redundancy-group host diameter authentication endpoint](#), on page 19
- [context aaa group redundancy-group host diameter authentication server](#), on page 20
- [context aaa group redundancy-group host radius accounting interim](#), on page 20
- [context aaa group redundancy-group host radius accounting interim volume](#), on page 21
- [context aaa group redundancy-group host radius algorithm](#), on page 21
- [context aaa group redundancy-group host radius attribute nas-ip-address address](#), on page 22
- [context aaa group redundancy-group host radius dictionary](#), on page 22
- [context aaa group redundancy-group host radius mediation-device](#), on page 25

- context aaa group redundancy-group host radius server, on page 25
- context aaa group redundancy-group host radius server encrypted key, on page 26
- context aaa group redundancy-group host radius server key, on page 26
- context apn, on page 26
- context apn active-charging, on page 27
- context apn authorize-with-hss, on page 27
- context apn authorize-with-hss egtp, on page 28
- context apn authorize-with-hss egtp gn-gp-enabled, on page 28
- context apn authorize-with-hss egtp s2b, on page 28
- context apn authorize-with-hss egtp s2b gn-gp-enabled, on page 28
- context apn authorize-with-hss egtp s2b s5-s8, on page 29
- context apn authorize-with-hss egtp s5-s8, on page 29
- context apn authorize-with-hss egtp s5-s8 s2b, on page 29
- context apn authorize-with-hss lma, on page 29
- context apn cc-profile, on page 30
- context apn content-filtering category, on page 30
- context apn data-tunnel, on page 31
- context apn gtpp group, on page 31
- context apn ip, on page 31
- context apn ip access-group, on page 32
- context apn ip source-violation, on page 32
- context apn ppp, on page 33
- context apn redundancy-group, on page 33
- context apn redundancy-group active-charging, on page 33
- context apn redundancy-group authorize-with-hss, on page 34
- context apn redundancy-group authorize-with-hss egtp, on page 34
- context apn redundancy-group authorize-with-hss egtp gn-gp-enabled, on page 34
- context apn redundancy-group authorize-with-hss egtp s2b, on page 34
- context apn redundancy-group authorize-with-hss egtp s2b gn-gp-enabled, on page 35
- context apn redundancy-group authorize-with-hss egtp s2b s5-s8, on page 35
- context apn redundancy-group authorize-with-hss egtp s5-s8, on page 35
- context apn redundancy-group authorize-with-hss egtp s5-s8 s2b, on page 36
- context apn redundancy-group authorize-with-hss lma, on page 36
- context apn redundancy-group cc-profile, on page 36
- context apn redundancy-group content-filtering category, on page 37
- context apn redundancy-group data-tunnel, on page 37
- context apn redundancy-group gtpp group, on page 38
- context apn redundancy-group ip, on page 38
- context apn redundancy-group ip access-group, on page 38
- context apn redundancy-group ip source-violation, on page 39
- context apn redundancy-group ppp, on page 39
- context apn redundancy-group timeout, on page 39
- context apn timeout, on page 40
- context gtpp group, on page 40
- context gtpp group gtpp, on page 41
- context gtpp group gtpp egcdr, on page 41

- context gtpp group gtpp egcdr final-record closing-cause, on page 41
- context gtpp group gtpp egcdr losdv-max-containers, on page 42
- context gtpp group gtpp egcdr service-data-flow threshold, on page 42
- context gtpp group gtpp egcdr service-data-flow threshold volume, on page 43
- context gtpp group gtpp egcdr service-idle-timeout, on page 43
- context gtpp group gtpp storage-server ip-address, on page 44
- context gtpp group gtpp storage-server local, on page 44
- context gtpp group gtpp storage-server local file, on page 45
- context gtpp group gtpp storage-server local file name, on page 45
- context gtpp group gtpp trigger, on page 46
- context gtpp group gtpp trigger egcdr, on page 46
- context gtpp group redundancy-group, on page 47
- context gtpp group redundancy-group host, on page 47
- context gtpp group redundancy-group host gtpp, on page 47
- context gtpp group redundancy-group host gtpp egcdr, on page 48
- context gtpp group redundancy-group host gtpp egcdr final-record closing-cause, on page 48
- context gtpp group redundancy-group host gtpp egcdr losdv-max-containers, on page 49
- context gtpp group redundancy-group host gtpp egcdr service-data-flow threshold, on page 49
- context gtpp group redundancy-group host gtpp egcdr service-data-flow threshold volume, on page 49
- context gtpp group redundancy-group host gtpp egcdr service-idle-timeout, on page 50
- context gtpp group redundancy-group host gtpp storage-server ip-address, on page 51
- context gtpp group redundancy-group host gtpp storage-server local, on page 51
- context gtpp group redundancy-group host gtpp storage-server local file, on page 52
- context gtpp group redundancy-group host gtpp storage-server local file name, on page 53
- context gtpp group redundancy-group host gtpp trigger, on page 53
- context gtpp group redundancy-group host gtpp trigger egcdr, on page 54
- context gtpu-service, on page 54
- context gtpu-service bind, on page 54
- context gtpu-service echo-interval, on page 55
- context gtpu-service echo-interval dynamic, on page 55
- context gtpu-service redundancy-group, on page 56
- context gtpu-service redundancy-group host, on page 56
- context gtpu-service redundancy-group host bind, on page 56
- context gtpu-service redundancy-group host echo-interval, on page 57
- context gtpu-service redundancy-group host echo-interval dynamic, on page 58
- context interface-loopback, on page 58
- context interface-loopback redundancy-group, on page 58
- context interface-loopback redundancy-group host, on page 59
- context lawful-intercept, on page 59
- context lawful-intercept dictionary, on page 60
- context lawful-intercept redundancy-group, on page 60
- context lawful-intercept redundancy-group host, on page 61
- context lawful-intercept redundancy-group host dictionary, on page 61
- context lawful-intercept redundancy-group host src-ip-addr, on page 62
- context lawful-intercept src-ip-addr, on page 62
- context sx-service, on page 62

- context sx-service bind, on page 63
- context sx-service instance-type, on page 63
- context sx-service redundancy-group, on page 64
- context sx-service redundancy-group host, on page 64
- context sx-service redundancy-group host bind, on page 64
- context sx-service redundancy-group host instance-type, on page 65
- context sx-service redundancy-group host sx-protocol association, on page 65
- context sx-service redundancy-group host sx-protocol heart-beat interval, on page 66
- context sx-service redundancy-group host sx-protocol heart-beat max-retransmissions, on page 66
- context sx-service redundancy-group host sx-protocol heart-beat retransmission-timeout, on page 66
- context sx-service sx-protocol association, on page 67
- context sx-service sx-protocol heart-beat interval, on page 67
- context sx-service sx-protocol heart-beat max-retransmissions, on page 68
- context sx-service sx-protocol heart-beat retransmission-timeout, on page 68
- context user-plane-service, on page 68
- context user-plane-service associate control-plane-group, on page 69
- context user-plane-service associate fast-path service, on page 69
- context user-plane-service associate gtpu-service, on page 69
- context user-plane-service associate gtpu-service cp-tunnel, on page 70
- context user-plane-service associate gtpu-service pgw-ingress, on page 70
- context user-plane-service associate gtpu-service sgw-egress, on page 70
- context user-plane-service associate gtpu-service sgw-ingress, on page 71
- context user-plane-service associate gtpu-service upf-ingress, on page 71
- context user-plane-service associate sx-service, on page 71
- context user-plane-service redundancy-group, on page 71
- context user-plane-service redundancy-group host, on page 72
- context user-plane-service redundancy-group host associate control-plane-group, on page 72
- context user-plane-service redundancy-group host associate fast-path service, on page 73
- context user-plane-service redundancy-group host associate gtpu-service, on page 73
- context user-plane-service redundancy-group host associate gtpu-service cp-tunnel, on page 73
- context user-plane-service redundancy-group host associate gtpu-service pgw-ingress, on page 74
- context user-plane-service redundancy-group host associate gtpu-service sgw-egress, on page 74
- context user-plane-service redundancy-group host associate gtpu-service sgw-ingress, on page 74
- context user-plane-service redundancy-group host associate gtpu-service upf-ingress, on page 75
- context user-plane-service redundancy-group host associate sx-service, on page 75
- control-plane-group, on page 75
- control-plane-group peer-node-id ipv4-address, on page 76
- control-plane-group peer-node-id ipv6-address, on page 76
- control-plane-group redundancy-group, on page 77
- control-plane-group redundancy-group host, on page 77
- control-plane-group redundancy-group host peer-node-id ipv4-address, on page 77
- control-plane-group redundancy-group host peer-node-id ipv6-address, on page 78
- control-plane-group redundancy-group host sx-association initiated-by-cp, on page 78
- control-plane-group redundancy-group host sx-association initiated-by-up, on page 79
- control-plane-group sx-association initiated-by-cp, on page 79
- control-plane-group sx-association initiated-by-up, on page 79

- interface, on page 79
- rcm switchover, on page 80
- url-blacklisting database directory, on page 80

apn-profile

Configures Access Point Name (APN) profile.

Privilege Security Administrator, Administrator

Syntax Description **apn-profile** *apn_profile_name*

apn_profile_name

Specify the APN profile name.

Must be a string.

Usage Guidelines Use this command to create an instance of an APN profile and configure it. An APN profile is a template which groups a set of APN-specific commands that may be applicable to one or more APNs.

Example

```
apn-profile apnprof27
```

apn-profile accounting mode

Configures type of accounting to be performed for this subscriber template.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > APN Profile

Syntax Description **mode** *accounting_mode*

accounting_mode

Specify the accounting mode.

Must be one of the following:

- none: No accounting.
- gtpp: GTPP accounting.

Default Value: "gtpp".

Usage Guidelines Use this command to configure the type of accounting to be performed for this subscriber template.

apn-profile timeout bearer-inactivity

Configures checks for low activity in a bearer.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > APN Profile

Syntax Description **bearer-inactivity exclude-default-bearer**

exclude-default-bearer

Specify to exclude bearer inactivity handling for default/primary bearer.

Usage Guidelines Use this command to configure checks for low activity in a bearer.

apn-profile timeout bearer-inactivity gbr

Configures checks for low activity in a GBR bearer.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > APN Profile

Syntax Description **timeout bearer-inactivity gbr timer bearer_inactivity_timer**

timer bearer_inactivity_timer

Specify the bearer inactivity timer in seconds. Must be an integer in the range of 300-2592000.

Must be an integer.

