

# **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

<b>1</b>	<b>VTY reference</b>	<b>1</b>
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 lmib lmsl ctrl 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 lmil mib 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 (onloff) . . . . .	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

### 1.1 Common Commands

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

### 1.1.1 end

#### Command

```
end
```

#### Parameters

end

End current mode and change to enable mode.

### 1.1.2 exit

#### Command

```
exit
```

#### Parameters

exit

Exit current mode and down to previous mode

### 1.1.3 help

#### Command

```
help
```

#### Parameters

help

Description of the interactive help system

### 1.1.4 list

#### Command

```
list
```

#### Parameters

list

Print command list

### 1.1.5 show running-config

#### Command

```
show running-config
```

#### Parameters

##### show

Show running system information

##### running-config

running configuration

### 1.1.6 write

#### Command

```
write
```

#### Parameters

##### write

Write running configuration to memory, network, or terminal

### 1.1.7 write file

#### Command

```
write file
```

#### Parameters

##### write

Write running configuration to memory, network, or terminal

##### file

Write to configuration file

### 1.1.8 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)

---

### 1.1.9 write terminal

#### Command

```
write terminal
```

#### Parameters

##### write

Write running configuration to memory, network, or terminal

##### terminal

Write to terminal

## 1.2 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.

### 1.2.1 enable

#### Command

```
enable
```

#### Parameters

##### enable

Turn on privileged mode command

### 1.2.2 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

---

### 1.2.3 logging disable

#### Command

```
logging disable
```

#### Parameters

##### logging

Configure logging

##### disable

Disables logging to this vty

### 1.2.4 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

### 1.2.5 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

---

## 1.2.6 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

### 1.2.7 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

### 1.2.8 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

### 1.2.9 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

### 1.2.10 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>')

### 1.2.11 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

### 1.2.12 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.

### 1.2.13 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

### 1.2.14 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

### 1.2.15 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

---

### 1.2.16 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>'

### 1.2.17 show alarms

#### Command

```
show alarms
```

#### Parameters

show

Show running system information

alarms

Show current logging configuration

### 1.2.18 show asciidoc counters

#### Command

```
show asciidoc counters
```

#### Parameters

show

Show running system information

asciidoc

Asciidoc generation

counters

Generate table of all registered counters

---

### 1.2.19 show history

#### Command

```
show history
```

#### Parameters

##### show

Show running system information

##### history

Display the session command history

### 1.2.20 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

### 1.2.21 show mgcp [stats]

#### Command

```
show mgcp [stats]
```

#### Parameters

##### show

Show running system information

##### mgcp

Display information about the MGCP Media Gateway

##### [stats]

Include Statistics

---

### 1.2.22 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

### 1.2.23 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



### 1.2.24 show online-help

#### Command

```
show online-help
```

#### Parameters

##### show

Show running system information

##### online-help

Online help

### 1.2.25 show rate-counters

#### Command

```
show rate-counters
```

#### Parameters

##### show

Show running system information

##### rate-counters

Show all rate counters

### 1.2.26 show stats

#### Command

```
show stats
```

#### Parameters

##### show

Show running system information

##### stats

Show statistical values

### 1.2.27 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

### 1.2.28 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

---

### 1.2.29 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

### 1.2.30 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)

### 1.2.31 show version

Command

```
show version
```

Parameters

show

Show running system information

version

Displays program version

### 1.2.32 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)

---

### 1.2.33 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

### 1.2.34 who

#### Command

```
who
```

#### Parameters

##### who

Display who is on vty

## 1.3 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.

### 1.3.1 configure terminal

#### Command

```
configure terminal
```

#### Parameters

##### configure

Configuration from vty interface

##### terminal

Configuration terminal

### 1.3.2 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)

### 1.3.3 disable

#### Command

```
disable
```

#### Parameters

##### disable

Turn off privileged mode command

### 1.3.4 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.

---

### 1.3.5 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

### 1.3.6 logging disable

#### Command

```
logging disable
```

#### Parameters

##### logging

Configure logging

##### disable

Disables logging to this vty

### 1.3.7 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

---

### 1.3.8 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

### 1.3.9 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| ↵
ls7|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

