

OsmoMGW VTY Reference

Copyright © 2017

This work is copyright by sysmocom - s.f.m.c. GmbH. All rights reserved.

COLLABORATORS

	<i>TITLE :</i> OsmoMGW VTY Reference		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY		August 29, 2020	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME
v1	12th December 2017	Initial	pm

Contents

1	VTY reference	1
1.1	Common Commands	1
1.1.1	end	2
1.1.2	exit	2
1.1.3	help	2
1.1.4	list	2
1.1.5	show running-config	3
1.1.6	write	3
1.1.7	write file	3
1.1.8	write memory	3
1.1.9	write terminal	4
1.2	view	4
1.2.1	enable	4
1.2.2	logging color (0 1)	4
1.2.3	logging disable	5
1.2.4	logging enable	5
1.2.5	logging filter all (0 1)	5
1.2.6	logging level (rtpl global lapd linp lmux lmill mibl sms lctrl lgtpl stats lgsup...	6
1.2.7	logging level force-all (debug info notice error fatal)	7
1.2.8	logging level set-all (debug info notice error fatal)	8
1.2.9	logging print category (0 1)	8
1.2.10	logging print category-hex (0 1)	9
1.2.11	logging print extended-timestamp (0 1)	9
1.2.12	logging print file (0 1 basename) [last]	10
1.2.13	logging print level (0 1)	10
1.2.14	logging set-log-mask MASK	11
1.2.15	logging timestamp (0 1)	11
1.2.16	no logging level force-all	12
1.2.17	show alarms	12
1.2.18	show asciidoc counters	12

1.2.19	show history	13
1.2.20	show logging vty	13
1.2.21	show mgcp [stats]	13
1.2.22	show mgcp endpoint NAME	14
1.2.23	show mgcp trunk <0-64> endpoint NAME	14
1.2.24	show online-help	15
1.2.25	show rate-counters	15
1.2.26	show stats	15
1.2.27	show stats level (global peer subscriber)	16
1.2.28	show talloc-context (application all) (full brief DEPTH)	16
1.2.29	show talloc-context (application all) (full brief DEPTH) filter REGEXP	17
1.2.30	show talloc-context (application all) (full brief DEPTH) tree ADDRESS	17
1.2.31	show version	18
1.2.32	terminal length <0-512>	18
1.2.33	terminal no length	19
1.2.34	who	19
1.3	enable	19
1.3.1	configure terminal	19
1.3.2	copy running-config startup-config	20
1.3.3	disable	20
1.3.4	free-endpoint <0-64> NUMBER	20
1.3.5	logging color (0 1)	21
1.3.6	logging disable	21
1.3.7	logging enable	21
1.3.8	logging filter all (0 1)	22
1.3.9	logging level (rtpl global lapd linp lmux lmi lmib lsm lctrl lgtpl stats lgsup...	22
1.3.10	logging level force-all (debug info notice error fatal)	24
1.3.11	logging level set-all (debug info notice error fatal)	24
1.3.12	logging print category (0 1)	25
1.3.13	logging print category-hex (0 1)	25
1.3.14	logging print extended-timestamp (0 1)	26
1.3.15	logging print file (0 1 basename) [last]	26
1.3.16	logging print level (0 1)	27
1.3.17	logging set-log-mask MASK	27
1.3.18	logging timestamp (0 1)	28
1.3.19	loop-endpoint <0-64> NAME (0 1)	28
1.3.20	no logging level force-all	28
1.3.21	reset-all-endpoints	29
1.3.22	reset-endpoint <0-64> NUMBER	29

1.3.23	show alarms	29
1.3.24	show asciidoc counters	30
1.3.25	show history	30
1.3.26	show logging vty	30
1.3.27	show mgcp [stats]	31
1.3.28	show mgcp endpoint NAME	31
1.3.29	show mgcp trunk <0-64> endpoint NAME	31
1.3.30	show online-help	32
1.3.31	show rate-counters	32
1.3.32	show startup-config	32
1.3.33	show stats	33
1.3.34	show stats level (global peer subscriber)	33
1.3.35	show talloc-context (application all) (full brief DEPTH)	33
1.3.36	show talloc-context (application all) (full brief DEPTH) filter REGEXP	34
1.3.37	show talloc-context (application all) (full brief DEPTH) tree ADDRESS	35
1.3.38	show version	35
1.3.39	tap-rtp <0-64> ENDPOINT CONN (in out) A.B.C.D <0-65534>	36
1.3.40	terminal length <0-512>	36
1.3.41	terminal monitor	37
1.3.42	terminal no length	37
1.3.43	terminal no monitor	37
1.3.44	who	38
1.4	config	38
1.4.1	banner motd default	38
1.4.2	banner motd file [FILE]	38
1.4.3	enable password (8) WORD	39
1.4.4	enable password LINE	39
1.4.5	hostname WORD	39
1.4.6	line vty	40
1.4.7	log alarms <2-32700>	40
1.4.8	log file .FILENAME	40
1.4.9	log gsmtp [HOSTNAME]	41
1.4.10	log stderr	41
1.4.11	log syslog (auth priv cron daemon ftp lpr mail news user uucp)	41
1.4.12	log syslog local <0-7>	42
1.4.13	mgcp	42
1.4.14	no banner motd	43
1.4.15	no enable password	43
1.4.16	no hostname [HOSTNAME]	43

1.4.17	no log alarms	44
1.4.18	no log file .FILENAME	44
1.4.19	no log stderr	44
1.4.20	no log syslog	45
1.4.21	no service advanced-vty	45
1.4.22	no service terminal-length [<0-512>]	45
1.4.23	no stats reporter log	46
1.4.24	no stats reporter statsd	46
1.4.25	password (8l) WORD	46
1.4.26	password LINE	47
1.4.27	service advanced-vty	47
1.4.28	service terminal-length <0-512>	47
1.4.29	show history	48
1.4.30	stats interval <1-65535>	48
1.4.31	stats reporter log	48
1.4.32	stats reporter statsd	49
1.5	config-log	49
1.5.1	logging color (0l1)	49
1.5.2	logging filter all (0l1)	50
1.5.3	logging level (rtp global lapd linp lmux lmill mibl sms lctrl lgtpl stats lgsup...	50
1.5.4	logging level force-all (debug info notice error fatal)	52
1.5.5	logging level set-all (debug info notice error fatal)	52
1.5.6	logging print category (0l1)	53
1.5.7	logging print category-hex (0l1)	53
1.5.8	logging print extended-timestamp (0l1)	54
1.5.9	logging print file (0l1 basename) [last]	54
1.5.10	logging print level (0l1)	55
1.5.11	logging timestamp (0l1)	55
1.5.12	no logging level force-all	56
1.6	config-stats	56
1.6.1	disable	56
1.6.2	enable	56
1.6.3	level (global peer subscriber)	57
1.6.4	local-ip ADDR	57
1.6.5	mtu <100-65535>	57
1.6.6	no local-ip	58
1.6.7	no mtu	58
1.6.8	no prefix	58
1.6.9	prefix PREFIX	58

1.6.10	remote-ip ADDR	59
1.6.11	remote-port <1-65535>	59
1.7	config-line	59
1.7.1	bind A.B.C.D [<0-65535>]	59
1.7.2	login	60
1.7.3	no login	60
1.8	config-mgcp	60
1.8.1	allow-transcoding	60
1.8.2	bind early (0 1)	60
1.8.3	bind ip A.B.C.D	61
1.8.4	bind port <0-65534>	61
1.8.5	call-agent ip A.B.C.D	62
1.8.6	conn-timeout <0-65534>	62
1.8.7	domain NAME	62
1.8.8	force-realloc (0 1)	63
1.8.9	local ip A.B.C.D	63
1.8.10	loop (0 1)	63
1.8.11	no allow-transcoding	64
1.8.12	no rtcp-omit	64
1.8.13	no rtp bind-ip	64
1.8.14	no rtp force-ptime	65
1.8.15	no rtp ip-probing	65
1.8.16	no rtp keep-alive	65
1.8.17	no rtp-patch	66
1.8.18	no rtp-patch rfc5993hr	66
1.8.19	no rtp-patch ssrc	66
1.8.20	no rtp-patch timestamp	67
1.8.21	no sdp audio-payload send-name	67
1.8.22	no sdp audio-payload send-ptime	67
1.8.23	number endpoints <0-65534>	68
1.8.24	osmux (onoff only)	68
1.8.25	osmux batch-factor <1-8>	68
1.8.26	osmux batch-size <1-65535>	69
1.8.27	osmux bind-ip A.B.C.D	69
1.8.28	osmux dummy (onoff)	69
1.8.29	osmux port <1-65535>	70
1.8.30	rtcp-omit	70
1.8.31	rtp bind-ip A.B.C.D	70
1.8.32	rtp force-ptime (10 20 40)	71