Usage Guidelines Use this command to configure checks for low activity in a GBR bearer.

apn-profile timeout bearer-inactivity gbr volume-threshold

Configures threshold value of the data traffic in a bearer.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > APN Profile

Syntax Description **volume-threshold [total total_data_traffic | downlink downlink_data_traffic | uplink uplink_data_traffic]**

total total_data_traffic

Specify the uplink and downlink data traffic in a bearer, in bytes.

Must be an integer.

downlink *downlink_data_traffic*

Specify the downlink data traffic in a bearer, in bytes.

Must be an integer.

uplink *uplink_data_traffic*

Specify the uplink data traffic in a bearer, in bytes.

Must be an integer.

Usage Guidelines	Use this command to configure the threshold value of the data traffic in a bearer.
-------------------------	--

call-control-profile

Configures call-control profile.

Privilege	Security Administrator, Administrator
------------------	---------------------------------------

Command Modes	Exec > Global Configuration
----------------------	-----------------------------

Syntax Description	call-control-profile <i>cc_profile_name</i>
---------------------------	--

cc_profile_name

Specify the call-control profile name.

Must be a string.

Usage Guidelines	Use this command to create and configure an instance of a call-control profile. A call-control profile is a template which groups a set of call-handling instructions that may be applicable to one or more incoming calls.
-------------------------	---

call-control-profile accounting mode

Configures the name of the accounting context or mode of accounting for this operator policy.

Privilege	Security Administrator, Administrator
------------------	---------------------------------------

Command Modes	Exec > Global Configuration > Call Control Profile
----------------------	--

Syntax Description	mode <i>accounting_mode</i>
---------------------------	------------------------------------

accounting_mode

Specify the accounting mode.

Must be one of the following:

content-filtering category database directory

- none: No accounting.
- gtpp: GTPP accounting.
- radius-diameter: RADIUS or Diameter accounting.

Usage Guidelines

Use this command to designate the name of the accounting context or mode of accounting for this operator policy.

content-filtering category database directory

Configures Content Filtering directory parameters.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration

Syntax Description **directory path cf_directory_path**

path cf_directory_path

Specify the Content Filtering directory path.

Must be a string.

Usage Guidelines

Use this command to configure Content Filtering directory parameters.

context

Creates and configures a context.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration

Syntax Description **context context_name**

context_name

Specify the context name.

Must be a string.

Usage Guidelines

Use this command to create and configure a context. If the named context does not exist, it is created. Enters the Context Configuration mode.

context aaa group

Configures handling of AAA within context.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > AAA Group
Syntax Description	<p>group <i>aaa_group_name</i></p> <p><i>aaa_group_name</i></p> <p>Specify the AAA group name.</p> <p>Must be a string.</p>
Usage Guidelines	Use this command to configure the handling of AAA within context.

context aaa group diameter authentication dictionary

Configures Diameter authentication dictionary.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > AAA Group
Syntax Description	<p>dictionary <i>dictionary_name</i></p> <p><i>dictionary_name</i></p> <p>Specify the Diameter authentication dictionary name.</p>

Must be one of the following:

- aaa-custom1
- aaa-custom10
- aaa-custom11
- aaa-custom12
- aaa-custom13
- aaa-custom14
- aaa-custom15
- aaa-custom16
- aaa-custom17
- aaa-custom18
- aaa-custom19
- aaa-custom2
- aaa-custom20
- aaa-custom21

context aaa group diameter authentication endpoint

- aaa-custom22
- aaa-custom23
- aaa-custom24
- aaa-custom25
- aaa-custom26
- aaa-custom27
- aaa-custom28
- aaa-custom29
- aaa-custom3
- aaa-custom30
- aaa-custom4
- aaa-custom5
- aaa-custom6
- aaa-custom7
- aaa-custom8
- aaa-custom9
- dynamic-load
- nasreq

Usage Guidelines Use this command to configure the Diameter authentication dictionary.

context aaa group diameter authentication endpoint

Configures Diameter endpoint parameters.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description **endpoint** *endpoint_name*

endpoint_name

Specify the Diameter endpoint name.

Must be a string.

Usage Guidelines Use this command to configure the Diameter endpoint parameters.

context aaa group diameter authentication server

Configures Diameter host name.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description `server host_name [priority priority]`

host_name

Specify the Diameter server host name.

Must be a string.

priority priority

Specify the priority.

Must be an integer in the range of 1-1000.

Usage Guidelines Use this command to configure the Diameter host name.

context aaa group radius accounting interim

Configures when the system should send an interim accounting record to the server.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description `interim [interval duration]`

interval duration

Specify the periodic interval at which to send an interim accounting record in seconds.

Must be an integer in the range of 50-40000000.

Usage Guidelines Use this command to configure when the system should send an interim accounting record to the server.

context aaa group radius accounting interim volume

Configures the uplink/downlink volume octet counts for the generation of RADIUS interims. This command is applicable for GGSN only.

Privilege Security Administrator, Administrator

context aaa group radius algorithm

Command Modes Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description **volume [downlink downlink_volume | uplink uplink_volume | total total_volume]**

downlink downlink_volume

Specify the downlink volume limit for RADIUS interim generation in bytes.

Must be an integer in the range of 100000-4000000000.

uplink uplink_volume

Specify the uplink volume limit for RADIUS interim generation in bytes.

Must be an integer in the range of 100000-4000000000.

total total_volume

Specify the total volume limit for RADIUS interim generation in bytes.

Must be an integer in the range of 100000-4000000000.

Usage Guidelines Use this command to configure the uplink/downlink volume octet counts for the generation of RADIUS interims. This command is applicable for GGSN only.

context aaa group radius algorithm

Configures the algorithm for selecting among various defined RADIUS servers.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description **algorithm algorithm**

algorithm

Specify the algorithm.

Must be one of the following:

- round-robin
- first-server

Usage Guidelines Use this command to configure the algorithm for selecting among various defined RADIUS servers.

context aaa group radius attribute nas-ip-address address

Configures the system's NAS-IP-Address attribute.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description **address { ipv4-address *ipv4_address* | ipv6-address *ipv6_address* }**

ipv4-address *ipv4_address*

Specify the IPv4 address.

Must be an IPv4 address.

ipv6-address *ipv6_address*

Specify the IPv6 address.

Must be an IPv6 address.

Usage Guidelines Use this command to configure the system's NAS-IP-Address attribute.

context aaa group radius dictionary

Configures dictionary used by RADIUS for specific context.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description **dictionary *radius_dictionary_name***

dictionary *radius_dictionary_name*

Specify the RADIUS dictionary name.

Must be one of the following:

- standard: Contains all standard RADIUS attributes, as defined in RFC-2865, RFC-2866, and RFC-2869.
- starent: Contains master set of all attributes found in all other non-custom dictionaries supported. Starent VSAs use a two-byte VSA Type.
- 3gpp: Contains standard dictionary plus all attributes specified in 3GPP 32.015.
- 3gpp2: Contains standard dictionary plus all attributes specified in IS-835-B, plus some attributes specified in IS-835-C.
- custom1: Custom-defined dictionary.
- custom10: Custom-defined dictionary.
- custom11: Custom-defined dictionary.
- custom12: Custom-defined dictionary.
- custom14: Custom-defined dictionary.
- custom15: Custom-defined dictionary.

context aaa group radius dictionary

- custom16: Custom-defined dictionary.
- custom17: Custom-defined dictionary.
- custom18: Custom-defined dictionary.
- custom19: Custom-defined dictionary.
- custom2: Custom-defined dictionary.
- custom20: Custom-defined dictionary.
- custom21: Custom-defined dictionary.
- custom22: Custom-defined dictionary.
- custom23: Custom-defined dictionary.
- custom24: Custom-defined dictionary.
- custom25: Custom-defined dictionary.
- custom26: Custom-defined dictionary.
- custom27: Custom-defined dictionary.
- custom28: Custom-defined dictionary.
- custom29: Custom-defined dictionary.
- custom3: Custom-defined dictionary.
- custom30: Custom-defined dictionary.
- custom31: Custom-defined dictionary.
- custom32: Custom-defined dictionary.
- custom33: Custom-defined dictionary.
- custom34: Custom-defined dictionary.
- custom35: Custom-defined dictionary.
- custom36: Custom-defined dictionary.
- custom37: Custom-defined dictionary.
- custom38: Custom-defined dictionary.
- custom39: Custom-defined dictionary.
- custom4: Custom-defined dictionary.
- custom40: Custom-defined dictionary.
- custom41: Custom-defined dictionary.
- custom42: Custom-defined dictionary.
- custom43: Custom-defined dictionary.
- custom44: Custom-defined dictionary.

- custom45: Custom-defined dictionary.
- custom46: Custom-defined dictionary.
- custom47: Custom-defined dictionary.
- custom48: Custom-defined dictionary.
- custom49: Custom-defined dictionary.
- custom5: Custom-defined dictionary.
- custom50: Custom-defined dictionary.
- custom51: Custom-defined dictionary.
- custom52: Custom-defined dictionary.
- custom53: Custom-defined dictionary.
- custom54: Custom-defined dictionary.
- custom55: Custom-defined dictionary.
- custom56: Custom-defined dictionary.
- custom57: Custom-defined dictionary.
- custom58: Custom-defined dictionary.
- custom59: Custom-defined dictionary.
- custom6: Custom-defined dictionary.
- custom60: Custom-defined dictionary.
- custom61: Custom-defined dictionary.
- custom62: Custom-defined dictionary.
- custom63: Custom-defined dictionary.
- custom64: Custom-defined dictionary.
- custom65: Custom-defined dictionary.
- custom66: Custom-defined dictionary.
- custom67: Custom-defined dictionary.
- custom68: Custom-defined dictionary.
- custom69: Custom-defined dictionary.

Usage Guidelines

Use this command to configure the dictionary used by RADIUS for specific context.

context aaa group radius mediation-device

Configures mediation-device specific AAA transactions.

context aaa group radius server

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > AAA Group Configuration > Redundancy Group Configuration > Host Configuration
Syntax Description	radius mediation-device
Usage Guidelines	Use this command to configure the mediation-device specific AAA transactions.

context aaa group radius server

Configures RADIUS server that the system communicates with for specific context.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > AAA Group Configuration
Syntax Description	server { ipv4_address ipv6_address } { ipv4_address ipv6_address } Specify the RADIUS server IP address. Must be an IPv4 address. -Or- Must be an IPv6 address.
Usage Guidelines	Use this command to configure the RADIUS server parameters.

context aaa group radius server encrypted key

Configures use of encrypted key.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > AAA Group Configuration
Syntax Description	key encrypted_key [port port_number] key encrypted_key Specify the encrypted key that is exchanged between server and client. Must be followed by shared secret. Must be a string.
port port_number	Specify the UDP port that the RADIUS server is using. Must be an integer in the range of 1-65535.