### 1.3.10 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

### 1.3.11 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

### 1.3.12 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

### 1.3.13 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>')

### 1.3.14 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

### 1.3.15 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.

### 1.3.16 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

### 1.3.17 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

### 1.3.18 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

### 1.3.19 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

### 1.3.20 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>'

### 1.3.21 reset-all-endpoints

Command

```
reset-all-endpoints
```

Parameters

reset-all-endpoints

Reset all endpoints

### 1.3.22 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.

### 1.3.23 show alarms

Command

```
show alarms
```

Parameters

show

Show running system information

alarms

Show current logging configuration

### 1.3.24 show asciidoc counters

#### Command

```
show asciidoc counters
```

#### Parameters

##### show

Show running system information

##### asciidoc

Asciidoc generation

##### counters

Generate table of all registered counters

### 1.3.25 show history

#### Command

```
show history
```

#### Parameters

##### show

Show running system information

##### history

Display the session command history

### 1.3.26 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

---



### 1.3.27 show mgcp [stats]

#### Command

```
show mgcp [stats]
```

#### Parameters

show

Show running system information

mgcp

Display information about the MGCP Media Gateway

[stats]

Include Statistics

### 1.3.28 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

### 1.3.29 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

### 1.3.30 show online-help

Command

```
show online-help
```

Parameters

show

Show running system information

online-help

Online help

### 1.3.31 show rate-counters

Command

```
show rate-counters
```

Parameters

show

Show running system information

rate-counters

Show all rate counters

### 1.3.32 show startup-config

Command

```
show startup-config
```

Parameters

show

Show running system information

startup-config

Contentes of startup configuration

### 1.3.33 show stats

#### Command

```
show stats
```

#### Parameters

##### show

Show running system information

##### stats

Show statistical values

### 1.3.34 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

### 1.3.35 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

### 1.3.36 **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

### 1.3.37 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)

### 1.3.38 show version

#### Command

```
show version
```

#### Parameters

##### show

Show running system information

##### version

Displays program version

### 1.3.39 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

### 1.3.40 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)

---

### 1.3.41 terminal monitor

#### Command

```
terminal monitor
```

#### Parameters

##### terminal

Set terminal line parameters

##### monitor

Copy debug output to the current terminal line

### 1.3.42 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

### 1.3.43 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

---

### 1.3.44 who

#### Command

```
who
```

#### Parameters

who

Display who is on vty

## 1.4 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.

### 1.4.1 banner motd default

#### Command

```
banner motd default
```

#### Parameters

banner

Set banner string

motd

Strings for motd

default

Default string

### 1.4.2 banner motd file [FILE]

#### Command

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

#### Parameters

banner

Set banner

motd

Banner for motd

file

Banner from a file

[FILE]