1.8.33	rtp ip-dscp <0-255>	71
1.8.34	rtp ip-probing	71
1.8.35	rtp keep-alive <1-120>	72
1.8.36	rtp keep-alive once	72
1.8.37	rtp port-range <1024-65534> <1025-65535>	72
1.8.38	rtp-accept-all (0 1)	73
1.8.39	rtp-patch rfc5993hr	73
1.8.40	rtp-patch ssrc	73
1.8.41	rtp-patch timestamp	74
1.8.42	sdp audio fmp-extra .NAME	74
1.8.43	sdp audio-payload name NAME	74
1.8.44	sdp audio-payload number <0-255>	75
1.8.45	sdp audio-payload send-name	75
1.8.46	sdp audio-payload send-ptime	75
1.8.47	trunk <1-64>	76
1.9	config-mgcp-trunk	76
1.9.1	allow-transcoding	76
1.9.2	loop (0 1)	76
1.9.3	no allow-transcoding	77
1.9.4	no rtcp-omit	77
1.9.5	no rtp keep-alive	77
1.9.6	no rtp-patch	78
1.9.7	no rtp-patch rfc5993hr	78
1.9.8	no rtp-patch ssrc	78
1.9.9	no rtp-patch timestamp	79
1.9.10	no sdp audio-payload send-name	79
1.9.11	no sdp audio-payload send-ptime	79
1.9.12	rtcp-omit	80
1.9.13	rtp keep-alive <1-120>	80
1.9.14	rtp keep-alive once	80
1.9.15	rtp-patch rfc5993hr	81
1.9.16	rtp-patch ssrc	81
1.9.17	rtp-patch timestamp	81
1.9.18	sdp audio fmp-extra .NAME	82
1.9.19	sdp audio-payload name NAME	82
1.9.20	sdp audio-payload number <0-255>	82
1.9.21	sdp audio-payload send-name	83
1.9.22	sdp audio-payload send-ptime	83

List of Tables

1.1	VTY Parameter Patterns	1
1.2	VTY port numbers	1

Chapter 1

VTY reference

The Virtual Tele Type (VTY) has the concept of nodes and commands. This chapter lists all nodes and the commands that are available within the node. Each command can consist out of several words followed by a variable number of parameters. There are common patterns for the parameters, these include IPv4 addresses, number ranges, a word, a line of text and choice. The following will explain the commonly used patterns.

Pattern	Example	Explanation
A.B.C.D	127.0.0.1	A IPv4 address
TEXT	example01	A single string without any spaces, tabs
.TEXT	Some information	A line of text
(OptionA OptionB OptionC)	OptionA	A choice between a list of available options
<0-10>	5	A number from a range

Table 1.1: VTY Parameter Patterns

The application is configured through the VTY. For configuring a system one needs to enter the **enable** node and then enter the **configure terminal** command. Then the configuration can be made according to the available commands. After the system has been configured one can use the **write** command to write the new configuration to the configuration file. The new file will be used after the application has been restarted.

The following table lists the TCP port numbers of the VTY for the various Osmocom GSM related programs as used on sysmocom products:

Port Number	Software
4240	osmo-pcu
4241	osmo-bts
4242	osmo-nitb, osmo-bsc
4243	osmo-bsc_mgcp
4244	osmo-bsc_nat
4245	osmo-sgsn
4246	osmo-gbproxy

Table 1.2: VTY port numbers

Common Commands

These commands are available on all VTY nodes. They are listed here only once, to unclutter the VTY reference.

end

Command

```
end
```

Parameters

end

End current mode and change to enable mode.

exit

Command

```
exit
```

Parameters

exit

Exit current mode and down to previous mode

help

Command

```
help
```

Parameters

help

Description of the interactive help system

list

Command

```
list
```

Parameters

list

Print command list

show running-config

Command

```
show running-config
```

Parameters

show

Show running system information

running-config

running configuration

write

Command

```
write
```

Parameters

write

Write running configuration to memory, network, or terminal

write file

Command

```
write file
```

Parameters

write

Write running configuration to memory, network, or terminal

file

Write to configuration file

write memory

Command

```
write memory
```

Parameters

write

Write running configuration to memory, network, or terminal

memory

Write configuration to the file (same as write file)

write terminal

Command

```
write terminal
```

Parameters

write

Write running configuration to memory, network, or terminal

terminal

Write to terminal

view

The view node is the default node when connecting to the VTY interface. This node does not require any additional permission and allows to introspect the application.

enable

Command

```
enable
```

Parameters

enable

Turn on privileged mode command

logging color (0|1)

Command

```
logging color (0|1)
```

Parameters

logging

Configure logging

color

Configure color-printing for log messages

0

Don't use color for printing messages

1

Use color for printing messages

logging disable

Command

```
logging disable
```

Parameters

logging

Configure logging

disable

Disables logging to this vty

logging enable

This command is required to make logging commands available on the telnet VTY.

Command

```
logging enable
```

Parameters

logging

Configure logging

enable

Enables logging to this vty

logging filter all (0|1)

Disable/enable general log output on a given target. Typically, 'logging filter all 1' allows to see the usual log output on a given target. Setting to '0' can be useful when logging to the telnet VTY console: mute all log output to allow typing VTY commands on the telnet prompt without interference from log output; 'logging filter all 1' then re-enables logging in the same log output configuration as before. Some applications provide more specific filters, e.g. to log a given IMSI only. To employ such filters, set 'logging filter all 0' to disable general logging, and then enable a more specific filter instead.

Command

```
logging filter all (0|1)
```

Parameters

logging

Configure logging

filter

Filter log messages

all

Do you want to log all messages?

0

Only print messages matched by other filters

1

Bypass filter and print all messages

logging level (rtp|lglobal|llapd|linp|lmux|lmi|lmib|lsms|lctrl|lgtp|lstats|lgsup...

Command

```
logging level (rtp|lglobal|llapd|linp|lmux|lmi|lmib|lsms|lctrl|lgtp|lstats|lgsup|loap| ↵  
lss7|lscdp|lsua|lm3ua|lmgcp|ljibuf|lrspro) (debug|info|notice|error|fatal)
```

Parameters

logging

Configure logging

level

Set the log level for a specified category

rtp

RTP stream handling

lglobal

Library-internal global log family

llapd

LAPD in libosmogsm

linp

A-bis Input Subsystem

lmux

A-bis B-Subchannel TRAU Frame Multiplex

lmi

A-bis Input Driver for Signalling

lmib

A-bis Input Driver for B-Channels (voice)

lsms

Layer3 Short Message Service (SMS)

lctrl

Control Interface

lgtp

GPRS GTP library

lstats

Statistics messages and logging

lgsup

Generic Subscriber Update Protocol

loap

Osmocom Authentication Protocol

lss7

libosmo-sigtran Signalling System 7

lsccp

libosmo-sigtran SCCP Implementation

lsua

libosmo-sigtran SCCP User Adaptation

lm3ua

libosmo-sigtran MTP3 User Adaptation

lmgcp

libosmo-mgcp Media Gateway Control Protocol

ljibuf

libosmo-netif Jitter Buffer

lrspro

Remote SIM protocol

debug

Log debug messages and higher levels

info

Log informational messages and higher levels

notice

Log noticeable messages and higher levels

error

Log error messages and higher levels

fatal

Log only fatal messages

logging level force-all (debug|info|notice|error|fatal)**Command**

```
logging level force-all (debug|info|notice|error|fatal)
```