Usage Guidelines Use this command to configure the use of encrypted key.

context aaa group radius server key

Configures the key that is exchanged between server and client.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description **key** *key*

key

Specify the key that is exchanged between server and client. Must be followed by shared secret.

Must be a string.

Usage Guidelines Use this command to configure the key that is exchanged between server and client. Must be followed by shared secret.

context aaa group redundancy-group

Configures the redundancy group parameters.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description **redundancy-group** *group_name*

group_name

Specify the redundancy group name.

Must be a string.

Usage Guidelines Use this command to configure the redundancy group parameters.

context aaa group redundancy-group host

Configures redundancy group host parameters.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration

Syntax Description **host** *host_name*

context aaa group redundancy-group host diameter authentication dictionary

host_name

Specify the host name.

Must be a string.

Usage Guidelines Use this command to configure the redundancy group host parameters.

context aaa group redundancy-group host diameter authentication dictionary

Configures Diameter authentication dictionary.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > AAA Group

Syntax Description **dictionary** *dictionary_name*

dictionary_name

Specify the Diameter authentication dictionary name.

Must be one of the following:

- aaa-custom1
- aaa-custom10
- aaa-custom11
- aaa-custom12
- aaa-custom13
- aaa-custom14
- aaa-custom15
- aaa-custom16
- aaa-custom17
- aaa-custom18
- aaa-custom19
- aaa-custom2
- aaa-custom20
- aaa-custom21
- aaa-custom22
- aaa-custom23

- aaa-custom24
- aaa-custom25
- aaa-custom26
- aaa-custom27
- aaa-custom28
- aaa-custom29
- aaa-custom3
- aaa-custom30
- aaa-custom4
- aaa-custom5
- aaa-custom6
- aaa-custom7
- aaa-custom8
- aaa-custom9
- dynamic-load
- nasreq

Usage Guidelines

Use this command to configure the Diameter authentication dictionary.

context aaa group redundancy-group host diameter authentication endpoint

Configures Diameter endpoint parameters.

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description

endpoint *endpoint_name*

endpoint_name

Specify the Diameter endpoint name.

Must be a string.

Usage Guidelines

Use this command to configure the Diameter endpoint parameters.

context aaa group redundancy-group host diameter authentication server

context aaa group redundancy-group host diameter authentication server

Configures Diameter host name.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description **server** *host_name* [**priority** *priority*]

host_name

Specify the Diameter server host name.

Must be a string.

priority priority

Specify the priority.

Must be an integer in the range of 1-1000.

Usage Guidelines Use this command to configure the Diameter host name.

context aaa group redundancy-group host radius accounting interim

Configures when the system should send an interim accounting record to the server.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description **interim** [**interval** *duration*]

interval duration

Specify the periodic interval at which to send an interim accounting record in seconds.

Must be an integer in the range of 50-40000000.

Usage Guidelines Use this command to configure when the system should send an interim accounting record to the server.

context aaa group redundancy-group host radius accounting interim volume

Configures the uplink/downlink volume octet counts for the generation of RADIUS interims. This command is applicable for GGSN only.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description **volume [downlink downlink_volume | uplink uplink_volume | total total_volume]**

downlink *downlink_volume*

Specify the downlink volume limit for RADIUS interim generation in bytes.

Must be an integer in the range of 100000-4000000000.

uplink *uplink_volume*

Specify the uplink volume limit for RADIUS interim generation in bytes.

Must be an integer in the range of 100000-4000000000.

total *total_volume*

Specify the total volume limit for RADIUS interim generation in bytes.

Must be an integer in the range of 100000-4000000000.

Usage Guidelines Use this command to configure the uplink/downlink volume octet counts for the generation of RADIUS interims. This command is applicable for GGSN only.

context aaa group redundancy-group host radius algorithm

Configures the algorithm for selecting among various defined RADIUS servers.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description **algorithm *algorithm***

algorithm

Specify the algorithm.

Must be one of the following:

- round-robin

context aaa group redundancy-group host radius attribute nas-ip-address address

- first-server

Usage Guidelines Use this command to configure the algorithm for selecting among various defined RADIUS servers.

context aaa group redundancy-group host radius attribute nas-ip-address address

Configures the system's NAS-IP-Address attribute.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description **address { ipv4-address *ipv4_address* | ipv6-address *ipv6_address* }**

ipv4-address *ipv4_address*

Specify the IPv4 address.

Must be an IPv4 address.

ipv6-address *ipv6_address*

Specify the IPv6 address.

Must be an IPv6 address.

Usage Guidelines Use this command to configure the system's NAS-IP-Address attribute.

context aaa group redundancy-group host radius dictionary

Configures dictionary used by RADIUS for specific context.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description **dictionary *radius_dictionary_name***

dictionary *radius_dictionary_name*

Specify the RADIUS dictionary name.

Must be one of the following:

- standard: Contains all standard RADIUS attributes, as defined in RFC-2865, RFC-2866, and RFC-2869.
- starent: Contains master set of all attributes found in all other non-custom dictionaries supported. Starent VSAs use a two-byte VSA Type.

- 3gpp: Contains standard dictionary plus all attributes specified in 3GPP 32.015.
- 3gpp2: Contains standard dictionary plus all attributes specified in IS-835-B, plus some attributes specified in IS-835-C.
- custom1: Custom-defined dictionary.
- custom10: Custom-defined dictionary.
- custom11: Custom-defined dictionary.
- custom12: Custom-defined dictionary.
- custom14: Custom-defined dictionary.
- custom15: Custom-defined dictionary.
- custom16: Custom-defined dictionary.
- custom17: Custom-defined dictionary.
- custom18: Custom-defined dictionary.
- custom19: Custom-defined dictionary.
- custom2: Custom-defined dictionary.
- custom20: Custom-defined dictionary.
- custom21: Custom-defined dictionary.
- custom22: Custom-defined dictionary.
- custom23: Custom-defined dictionary.
- custom24: Custom-defined dictionary.
- custom25: Custom-defined dictionary.
- custom26: Custom-defined dictionary.
- custom27: Custom-defined dictionary.
- custom28: Custom-defined dictionary.
- custom29: Custom-defined dictionary.
- custom3: Custom-defined dictionary.
- custom30: Custom-defined dictionary.
- custom31: Custom-defined dictionary.
- custom32: Custom-defined dictionary.
- custom33: Custom-defined dictionary.
- custom34: Custom-defined dictionary.
- custom35: Custom-defined dictionary.
- custom36: Custom-defined dictionary.

```
context aaa group redundancy-group host radius dictionary
```

- custom37: Custom-defined dictionary.
- custom38: Custom-defined dictionary.
- custom39: Custom-defined dictionary.
- custom4: Custom-defined dictionary.
- custom40: Custom-defined dictionary.
- custom41: Custom-defined dictionary.
- custom42: Custom-defined dictionary.
- custom43: Custom-defined dictionary.
- custom44: Custom-defined dictionary.
- custom45: Custom-defined dictionary.
- custom46: Custom-defined dictionary.
- custom47: Custom-defined dictionary.
- custom48: Custom-defined dictionary.
- custom49: Custom-defined dictionary.
- custom5: Custom-defined dictionary.
- custom50: Custom-defined dictionary.
- custom51: Custom-defined dictionary.
- custom52: Custom-defined dictionary.
- custom53: Custom-defined dictionary.
- custom54: Custom-defined dictionary.
- custom55: Custom-defined dictionary.
- custom56: Custom-defined dictionary.
- custom57: Custom-defined dictionary.
- custom58: Custom-defined dictionary.
- custom59: Custom-defined dictionary.
- custom6: Custom-defined dictionary.
- custom60: Custom-defined dictionary.
- custom61: Custom-defined dictionary.
- custom62: Custom-defined dictionary.
- custom63: Custom-defined dictionary.
- custom64: Custom-defined dictionary.
- custom65: Custom-defined dictionary.

- custom66: Custom-defined dictionary.
- custom67: Custom-defined dictionary.
- custom68: Custom-defined dictionary.
- custom69: Custom-defined dictionary.

Usage Guidelines

Use this command to configure the dictionary used by RADIUS for specific context.

context aaa group redundancy-group host radius mediation-device

Configures mediation-device specific AAA transactions.

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration > AAA Group Configuration > Redundancy Group Configuration > Host Configuration

Syntax Description

radius mediation-device

Usage Guidelines

Use this command to configure the mediation-device specific AAA transactions.

context aaa group redundancy-group host radius server

Configures RADIUS server that the system communicates with for specific context.

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description

server { ipv4_address | ipv6_address }

{ ipv4_address | ipv6_address }

Specify the RADIUS server IP address.

Must be an IPv4 address.

-Or-

Must be an IPv6 address.

Usage Guidelines

Use this command to configure the RADIUS server parameters.

context aaa group redundancy-group host radius server encrypted key

context aaa group redundancy-group host radius server encrypted key

Configures use of encrypted key.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description **key** *encrypted_key* [**port** *port_number*]

key *encrypted_key*

Specify the encrypted key that is exchanged between server and client. Must be followed by shared secret.
Must be a string.

port *port_number*

Specify the UDP port that the RADIUS server is using.
Must be an integer in the range of 1-65535.

Usage Guidelines Use this command to configure the use of encrypted key.

context aaa group redundancy-group host radius server key

Configures the key that is exchanged between server and client.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > AAA Group Configuration

Syntax Description **key** *key*

key

Specify the key that is exchanged between server and client. Must be followed by shared secret.
Must be a string.

Usage Guidelines Use this command to configure the key that is exchanged between server and client. Must be followed by shared secret.

context apn

Configures Access Point Name (APN) templates.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration
Syntax Description	apn <i>apn_name</i>

apn_name

Specify the APN name.

Must be a string.

Usage Guidelines	Use this command to create and configure an APN.
-------------------------	--

Example

The following command creates an APN template named isp1:

apn isp1

context apn active-charging

Enables a configured ACS rulebase.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration
Syntax Description	active-charging rulebase <i>rulebase_name</i>

rulebase rulebase_name

Specify the rulebase name.

Must be a string.

Usage Guidelines	Use this command to enable a configured ACS rulebase.
-------------------------	---

context apn authorize-with-hss

Configures s6b authentication.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration
Syntax Description	authorize-with-hss [report-ipv6 <i>ipv6_address</i>]

Usage Guidelines	Use this command to configure s6b authentication. Enables IPv6 reporting through AAR towards s6b interface.
-------------------------	---

context apn authorize-with-hss egtp

context apn authorize-with-hss egtp

Enables s6b authorization for all the interfaces of EGTP along with GN-GP Handover except 3G initial attach.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > APN Configuration > Redundancy Group Configuration
Syntax Description	authorize-with-hss egtp [report-ipv6]
Usage Guidelines	Use this command to enable s6b authorization for all the interfaces of EGTP along with GN-GP Handover except 3G initial attach.

context apn authorize-with-hss egtp gn-gp-enabled

Enables s6b authorization for 3G initial attach and GNGP handover.

