



Symbols

<cr> [xv](#)

? command [xiv](#)

A

AAA (authentication, authorization, and accounting)

 GGSN

 RADIUS, configuring with [MWR-74](#)

access control

 GGSN

 access groups, configuring [MWR-38](#)

 authenticating users on [MWR-2](#)

 violations, configuring response to [MWR-6](#)

access groups

See GGSN access groups

access-mode command [MWR-2](#)

access-point command [MWR-4](#)

access-point configuration mode [MWR-4](#)

access point lists

See GGSN access point lists

access-point-name command [MWR-5](#)

access points

See GGSN access points

access-violation command [MWR-6](#)

authentication

 GGSN, configuring on [MWR-2](#)

C

canonical QoS

 GPRS

 best-effort bandwidth factor, configuring [MWR-19](#)

 configuring [MWR-36](#)

 throughput, configuring [MWR-23](#)

 ToS, mapping to [MWR-21](#)

carriage return (<cr>) [xv](#)

cautions

 charging gateway

 GGSN, disabling on [MWR-57](#)

 usage in text [x](#)

CDR (call detail record)

 GGSN

 aggregation limit, configuring [MWR-47](#)

 charging container volume, configuring [MWR-55](#)

 clearing on [MWR-7](#), [MWR-57](#)

 local record sequence number, enabling [MWR-48](#)

 maximum number, configuring [MWR-47](#)

 MSISDN, enabling [MWR-53](#)

 node ID, enabling [MWR-49](#)

 non-primary partial CDRs, disabling [MWR-50](#)

 packet counts, enabling [MWR-52](#)

charging function

 on GGSN, disabling [MWR-7](#)

charging gateway

See GGSN charging gateway

Cisco IOS configuration changes, saving [xviii](#)

clear gprs charging cdr command [MWR-7](#)

clear gprs gtp pdp-context command [MWR-9](#)

clear gprs gtp statistics command [MWR-11](#)

clear gprs isgsn statistics command [MWR-110](#)

clear l2relay statistics command [MWR-111](#)

clear l2relay topology-map command [MWR-112](#)

command modes, understanding [xiii to xiv](#)

commands

context-sensitive help for abbreviating [xiv](#)
 default form, using [xvii](#)
 no form, using [xvii](#)
 command syntax
 conventions [ix](#)
 displaying (example) [xv](#)
 configurations, saving [xviii](#)

D

DHCP (Dynamic Host Configuration Protocol)
 GGSN access points
 gateway address, configuring [MWR-12](#)
 proxy client, configuring [MWR-14](#)
 server, configuring [MWR-14, MWR-72](#)
 GPRS default server, configuring [MWR-72, MWR-74](#)
 dhcp-gateway-address command [MWR-12](#)
 dhcp-server command [MWR-14](#)
 documentation
 conventions [ix](#)
 feedback, providing [xi](#)
 modules [v to vii](#)
 online, accessing [x](#)
 ordering [xi](#)
 Documentation CD-ROM [x](#)
 documents and resources, supporting [viii](#)

E

encapsulation gtp command [MWR-16](#)

F

fast switching
 for GPRS, configuring [MWR-25](#)
 Feature Navigator
 See platforms, supported
 filtering output, show and more commands [xviii](#)

flow control
 GGSN
 GTP, configuring for [MWR-26](#)

G

GGSN access groups, configuring [MWR-38](#)
 GGSN access point lists, configuring [MWR-17](#)
 GGSN access points
 authenticating users [MWR-2](#)
 CDRs, clearing [MWR-7](#)
 configuring [MWR-4](#)
 DHCP gateway, configuring [MWR-12](#)
 DHCP server, configuring [MWR-14, MWR-72](#)
 displaying [MWR-78](#)
 IP access lists, specifying [MWR-38](#)
 IP address pools, configuring [MWR-39](#)
 naming [MWR-5](#)
 PDP contexts, clearing [MWR-9](#)
 performance [MWR-4](#)
 protocol type, configuring [MWR-43](#)
 RADIUS server, configuring [MWR-44, MWR-76](#)
 subscriptions, configuring [MWR-99](#)
 VPN interface, configuring [MWR-100](#)
 See also GGSN access point lists
 GGSN charging gateway
 alternate gateway
 switch-over timer, configuring [MWR-66](#)
 backup gateway, configuring [MWR-70](#)
 CDRs
 container volume, configuring [MWR-55](#)
 local record sequence number, enabling [MWR-48](#)
 maximum number, specifying [MWR-47](#)
 MSISDN, enabling [MWR-53](#)
 node ID, enabling [MWR-49](#)
 non-primary partial CDRs, disabling [MWR-50](#)
 packet counts, enabling [MWR-52](#)
 tariff time changes [MWR-67](#)
 charging data