Parameters**logging**

Configure logging

level

Set the log level for a specified category

force-all

Globally force all logging categories to a specific level. This is released by the 'no logging level force-all' command. Note: any 'logging level <category> <level>' commands will have no visible effect after this, until the forced level is released.

debug

Log debug messages and higher levels

info

Log informational messages and higher levels

notice

Log noticeable messages and higher levels

error

Log error messages and higher levels

fatal

Log only fatal messages

logging level set-all (debug|info|notice|error|fatal)**Command**

```
logging level set-all (debug|info|notice|error|fatal)
```

Parameters**logging**

Configure logging

level

Set the log level for a specified category

set-all

Once-off set all categories to the given log level. There is no single command to take back these changes -- each category is set to the given level, period.

debug

Log debug messages and higher levels

info

Log informational messages and higher levels

notice

Log noticeable messages and higher levels

error

Log error messages and higher levels

fatal

Log only fatal messages

logging print category (0|1)**Command**

```
logging print category (0|1)
```

Parameters

logging

Configure logging

print

Log output settings

category

Configure log message

0

Don't prefix each log message

1

Prefix each log message with category/subsystem name

logging print category-hex (0|1)**Command**

```
logging print category-hex (0|1)
```

Parameters**logging**

Configure logging

print

Log output settings

category-hex

Configure log message

0

Don't prefix each log message

1

Prefix each log message with category/subsystem nr in hex ('<000b>')

logging print extended-timestamp (0|1)**Command**

```
logging print extended-timestamp (0|1)
```

Parameters**logging**

Configure logging

print

Log output settings

extended-timestamp

Configure log message timestamping

0

Don't prefix each log message

1

Prefix each log message with current timestamp with YYYYMMDDhhmmssnnn

logging print file (0|1|basename) [last]

Command

```
logging print file (0|1|basename) [last]
```

Parameters

logging

Configure logging

print

Log output settings

file

Configure log message

0

Don't prefix each log message

1

Prefix each log message with the source file and line

basename

Prefix each log message with the source file's basename (strip leading paths) and line

[last]

Log source file info at the end of a log line. If omitted, log source file info just before the log text.

logging print level (0|1)

Command

```
logging print level (0|1)
```

Parameters

logging

Configure logging

print

Log output settings

level

Configure log message

0

Don't prefix each log message

1

Prefix each log message with the log level name

logging set-log-mask MASK

Command

```
logging set-log-mask MASK
```

Parameters

logging

Configure logging

set-log-mask

Set the logmask of this logging target

MASK

List of logging categories to log, e.g. 'abc:mno:xyz'. Available log categories depend on the specific application, refer to the 'logging level' command. Optionally add individual log levels like 'abc,1:mno,3:xyz,5', where the level numbers are LOGL_DEBUG=1 LOGL_INFO=3 LOGL_NOTICE=5 LOGL_ERROR=7 LOGL_FATAL=8

logging timestamp (0|1)

Command

```
logging timestamp (0|1)
```

Parameters

logging

Configure logging

timestamp

Configure log message timestamping

0

Don't prefix each log message

1

Prefix each log message with current timestamp

no logging level force-all

Command

```
no logging level force-all
```

Parameters

no

Negate a command or set its defaults

logging

Configure logging

level

Set the log level for a specified category

force-all

Release any globally forced log level set with 'logging level force-all <level>'

show alarms

Command

```
show alarms
```

Parameters

show

Show running system information

alarms

Show current logging configuration

show asciidoc counters

Command

```
show asciidoc counters
```

Parameters

show

Show running system information

asciidoc

Asciidoc generation

counters

Generate table of all registered counters

show history

Command

```
show history
```

Parameters

show

Show running system information

history

Display the session command history

show logging vty

Command

```
show logging vty
```

Parameters

show

Show running system information

logging

Show current logging configuration

vty

Show current logging configuration for this vty

show mgcp [stats]

Command

```
show mgcp [stats]
```

Parameters

show

Show running system information

mgcp

Display information about the MGCP Media Gateway

[stats]

Include Statistics

show mgcp endpoint NAME

Command

```
show mgcp endpoint NAME
```

Parameters

show

Show running system information

mgcp

Display information about the MGCP Media Gateway

endpoint

Display information about an endpoint

NAME

The name of the endpoint

show mgcp trunk <0-64> endpoint NAME

Command

```
show mgcp trunk <0-64> endpoint NAME
```

Parameters

show

Show running system information

mgcp

Display information about the MGCP Media Gateway

trunk

Display information about a trunk

<0-64>

Trunk number

endpoint

Display information about an endpoint

NAME

The name of the endpoint

show online-help

Command

```
show online-help
```

Parameters

show

Show running system information

online-help

Online help

show rate-counters

Command

```
show rate-counters
```

Parameters

show

Show running system information

rate-counters

Show all rate counters

show stats

Command

```
show stats
```

Parameters

show

Show running system information

stats

Show statistical values

show stats level (global|peer|subscriber)

Command

```
show stats level (global|peer|subscriber)
```

Parameters

show

Show running system information

stats

Show statistical values

level

Set the maximum group level

global

Show global groups only

peer

Show global and network peer related groups

subscriber

Show global, peer, and subscriber groups

show talloc-context (application|all) (full|brief|DEPTH)

Command

```
show talloc-context (application|all) (full|brief|DEPTH)
```

Parameters

show

Show running system information

talloc-context

Show talloc memory hierarchy

application

Application's context

all

All contexts, if NULL-context tracking is enabled

full

Display a full talloc memory hierarchy

brief

Display a brief talloc memory hierarchy

DEPTH

Specify required maximal depth value

show talloc-context (application|all) (full|brief|DEPTH) filter REGEXP

Command

```
show talloc-context (application|all) (full|brief|DEPTH) filter REGEXP
```

Parameters

show

Show running system information

talloc-context

Show talloc memory hierarchy

application

Application's context

all

All contexts, if NULL-context tracking is enabled

full

Display a full talloc memory hierarchy

brief

Display a brief talloc memory hierarchy

DEPTH

Specify required maximal depth value

filter

Filter chunks using regular expression

REGEXP

Regular expression

show talloc-context (application|all) (full|brief|DEPTH) tree ADDRESS

Command

```
show talloc-context (application|all) (full|brief|DEPTH) tree ADDRESS
```

Parameters

show

Show running system information

talloc-context

Show talloc memory hierarchy

application

Application's context

all

All contexts, if NULL-context tracking is enabled

full

Display a full talloc memory hierarchy

brief

Display a brief talloc memory hierarchy

DEPTH

Specify required maximal depth value

tree

Display only a specific memory chunk

ADDRESS

Chunk address (e.g. 0xdeadbeef)

show version

Command

```
show version
```

Parameters

show

Show running system information

version

Displays program version

terminal length <0-512>

Command

```
terminal length <0-512>
```

Parameters

terminal

Set terminal line parameters

length

Set number of lines on a screen

<0-512>

Number of lines on screen (0 for no pausing)

terminal no length

Command

```
terminal no length
```

Parameters

terminal

Set terminal line parameters

no

Negate a command or set its defaults

length

Set number of lines on a screen

who

Command

```
who
```

Parameters

who

Display who is on vty

enable

The enable node is a privileged node, allowing to make changes to the configuration and to access further commands like 'configure'. All commands seen on the view node are also available here.

configure terminal

Command

```
configure terminal
```

Parameters

configure

Configuration from vty interface

terminal

Configuration terminal

copy running-config startup-config

Command

```
copy running-config startup-config
```

Parameters

copy

Copy configuration

running-config

Copy running config to...

startup-config

Copy running config to startup config (same as write file)

disable

Command

```
disable
```

Parameters

disable

Turn off privileged mode command

free-endpoint <0-64> NUMBER

Command

```
free-endpoint <0-64> NUMBER
```

Parameters

free-endpoint

Free the given endpoint

<0-64>

Trunk number

NUMBER

Endpoint number in hex.

logging color (0|1)

Command

```
logging color (0|1)
```

Parameters

logging

Configure logging

color

Configure color-printing for log messages

0

Don't use color for printing messages

1

Use color for printing messages

logging disable

Command

```
logging disable
```

Parameters

logging

Configure logging

disable

Disables logging to this vty

logging enable

This command is required to make logging commands available on the telnet VTY.