Privilege	Security Administrator, Administrator
Syntax Description	gn-gp-enabled report-ipv6 <i>ipv6_address</i>
Usage Guidelines	Use this command to enable s6b authorization for 3G initial attach and GNGP handover.

context apn authorize-with-hss egtp s2b

Enables s6b authorization for egtp-s2b.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration
Syntax Description	authorize-with-hss egtp s2b report-ipv6-addr
Usage Guidelines	Use this command to enable s6b authorization for egtp-s2b.

context apn authorize-with-hss egtp s2b gn-gp-enabled

Enables s6b authorization for 3G initial attach and GNGP handover.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > APN Configuration
Syntax Description	gn-gp-enabled report-ipv6 <i>ipv6_address</i>

Usage Guidelines Use this command to enable s6b authorization for 3G initial attach and GNPG handover.

context apn authorize-with-hss egtp s2b s5-s8

Enables s6b authorization for egtp-s5s8.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > APN Configuration

Syntax Description `authorize-with-hss egtp s2b s5-s8 [gn_gp_option | report-ipv6-addr]`

Usage Guidelines Use this command to enable s6b authorization for egtp-s5s8.

context apn authorize-with-hss egtp s5-s8

Enables s6b authorization for egtp-s5s8.

Privilege Security Administrator, Administrator

Syntax Description `s5-s8`

Usage Guidelines Use this command to enable s6b authorization for egtp-s5s8.

context apn authorize-with-hss egtp s5-s8 s2b

Enables s6b authorization for egtp-s2b.

Command Modes Exec > Global Configuration > Context Configuration

Privilege Security Administrator, Administrator

Syntax Description `s2b`

Usage Guidelines Use this command to enable s6b authorization for egtp-s2b.

context apn authorize-with-hss lma

Enables IPv6 reporting through AAR towards s6b.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration

Syntax Description `lma [report-ipv6 ipv6_address | s6b-aaa-group group_name]`

context apn cc-profile**s6b-aaa-group *group_name***

Specify the AAA group name for s6b authorization.

Must be a string.

Usage Guidelines Use this command to enable IPv6 reporting through AAR towards s6b.

context apn cc-profile

Configures the subscriber charging characteristics profile parameters.

Privilege Security Administrator, Administrator**Command Modes** Exec > Global Configuration > Context Configuration**Syntax Description** **cc-profile** *index* { **credit-control-group** *cc_group_name* | **prepaid-prohibited** }***index***

Specify the charging characteristics profile index.

Must be an integer.

-Or-

Must be one of the following:

- any

credit-control-group* *cc_group_name

Specify the credit control group name.

Must be a string.

prepaid-prohibited

Specify to disable prepaid for the configured profile index.

Usage Guidelines Use this command to configure the subscriber charging characteristics profile parameters.

context apn content-filtering category

Configures Content Filtering category.

Privilege Security Administrator, Administrator**Command Modes** Exec > Global Configuration > Context Configuration**Syntax Description** **category** **policy-id** *policy_id*

policy-id *policy_id*

Specify the Content Filtering policy ID.

Must be an integer in the range of 1-4294967295.

Usage Guidelines	Use this command to configure Content Filtering category.
-------------------------	---

context apn data-tunnel

Configures the data tunnel MTU parameter.

Privilege	Security Administrator, Administrator
------------------	---------------------------------------

Command Modes	Exec > Global Configuration > Context Configuration
----------------------	---

Syntax Description	data-tunnel mtu <i>max_transmission_unit</i>
---------------------------	---

mtu *max_transmission_unit*

Specify the data tunnel MTU value, in octets.

Must be an integer.

Usage Guidelines	Use this command to configure the data tunnel MTU parameter.
-------------------------	--

context apn gtpp group

Enables and configures the GTPP group to be used by this APN.

Privilege	Security Administrator, Administrator
------------------	---------------------------------------

Command Modes	Exec > Global Configuration > Context Configuration
----------------------	---

Syntax Description	gtpp group <i>gtpp_group_name</i>
---------------------------	--

group *gtpp_group_name*

Specify the GTPP group name.

Must be a string.

Usage Guidelines	Use this command to enable and configure the GTPP group to be used by this APN.
-------------------------	---

context apn ip

Configures IP-related parameters.

Privilege	Security Administrator, Administrator
------------------	---------------------------------------

context apn ip access-group

Syntax Description **ip context-name** *context_name*

context-name *context_name*

Specify name of the destination context to use for subscribers accessing this APN.

Must be a string.

Usage Guidelines Use this command to configure IP-related parameters.

context apn ip access-group

Configures the access group to be used by this APN.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > APN Configuration

Syntax Description **ip access-group** *access_group_name* [**in** | **out**]

access_group_name

Specify the access group name.

Must be a string.

in

Specify the access group as inbound.

out

Specify the access group as outbound.

Usage Guidelines Use this command to specify the access group to be used by this APN.

You can configure a maximum of eight elements with this command.

context apn ip source-violation

Enables packet source validation.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration

Syntax Description **source-violation** [**ignore**]

ignore

Specify to disable source address checking for this APN.

Usage Guidelines Use this command to enable packet source validation.

context apn ppp

Configures PPP parameters for specified APN.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > APN Configuration

Syntax Description `ppp mtu max_transmission_unit`

mtu *max_transmission_unit*

Specify the maximum transmission unit. Default: 1500.

Must be an integer.

Usage Guidelines Use this command to configure the PPP parameters for specified APN.

context apn redundancy-group

Configures redundancy group parameters.

Privilege Security Administrator, Administrator

Syntax Description `redundancy-group group_name`

group_name

Specify the redundancy group name.

Must be a string.

Usage Guidelines Use this command to configure the redundancy group parameters.

context apn redundancy-group active-charging

Enables a configured ACS rulebase.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration

Syntax Description `active-charging rulebase rulebase_name`

rulebase rulebase_name

Specify the rulebase name.

context apn redundancy-group authorize-with-hss

Must be a string.

Usage Guidelines Use this command to enable a configured ACS rulebase.

context apn redundancy-group authorize-with-hss

Configures s6b authentication.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration

Syntax Description `authorize-with-hss [report-ipv6 ipv6_address]`

Usage Guidelines Use this command to configure s6b authentication. Enables IPv6 reporting through AAR towards s6b interface.

context apn redundancy-group authorize-with-hss egtp

Enables s6b authorization for all the interfaces of EGTP along with GN-GP Handover except 3G initial attach.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > APN Configuration > Redundancy Group Configuration

Syntax Description `authorize-with-hss egtp [report-ipv6]`

Usage Guidelines Use this command to enable s6b authorization for all the interfaces of EGTP along with GN-GP Handover except 3G initial attach.

context apn redundancy-group authorize-with-hss egtp gn-gp-enabled

Enables s6b authorization for 3G initial attach and GNGP handover.

Privilege Security Administrator, Administrator

Syntax Description `gn-gp-enabled report-ipv6 ipv6_address`

Usage Guidelines Use this command to enable s6b authorization for 3G initial attach and GNGP handover.

context apn redundancy-group authorize-with-hss egtp s2b

Enables s6b authorization for egtp-s2b.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration
Syntax Description	authorize-with-hss egtp s2b report-ipv6-addr
Usage Guidelines	Use this command to enable s6b authorization for egtp-s2b.

context apn redundancy-group authorize-with-hss egtp s2b gn-gp-enabled

Enables s6b authorization for 3G initial attach and GNGP handover.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > APN Configuration
Syntax Description	gn-gp-enabled report-ipv6 <i>ipv6_address</i>
Usage Guidelines	Use this command to enable s6b authorization for 3G initial attach and GNGP handover.

context apn redundancy-group authorize-with-hss egtp s2b s5-s8

Enables s6b authorization for egtp-s5s8.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > APN Configuration
Syntax Description	authorize-with-hss egtp s2b s5-s8 [<i>gn_gp_option</i> report-ipv6-addr]
Usage Guidelines	Use this command to enable s6b authorization for egtp-s5s8.

context apn redundancy-group authorize-with-hss egtp s5-s8

Enables s6b authorization for egtp-s5s8.

Privilege	Security Administrator, Administrator
Syntax Description	s5-s8
Usage Guidelines	Use this command to enable s6b authorization for egtp-s5s8.

```
context apn redundancy-group authorize-with-hss egtp s5-s8 s2b
```

context apn redundancy-group authorize-with-hss egtp s5-s8 s2b

Enables s6b authorization for egtp-s2b.

Command Modes Exec > Global Configuration > Context Configuration

Privilege Security Administrator, Administrator

Syntax Description **s2b**

Usage Guidelines Use this command to enable s6b authorization for egtp-s2b.

context apn redundancy-group authorize-with-hss lma

Enables IPv6 reporting through AAR towards s6b.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration

Syntax Description **lma [report-ipv6 ipv6_address | s6b-aaa-group group_name]**

s6b-aaa-group group_name

Specify the AAA group name for s6b authorization.

Must be a string.

Usage Guidelines Use this command to enable IPv6 reporting through AAR towards s6b.

context apn redundancy-group cc-profile

Configures the subscriber charging characteristics profile parameters.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration

Syntax Description **cc-profile index { credit-control-group cc_group_name | prepaid-prohibited }**

index

Specify the charging characteristics profile index.

Must be an integer.

-Or-

Must be one of the following:

- any

credit-control-group *cc_group_name*

Specify the credit control group name.

Must be a string.

prepaid-prohibited

Specify to disable prepaid for the configured profile index.

Usage Guidelines

Use this command to configure the subscriber charging characteristics profile parameters.

context apn redundancy-group content-filtering category

Configures Content Filtering category.

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration

Syntax Description

category policy-id *policy_id*

policy-id *policy_id*

Specify the Content Filtering policy ID.

Must be an integer in the range of 1-4294967295.

Usage Guidelines

Use this command to configure Content Filtering category.

context apn redundancy-group data-tunnel

Configures the data tunnel MTU parameter.

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration

Syntax Description

data-tunnel mtu *max_transmission_unit*

mtu *max_transmission_unit*

Specify the data tunnel MTU value, in octets.

Must be an integer.

Usage Guidelines

Use this command to configure the data tunnel MTU parameter.

context apn redundancy-group gtpp group

context apn redundancy-group gtpp group

Enables and configures the GTPP group to be used by this APN.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration

Syntax Description **gtpp group *gtpp_group_name***

group *gtpp_group_name*

Specify the GTPP group name.