Filename



### 1.4.3 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

### 1.4.4 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

### 1.4.5 hostname WORD

#### Command

```
hostname WORD
```

#### Parameters

##### hostname

Set system's network name

##### WORD

This system's network name

---

### 1.4.6 line vty

#### Command

```
line vty
```

#### Parameters

line

Configure a terminal line

vtty

Virtual terminal

### 1.4.7 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

### 1.4.8 log file .FILENAME

#### Command

```
log file .FILENAME
```

#### Parameters

log

Configure logging sub-system

file

Logging to text file

.FILENAME

Filename

### 1.4.9 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)

### 1.4.10 log stderr

#### Command

```
log stderr
```

#### Parameters

log

Configure logging sub-system

stderr

Logging via STDERR of the process

### 1.4.11 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

#### 1.4.12 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

#### 1.4.13 mgcp

Command

```
mgcp
```

Parameters

mgcp

Configure the MGCP

### 1.4.14 no banner motd

#### Command

```
no banner motd
```

#### Parameters

no

Negate a command or set its defaults

banner

Set banner string

motd

Strings for motd

### 1.4.15 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

### 1.4.16 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

---

### 1.4.17 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

### 1.4.18 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

### 1.4.19 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

### 1.4.20 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

### 1.4.21 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

### 1.4.22 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)

---

### 1.4.23 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

### 1.4.24 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

### 1.4.25 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



### 1.4.26 password LINE

#### Command

```
password LINE
```

#### Parameters

##### password

Assign the terminal connection password

##### LINE

The UNENCRYPTED (cleartext) line password

### 1.4.27 service advanced-vty

#### Command

```
service advanced-vty
```

#### Parameters

##### service

Set up miscellaneous service

##### advanced-vty

Enable advanced mode vty interface

### 1.4.28 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)

---

### 1.4.29 show history

#### Command

```
show history
```

#### Parameters

##### show

Show running system information

##### history

Display the session command history

### 1.4.30 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

### 1.4.31 stats reporter log

#### Command

```
stats reporter log
```

#### Parameters

##### stats

Configure stats sub-system

##### reporter

Configure a stats reporter

##### log

Report to the logger

---

### 1.4.32 stats reporter statsd

#### Command

```
stats reporter statsd
```

#### Parameters

##### stats

Configure stats sub-system

##### reporter

Configure a stats reporter

##### statsd

Report to a STATSD server

## 1.5 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.

### 1.5.1 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

---

### 1.5.2 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

### 1.5.3 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

### 1.5.4 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

### 1.5.5 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

### 1.5.6 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

### 1.5.7 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>')

### 1.5.8 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

### 1.5.9 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.

### 1.5.10 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

### 1.5.11 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

### 1.5.12 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>'

## 1.6 config-stats

### 1.6.1 disable

#### Command

```
disable
```

#### Parameters

disable

Disable the reporter

### 1.6.2 enable

#### Command

```
enable
```

#### Parameters

enable

Enable the reporter

---

### 1.6.3 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

### 1.6.4 local-ip ADDR

#### Command

```
local-ip ADDR
```

#### Parameters

##### local-ip

Set the IP address to which we bind locally

##### ADDR

IP Address

### 1.6.5 mtu <100-65535>

#### Command

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

#### Parameters

##### mtu

Set the maximum packet size

##### <100-65535>

Size in byte

---

### 1.6.6 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

### 1.6.7 no mtu

#### Command

```
no mtu
```

#### Parameters

no

Negate a command or set its defaults

mtu

Set the maximum packet size

### 1.6.8 no prefix

#### Command

```
no prefix
```

#### Parameters

no

Negate a command or set its defaults

prefix

Set the item name prefix

### 1.6.9 prefix PREFIX

#### Command

```
prefix PREFIX
```

#### Parameters

prefix

Set the item name prefix

PREFIX

The prefix string

### 1.6.10 remote-ip ADDR

#### Command

```
remote-ip ADDR
```

#### Parameters

##### remote-ip

Set the remote IP address to which we connect

##### ADDR

IP Address

### 1.6.11 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

## 1.7 config-line

### 1.7.1 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

---

### 1.7.2 login

#### Command

```
login
```

#### Parameters

login

Enable password checking

### 1.7.3 no login

#### Command

```
no login
```

#### Parameters

no

Negate a command or set its defaults

login

Enable password checking

## 1.8 config-mgcp

### 1.8.1 allow-transcoding

#### Command

```
allow-transcoding
```

#### Parameters

allow-transcoding

Allow transcoding

### 1.8.2 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

### 1.8.3 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

### 1.8.4 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

---

### 1.8.5 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

### 1.8.6 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.)

### 1.8.7 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

---