Command

```
logging enable
```

Parameters

logging

Configure logging

enable

Enables logging to this vty

logging filter all (0|1)

Disable/enable general log output on a given target. Typically, 'logging filter all 1' allows to see the usual log output on a given target. Setting to '0' can be useful when logging to the telnet VTY console: mute all log output to allow typing VTY commands on the telnet prompt without interference from log output; 'logging filter all 1' then re-enables logging in the same log output configuration as before. Some applications provide more specific filters, e.g. to log a given IMSI only. To employ such filters, set 'logging filter all 0' to disable general logging, and then enable a more specific filter instead.

Command

```
logging filter all (0|1)
```

Parameters

logging

Configure logging

filter

Filter log messages

all

Do you want to log all messages?

0

Only print messages matched by other filters

1

Bypass filter and print all messages

logging level (rtp|lglobal|llapd|linp|lmux|lmi|lmib|lsms|lctrl|lgtp|lstats|lgsup...

Command

```
logging level (rtp|lglobal|llapd|linp|lmux|lmi|lmib|lsms|lctrl|lgtp|lstats|lgsup|loap| ↵  
lss7|lscdp|lsua|lm3ua|lmgcp|ljibuf|lrspro) (debug|info|notice|error|fatal)
```

Parameters

logging

Configure logging

level

Set the log level for a specified category

rtp

RTP stream handling

lglobal

Library-internal global log family

llapd

LAPD in libosmogsm

linp
A-bis Input Subsystem

lmux
A-bis B-Subchannel TRAU Frame Multiplex

lmi
A-bis Input Driver for Signalling

lmib
A-bis Input Driver for B-Channels (voice)

lsms
Layer3 Short Message Service (SMS)

lctrl
Control Interface

lgtp
GPRS GTP library

lstats
Statistics messages and logging

lgsup
Generic Subscriber Update Protocol

loap
Osmocom Authentication Protocol

lss7
libosmo-sigtran Signalling System 7

lsccp
libosmo-sigtran SCCP Implementation

lsua
libosmo-sigtran SCCP User Adaptation

lm3ua
libosmo-sigtran MTP3 User Adaptation

lmgcp
libosmo-mgcp Media Gateway Control Protocol

ljibuf
libosmo-netif Jitter Buffer

lrspro
Remote SIM protocol

debug
Log debug messages and higher levels

info
Log informational messages and higher levels

notice

Log noticeable messages and higher levels

error

Log error messages and higher levels

fatal

Log only fatal messages

logging level force-all (debug|info|notice|error|fatal)**Command**

```
logging level force-all (debug|info|notice|error|fatal)
```

Parameters**logging**

Configure logging

level

Set the log level for a specified category

force-all

Globally force all logging categories to a specific level. This is released by the 'no logging level force-all' command. Note: any 'logging level <category> <level>' commands will have no visible effect after this, until the forced level is released.

debug

Log debug messages and higher levels

info

Log informational messages and higher levels

notice

Log noticeable messages and higher levels

error

Log error messages and higher levels

fatal

Log only fatal messages

logging level set-all (debug|info|notice|error|fatal)**Command**

```
logging level set-all (debug|info|notice|error|fatal)
```

Parameters**logging**

Configure logging

level

Set the log level for a specified category

set-all

Once-off set all categories to the given log level. There is no single command to take back these changes -- each category is set to the given level, period.

debug

Log debug messages and higher levels

info

Log informational messages and higher levels

notice

Log noticeable messages and higher levels

error

Log error messages and higher levels

fatal

Log only fatal messages

logging print category (0|1)**Command**

```
logging print category (0|1)
```

Parameters**logging**

Configure logging

print

Log output settings

category

Configure log message

0

Don't prefix each log message

1

Prefix each log message with category/subsystem name

logging print category-hex (0|1)**Command**

```
logging print category-hex (0|1)
```

Parameters

logging

Configure logging

print

Log output settings

category-hex

Configure log message

0

Don't prefix each log message

1

Prefix each log message with category/subsystem nr in hex ('<000b>')

logging print extended-timestamp (0|1)

Command

```
logging print extended-timestamp (0|1)
```

Parameters

logging

Configure logging

print

Log output settings

extended-timestamp

Configure log message timestamping

0

Don't prefix each log message

1

Prefix each log message with current timestamp with YYYYMMDDhhmmssnnn

logging print file (0|1|basename) [last]

Command

```
logging print file (0|1|basename) [last]
```

Parameters

logging

Configure logging

print

Log output settings

file

Configure log message

0

Don't prefix each log message

1

Prefix each log message with the source file and line

basename

Prefix each log message with the source file's basename (strip leading paths) and line

[last]

Log source file info at the end of a log line. If omitted, log source file info just before the log text.

logging print level (0|1)

Command

```
logging print level (0|1)
```

Parameters

logging

Configure logging

print

Log output settings

level

Configure log message

0

Don't prefix each log message

1

Prefix each log message with the log level name

logging set-log-mask MASK

Command

```
logging set-log-mask MASK
```

Parameters

logging

Configure logging

set-log-mask

Set the logmask of this logging target

MASK

List of logging categories to log, e.g. 'abc:mno:xyz'. Available log categories depend on the specific application, refer to the 'logging level' command. Optionally add individual log levels like 'abc,1:mno,3:xyz,5', where the level numbers are LOGL_DEBUG=1 LOGL_INFO=3 LOGL_NOTICE=5 LOGL_ERROR=7 LOGL_FATAL=8

logging timestamp (0|1)

Command

```
logging timestamp (0|1)
```

Parameters

logging

Configure logging

timestamp

Configure log message timestamping

0

Don't prefix each log message

1

Prefix each log message with current timestamp

loop-endpoint <0-64> NAME (0|1)

Command

```
loop-endpoint <0-64> NAME (0|1)
```

Parameters

loop-endpoint

Loop a given endpoint

<0-64>

Trunk number

NAME

The name in hex of the endpoint

0

Disable the loop

1

Enable the loop

no logging level force-all

Command

```
no logging level force-all
```

Parameters

no

Negate a command or set its defaults

logging

Configure logging

level

Set the log level for a specified category

force-all

Release any globally forced log level set with 'logging level force-all <level>'

reset-all-endpoints

Command

```
reset-all-endpoints
```

Parameters

reset-all-endpoints

Reset all endpoints

reset-endpoint <0-64> NUMBER

Command

```
reset-endpoint <0-64> NUMBER
```

Parameters

reset-endpoint

Reset the given endpoint

<0-64>

Trunk number

NUMBER

Endpoint number in hex.

show alarms

Command

```
show alarms
```

Parameters

show

Show running system information

alarms

Show current logging configuration

show asciidoc counters

Command

```
show asciidoc counters
```

Parameters

show

Show running system information

asciidoc

Asciidoc generation

counters

Generate table of all registered counters

show history

Command

```
show history
```

Parameters

show

Show running system information

history

Display the session command history

show logging vty

Command

```
show logging vty
```

Parameters

show

Show running system information

logging

Show current logging configuration

vty

Show current logging configuration for this vty

show mgcp [stats]

Command

```
show mgcp [stats]
```

Parameters

show

Show running system information

mgcp

Display information about the MGCP Media Gateway

[stats]