- mapping IP ToS to [MWR-60](#)
- transfer frequency, configuring [MWR-68](#)
- transfer request queue size, specifying [MWR-62](#)
- charging processing
 - (caution) [MWR-57](#)
 - disabling [MWR-57](#)
- default gateway, configuring [MWR-70](#)
- flow control echo signal, enabling [MWR-58](#)
- parameter configuration, displaying [MWR-81](#)
- path protocol, configuring [MWR-64](#)
- statistics, displaying [MWR-84](#)
- tariff times, configuring [MWR-67](#)
- TCP path, establishing [MWR-54](#)
- global configuration mode, summary of [xiv](#)
- GPRS (General Packet Radio Service)
 - GGSN command set [MWR-103](#)
 - GSN type, configuring [MWR-46](#)
 - performance
 - fast switching, configuring [MWR-25](#)
 - throughput, configuring [MWR-20](#)
- gprs access-point-list command [MWR-17](#)
- gprs canonical-qos best-effort bandwidth-factor command [MWR-19](#)
- gprs canonical-qos gsn-resource-factor command [MWR-20](#)
- gprs canonical-qos map tos command [MWR-21](#)
- gprs canonical-qos premium mean-throughput-deviation command [MWR-23](#)
- gprs charging cdr-aggregation-limit command [MWR-47](#)
- gprs charging cdr-option local-record-sequence-number command [MWR-48](#)
- gprs charging cdr-option node-id command [MWR-49](#)
- gprs charging cdr-option no-partial-cdr-generation command [MWR-50](#)
- gprs charging cdr-option packet-count command [MWR-52](#)
- gprs charging cdr-option served-msisdn command [MWR-53](#)
- gprs charging cg-path-requests command [MWR-54](#)
- gprs charging container volume-threshold command [MWR-55](#)
- gprs charging disable command [MWR-57](#)
- gprs charging flow-control private-echo command [MWR-58](#)
- gprs charging map data tos command [MWR-60](#)
- gprs charging packet-queue-size command [MWR-62](#)
- gprs charging path-protocol command [MWR-64](#)
- gprs charging server-switch-timer command [MWR-66](#)
- gprs charging tariff-time command [MWR-67](#)
- gprs charging transfer interval command [MWR-68](#)
- gprs default charging-gateway command [MWR-70](#)
- gprs default dhcp-server command [MWR-72](#)
- gprs default ip-address-pool command [MWR-74](#)
- gprs default radius-server command [MWR-76](#)
- gprs fastswitch command [MWR-25](#)
- gprs gtp error-indication throttle command [MWR-26](#)
- gprs gtp map signalling tos command [MWR-27](#)
- gprs gtp n3-buffer-size command [MWR-28](#)
- gprs gtp n3-requests command [MWR-29](#)
- gprs gtp path-echo-interval command [MWR-30](#)
- gprs gtp t3-response command [MWR-31](#)
- gprs gtp t3-tunnel command [MWR-32](#)
- gprs idle-pdp-context purge-timer command [MWR-33](#)
- gprs maximum-pdp-context-allowed command [MWR-34](#)
- gprs qos default-response requested command [MWR-35](#)
- gprs qos map canonical-qos command [MWR-36](#)
- gprs radius msisdn first-byte command [MWR-37](#)
- GTP (GPRS Tunneling Protocol)
 - echo-request messages
 - interval on GGSN, configuring [MWR-30](#)
 - encapsulation on GGSN, configuring [MWR-16](#)
 - error messages
 - maximum number on GGSN, configuring [MWR-26](#)
 - GGSN parameters, displaying [MWR-86](#)
 - GGSN paths, configuring [MWR-88](#)
 - N3 buffer on GGSN, configuring size of [MWR-28](#)
 - path failures
 - echo-request message interval, configuring [MWR-30](#)
 - signaling packets on GGSN
 - IP ToS, mapping [MWR-27](#)