### 1.8.8 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

### 1.8.9 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

### 1.8.10 loop (0|1)

#### Command

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

#### Parameters

##### loop

Loop audio for all endpoints on main trunk

0

Don't Loop

1

Loop

---

### 1.8.11 no allow-transcoding

#### Command

```
no allow-transcoding
```

#### Parameters

no

Negate a command or set its defaults

allow-transcoding

Allow transcoding

### 1.8.12 no rtcp-omit

#### Command

```
no rtcp-omit
```

#### Parameters

no

Negate a command or set its defaults

rtcp-omit

Drop RTCP packets in both directions

### 1.8.13 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

---

### 1.8.14 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

### 1.8.15 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

### 1.8.16 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

---

### 1.8.17 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

### 1.8.18 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

### 1.8.19 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

---

### 1.8.20 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

### 1.8.21 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

### 1.8.22 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

### 1.8.23 number endpoints <0-65534>

#### Command

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

#### Parameters

number

Number options

endpoints

Endpoints available

<0-65534>

Number endpoints

### 1.8.24 osmux (on|off|only)

#### Command

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

#### Parameters

osmux

RTP multiplexing

on

Enable OSMUX

off

Disable OSMUX

only

Only use OSMUX

### 1.8.25 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

### 1.8.26 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

### 1.8.27 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

### 1.8.28 osmux dummy (on|off)

#### Command

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

#### Parameters

osmux

RTP multiplexing

dummy

Dummy padding

on

Enable dummy padding

off

Disable dummy padding

### 1.8.29 osmux port <1-65535>

#### Command

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

#### Parameters

osmux

RTP multiplexing

port

port

<1-65535>

UDP port

### 1.8.30 rtcp-omit

#### Command

```
rtcp-omit
```

#### Parameters

rtcp-omit

Drop RTCP packets in both directions

### 1.8.31 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

---



### 1.8.32 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

### 1.8.33 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

### 1.8.34 rtp ip-probing

#### Command

```
rtp ip-probing
```

#### Parameters

rtp

RTP configuration

ip-probing

automatic rtp bind ip selection

---

### 1.8.35 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

### 1.8.36 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

### 1.8.37 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

---

### 1.8.38 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

### 1.8.39 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

### 1.8.40 rtp-patch ssrc

#### Command

```
rtp-patch ssrc
```

#### Parameters

##### rtp-patch

Modify RTP packet header in both directions

##### ssrc

Force a fixed SSRC

---

### 1.8.41 rtp-patch timestamp

#### Command

```
rtp-patch timestamp
```

#### Parameters

rtp-patch

Modify RTP packet header in both directions

timestamp

Adjust RTP timestamp

### 1.8.42 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

### 1.8.43 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

### 1.8.44 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

### 1.8.45 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

### 1.8.46 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

### 1.8.47 trunk <1-64>

#### Command

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

#### Parameters

trunk

Configure a SS7 trunk

<1-64>

Trunk Nr

## 1.9 config-mgcp-trunk

### 1.9.1 allow-transcoding

#### Command

```
allow-transcoding
```

#### Parameters

allow-transcoding

Allow transcoding

### 1.9.2 loop (0|1)

#### Command

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

#### Parameters

loop

Loop audio for all endpoints on this trunk

0

Don't Loop

1

Loop

### 1.9.3 no allow-transcoding

#### Command

```
no allow-transcoding
```

#### Parameters

no

Negate a command or set its defaults

allow-transcoding

Allow transcoding

### 1.9.4 no rtcp-omit

#### Command

```
no rtcp-omit
```

#### Parameters

no

Negate a command or set its defaults

rtcp-omit

Drop RTCP packets in both directions

### 1.9.5 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

---

### 1.9.6 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

### 1.9.7 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

### 1.9.8 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

---



### 1.9.9 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

### 1.9.10 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

### 1.9.11 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

### 1.9.12 rtcp-omit

#### Command

```
rtcp-omit
```

#### Parameters

rtcp-omit

Drop RTCP packets in both directions

### 1.9.13 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

### 1.9.14 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

---

### 1.9.15 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

### 1.9.16 rtp-patch ssrc

#### Command

```
rtp-patch ssrc
```

#### Parameters

##### rtp-patch

Modify RTP packet header in both directions

##### ssrc

Force a fixed SSRC

### 1.9.17 rtp-patch timestamp

#### Command

```
rtp-patch timestamp
```

#### Parameters

##### rtp-patch

Modify RTP packet header in both directions

##### timestamp

Adjust RTP timestamp

### 1.9.18 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

### 1.9.19 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

### 1.9.20 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

### 1.9.21 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

### 1.9.22 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