Include Statistics

show mgcp endpoint NAME

Command

```
show mgcp endpoint NAME
```

Parameters

show

Show running system information

mgcp

Display information about the MGCP Media Gateway

endpoint

Display information about an endpoint

NAME

The name of the endpoint

show mgcp trunk <0-64> endpoint NAME

Command

```
show mgcp trunk <0-64> endpoint NAME
```

Parameters

show

Show running system information

mgcp

Display information about the MGCP Media Gateway

trunk

Display information about a trunk

<0-64>

Trunk number

endpoint

Display information about an endpoint

NAME

The name of the endpoint

show online-help

Command

```
show online-help
```

Parameters

show

Show running system information

online-help

Online help

show rate-counters

Command

```
show rate-counters
```

Parameters

show

Show running system information

rate-counters

Show all rate counters

show startup-config

Command

```
show startup-config
```

Parameters

show

Show running system information

startup-config

Contentes of startup configuration

show stats

Command

```
show stats
```

Parameters

show

Show running system information

stats

Show statistical values

show stats level (global|peer|subscriber)

Command

```
show stats level (global|peer|subscriber)
```

Parameters

show

Show running system information

stats

Show statistical values

level

Set the maximum group level

global

Show global groups only

peer

Show global and network peer related groups

subscriber

Show global, peer, and subscriber groups

show talloc-context (application|all) (full|brief|DEPTH)

Command

```
show talloc-context (application|all) (full|brief|DEPTH)
```

Parameters

show

Show running system information

talloc-context
Show talloc memory hierarchy

application
Application's context

all
All contexts, if NULL-context tracking is enabled

full
Display a full talloc memory hierarchy

brief
Display a brief talloc memory hierarchy

DEPTH
Specify required maximal depth value

show talloc-context (application|all) (full|brief|DEPTH) filter REGEXP

Command

```
show talloc-context (application|all) (full|brief|DEPTH) filter REGEXP
```

Parameters

show
Show running system information

talloc-context
Show talloc memory hierarchy

application
Application's context

all
All contexts, if NULL-context tracking is enabled

full
Display a full talloc memory hierarchy

brief
Display a brief talloc memory hierarchy

DEPTH
Specify required maximal depth value

filter
Filter chunks using regular expression

REGEXP
Regular expression

show talloc-context (application|all) (full|brief|DEPTH) tree ADDRESS

Command

```
show talloc-context (application|all) (full|brief|DEPTH) tree ADDRESS
```

Parameters

show

Show running system information

talloc-context

Show talloc memory hierarchy

application

Application's context

all

All contexts, if NULL-context tracking is enabled

full

Display a full talloc memory hierarchy

brief

Display a brief talloc memory hierarchy

DEPTH

Specify required maximal depth value

tree

Display only a specific memory chunk

ADDRESS

Chunk address (e.g. 0xdeadbeef)

show version

Command

```
show version
```

Parameters

show

Show running system information

version

Displays program version

tap-rtp <0-64> ENDPOINT CONN (in|out) A.B.C.D <0-65534>

Command

```
tap-rtp <0-64> ENDPOINT CONN (in|out) A.B.C.D <0-65534>
```

Parameters

tap-rtp

Forward data on endpoint to a different system

<0-64>

Trunk number

ENDPOINT

The endpoint in hex

CONN

The connection id in hex

in

Forward incoming data

out

Forward leaving data

A.B.C.D

destination IP of the data

<0-65534>

destination port

terminal length <0-512>

Command

```
terminal length <0-512>
```

Parameters

terminal

Set terminal line parameters

length

Set number of lines on a screen

<0-512>

Number of lines on screen (0 for no pausing)

terminal monitor

Command

```
terminal monitor
```

Parameters

terminal

Set terminal line parameters

monitor

Copy debug output to the current terminal line

terminal no length

Command

```
terminal no length
```

Parameters

terminal

Set terminal line parameters

no

Negate a command or set its defaults

length

Set number of lines on a screen

terminal no monitor

Command

```
terminal no monitor
```

Parameters

terminal

Set terminal line parameters

no

Negate a command or set its defaults

monitor

Copy debug output to the current terminal line

who

Command

```
who
```

Parameters

who

Display who is on vty

config

The config node is the root for all configuration commands, which are identical to the config file format. Changes made on the telnet VTY can be made persistent with the 'write file' command.

banner motd default

Command

```
banner motd default
```

Parameters

banner

Set banner string

motd

Strings for motd

default

Default string

banner motd file [FILE]

Command

```
banner motd file [FILE]
```

Parameters

banner

Set banner

motd

Banner for motd

file

Banner from a file

[FILE]

Filename

enable password (8|) WORD

Command

```
enable password (8|) WORD
```

Parameters

enable

Modify enable password parameters

password

Assign the privileged level password

8

Specifies a HIDDEN password will follow

dummy string

WORD

The HIDDEN 'enable' password string

enable password LINE

Command

```
enable password LINE
```

Parameters

enable

Modify enable password parameters

password

Assign the privileged level password

LINE

The UNENCRYPTED (cleartext) 'enable' password

hostname WORD

Command

```
hostname WORD
```

Parameters

hostname

Set system's network name

WORD

This system's network name

line vty

Command

```
line vty
```

Parameters

line

Configure a terminal line

vtty

Virtual terminal

log alarms <2-32700>

Command

```
log alarms <2-32700>
```

Parameters

log

Configure logging sub-system

alarms

Logging alarms to osmo_strrb

<2-32700>

Maximum number of messages to log

log file .FILENAME

Command

```
log file .FILENAME
```

Parameters

log

Configure logging sub-system

file

Logging to text file

.FILENAME

Filename

log gsmtap [HOSTNAME]

Command

```
log gsmtap [HOSTNAME]
```

Parameters

log

Configure logging sub-system

gsmtap

Logging via GSMTAP

[HOSTNAME]

Host name to send the GSMTAP logging to (UDP port 4729)

log stderr

Command

```
log stderr
```

Parameters

log

Configure logging sub-system

stderr

Logging via STDERR of the process

log syslog (authpriv|cron|daemon|ftp|lpr|mail|news|user|uucp)

Command

```
log syslog (authpriv|cron|daemon|ftp|lpr|mail|news|user|uucp)
```

Parameters

log

Configure logging sub-system

syslog

Logging via syslog

authpriv

Security/authorization messages facility

cron

Clock daemon (cron/at) facility

daemon

General system daemon facility

ftp

Ftp daemon facility

lpr

Line printer facility

mail

Mail facility

news

News facility

user

Generic facility

uucp

UUCP facility

log syslog local <0-7>

Command

```
log syslog local <0-7>
```

Parameters

log

Configure logging sub-system

syslog

Logging via syslog

local

Syslog LOCAL facility

<0-7>

Local facility number

mgcp

Command

```
mgcp
```

Parameters

mgcp

Configure the MGCP

no banner motd

Command

```
no banner motd
```

Parameters

no

Negate a command or set its defaults

banner

Set banner string

motd

Strings for motd

no enable password

Command

```
no enable password
```

Parameters

no

Negate a command or set its defaults

enable

Modify enable password parameters

password

Assign the privileged level password

no hostname [HOSTNAME]

Command

```
no hostname [HOSTNAME]
```

Parameters

no

Negate a command or set its defaults

hostname

Reset system's network name

[HOSTNAME]

Host name of this router

no log alarms

Command

```
no log alarms
```

Parameters

no

Negate a command or set its defaults

log

Configure logging sub-system

alarms

Logging alarms to osmo_strrb

no log file .FILENAME

Command

```
no log file .FILENAME
```

Parameters

no

Negate a command or set its defaults

log

Configure logging sub-system

file

Logging to text file

.FILENAME

Filename

no log stderr

Command

```
no log stderr
```

Parameters

no

Negate a command or set its defaults

log

Configure logging sub-system

stderr

Logging via STDERR of the process

no log syslog

Command

```
no log syslog
```

Parameters

no

Negate a command or set its defaults

log

Configure logging sub-system

syslog

Logging via syslog

no service advanced-vty

Command

```
no service advanced-vty
```

Parameters

no

Negate a command or set its defaults

service

Set up miscellaneous service

advanced-vty

Enable advanced mode vty interface

no service terminal-length [<0-512>]