N3 buffer, configuring [MWR-28](#)
 signaling requests
 GGSN response time, configuring [MWR-31](#)
 retry attempts on GGSN, configuring [MWR-29](#)
 statistics on GGSN
 clearing [MWR-11](#), [MWR-94](#)
 displaying [MWR-94](#)
 status on GGSN, displaying [MWR-97](#)
 T3 tunnel interval on GGSN, configuring [MWR-32](#)

H

hardware platforms
 See platforms, supported
 help command [xiv](#)

I

IMSI (International Mobile Subscriber Identity)
 PDP contexts, clearing [MWR-9](#)
 indexes, master [viii](#)
 interface configuration mode, summary of [xiv](#)
 ip-access-group command [MWR-38](#)
 IP addresses
 GGSN
 DHCP, configuring [MWR-74](#)
 pools, configuring [MWR-14](#), [MWR-39](#)
 RADIUS, configuring [MWR-74](#)
 ip-address-pool command [MWR-39](#)

L

l2relay echo-interval command [MWR-113](#)
 l2relay flow-control command [MWR-114](#)
 l2relay pilot-uid command [MWR-115](#)
 l2relay use-interface command [MWR-116](#)

M

MIB, descriptions online [viii](#)
 mobile sessions
 GGSN
 access point subscriptions, configuring [MWR-99](#)
 clearing on [MWR-9](#)
 IP addressing, specifying method for [MWR-74](#)
 purge timer, configuring [MWR-33](#)
 users, authenticating [MWR-2](#), [MWR-76](#)
 mobile stations
 IP addresses, allocating [MWR-14](#)
 modes
 See command modes
 MSISDN (Mobile Station international PSTN/ISDN)
 RADIUS requests
 including in [MWR-37](#)
 overriding in [MWR-41](#)
 msisdn suppression command [MWR-41](#)

N

notes, usage in text [x](#)

P

PDN (public data network)
 GGSN access points
 configuring [MWR-4](#), [MWR-5](#)
 naming [MWR-5](#)
 PDP (packet data protocol) contexts
 GGSN
 clearing on [MWR-9](#)
 displaying on [MWR-89](#)
 idle sessions, purging [MWR-33](#)
 maximum, configuring [MWR-34](#)
 platforms, supported
 Feature Navigator, identify using [xix](#)
 release notes, identify using [xix](#)

privileged EXEC mode, summary of [xiv](#)
 prompts, system [xiv](#)
 protocol-type command [MWR-43](#)

Q

QoS (quality of service)

GPRS

best-effort bandwidth factor, configuring [MWR-19](#)
 canonical, configuring [MWR-36](#)
 canonical QoS, configuring [MWR-23](#)
 GGSN default response, configuring [MWR-35](#)
 throughput, configuring [MWR-20](#)
 ToS, mapping to [MWR-21](#)
 question mark (?) command [xiv](#)

R

RADIUS (Remote Access Dial-In User Service)

GPRS default server, configuring [MWR-44](#), [MWR-74](#),
[MWR-76](#)
 including MSISDN IE [MWR-37](#)
 overriding MSISDN [MWR-41](#)
 radius-server command [MWR-44](#)
 release notes
See platforms, supported
 RFC
 full text, obtaining [viii](#)
 ROM monitor mode, summary of [xiv](#)

S

service gprs command [MWR-46](#)
 show gprs access-point command [MWR-78](#)
 show gprs charging parameters command [MWR-81](#)
 show gprs charging statistics command [MWR-84](#)
 show gprs gtp parameters command [MWR-86](#)
 show gprs gtp path command [MWR-88](#)
 show gprs gtp pdp-context command [MWR-89](#)

show gprs gtp statistics command [MWR-94](#)
 show gprs gtp status command [MWR-97](#)
 show gprs isgsn statistics command [MWR-117](#)
 show l2relay statistics command [MWR-119](#)
 subscription-required command [MWR-99](#)

T

Tab key, command completion [xiv](#)
 TID (tunnel ID)
 CDRs, clearing [MWR-7](#)
 ToS (type of service)
 GPRS
 canonical QoS, mapping to [MWR-21](#)
 charging data, mapping to [MWR-60](#)
 GTP signaling packets, mapping to [MWR-27](#)

U

use-interface command [MWR-100](#)
 user EXEC mode, summary of [xiv](#)

V

virtual template interfaces
 GGSN
 GTP encapsulation, configuring [MWR-16](#)