Must be a string.

Usage Guidelines Use this command to enable and configure the GTPP group to be used by this APN.

context apn redundancy-group ip

Configures IP-related parameters.

Privilege Security Administrator, Administrator

Syntax Description **ip context-name *context_name***

context-name *context_name*

Specify name of the destination context to use for subscribers accessing this APN.

Must be a string.

Usage Guidelines Use this command to configure IP-related parameters.

context apn redundancy-group ip access-group

Configures the access group to be used by this APN.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > APN Configuration

Syntax Description **ip access-group *access_group_name* [in | out]**

access_group_name

Specify the access group name.

Must be a string.

in

Specify the access group as inbound.

out

Specify the access group as outbound.

Usage Guidelines

Use this command to specify the access group to be used by this APN.

You can configure a maximum of eight elements with this command.

context apn redundancy-group ip source-violation

Enables packet source validation.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration

Syntax Description **source-violation [ignore]**

ignore

Specify to disable source address checking for this APN.

Usage Guidelines Use this command to enable packet source validation.

context apn redundancy-group ppp

Configures PPP parameters for specified APN.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > APN Configuration

Syntax Description **ppp mtu max_transmission_unit**

mtu max_transmission_unit

Specify the maximum transmission unit. Default: 1500.

Must be an integer.

Usage Guidelines Use this command to configure the PPP parameters for specified APN.

context apn redundancy-group timeout

Configures session timeout parameters for the current APN.

context apn timeout

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration
Syntax Description	timeout idle idle_timeout idle idle_timeout Specify the session idle timeout period for the current APN. Must be an integer in the range of 0-4294967295.
Usage Guidelines	Use this command to configure the session timeout parameters for the current APN.

context apn timeout

Configures session timeout parameters for the current APN.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration
Syntax Description	timeout idle idle_timeout idle idle_timeout Specify the session idle timeout period for the current APN. Must be an integer in the range of 0-4294967295.
Usage Guidelines	Use this command to configure the session timeout parameters for the current APN.

context gtpp group

Configures GTPP group related parameters.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration
Syntax Description	gtpp gtpp_group_name gtpp_group_name Specify the GTPP group name. Must be a string.
Usage Guidelines	Use this command to configure GTPP group related parameters.

context gtpp group gtpp

Disables GTPP trigger conditions that cause either partial CDR record closure or opening of a new CDR record container. GTPP Triggers are specified in 3GPP TS 32.251 v6.6.0. All GTPP trigger changes take effect immediately, except volume-limit.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > GTPP Group Configuration
Syntax Description	<code>gtpp trigger { time-limit volume-limit }</code>
Usage Guidelines	Use this command to disable or enable GTPP triggers that can cause partial CDR record closure or cause a new CDR to be created.

Example

The following command disables partial record closure when a configured time limit is reached:

```
gtpp trigger time-limit
```

context gtpp group gtpp egcdr

Configures the eG-CDR and P-CDR (P-GW CDR) parameters and triggers.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > GTPP Group Configuration
Syntax Description	<code>gtpp egcdr { service-data-flow threshold { interval duration volume { downlink bytes uplink bytes total bytes } } service-idle-timeout { 0 service_idle_timeout } }</code>
Usage Guidelines	Use this command to configure individual triggers for eG-CDR/P-CDR generation. Use the service-data-flow threshold option to configure the thresholds for closing a service data flow container within an eG-CDR (eG-CDRs for GGSN and P-CDRs for P-GW) during flow-based charging (FBC). A service data flow container has statistics regarding an individual content ID.

context gtpp group gtpp egcdr final-record closing-cause

Configures closing cause for final EGCDR.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > GTPP Group Configuration

```
context gtpp group gtpp egcdr losdv-max-containers
```

Syntax Description **gtpp egcdr final-record closing-cause { same-in-all-partial | unique }**

unique

Specify unique closing cause for final EGCDR.

same-in-all-partial

Specify same closing cause for multiple final EGCDR(s).

Usage Guidelines Use this command to configure closing cause for final EGCDR.

context gtpp group gtpp egcdr losdv-max-containers

Configures maximum number of LoSDV containers in one EGCDR.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description **losdv-max-containers *max_containers***

max_containers

Specify the number of LOSDV containers.

Must be an integer in the range of 1-255.

Usage Guidelines Use this command to configure the maximum number of LoSDV containers in one EGCDR.

context gtpp group gtpp egcdr service-data-flow threshold

Configures service data flow related parameters.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description **threshold interval *duration***

interval duration

Specify the time interval, in seconds, to close the eG-CDR/P-CDR if the minimum time duration thresholds for service data flow containers satisfied in flow-based charging. By default, this option is disabled.

Must be an integer in the range of 60-40000000.

Usage Guidelines Use this command to assign volume or interval values to the interim GCDRs.

context gtpp group gtpp egcdr service-data-flow threshold volume

Configures the uplink/downlink volume octet counts for the generation of interim GCDRs.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description `volume { downlink bytes | uplink bytes | total bytes }`

downlink bytes

Specify the limit for the number of downlink octets after which the eG-CDR/P-CDR is closed.

Must be an integer in the range of 100000-4000000000.

uplink bytes

Specify the limit for the number of uplink octets after which the eG-CDR/P-CDR is closed.

Must be an integer in the range of 100000-4000000000.

total bytes

Specify the limit for the total number of octets (uplink+downlink) after which the eG-CDR/P-CDR is closed.

Must be an integer in the range of 100000-4000000000.

Usage Guidelines Use this command to configure the uplink/downlink volume octet counts for the generation of interim GCDRs.

context gtpp group gtpp egcdr service-idle-timeout

Enables configuration for service idle out closure of LOSDV container.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description `gtpp egcdr service-idle-timeout { zero | service_idle_timeout }`

service_idle_timeout

Specify time limit in seconds for service-idle-timeout.

Must be an integer in the range of 10-86400.

zero

Specify no service-idle-timeout trigger.

```
context gtpp group gtpp storage-server ip-address
```

Must be one of the following:

- 0

Usage Guidelines Use this command to enable configuration for service idle out closure.

context gtpp group gtpp storage-server ip-address

Configures IP address of the external GTPP storage server for storing CDRs.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description **gtpp storage-server { { ipv4_address | ipv6_address } | port port_number }**

{ ipv4_address | ipv6_address }

Specify the IP address.

Must be IPv4 CIDR notation ##.##.##.##/x or in IPv6 CIDR notation
#####:#####:#####:#####:#####:#####:#####:#####/##.

-Or-

Must be an IP address.

port port_number

Specify the UDP port number that the GTPP Backup server is using.

Must be an integer in the range of 1-65535.

Usage Guidelines Use this command to configure the IP address of the external GTPP storage server for storing CDRs.

context gtpp group gtpp storage-server local

Configures storage-server local-mode configuration.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description **local aaamgr-wait-time aaamgr_wait_time**

aaamgr-wait-time aaamgr_wait_time

Specify the time in seconds that AAAMgr has to wait trying to accumulate 255 CDRs.

Must be an integer in the range of 1-300.

Default Value: 300.

Usage Guidelines Use this command to configure the storage-server local-mode configuration.

context gtpp group gtpp storage-server local file

Configures GTPP file related parameters.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description `file compression { file_compression | format file_format }`

compression file_compression

Specify the GTPP file compression related configurations. By default, GZIP file compression is disabled.

Must be one of the following:

- gzip
- none

Default Value: "none".

format file_format

Specify the file format to be used for local storage.

Must be one of the following:

- custom1
- custom2
- custom3
- custom4
- custom5
- custom6
- custom7
- custom8

Default Value: "custom1".

Usage Guidelines Use this command to configure the GTPP file related parameters.

context gtpp group gtpp storage-server local file name

Configures file name related parameters.

context gtpp group gtpp trigger

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > GTPP Group Configuration
Syntax Description	<pre>name { format file_name_format prefix file_name_prefix }</pre> <p>format file_name_format Specify the file name format to be used. Must be a string.</p> <p>prefix file_name_prefix Specify the file name prefix to be used. Must be a string.</p>
Usage Guidelines	Use this command to configure the file name related parameters.

context gtpp group gtpp trigger

Configures triggers for CDR.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > GTPP Group Configuration
Syntax Description	<pre>trigger { time-limit volume-limit }</pre> <p>time-limit When this trigger is disabled, no partial record closure occurs when the configured time limit is reached. Default: Enabled.</p> <p>volume-limit When this trigger is disabled no partial record closure occurs when volume limit is reached. Default: Enabled.</p>
Usage Guidelines	Use this command to configure triggers for CDR.

context gtpp group gtpp trigger egcdr

Enables or disables and configures eGCDR-related parameters.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > GTPP Group Configuration
Syntax Description	egcdr max-losdv

max-losdv

Enable trigger for eGCDR release at MAX LoSDV containers.

Usage Guidelines	Use this command to enable or disable and configure eGCDR-related parameters.
-------------------------	---

context gtpp group redundancy-group

Configures redundancy group parameters.

Privilege	Security Administrator, Administrator
------------------	---------------------------------------

Command Modes	Exec > Global Configuration
----------------------	-----------------------------

Syntax Description	redundancy-group <i>group_name</i>
---------------------------	---

group_name

Specify the redundancy group name.

Must be a string.

Usage Guidelines	Use this command to configure the redundancy group parameters.
-------------------------	--

context gtpp group redundancy-group host

Configures redundancy group host parameters.

Privilege	Security Administrator, Administrator
------------------	---------------------------------------

Command Modes	Exec > Global Configuration
----------------------	-----------------------------

Syntax Description	host <i>host_name</i>
---------------------------	------------------------------

host_name

Specify the host name.

Must be a string.

Usage Guidelines	Use this command to configure the redundancy group host parameters.
-------------------------	---

context gtpp group redundancy-group host gtpp

Disables GTPP trigger conditions that cause either partial CDR record closure or opening of a new CDR record container. GTPP Triggers are specified in 3GPP TS 32.251 v6.6.0. All GTPP trigger changes take effect immediately, except volume-limit.

Privilege	Security Administrator, Administrator
------------------	---------------------------------------

```
context gtpp group redundancy-group host gtpp egcdr
```

Command Modes	Exec > Global Configuration > Context Configuration > GTPP Group Configuration
Syntax Description	<code>gtpp trigger { time-limit volume-limit }</code>
Usage Guidelines	Use this command to disable or enable GTTP triggers that can cause partial CDR record closure or cause a new CDR to be created.