Command

```
no service terminal-length [<0-512>]
```

Parameters

no

Negate a command or set its defaults

service

Set up miscellaneous service

terminal-length

System wide terminal length configuration

[<0-512>]

Number of lines of VTY (0 means no line control)

no stats reporter log

Command

```
no stats reporter log
```

Parameters

no

Negate a command or set its defaults

stats

Configure stats sub-system

reporter

Configure a stats reporter

log

Report to the logger

no stats reporter statsd

Command

```
no stats reporter statsd
```

Parameters

no

Negate a command or set its defaults

stats

Configure stats sub-system

reporter

Configure a stats reporter

statsd

Report to a STATSD server

password (8|) WORD

Command

```
password (8|) WORD
```

Parameters

password

Assign the terminal connection password

8

Specifies a HIDDEN password will follow

dummy string

WORD

The HIDDEN line password string

password LINE

Command

```
password LINE
```

Parameters

password

Assign the terminal connection password

LINE

The UNENCRYPTED (cleartext) line password

service advanced-vty

Command

```
service advanced-vty
```

Parameters

service

Set up miscellaneous service

advanced-vty

Enable advanced mode vty interface

service terminal-length <0-512>

Command

```
service terminal-length <0-512>
```

Parameters

service

Set up miscellaneous service

terminal-length

System wide terminal length configuration

<0-512>

Number of lines of VTY (0 means no line control)

show history

Command

```
show history
```

Parameters

show

Show running system information

history

Display the session command history

stats interval <1-65535>

Command

```
stats interval <1-65535>
```

Parameters

stats

Configure stats sub-system

interval

Set the reporting interval

<1-65535>

Interval in seconds

stats reporter log

Command

```
stats reporter log
```

Parameters

stats

Configure stats sub-system

reporter

Configure a stats reporter

log

Report to the logger

stats reporter statsd

Command

```
stats reporter statsd
```

Parameters

stats

Configure stats sub-system

reporter

Configure a stats reporter

statsd

Report to a STATSD server

config-log

The log node is commonly available in all Osmocom programs and allows configuring logging to stderr and/or log files, including logging category and level filtering as well as output formatting options. Note that the 'logging enable' command is required to make logging commands available on the telnet VTY.

logging color (0|1)

Command

```
logging color (0|1)
```

Parameters

logging

Configure logging

color

Configure color-printing for log messages

0

Don't use color for printing messages

1

Use color for printing messages

logging filter all (0|1)

Disable/enable general log output on a given target. Typically, 'logging filter all 1' allows to see the usual log output on a given target. Setting to '0' can be useful when logging to the telnet VTY console: mute all log output to allow typing VTY commands on the telnet prompt without interference from log output; 'logging filter all 1' then re-enables logging in the same log output configuration as before. Some applications provide more specific filters, e.g. to log a given IMSI only. To employ such filters, set 'logging filter all 0' to disable general logging, and then enable a more specific filter instead.

Command

```
logging filter all (0|1)
```

Parameters

logging

Configure logging

filter

Filter log messages

all

Do you want to log all messages?

0

Only print messages matched by other filters

1

Bypass filter and print all messages

logging level (rtp|lglobal|llapd|linp|lmux|lmi|lmib|lsms|lctrl|lgtp|lstats|lgsup...

Command

```
logging level (rtp|lglobal|llapd|linp|lmux|lmi|lmib|lsms|lctrl|lgtp|lstats|lgsup|loap| ↵  
lss7|lscdp|lsua|lm3ua|lmgcp|ljibuf|lrspro) (debug|info|notice|error|fatal)
```

Parameters

logging

Configure logging

level

Set the log level for a specified category

rtp

RTP stream handling

lglobal

Library-internal global log family

llapd

LAPD in libosmogsm

linp
A-bis Input Subsystem

lmux
A-bis B-Subchannel TRAU Frame Multiplex

lmi
A-bis Input Driver for Signalling

lmib
A-bis Input Driver for B-Channels (voice)

lsms
Layer3 Short Message Service (SMS)

lctrl
Control Interface

lgtp
GPRS GTP library

lstats
Statistics messages and logging

lgsup
Generic Subscriber Update Protocol

loap
Osmocom Authentication Protocol

lss7
libosmo-sigtran Signalling System 7

lsccp
libosmo-sigtran SCCP Implementation

lsua
libosmo-sigtran SCCP User Adaptation

lm3ua
libosmo-sigtran MTP3 User Adaptation

lmgcp
libosmo-mgcp Media Gateway Control Protocol

ljibuf
libosmo-netif Jitter Buffer

lrspro
Remote SIM protocol

debug
Log debug messages and higher levels

info
Log informational messages and higher levels

notice

Log noticeable messages and higher levels

error

Log error messages and higher levels

fatal

Log only fatal messages

logging level force-all (debug|info|notice|error|fatal)**Command**

```
logging level force-all (debug|info|notice|error|fatal)
```

Parameters**logging**

Configure logging

level

Set the log level for a specified category

force-all

Globally force all logging categories to a specific level. This is released by the 'no logging level force-all' command. Note: any 'logging level <category> <level>' commands will have no visible effect after this, until the forced level is released.

debug

Log debug messages and higher levels

info

Log informational messages and higher levels

notice

Log noticeable messages and higher levels

error

Log error messages and higher levels

fatal

Log only fatal messages

logging level set-all (debug|info|notice|error|fatal)**Command**

```
logging level set-all (debug|info|notice|error|fatal)
```

Parameters**logging**

Configure logging

level

Set the log level for a specified category

set-all

Once-off set all categories to the given log level. There is no single command to take back these changes -- each category is set to the given level, period.

debug

Log debug messages and higher levels

info

Log informational messages and higher levels

notice

Log noticeable messages and higher levels

error

Log error messages and higher levels

fatal

Log only fatal messages

logging print category (0|1)**Command**

```
logging print category (0|1)
```

Parameters**logging**

Configure logging

print

Log output settings

category

Configure log message

0

Don't prefix each log message

1

Prefix each log message with category/subsystem name

logging print category-hex (0|1)**Command**

```
logging print category-hex (0|1)
```

Parameters

logging

Configure logging

print

Log output settings

category-hex

Configure log message

0

Don't prefix each log message

1

Prefix each log message with category/subsystem nr in hex ('<000b>')

logging print extended-timestamp (0|1)

Command

```
logging print extended-timestamp (0|1)
```

Parameters

logging

Configure logging

print

Log output settings

extended-timestamp

Configure log message timestamping

0

Don't prefix each log message

1

Prefix each log message with current timestamp with YYYYMMDDhhmmssnnn

logging print file (0|1|basename) [last]

Command

```
logging print file (0|1|basename) [last]
```

Parameters

logging

Configure logging

print

Log output settings

file

Configure log message

0

Don't prefix each log message

1

Prefix each log message with the source file and line

basename

Prefix each log message with the source file's basename (strip leading paths) and line

[last]

Log source file info at the end of a log line. If omitted, log source file info just before the log text.

logging print level (0|1)

Command

```
logging print level (0|1)
```

Parameters

logging

Configure logging

print

Log output settings

level

Configure log message

0

Don't prefix each log message

1

Prefix each log message with the log level name

logging timestamp (0|1)

Command

```
logging timestamp (0|1)
```

Parameters

logging

Configure logging

timestamp

Configure log message timestamping

0

Don't prefix each log message

1

Prefix each log message with current timestamp

no logging level force-all

Command

```
no logging level force-all
```

Parameters

no

Negate a command or set its defaults

logging

Configure logging

level

Set the log level for a specified category

force-all

Release any globally forced log level set with 'logging level force-all <level>'

config-stats

disable

Command

```
disable
```

Parameters

disable

Disable the reporter

enable

Command

```
enable
```

Parameters

enable

Enable the reporter

level (global|peer|subscriber)

