OsmoPCAP VTY Reference

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osmo-pcap-client

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COLLABORATORS

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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 [with-flags]**

Command

```
list [with-flags]
```

Parameters

list

> Print command list

[with-flags]

> Also print the VTY attribute flags

1.1.5 show running-config

Command

```
show running-config
```

Parameters

show
> Show running system information

running-config
> running configuration

1.1.6 show vty-attributes

Command

```
show vty-attributes
```

Parameters

show
> Show running system information

vty-attributes
> List of VTY attributes

1.1.7 show vty-attributes (application|library|global)

Command

```
show vty-attributes (application|library|global)
```

Parameters

show
> Show running system information

vty-attributes
> List of VTY attributes

application
> Application specific attributes only

library
> Library specific attributes only

global
> Global attributes only

1.1.8 write

Command

```
write
```

Parameters

write

Write running configuration to memory, network, or terminal

1.1.9 write file [PATH]

Command

```
write file [PATH]
```

Parameters

write

Write running configuration to memory, network, or terminal

file

Write to configuration file

[PATH]

Set file path to store the config, or replace if already exists

1.1.10 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)

1.1.11 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 [expert-mode]

Command

```
enable [expert-mode]
```

Parameters

enable

Turn on privileged mode command

[expert-mode]

Enable the expert mode (show hidden commands)

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 (pcap|client|server|vty|tls|lglobal|llapd|linp|lmux|lmi|lmib|lsms|...

Command

```
logging level (pcap|client|server|vty|tls|lglobal|llapd|linp|lmux|lmi|lmib|lsms|lctrl| ←
    lgtp|lstats|lgsup|loap|lss7|lsccp|lsua|lm3ua|lmgcp|ljibuf|lrspro|lns|lbssgp|lnsdata ←
    |lnssignal|liuup|lpfcp|lcsn1|lio) (debug|info|notice|error|fatal)
```

Parameters

logging

    Configure logging

level

    Set the log level for a specified category

pcap

    PCAP related functionality

client

    Client related functionality

server

    Server related functionality

vty

    VTY code

tls

    TLS code

lglobal

    Library-internal global log family

llapd

    LAPD in libosmogsm

linp

    A-bis Intput 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

lns

GPRS NS layer

lbssgp

GPRS BSSGP layer

lnsdata

GPRS NS layer data PDU

lnssignal

GPRS NS layer signal PDU

liuup

Iu UP layer

lpfcp

    libosmo-pfcp Packet Forwarding Control Protocol

lcsn1

    libosmo-csn1 Concrete Syntax Notation 1 codec

lio

    libosmocore IO Subsystem

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 print thread-id (0|1)

Command

```
logging print thread-id (0|1)
```

Parameters

logging

> Configure logging

print

> Log output settings

thread-id

> Configure log message logging Thread ID

0

> Don't prefix each log message

1

> Prefix each log message with current Thread ID

1.2.15 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

1.2.16 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

1.2.17 logp (pcap|client|server|vty|tls|lglobal|llapd|linp|lmux|lmi|lmib|lsms|lctrl|lgt...

Command

```
logp (pcap|client|server|vty|tls|lglobal|llapd|linp|lmux|lmi|lmib|lsms|lctrl|lgtp| ←↩
    lstats|lgsup|loap|lss7|lsccp|lsua|lm3ua|lmgcp|ljibuf|lrspro|lns|lbssgp|lnsdata| ←↩
    lnssignal|liuup|lpfcp|lcsn1|lio) (debug|info|notice|error|fatal) .LOGMESSAGE
```

Parameters

logp

    Print a message on all log outputs; useful for placing markers in test logs

pcap

    PCAP related functionality

client

    Client related functionality

server

    Server related functionality

vty

    VTY code

tls

    TLS code

lglobal

    Library-internal global log family

llapd

LAPD in libosmogsm

linp

A-bis Intput 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)

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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

lns

GPRS NS layer

lbssgp

>GPRS BSSGP layer

lnsdata

>GPRS NS layer data PDU

lnssignal

>GPRS NS layer signal PDU

liuup

>Iu UP layer

lpfcp

>libosmo-pfcp Packet Forwarding Control Protocol

lcsn1

>libosmo-csn1 Concrete Syntax Notation 1 codec

lio

>libosmocore IO Subsystem

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

.LOGMESSAGE

>Arbitrary message to log on given category and log level

1.2.18 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>'