Example

The following command disables partial record closure when a configured time limit is reached:

```
gtpp trigger time-limit
```

context gtpp group redundancy-group host gtpp egcdr

Configures the eG-CDR and P-CDR (P-GW CDR) parameters and triggers.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > GTPP Group Configuration
Syntax Description	<code>gtpp egcdr { service-data-flow threshold { interval duration volume { downlink bytes uplink bytes total bytes } } service-idle-timeout { 0 service_idle_timeout } }</code>
Usage Guidelines	Use this command to configure individual triggers for eG-CDR/P-CDR generation. Use the service-data-flow threshold option to configure the thresholds for closing a service data flow container within an eG-CDR (eG-CDRs for GGSN and P-CDRs for P-GW) during flow-based charging (FBC). A service data flow container has statistics regarding an individual content ID.

context gtpp group redundancy-group host gtpp egcdr final-record closing-cause

Configures closing cause for final EGCDR.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > GTPP Group Configuration
Syntax Description	<code>gtpp egcdr final-record closing-cause { same-in-all-partial unique }</code>

unique

Specify unique closing cause for final EGCDR.

same-in-all-partial

Specify same closing cause for multiple final EGCDR(s).

Usage Guidelines Use this command to configure closing cause for final EGCDR.

context gtpp group redundancy-group host gtpp egcdr losdv-max-containers

Configures maximum number of LoSDV containers in one EGCDR.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description **losdv-max-containers** *max_containers*

max_containers

Specify the number of LOSDV containers.

Must be an integer in the range of 1-255.

Usage Guidelines Use this command to configure the maximum number of LoSDV containers in one EGCDR.

context gtpp group redundancy-group host gtpp egcdr service-data-flow threshold

Configures service data flow related parameters.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description **threshold interval duration**

interval duration

Specify the time interval, in seconds, to close the eG-CDR/P-CDR if the minimum time duration thresholds for service data flow containers satisfied in flow-based charging. By default, this option is disabled.

Must be an integer in the range of 60-40000000.

Usage Guidelines Use this command to assign volume or interval values to the interim GCDRs.

context gtpp group redundancy-group host gtpp egcdr service-data-flow threshold volume

Configures the uplink/downlink volume octet counts for the generation of interim GCDRs.

```
context gtpp group redundancy-group host gtpp egcdr service-idle-timeout
```

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description `volume { downlink bytes | uplink bytes | total bytes }`

downlink bytes

Specify the limit for the number of downlink octets after which the eG-CDR/P-CDR is closed.

Must be an integer in the range of 100000-4000000000.

uplink bytes

Specify the limit for the number of uplink octets after which the eG-CDR/P-CDR is closed.

Must be an integer in the range of 100000-4000000000.

total bytes

Specify the limit for the total number of octets (uplink+downlink) after which the eG-CDR/P-CDR is closed.

Must be an integer in the range of 100000-4000000000.

Usage Guidelines Use this command to configure the uplink/downlink volume octet counts for the generation of interim GCDRs.

context gtpp group redundancy-group host gtpp egcdr service-idle-timeout

Enables configuration for service idle out closure of LOSDV container.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description `gtpp egcdr service-idle-timeout { zero | service_idle_timeout }`

service_idle_timeout

Specify time limit in seconds for service-idle-timeout.

Must be an integer in the range of 10-86400.

zero

Specify no service-idle-timeout trigger.

Must be one of the following:

- 0

Usage Guidelines Use this command to enable configuration for service idle out closure.

context gtpp group redundancy-group host gtpp storage-server ip-address

Configures IP address of the external GTPP storage server for storing CDRs.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description **gtpp storage-server { { ipv4_address | ipv6_address } | port port_number }**

{ ipv4_address | ipv6_address }

Specify the IP address.

Must be IPv4 CIDR notation ##.##.##.##/x or in IPv6 CIDR notation #####:#####:#####:#####:#####:#####:#####:#####/##.

-Or-

Must be an IP address.

port port_number

Specify the UDP port number that the GTPP Backup server is using.

Must be an integer in the range of 1-65535.

Usage Guidelines Use this command to configure the IP address of the external GTPP storage server for storing CDRs.

context gtpp group redundancy-group host gtpp storage-server local

Configures storage-server local-mode configuration.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description **local aaamgr-wait-time aaamgr_wait_time**

aaamgr-wait-time aaamgr_wait_time

Specify the time in seconds that AAAMgr has to wait trying to accumulate 255 CDRs.

Must be an integer in the range of 1-300.

Default Value: 300.

Usage Guidelines Use this command to configure the storage-server local-mode configuration.

```
context gtpp group redundancy-group host gtpp storage-server local file
```

context gtpp group redundancy-group host gtpp storage-server local file

Configures GTPP file related parameters.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description **file compression { file_compression | format file_format }**

compression file_compression

Specify the GTPP file compression related configurations. By default, GZIP file compression is disabled.

Must be one of the following:

- gzip
- none

Default Value: "none".

format file_format

Specify the file format to be used for local storage.

Must be one of the following:

- custom1
- custom2
- custom3
- custom4
- custom5
- custom6
- custom7
- custom8

Default Value: "custom1".

Usage Guidelines Use this command to configure the GTPP file related parameters.

context gtpp group redundancy-group host gtpp storage-server local file name

Configures file name related parameters.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description `name { format file_name_format | prefix file_name_prefix }`

format *file_name_format*

Specify the file name format to be used.

Must be a string.

prefix *file_name_prefix*

Specify the file name prefix to be used.

Must be a string.

Usage Guidelines Use this command to configure the file name related parameters.

context gtpp group redundancy-group host gtpp trigger

Configures triggers for CDR.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description `trigger { time-limit | volume-limit }`

time-limit

When this trigger is disabled, no partial record closure occurs when the configured time limit is reached.
Default: Enabled.

volume-limit

When this trigger is disabled no partial record closure occurs when volume limit is reached. Default: Enabled.

Usage Guidelines Use this command to configure triggers for CDR.

```
context gtpp group redundancy-group host gtpp trigger egcdr
```

context gtpp group redundancy-group host gtpp trigger egcdr

Enables or disables and configures eGCDR-related parameters.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > GTPP Group Configuration

Syntax Description **egcdr max-losdv**

max-losdv

Enable trigger for eGCDR release at MAX LoSDV containers.

Usage Guidelines Use this command to enable or disable and configure eGCDR-related parameters.

context gtpu-service

Creates specified user plane service name to allow configuration of user plane service.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration

Syntax Description **gtpu-service *gtpu_service_name***

gtpu_service_name

Specify the GTPU service name.

Must be a string.

Usage Guidelines Use this command to create specified user plane service name to allow configuration of user plane service.

context gtpu-service bind

Binds the service to an IP address.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > GTPU Service Configuration

Syntax Description **bind { ipv4-address *ipv4_address* | ipv6-address *ipv6_address* } [bearer-type *bearer_type*]**

ipv4-address* *ipv4_address

Specify the GTPU address of the GTPU service.

Must be an IP address.

ipv4-address* *ipv6_address

Specify the GTPU address of the GTPU service.

Must be an IPv6 address.

bearer-type* *bearer_type

Specify the media type supported for the GTPU endpoint.

Must be one of the following:

- all
- ims-media
- non-ims-media

Usage Guidelines

Use this command to bind the service to an IP address.

context gtpu-service echo-interval

Configures the echo interval.

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > GTPU Service Configuration

Syntax Description

`echo-interval` *echo_interval*

echo_interval

Specify the echo interval.

Must be an integer in the range of 60-3600.

Usage Guidelines

Use this command to configure the echo interval.

context gtpu-service echo-interval dynamic

Enables the dynamic echo timer for GTPU Service.

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > GTPU Service Configuration

Syntax Description

`dynamic [smooth-factor` *smooth_factor* `]`

context gtpu-service redundancy-group

dynamic

Specify the enable dynamic echo timer for GTPU service.

smooth-factor *smooth_factor*

Specify the smooth-factor used in the dynamic echo timer for GTPU service.

Must be an integer in the range of 1-5.

Usage Guidelines Use this command to enable the dynamic echo timer for GTPU service.

context gtpu-service redundancy-group

Configures redundancy group parameters.

Privilege Security Administrator, Administrator

Syntax Description **redundancy-group** *redundancy_group_name*

redundancy_group_name

Specify the redundancy group name.

Must be a string.

Usage Guidelines Use this command to configure redundancy group parameters.

context gtpu-service redundancy-group host

Configures redundancy group host parameters.

Privilege Security Administrator, Administrator

Syntax Description **host** *host_name*

host_name

Specify the redundancy group host name.

Must be a string.

Usage Guidelines Use this command to configure the redundancy group host parameters.

context gtpu-service redundancy-group host bind

Binds the service to an IP address.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > GTPU Service Configuration

Syntax Description **bind { ipv4-address *ipv4_address* | ipv6-address *ipv6_address* } [bearer-type *bearer_type*]**

ipv4-address *ipv4_address*

Specify the GTPU address of the GTPU service.

Must be an IP address.

ipv4-address *ipv6_address*

Specify the GTPU address of the GTPU service.

Must be an IPv6 address.

bearer-type *bearer_type*

Specify the media type supported for the GTPU endpoint.

Must be one of the following:

- all
- ims-media
- non-ims-media

Usage Guidelines Use this command to bind the service to an IP address.

context gtpu-service redundancy-group host echo-interval

Configures the echo interval.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > GTPU Service Configuration

Syntax Description **echo-interval *echo_interval***

echo_interval

Specify the echo interval.

Must be an integer in the range of 60-3600.

Usage Guidelines Use this command to configure the echo interval.

```
context gtpu-service redundancy-group host echo-interval dynamic
```

context gtpu-service redundancy-group host echo-interval dynamic

Enables the dynamic echo timer for GTPU Service.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > GTPU Service Configuration

Syntax Description **dynamic [smooth-factor *smooth_factor*]**

dynamic

Specify the enable dynamic echo timer for GTPU service.

smooth-factor *smooth_factor*

Specify the smooth-factor used in the dynamic echo timer for GTPU service.

Must be an integer in the range of 1-5.

Usage Guidelines Use this command to enable the dynamic echo timer for GTPU service.

context interface-loopback

Configures loopback interface parameters.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration

Syntax Description **interface-loopback *interface_name***

interface_name

Specify the interface name.

Must be a string.

Usage Guidelines Use this command to configure loopback interface parameters.

context interface-loopback redundancy-group

Configures redundancy group parameters.

Privilege Security Administrator, Administrator

Syntax Description **redundancy-group** *group_name*

group_name

Specify the redundancy group name.

Must be a string.

Usage Guidelines Use this command to configure the redundancy group parameters.

context interface-loopback redundancy-group host

Configures redundancy group host parameter.