Command

```
level (global|peer|subscriber)
```

Parameters

level

Set the maximum group level

global

Report global groups only

peer

Report global and network peer related groups

subscriber

Report global, peer, and subscriber groups

local-ip ADDR

Command

```
local-ip ADDR
```

Parameters

local-ip

Set the IP address to which we bind locally

ADDR

IP Address

mtu <100-65535>

Command

```
mtu <100-65535>
```

Parameters

mtu

Set the maximum packet size

<100-65535>

Size in byte

no local-ip

Command

```
no local-ip
```

Parameters

no

Negate a command or set its defaults

local-ip

Set the IP address to which we bind locally

no mtu

Command

```
no mtu
```

Parameters

no

Negate a command or set its defaults

mtu

Set the maximum packet size

no prefix

Command

```
no prefix
```

Parameters

no

Negate a command or set its defaults

prefix

Set the item name prefix

prefix PREFIX

Command

```
prefix PREFIX
```

Parameters

prefix

Set the item name prefix

PREFIX

The prefix string

remote-ip ADDR

Command

```
remote-ip ADDR
```

Parameters

remote-ip

Set the remote IP address to which we connect

ADDR

IP Address

remote-port <1-65535>

Command

```
remote-port <1-65535>
```

Parameters

remote-port

Set the remote port to which we connect

<1-65535>

Remote port number

config-line

bind A.B.C.D [<0-65535>]

Command

```
bind A.B.C.D [<0-65535>]
```

Parameters

bind

Accept VTY telnet connections on local interface

A.B.C.D

Local interface IP address (default: 127.0.0.1)

[<0-65535>]

Local TCP port number

login

Command

```
login
```

Parameters

login

Enable password checking

no login

Command

```
no login
```

Parameters

no

Negate a command or set its defaults

login

Enable password checking

config-mgcp

allow-transcoding

Command

```
allow-transcoding
```

Parameters

allow-transcoding

Allow transcoding

bind early (0|1)

Command

```
bind early (0|1)
```

Parameters

bind

Listen/Bind related socket option

early

Bind local ports on start up

0

Bind on demand

1

Bind on startup

bind ip A.B.C.D

Command

```
bind ip A.B.C.D
```

Parameters

bind

Listen/Bind related socket option

ip

IP information

A.B.C.D

IPv4 Address to bind to

bind port <0-65534>

Command

```
bind port <0-65534>
```

Parameters

bind

Listen/Bind related socket option

port

Port information

<0-65534>

UDP port to listen for MGCP messages

call-agent ip A.B.C.D

Command

```
call-agent ip A.B.C.D
```

Parameters

call-agent

Callagent information

ip

IP information

A.B.C.D

IPv4 Address of the callagent

conn-timeout <0-65534>

Command

```
conn-timeout <0-65534>
```

Parameters

conn-timeout

Set a time after which inactive connections (CIs) are closed. Set to 0 to disable timeout. This can be used to work around interoperability problems causing connections to stay open forever, and slowly exhausting all available ports. Enable keep-alive packets in MGW clients when using this option together with LCLS (OsmoBSC, OsmoMSC: 'rtp keep-alive')!

<0-65534>

Timeout value (sec.)

domain NAME

Command

```
domain NAME
```

Parameters

domain

Set the domain part expected in MGCP messages' endpoint names

NAME

Qualified domain name expected in MGCP endpoint names, or '*' to accept any domain

force-realloc (0|1)

Command

```
force-realloc (0|1)
```

Parameters

force-realloc

Force endpoint reallocation when the endpoint is still seized

0

Don't force reallocation

1

force reallocation

local ip A.B.C.D

Command

```
local ip A.B.C.D
```

Parameters

local

Local options for the SDP record

ip

IP information

A.B.C.D

IPv4 Address to use in SDP record

loop (0|1)

Command

```
loop (0|1)
```

Parameters

loop

Loop audio for all endpoints on main trunk

0

Don't Loop

1

Loop

no allow-transcoding

Command

```
no allow-transcoding
```

Parameters

no

Negate a command or set its defaults

allow-transcoding

Allow transcoding

no rtcp-omit

Command

```
no rtcp-omit
```

Parameters

no

Negate a command or set its defaults

rtcp-omit

Drop RTCP packets in both directions

no rtp bind-ip

Command

```
no rtp bind-ip
```

Parameters

no

Negate a command or set its defaults

rtp

RTP configuration

bind-ip

Bind endpoints facing the Network

no rtp force-ptime

Command

```
no rtp force-ptime
```

Parameters

no

Negate a command or set its defaults

rtp

RTP configuration

force-ptime

Force a fixed ptime for packets sent

no rtp ip-probing

Command

```
no rtp ip-probing
```

Parameters

no

Negate a command or set its defaults

rtp

RTP configuration

ip-probing

no automatic rtp bind ip selection

no rtp keep-alive

Command

```
no rtp keep-alive
```

Parameters

no

Negate a command or set its defaults

rtp

RTP configuration

keep-alive

Send dummy UDP packet to net RTP destination

no rtp-patch

Command

```
no rtp-patch
```

Parameters

no

Negate a command or set its defaults

rtp-patch

Modify RTP packet header in both directions

no rtp-patch rfc5993hr

Command

```
no rtp-patch rfc5993hr
```

Parameters

no

Negate a command or set its defaults

rtp-patch

Modify RTP packet header in both directions

rfc5993hr

Convert GSM-HR from TS101318 to RFC5993 and vice versa

no rtp-patch ssrc

Command

```
no rtp-patch ssrc
```

Parameters

no

Negate a command or set its defaults

rtp-patch

Modify RTP packet header in both directions

ssrc

Force a fixed SSRC

no rtp-patch timestamp

Command

```
no rtp-patch timestamp
```

Parameters

no

Negate a command or set its defaults

rtp-patch

Modify RTP packet header in both directions

timestamp

Adjust RTP timestamp

no sdp audio-payload send-name

Command

```
no sdp audio-payload send-name
```

Parameters

no

Negate a command or set its defaults

sdp

SDP File related options

audio-payload

Audio payload options

send-name

Send SDP rtpmap with the audio name

no sdp audio-payload send-ptime

Command

```
no sdp audio-payload send-ptime
```

Parameters

no

Negate a command or set its defaults

sdp

SDP File related options

audio-payload

Audio payload options

send-ptime

Send SDP ptime (packet duration) attribute

number endpoints <0-65534>

Command

```
number endpoints <0-65534>
```

Parameters

number

Number options

endpoints

Endpoints available

<0-65534>

Number endpoints

osmux (on|off|only)

Command

```
osmux (on|off|only)
```

Parameters

osmux

RTP multiplexing

on

Enable OSMUX

off

Disable OSMUX

only

Only use OSMUX

osmux batch-factor <1-8>

Command

```
osmux batch-factor <1-8>
```

Parameters

osmux

RTP multiplexing

batch-factor

Batching factor

<1-8>

Number of messages in the batch

osmux batch-size <1-65535>

Command

```
osmux batch-size <1-65535>
```

Parameters

osmux

RTP multiplexing

batch-size

batch size

<1-65535>

Batch size in bytes

osmux bind-ip A.B.C.D

Command

```
osmux bind-ip A.B.C.D
```

Parameters

osmux

RTP multiplexing

bind-ip

IP information

A.B.C.D

IPv4 Address to bind to

osmux dummy (on|off)

Command

```
osmux dummy (on|off)
```

Parameters

osmux

RTP multiplexing

dummy

Dummy padding

on

Enable dummy padding

off

Disable dummy padding

osmux port <1-65535>

Command

```
osmux port <1-65535>
```

Parameters

osmux

RTP multiplexing

port

port

<1-65535>

UDP port

rtcp-omit

Command

```
rtcp-omit
```

Parameters

rtcp-omit

Drop RTCP packets in both directions

rtp bind-ip A.B.C.D

Command

```
rtp bind-ip A.B.C.D
```

Parameters

rtp

RTP configuration

bind-ip

Bind endpoints facing the Network

A.B.C.D

Address to bind to

rtp force-ptime (10|20|40)