1.2.19 show alarms

Command

```
show alarms
```

Parameters

show
    Show running system information

alarms
    Show current logging configuration

1.2.20 show asciidoc counters

Command

```
show asciidoc counters
```

Parameters

show
    Show running system information

asciidoc
    Asciidoc generation

counters
    Generate table of all registered counters

1.2.21 show history

Command

```
show history
```

Parameters

show
    Show running system information

history
    Display the session command history

1.2.22 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

1.2.23 show online-help

Command

```
show online-help
```

Parameters

show

    Show running system information

online-help

    Online help

1.2.24 show pid

Command

```
show pid
```

Parameters

show

    Show running system information

pid

    Displays the process ID

1.2.25 show rate-counters [skip-zero]

Command

```
show rate-counters [skip-zero]
```

Parameters

show

Show running system information

rate-counters

Show all rate counters

[skip-zero]

Skip items with total count zero

1.2.26 show stats [skip-zero]

Command

```
show stats [skip-zero]
```

Parameters

show

Show running system information

stats

Show statistical values

[skip-zero]

Skip items with total count zero

1.2.27 show stats level (global|peer|subscriber) [skip-zero]

Command

```
show stats level (global|peer|subscriber) [skip-zero]
```

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

[skip-zero]

    Skip items with total count zero

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

Command

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

Parameters

show

    Show running system information

talloc-context

    Show talloc memory hierarchy

application

    Application's context

global

    Global context (OTC_GLOBAL)

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|global|all) (full|brief|DEPTH) filter REGEXP

Command

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

Parameters

show

Show running system information

talloc-context

Show talloc memory hierarchy

application

Application's context

global

Global context (OTC_GLOBAL)

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|global|all) (full|brief|DEPTH) tree ADDRESS

Command

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

Parameters

show

Show running system information

talloc-context

Show talloc memory hierarchy

application

> Application's context

global

> Global context (OTC_GLOBAL)

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 uptime

Command

```
show uptime
```

Parameters

show

> Show running system information

uptime

> Displays how long the program has been running

1.2.32 show version

Command

```
show version
```

Parameters

show

> Show running system information

version

> Displays program version

1.2.33 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)

1.2.34 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

1.2.35 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 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

1.3.5 logging disable

Command

```
logging disable
```

Parameters

logging
>   Configure logging

disable
>   Disables logging to this vty

1.3.6 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

1.3.7 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

1.3.8 logging level (pcap|client|server|vty|tls|lglobal|llapd|linp|lmux|lmi|lmib|lsms|...

Command

```
logging level (pcap|client|server|vty|tls|lglobal|llapd|linp|lmux|lmi|lmib|lsms|lctrl| ←
    lgtp|lstats|lgsup|loap|lss7|lsccp|lsua|lm3ua|lmgcp|ljibuf|lrspro|lns|lbssgp|lnsdata ←
    |lnssignal|liuup|lpfcp|lcsn1|lio) (debug|info|notice|error|fatal)
```

Parameters

logging

Configure logging

level

Set the log level for a specified category

pcap

PCAP related functionality

client

Client related functionality

server

    Server related functionality

vty

    VTY code

tls

    TLS code

lglobal

    Library-internal global log family

llapd

    LAPD in libosmogsm

linp

    A-bis Intput 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

lns

    GPRS NS layer

lbssgp

    GPRS BSSGP layer

lnsdata

    GPRS NS layer data PDU

lnssignal

    GPRS NS layer signal PDU

liuup

    Iu UP layer

lpfcp

    libosmo-pfcp Packet Forwarding Control Protocol

lcsn1

    libosmo-csn1 Concrete Syntax Notation 1 codec

lio

    libosmocore IO Subsystem

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

1.3.9 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

1.3.10 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

1.3.11 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

1.3.12 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>')

1.3.13 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

1.3.14 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.

1.3.15 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

1.3.16 logging print thread-id (0|1)

Command

```
logging print thread-id (0|1)
```

Parameters

logging

    Configure logging

print

Log output settings

thread-id

Configure log message logging Thread ID

0

Don't prefix each log message

1

Prefix each log message with current Thread ID

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 logp (pcap|client|server|vty|tls|lglobal|llapd|linp|lmux|lmi|lmib|lsms|lctrl|lgt...