Privilege Security Administrator, Administrator

Syntax Description **host** *host_name*

host_name

Specify the redundancy group host name.

Must be a string.

ipv4-address* *ipv4_address

Specify the IPv4 address.

Must be IPv4 CIDR notation ##.##.##.##/x.

ipv6-address* *ipv6_address

Specify the IPv6 address.

Must be IPv6 CIDR notation #####:#####:#####:#####:#####:#####:#####:#####/####.

Usage Guidelines Use this command to configure the redundancy group host parameter.

context lawful-intercept

Configures Lawful Intercept.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration

Syntax Description **lawful-intercept**

Usage Guidelines Use this command to configure Lawful Intercept. Changes to the Lawful Intercept Configuration mode.

context lawful-intercept dictionary

context lawful-intercept dictionary

Configures the dictionary to use for Lawful Intercept.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration

Syntax Description **dictionary** *dictionary_name*

dictionary_name

Specify the Lawful Intercept dictionary name.

Must be one of the following:

- custom1
- custom2
- custom3
- custom4
- custom5
- custom6
- custom7
- custom8
- custom9
- custom10
- standard

Usage Guidelines Use this command to configure the dictionary to use for Lawful Intercept.

context lawful-intercept redundancy-group

Configures Lawful Intercept redundancy group parameters.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration

Syntax Description **redundancy-group** *group_name*

group_name

Specify the redundancy group name.

Must be a string.

Usage Guidelines	Use this command to configure Lawful Intercept redundancy group parameters.
-------------------------	---

context lawful-intercept redundancy-group host

Configures Lawful Intercept redundancy group hosts parameters.

Privilege	Security Administrator, Administrator
------------------	---------------------------------------

Command Modes	Exec > Global Configuration > Context Configuration
----------------------	---

Syntax Description	host <i>host_name</i>
---------------------------	------------------------------

host_name

Specify the host name.

Must be a string.

Usage Guidelines	Use this command to configure Lawful Intercept redundancy group hosts parameters.
-------------------------	---

context lawful-intercept redundancy-group host dictionary

Configures the dictionary to use for Lawful Intercept.

Privilege	Security Administrator, Administrator
------------------	---------------------------------------

Command Modes	Exec > Global Configuration > Context Configuration
----------------------	---

Syntax Description	dictionary <i>dictionary_name</i>
---------------------------	--

dictionary_name

Specify the Lawful Intercept dictionary name.

Must be one of the following:

- custom1
- custom2
- custom3
- custom4
- custom5
- custom6
- custom7
- custom8

```
context lawful-intercept redundancy-group host src-ip-addr
```

- custom9
- custom10
- standard

Usage Guidelines Use this command to configure the dictionary to use for Lawful Intercept.

context lawful-intercept redundancy-group host src-ip-addr

Configures the source IP address used by Lawful Intercept.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration

Syntax Description `src-ip-addr { ipv4_address | ipv6_address }`

`{ ipv4_address | ipv6_address }`

Specify the IP address.

Must be an IPv4 address.

Usage Guidelines Use this command to configure the source IP address used by Lawful Intercept.

context lawful-intercept src-ip-addr

Configures the source IP address used by Lawful Intercept.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration

Syntax Description `src-ip-addr { ipv4_address | ipv6_address }`

`{ ipv4_address | ipv6_address }`

Specify the IP address.

Must be an IPv4 address.

Usage Guidelines Use this command to configure the source IP address used by Lawful Intercept.

context sx-service

Configures SX service parameters.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration
Syntax Description	<p>sx-service <i>sx_service_name</i></p> <p>sx_service_name</p> <p>Specify the SX service name.</p> <p>Must be a string.</p>
Usage Guidelines	Use this command to configure SX service parameters.

context sx-service bind

Designates an IPv4 address of the Sx service.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > SX Service Configuration
Syntax Description	<p>bind { ipv4-address <i>ipv4_address</i> ipv6-address <i>ipv6_address</i> }</p> <p>ipv4-address <i>ipv4_address</i></p> <p>Specify the IPv4 address.</p> <p>Must be an IPv4 address.</p> <p>ipv6-address <i>ipv6_address</i></p> <p>Specify the IPv6 address.</p> <p>Must be an IPv6 address.</p>
Usage Guidelines	Use this command to designate an IPv4 address of the Sx service.

context sx-service instance-type

Configures the instance type that this service is going to be used for.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > SX Service Configuration
Syntax Description	<p>instance-type { controlplane <i>cp_instance</i> userplane <i>up_instance</i> }</p> <p>controlplane <i>cp_instance</i></p> <p>Specify the SX service control plane instance.</p>

context sx-service redundancy-group

userplane up_instance

Specify the SX service user plane instance.

Usage Guidelines	Use this command to configure the instance type that this service is going to be used for.
-------------------------	--

context sx-service redundancy-group

Configures redundancy group parameters.

Privilege	Security Administrator, Administrator
------------------	---------------------------------------

Syntax Description	redundancy-group <i>group_name</i>
---------------------------	---

group_name

Specify the redundancy group name.

Must be a string.

Usage Guidelines	Use this command to configure the redundancy group parameters.
-------------------------	--

context sx-service redundancy-group host

Configures redundancy group host parameters.

Privilege	Security Administrator, Administrator
------------------	---------------------------------------

Syntax Description	host <i>host_name</i>
---------------------------	------------------------------

host_name

Specify the host name.

Must be a string.

Usage Guidelines	Use this command to configure redundancy group host parameters.
-------------------------	---

context sx-service redundancy-group host bind

Designates an IPv4 address of the Sx service.

Privilege	Security Administrator, Administrator
------------------	---------------------------------------

Command Modes	Exec > Global Configuration > Context Configuration > SX Service Configuration
----------------------	--

Syntax Description	bind { ipv4-address <i>ipv4_address</i> ipv6-address <i>ipv6_address</i> }
---------------------------	---

ipv4-address *ipv4_address*

Specify the IPv4 address.

Must be an IPv4 address.

ipv6-address *ipv6_address*

Specify the IPv6 address.

Must be an IPv6 address.

Usage Guidelines	Use this command to designate an IPv4 address of the Sx service.
-------------------------	--

context sx-service redundancy-group host instance-type

Configures the instance type that this service is going to be used for.

Privilege	Security Administrator, Administrator
------------------	---------------------------------------

Command Modes	Exec > Global Configuration > Context Configuration > SX Service Configuration
----------------------	--

Syntax Description	<code>instance-type { controlplane cp_instance userplane up_instance }</code>
---------------------------	---

controlplane *cp_instance*

Specify the SX service control plane instance.

userplane *up_instance*

Specify the SX service user plane instance.

Usage Guidelines	Use this command to configure the instance type that this service is going to be used for.
-------------------------	--

context sx-service redundancy-group host sx-protocol association

Configures SX Association parameters.

Privilege	Security Administrator, Administrator
------------------	---------------------------------------

Command Modes	Exec > Global Configuration > Context Configuration > Sx Service Configuration
----------------------	--

Syntax Description	<code>association reattempt-timeout reattempt_timeout</code>
---------------------------	--

reattempt-timeout *reattempt_timeout*

Specify the Association Reattempt timeout for SX Service in seconds.

Must be an integer in the range of 30-300.

```
context sx-service redundancy-group host sx-protocol heart-beat interval
```

Usage Guidelines Use this command to configure SX Association parameters.

context sx-service redundancy-group host sx-protocol heart-beat interval

Configures SX heartbeat interval.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > Sx Service Configuration

Syntax Description **interval heartbeat_interval**

interval heartbeat_interval

Specify the SX heartbeat interval.

Must be an integer in the range of 1-3600.

Usage Guidelines Use this command to configure the SX heartbeat Interval.

context sx-service redundancy-group host sx-protocol heart-beat max-retransmissions

Configures maximum number of retries for SX heartbeat request.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > SX Service Configuration

Syntax Description **max-retransmissions max_retransmissions**

max-retransmissions max_retransmissions

Specify the maximum number of retries for SX heartbeat requests.

Must be an integer in the range of 1-15.

Default Value: 4.

Usage Guidelines Use this command to configure maximum number of retries for SX heartbeat request.

context sx-service redundancy-group host sx-protocol heart-beat retransmission-timeout

Configures the heartbeat retransmission timeout for SX Service.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > SX Service Configuration
Syntax Description	<p>retransmission-timeout <i>retransmission_timeout</i></p> <p>retransmission_timeout</p> <p>Specify the heartbeat retransmission timeout for SX service.</p> <p>Must be an integer in the range of 1-20.</p> <p>Default Value: 5.</p>
Usage Guidelines	Use this command to configure the heartbeat retransmission timeout for SX service.

context sx-service sx-protocol association

	Configures SX Association parameters.
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > Sx Service Configuration
Syntax Description	<p>association reattempt-timeout <i>reattempt_timeout</i></p> <p>reattempt-timeout <i>reattempt_timeout</i></p> <p>Specify the Association Reattempt timeout for SX Service in seconds.</p> <p>Must be an integer in the range of 30-300.</p>
Usage Guidelines	Use this command to configure SX Association parameters.

context sx-service sx-protocol heart-beat interval

	Configures SX heartbeat interval.
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > Sx Service Configuration
Syntax Description	<p>interval <i>heartbeat_interval</i></p> <p>interval <i>heartbeat_interval</i></p> <p>Specify the SX heartbeat interval.</p> <p>Must be an integer in the range of 1-3600.</p>
Usage Guidelines	Use this command to configure the SX heartbeat Interval.

context sx-service sx-protocol heart-beat max-retransmissions

contextsx-servicesx-protocolheart-beatmax-retransmissions

Configures maximum number of retries for SX heartbeat request.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > SX Service Configuration

Syntax Description **max-retransmissions** *max_retransmissions*

max-retransmissions *max_retransmissions*

Specify the maximum number of retries for SX heartbeat requests.

Must be an integer in the range of 1-15.

Default Value: 4.

Usage Guidelines Use this command to configure maximum number of retries for SX heartbeat request.

context sx-service sx-protocol heart-beat retransmission-timeout

Configures the heartbeat retransmission timeout for SX Service.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > SX Service Configuration

Syntax Description **retransmission-timeout** *retransmission_timeout*

retransmission_timeout

Specify the heartbeat retransmission timeout for SX service.

Must be an integer in the range of 1-20.

Default Value: 5.

Usage Guidelines Use this command to configure the heartbeat retransmission timeout for SX service.

context user-plane-service

Creates and configures user plane service.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration

Syntax Description `user-plane-service up_service_name`

up_service_name

Specify the user plane service name.

Must be a string.