Command

```
rtp force-ptime (10|20|40)
```

Parameters

rtp

RTP configuration

force-ptime

Force a fixed ptime for packets sentThe required ptime (packet duration) in ms

10

10 ms

20

20 ms

40

40 ms

rtp ip-dscp <0-255>

Command

```
rtp ip-dscp <0-255>
```

Parameters

rtp

RTP configuration

ip-dscp

Apply IP_TOS to the audio stream (including Osmux)

<0-255>

The DSCP value

rtp ip-probing

Command

```
rtp ip-probing
```

Parameters

rtp

RTP configuration

ip-probing

automatic rtp bind ip selection

rtp keep-alive <1-120>

Command

```
rtp keep-alive <1-120>
```

Parameters

rtp

RTP configuration

keep-alive

Send dummy UDP packet to net RTP destination

<1-120>

Keep alive interval in secs

rtp keep-alive once

Command

```
rtp keep-alive once
```

Parameters

rtp

RTP configuration

keep-alive

Send dummy UDP packet to net RTP destination

once

Send dummy packet only once after CRCX/MDCX

rtp port-range <1024-65534> <1025-65535>

Command

```
rtp port-range <1024-65534> <1025-65535>
```

Parameters

rtp

RTP configuration

port-range

Range of ports to use for the NET side

<1024-65534>

Start of the range of ports

<1025-65535>

End of the range of ports

rtp-accept-all (0|1)

Command

```
rtp-accept-all (0|1)
```

Parameters

rtp-accept-all

Accept all RTP packets, even when the originating IP/Port does not match

0

enable filter

1

disable filter

rtp-patch rfc5993hr

Command

```
rtp-patch rfc5993hr
```

Parameters

rtp-patch

Modify RTP packet header in both directions

rfc5993hr

Convert GSM-HR from TS101318 to RFC5993 and vice versa

rtp-patch ssrc

Command

```
rtp-patch ssrc
```

Parameters

rtp-patch

Modify RTP packet header in both directions

ssrc

Force a fixed SSRC

rtp-patch timestamp

Command

```
rtp-patch timestamp
```

Parameters

rtp-patch

Modify RTP packet header in both directions

timestamp

Adjust RTP timestamp

sdp audio fntp-extra .NAME

Command

```
sdp audio fntp-extra .NAME
```

Parameters

sdp

Add extra fntp for the SDP file

audio

Audio

fntp-extra

Fntp-extra

.NAME

Extra Information

sdp audio-payload name NAME

Command

```
sdp audio-payload name NAME
```

Parameters

sdp

SDP File related options

audio-payload

Audio payload options

name

Name

NAME

Payload name

sdp audio-payload number <0-255>

Command

```
sdp audio-payload number <0-255>
```

Parameters

sdp

SDP File related options

audio-payload

Audio payload options

number

Number

<0-255>

Payload number

sdp audio-payload send-name

Command

```
sdp audio-payload send-name
```

Parameters

sdp

SDP File related options

audio-payload

Audio payload options

send-name

Send SDP rtpmap with the audio name

sdp audio-payload send-ptime

Command

```
sdp audio-payload send-ptime
```

Parameters

sdp

SDP File related options

audio-payload

Audio payload options

send-ptime

Send SDP ptime (packet duration) attribute

trunk <1-64>

Command

```
trunk <1-64>
```

Parameters

trunk

Configure a SS7 trunk

<1-64>

Trunk Nr

config-mgcp-trunk

allow-transcoding

Command

```
allow-transcoding
```

Parameters

allow-transcoding

Allow transcoding

loop (0|1)

Command

```
loop (0|1)
```

Parameters

loop

Loop audio for all endpoints on this trunk

0

Don't Loop

1

Loop

no allow-transcoding

Command

```
no allow-transcoding
```

Parameters

no

Negate a command or set its defaults

allow-transcoding

Allow transcoding

no rtcp-omit

Command

```
no rtcp-omit
```

Parameters

no

Negate a command or set its defaults

rtcp-omit

Drop RTCP packets in both directions

no rtp keep-alive

Command

```
no rtp keep-alive
```

Parameters

no

Negate a command or set its defaults

rtp

RTP configuration

keep-alive

Send dummy UDP packet to net RTP destination

no rtp-patch

Command

```
no rtp-patch
```

Parameters

no

Negate a command or set its defaults

rtp-patch

Modify RTP packet header in both directions

no rtp-patch rfc5993hr

Command

```
no rtp-patch rfc5993hr
```

Parameters

no

Negate a command or set its defaults

rtp-patch

Modify RTP packet header in both directions

rfc5993hr

Convert GSM-HR from TS101318 to RFC5993 and vice versa

no rtp-patch ssrc

Command

```
no rtp-patch ssrc
```

Parameters

no

Negate a command or set its defaults

rtp-patch

Modify RTP packet header in both directions

ssrc

Force a fixed SSRC

no rtp-patch timestamp

Command

```
no rtp-patch timestamp
```

Parameters

no

Negate a command or set its defaults

rtp-patch

Modify RTP packet header in both directions

timestamp

Adjust RTP timestamp

no sdp audio-payload send-name

Command

```
no sdp audio-payload send-name
```

Parameters

no

Negate a command or set its defaults

sdp

SDP File related options

audio-payload

Audio payload options

send-name

Send SDP rtpmap with the audio name

no sdp audio-payload send-ptime

Command

```
no sdp audio-payload send-ptime
```

Parameters

no

Negate a command or set its defaults

sdp

SDP File related options

audio-payload

Audio payload options

send-ptime

Send SDP ptime (packet duration) attribute

rtcp-omit

Command

```
rtcp-omit
```

Parameters

rtcp-omit

Drop RTCP packets in both directions

rtp keep-alive <1-120>

Command

```
rtp keep-alive <1-120>
```

Parameters

rtp

RTP configuration

keep-alive

Send dummy UDP packet to net RTP destination

<1-120>

Keep-alive interval in secs

rtp keep-alive once

Command

```
rtp keep-alive once
```

Parameters

rtp

RTP configuration

keep-alive

Send dummy UDP packet to net RTP destination

once

Send dummy packet only once after CRCX/MDCX

rtp-patch rfc5993hr

Command

```
rtp-patch rfc5993hr
```

Parameters

rtp-patch

Modify RTP packet header in both directions

rfc5993hr

Convert GSM-HR from TS101318 to RFC5993 and vice versa

rtp-patch ssrc

Command

```
rtp-patch ssrc
```

Parameters

rtp-patch

Modify RTP packet header in both directions

ssrc

Force a fixed SSRC

rtp-patch timestamp

Command

```
rtp-patch timestamp
```

Parameters

rtp-patch

Modify RTP packet header in both directions

timestamp

Adjust RTP timestamp

sdp audio fntp-extra .NAME

Command

```
sdp audio fntp-extra .NAME
```

Parameters

sdp

Add extra fntp for the SDP file

audio

Audio

fntp-extra

Fntp-extra

.NAME

Extra Information

sdp audio-payload name NAME

Command

```
sdp audio-payload name NAME
```

Parameters

sdp

SDP File related options

audio-payload

Audio payload options

name

Payload

NAME

Payload Name

sdp audio-payload number <0-255>

Command

```
sdp audio-payload number <0-255>
```

Parameters

sdp

SDP File related options

audio-payload
Audio payload options

number
Number

<0-255>
Payload Number

sdp audio-payload send-name

Command

```
sdp audio-payload send-name
```

Parameters

sdp
SDP File related options

audio-payload
Audio payload options

send-name
Send SDP rtpmap with the audio name

sdp audio-payload send-ptime

Command

```
sdp audio-payload send-ptime
```

Parameters

sdp
SDP File related options

audio-payload
Audio payload options

send-ptime
Send SDP ptime (packet duration) attribute