Command

```
logp (pcap|client|server|vty|tls|lglobal|llapd|linp|lmux|lmi|lmib|lsms|lctrl|lgtp| ↩
    lstats|lgsup|loap|lss7|lsccp|lsua|lm3ua|lmgcp|ljibuf|lrspro|lns|lbssgp|lnsdata| ↩
    lnssignal|liuup|lpfcp|lcsn1|lio) (debug|info|notice|error|fatal) .LOGMESSAGE
```

Parameters

logp

 Print a message on all log outputs; useful for placing markers in test logs

pcap

 PCAP related functionality

client

 Client related functionality

server

 Server related functionality

vty

 VTY code

tls

 TLS code

lglobal

 Library-internal global log family

llapd

 LAPD in libosmogsm

linp

 A-bis Intput 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

lns

GPRS NS layer

lbssgp

GPRS BSSGP layer

lnsdata

GPRS NS layer data PDU

lnssignal

GPRS NS layer signal PDU

liuup

Iu UP layer

lpfcp

libosmo-pfcp Packet Forwarding Control Protocol

lcsn1

libosmo-csn1 Concrete Syntax Notation 1 codec

lio

libosmocore IO Subsystem

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

.LOGMESSAGE

>   Arbitrary message to log on given category and log level

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   show alarms

Command

```
show alarms
```

Parameters

show

>   Show running system information

alarms

>   Show current logging configuration

1.3.22 show asciidoc counters

Command

```
show asciidoc counters
```

Parameters

show
> Show running system information

asciidoc
> Asciidoc generation

counters
> Generate table of all registered counters

1.3.23 show history

Command

```
show history
```

Parameters

show
> Show running system information

history
> Display the session command history

1.3.24 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

1.3.25 show online-help

Command

```
show online-help
```

Parameters

show

    Show running system information

online-help

    Online help

1.3.26 show rate-counters [skip-zero]

Command

```
show rate-counters [skip-zero]
```

Parameters

show

    Show running system information

rate-counters

    Show all rate counters

[skip-zero]

    Skip items with total count zero

1.3.27 show startup-config

Command

```
show startup-config
```

Parameters

show

    Show running system information

startup-config

    Contentes of startup configuration

1.3.28   show stats [skip-zero]

Command

```
show stats [skip-zero]
```

Parameters

show

  Show running system information

stats

  Show statistical values

[skip-zero]

  Skip items with total count zero

1.3.29   show stats level (global|peer|subscriber) [skip-zero]

Command

```
show stats level (global|peer|subscriber) [skip-zero]
```

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

[skip-zero]

  Skip items with total count zero

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

Command

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

Parameters

show

    Show running system information

talloc-context

    Show talloc memory hierarchy

application

    Application's context

global

    Global context (OTC_GLOBAL)

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

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

Command

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

Parameters

show

    Show running system information

talloc-context

    Show talloc memory hierarchy

application

    Application's context

global

    Global context (OTC_GLOBAL)

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

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

Command

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

Parameters

show

    Show running system information

talloc-context

    Show talloc memory hierarchy

application

    Application's context

global

    Global context (OTC_GLOBAL)

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)

1.3.33 show version

Command

```
show version
```

Parameters

show

Show running system information

version

Displays program version

1.3.34 shutdown

Command

```
shutdown
```

Parameters

shutdown

Request a shutdown of the program

1.3.35 stats report

Command

```
stats report
```

Parameters

stats

Stats related commands

report

Manurally trigger reporting of stats

1.3.36 stats reset

Command

```
stats reset
```

Parameters

stats

Stats related commands

reset

Reset all rate counter stats

1.3.37   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)

1.3.38   terminal monitor

Command

```
terminal monitor
```

Parameters

terminal
>   Set terminal line parameters

monitor
>   Copy debug output to the current terminal line

1.3.39   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

1.3.40 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

1.3.41 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 client

Command

```
client
```

Parameters

client

> Enter the client configuration

1.4.4 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

1.4.5 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

1.4.6 hostname WORD

Command

```
hostname WORD
```

Parameters

hostname

Set system's network name

WORD

This system's network name

1.4.7 line vty

Command

```
line vty
```

Parameters

line

Configure a terminal line

vty

Virtual terminal

1.4.8   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

1.4.9   log file FILENAME [blocking-io]

Command

```
log file FILENAME [blocking-io]
```

Parameters

log

Configure logging sub-system

file

Logging to text file

FILENAME

Filename

[blocking-io]

Use blocking, synchronous I/O

1.4.10   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)

1.4.11 log stderr [blocking-io]

Command

```
log stderr [blocking-io]
```

Parameters

log
   Configure logging sub-system

stderr
   Logging via STDERR of the process

[blocking-io]
   Use blocking, synchronous I/O

1.4.12 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

1.4.13   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

1.4.14   log systemd-journal [raw]