Usage Guidelines Use this command to create and configure a user plane service.

context user-plane-service associate control-plane-group

Associates control plane Group to which user plane service will perform Sx-Association.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > User Plane Service Configuration

Syntax Description `control-plane-group cp_group_name`

cp_group_name

Specify the control plane group name.

Must be a string.

Usage Guidelines Use this command to associate control plane group to which user plane service will perform Sx-Association.

context user-plane-service associate fast-path service

Configures fast path related parameters.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > User Plane Service Configuration

Syntax Description `fast-path service`

Usage Guidelines Use this command to configure fast path related parameters.

context user-plane-service associate gtpu-service

Configures the GTPU service for this user plane service.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > User Plane Service Configuration

```
context user-plane-service associate gtpu-service cp-tunnel
```

Syntax Description **gtpu-service** *gtpu_service_name*

gtpu_service_name

Specify the GTPU service name.

Must be a string.

Usage Guidelines Use this command to configure the GTPU service for this user plane service.

context user-plane-service associate gtpu-service cp-tunnel

Configures the interface type as cp-tunnel (tunnel towards control plane function).

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > User Plane Service Configuration

Syntax Description **cp-tunnel**

Usage Guidelines Use this command to configure the interface type as cp-tunnel (tunnel towards control plane function).

context user-plane-service associate gtpu-service pgw-ingress

Configures the interface type as PGW ingress.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > User Plane Service Configuration

Syntax Description **pgw-ingress**

Usage Guidelines Use this command to configure the interface type as PGW ingress.

context user-plane-service associate gtpu-service sgw-egress

Configures the interface type as SGW egress.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > User Plane Service Configuration

Syntax Description **sgw-egress**

Usage Guidelines Use this command to configure the interface type as SGW egress.

context user-plane-service associate gtpu-service sgw-ingress

Configures the interface type as SGW ingress.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > User Plane Service Configuration
Syntax Description	sgw-ingress
Usage Guidelines	Use this command to configure the interface type as SGW ingress.

context user-plane-service associate gtpu-service upf-ingress

Configures the interface type as UPF ingress.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > User Plane Service Configuration
Syntax Description	upf-ingress
Usage Guidelines	Use this command to configure the interface type as UPF ingress.

context user-plane-service associate sx-service

Configures the Sx service for this user plane service.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > User Plane Service Configuration
Syntax Description	sx-service <i>sx_service_name</i>
	sx_service_name
	Specify the Sx service name.
	Must be a string.
Usage Guidelines	Use this command to configure the Sx service for this user plane service.

context user-plane-service redundancy-group

Configures redundancy group parameters.

context user-plane-service redundancy-group host

Privilege Security Administrator, Administrator

Syntax Description **redundancy-group** *redundancy_group_name*

redundancy_group_name

Specify the redundancy group name.

Must be a string.

Usage Guidelines Use this command to configure the redundancy group parameters.

context user-plane-service redundancy-group host

Configures redundancy group host parameters.

Privilege Security Administrator, Administrator

Syntax Description **host** *host_name*

host_name

Specify the host name.

Must be a string.

Usage Guidelines Use this command to configure the redundancy group host parameters.

context user-plane-service redundancy-group host associate control-plane-group

Associates control plane Group to which user plane service will perform Sx-Association.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > User Plane Service Configuration

Syntax Description **control-plane-group** *cp_group_name*

cp_group_name

Specify the control plane group name.

Must be a string.

Usage Guidelines Use this command to associate control plane group to which user plane service will perform Sx-Association.

context user-plane-service redundancy-group host associate fast-path service

Configures fast path related parameters.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > User Plane Service Configuration
Syntax Description	fast-path service
Usage Guidelines	Use this command to configure fast path related parameters.

context user-plane-service redundancy-group host associate gtpu-service

Configures the GTPU service for this user plane service.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > User Plane Service Configuration
Syntax Description	gtpu-service <i>gtpu_service_name</i>
	<i>gtpu_service_name</i>
	Specify the GTPU service name.
	Must be a string.
Usage Guidelines	Use this command to configure the GTPU service for this user plane service.

context user-plane-service redundancy-group host associate gtpu-service cp-tunnel

Configures the interface type as cp-tunnel (tunnel towards control plane function).

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > User Plane Service Configuration
Syntax Description	cp-tunnel
Usage Guidelines	Use this command to configure the interface type as cp-tunnel (tunnel towards control plane function).

```
context user-plane-service redundancy-group host associate gtpu-service pgw-ingress
```

context user-plane-service redundancy-group host associate gtpu-service pgw-ingress

Configures the interface type as PGW ingress.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > User Plane Service Configuration

Syntax Description **pgw-ingress**

Usage Guidelines Use this command to configure the interface type as PGW ingress.

context user-plane-service redundancy-group host associate gtpu-service sgw-egress

Configures the interface type as SGW egress.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > User Plane Service Configuration

Syntax Description **sgw-egress**

Usage Guidelines Use this command to configure the interface type as SGW egress.

context user-plane-service redundancy-group host associate gtpu-service sgw-ingress

Configures the interface type as SGW ingress.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > User Plane Service Configuration

Syntax Description **sgw-ingress**

Usage Guidelines Use this command to configure the interface type as SGW ingress.

context user-plane-service redundancy-group host associate gtpu-service upf-ingress

Configures the interface type as UPF ingress.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > User Plane Service Configuration
Syntax Description	upf-ingress
Usage Guidelines	Use this command to configure the interface type as UPF ingress.

context user-plane-service redundancy-group host associate sx-service

Configures the Sx service for this user plane service.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > Context Configuration > User Plane Service Configuration
Syntax Description	sx-service <i>sx_service_name</i> <i>sx_service_name</i> Specify the Sx service name. Must be a string.
Usage Guidelines	Use this command to configure the Sx service for this user plane service.

control-plane-group

Configures control plane group on user plane.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration
Syntax Description	control-plane-group <i>cp_group_name</i> <i>cp_group_name</i> Specify the control plane group name.

control-plane-group peer-node-id ipv4-address

Must be a string.

Usage Guidelines Use this command to configure control plane group on user plane.

control-plane-group peer-node-id ipv4-address

Configures IPv4 address.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Control Plane Group Configuration

Syntax Description **peer-node-id** *ipv4_address* [**interface** *interface*]

ipv4_address

Specify the IPv4 address.

Must be an IPv4 address.

interface interface_type

Specify the interface type for peer node.

Must be one of the following:

- n4

Usage Guidelines Use this command to configure IPv4 address.

control-plane-group peer-node-id ipv6-address

Configures IPv6 address.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Control Plane Group Configuration

Syntax Description **peer-node-id** *ipv6_address* [**interface** *interface*]

ipv6_address

Specify the IPv6 address.

Must be an IPv6 address.

interface interface_type

Specify the interface type for peer node.

Must be one of the following:

- n4

Usage Guidelines Use this command to configure the IPv6 address.

control-plane-group redundancy-group

Configures redundancy group parameters.

Privilege Security Administrator, Administrator

Syntax Description **redundancy-group** *redundancy_group_name*

redundancy_group_name

Specify the redundancy group name.

Must be a string.

Usage Guidelines Use this command to configure the redundancy group parameters.

control-plane-group redundancy-group host

Configures redundancy group host parameters.

Privilege Security Administrator, Administrator

Syntax Description **host** *redundancy_group_host_name*

redundancy_group_host_name

Specify the redundancy group host name.

Must be a string.

Usage Guidelines Use this command to configure the redundancy group host parameters.

control-plane-group redundancy-group host peer-node-id ipv4-address

Configures IPv4 address.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Control Plane Group Configuration

Syntax Description **peer-node-id** *ipv4_address* [**interface** *interface*]

control-plane-group redundancy-group host peer-node-id ipv6-address

ipv4_address

Specify the IPv4 address.

Must be an IPv4 address.

interface interface_type

Specify the interface type for peer node.

Must be one of the following:

- n4

Usage Guidelines Use this command to configure IPv4 address.

control-plane-group redundancy-group host peer-node-id ipv6-address

Configures IPv6 address.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Control Plane Group Configuration

Syntax Description **peer-node-id** *ipv6_address* [**interface** *interface*]

ipv6_address

Specify the IPv6 address.

Must be an IPv6 address.

interface interface_type

Specify the interface type for peer node.

Must be one of the following:

- n4

Usage Guidelines Use this command to configure the IPv6 address.

control-plane-group redundancy-group host sx-association initiated-by-cp

Configures the Sx Association Setup Request be initiated by control plane.

Privilege Security Administrator, Administrator

Syntax Description **sx-association initiated-by-cp**

Usage Guidelines Use this command to specify Sx Association Setup Request will be initiated by control plane.

control-plane-group redundancy-group host sx-association initiated-by-up

Configures the Sx Association Setup Request be initiated by user plane.

Privilege Security Administrator, Administrator

Syntax Description **sx-association initiated-by-up**

Usage Guidelines Use this command to specify Sx Association Setup Request will be initiated by user plane. This is the default setting.

control-plane-group sx-association initiated-by-cp

Configures the Sx Association Setup Request be initiated by control plane.

Privilege Security Administrator, Administrator

Syntax Description **sx-association initiated-by-cp**

Usage Guidelines Use this command to specify Sx Association Setup Request will be initiated by control plane.

control-plane-group sx-association initiated-by-up

Configures the Sx Association Setup Request be initiated by user plane.

Privilege Security Administrator, Administrator

Syntax Description **sx-association initiated-by-up**

Usage Guidelines Use this command to specify Sx Association Setup Request will be initiated by user plane. This is the default setting.

interface

Configures interface parameters.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration

rcm switchover**Syntax Description** **interface** *interface_name****interface_name***

Specify the interface name.

Must be a string.

loopback

Specify to enable loopback.

ipaddress *ip_address*

Specify the IP address.

Must be IPv4 CIDR notation ##.##.##.##/x or in IPv6 CIDR notation #####:#####:#####:#####:#####:#####:#####:#####/####.

-Or-

Must be an IP address.

Usage Guidelines Use this command to configure interface parameters.

rcm switchover

Configures RCM switchover operation.

Privilege Security Administrator, Administrator**Command Modes** Exec**Syntax Description** **rcm switchover source** *ip_address* [**destination** *ip_address*]***source ip_address***

Specify the source IP address.

Must be an IP address.

destination ip_address

Specify the destination IP address.

Must be an IP address.

Usage Guidelines Use this command to configure RCM switchover operation.

url-blacklisting database directory

Configures URL Blacklisting database directory parameters.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration

Syntax Description **url-blacklisting directory path** *directory_path*

path *directory_path*

Specify the URL Blacklisting directory path.

Must be a string.

Usage Guidelines Use this command to configure URL Blacklisting database directory parameters.

url-blacklisting database directory