Command

```
log systemd-journal [raw]
```

Parameters

log
   Configure logging sub-system

systemd-journal
   Logging to systemd-journal

[raw]
   Offload rendering of the meta information (location, category) to systemd

1.4.15   no banner motd

Command

```
no banner motd
```

Parameters

no
   Negate a command or set its defaults

banner
   Set banner string

motd
   Strings for motd

1.4.16   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

1.4.17   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

1.4.18   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

1.4.19 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

1.4.20 no log gsmtap [HOSTNAME]

Command

```
no log gsmtap [HOSTNAME]
```

Parameters

no

Negate a command or set its defaults

log

Configure logging sub-system

gsmtap

Logging via GSMTAP

[HOSTNAME]

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

1.4.21 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

1.4.22   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

1.4.23   no log systemd-journal

Command

```
no log systemd-journal
```

Parameters

no

Negate a command or set its defaults

log

Configure logging sub-system

systemd-journal

Logging to systemd-journal

1.4.24   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

1.4.25   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)

1.4.26   no stats reporter log [NAME]

Command

```
no stats reporter log [NAME]
```

Parameters

no

Negate a command or set its defaults

stats

Configure stats sub-system

reporter

Configure a stats reporter

log

Report to the logger

[NAME]

Name of the reporter

1.4.27 no stats reporter statsd [NAME]

Command

```
no stats reporter statsd [NAME]
```

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

[NAME]
   Name of the reporter

1.4.28 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

1.4.29 password LINE

Command

```
password LINE
```

Parameters

password
   Assign the terminal connection password

LINE
   The UNENCRYPTED (cleartext) line password

1.4.30 service advanced-vty

Command

```
service advanced-vty
```

Parameters

service

Set up miscellaneous service

advanced-vty

Enable advanced mode vty interface

1.4.31 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)

1.4.32 show history

Command

```
show history
```

Parameters

show

Show running system information

history

Display the session command history

1.4.33 stats interval <0-65535>

Command

```
stats interval <0-65535>
```

Parameters

stats

Configure stats sub-system

interval

Set the reporting interval

<0-65535>

Interval in seconds (0 disables the reporting interval)

1.4.34 stats reporter log [NAME]

Command

```
stats reporter log [NAME]
```

Parameters

stats

Configure stats sub-system

reporter

Configure a stats reporter

log

Report to the logger

[NAME]

Name of the reporter

1.4.35 stats reporter statsd [NAME]

Command

```
stats reporter statsd [NAME]
```

Parameters

stats

Configure stats sub-system

reporter

Configure a stats reporter

statsd

Report to a STATSD server

[NAME]

Name of the reporter

1.4.36   stats-tcp batch-size <1-65535>

Command

```
stats-tcp batch-size <1-65535>
```

Parameters

stats-tcp

   Configure stats sub-system

batch-size

   Set the number of tcp sockets that are processed per stats polling interval

<1-65535>

   Number of sockets per interval

1.4.37   stats-tcp interval <0-65535>

Command

```
stats-tcp interval <0-65535>
```

Parameters

stats-tcp

   Configure stats sub-system

interval

   Set the tcp socket stats polling interval

<0-65535>

   Interval in seconds (0 disables the polling interval)

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 (pcap|client|server|vty|tls|lglobal|llapd|linp|lmux|lmi|lmib|lsms|...

Command

```
logging level (pcap|client|server|vty|tls|lglobal|llapd|linp|lmux|lmi|lmib|lsms|lctrl| ←
    lgtp|lstats|lgsup|loap|lss7|lsccp|lsua|lm3ua|lmgcp|ljibuf|lrspro|lns|lbssgp|lnsdata ←
    |lnssignal|liuup|lpfcp|lcsn1|lio) (debug|info|notice|error|fatal)
```

Parameters

logging

   Configure logging

level

   Set the log level for a specified category

pcap

   PCAP related functionality

client

   Client related functionality

server

   Server related functionality

vty

   VTY code

tls

   TLS code

lglobal

   Library-internal global log family

llapd

   LAPD in libosmogsm

linp

   A-bis Intput 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

lns

  GPRS NS layer

lbssgp

  GPRS BSSGP layer

lnsdata

  GPRS NS layer data PDU

lnssignal

  GPRS NS layer signal PDU

liuup

  Iu UP layer

lpfcp

  libosmo-pfcp Packet Forwarding Control Protocol

lcsn1

  libosmo-csn1 Concrete Syntax Notation 1 codec

lio

  libosmocore IO Subsystem

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 print thread-id (0|1)

Command

```
logging print thread-id (0|1)
```

Parameters

logging
    Configure logging

print
    Log output settings

thread-id
    Configure log message logging Thread ID

0
    Don't prefix each log message

1
    Prefix each log message with current Thread ID

1.5.12 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

1.5.13 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 flush-period <0-65535>

Command

```
flush-period <0-65535>
```

Parameters

flush-period

Configure stats sub-system

<0-65535>

Send all stats even if they have not changed (i.e. force the flush)every N-th reporting interval. Set to 0 to disable regular flush (default).

1.6.4 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

1.6.5 local-ip ADDR

Command

```
local-ip ADDR
```

Parameters

local-ip

Set the IP address to which we bind locally

ADDR

IP Address

1.6.6 mtu <100-65535>

Command

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

Parameters

mtu
>   Set the maximum packet size

<100-65535>
>   Size in byte

1.6.7 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

1.6.8 no mtu

Command

```
no mtu
```

Parameters

no
>   Negate a command or set its defaults

mtu
>   Set the maximum packet size

1.6.9 no prefix

Command

```
no prefix
```

Parameters

no
    Negate a command or set its defaults

prefix
    Set the item name prefix

1.6.10 prefix PREFIX

Command

```
prefix PREFIX
```

Parameters

prefix
    Set the item name prefix

PREFIX
    The prefix string

1.6.11 remote-ip ADDR

Command

```
remote-ip ADDR
```

Parameters

remote-ip
    Set the remote IP address to which we connect

ADDR
    IP Address

1.6.12 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 client

1.8.1 disable tls

Command

```
disable tls
```

Parameters

disable

  Disable

tls

  Transport Layer Security

1.8.2 enable tls

Command

```
enable tls
```

Parameters

enable

  Enable

tls

  Transport Layer Security

1.8.3 no pcap add-filter gprs

Command

```
no pcap add-filter gprs
```

Parameters

no

Negate a command or set its defaults

pcap

PCAP related functions

add-filter

Add-filter

gprs

Custom filter for GPRS

1.8.4 no pcap device NAME

Command

```
no pcap device NAME
```

Parameters

no

Negate a command or set its defaults

pcap

PCAP related functions

device

the device to filter

NAME

device name

1.8.5 no pcap-store-connection .NAME

Command

```
no pcap-store-connection .NAME
```

Parameters

no

Negate a command or set its defaults

pcap-store-connection

Configure additional PCAP store server

.NAME

Name of server

1.8.6 no tls capath

Command

```
no tls capath
```

Parameters

no

    Negate a command or set its defaults

tls

    Transport Layer Security

capath

    Trusted root certificates

1.8.7 no tls client-cert

Command

```
no tls client-cert
```

Parameters

no

    Negate a command or set its defaults

tls

    Transport Layer Security

client-cert

    Client certificate for authentication

1.8.8 no tls client-key

Command

```
no tls client-key
```

Parameters

no

    Negate a command or set its defaults

tls

    Transport Layer Security

client-key

    Client private key

1.8.9 no tls hostname

Command

```
no tls hostname
```

Parameters

no

Negate a command or set its defaults

tls

Transport Layer Security

hostname

hostname for certificate validation

1.8.10 no tls priority

Command

```
no tls priority
```

Parameters

no

Negate a command or set its defaults

tls

Transport Layer Security

priority

Priority string for GNUtls

1.8.11 no tls verify-cert

Command

```
no tls verify-cert
```

Parameters

no

Negate a command or set its defaults

tls

Transport Layer Security

verify-cert

Verify certificates

1.8.12 pcap add-filter gprs

Command

```
pcap add-filter gprs
```

Parameters

pcap
> PCAP related functions

add-filter
> Add-filter

gprs
> Custom filtering for GPRS

1.8.13 pcap detect-loop (0|1)

Command

```
pcap detect-loop (0|1)
```

Parameters

pcap
> PCAP related functions

detect-loop
> detect loop and drop

0
> No detection

1
> Detection

1.8.14 pcap device NAME

Command

```
pcap device NAME
```

Parameters

pcap
> PCAP related functions

device
> the device to filter

NAME
> device name

1.8.15 pcap file-format (pcap|pcapng)

Command

```
pcap file-format (pcap|pcapng)
```

Parameters

pcap
> PCAP related functions

file-format
> The pcap file format to use

pcap
> Libpcap Capture File Format (.pcap)

pcapng
> PCAP Next Generation Capture File Format (.pcapng)

1.8.16 pcap filter .NAME

Command

```
pcap filter .NAME
```

Parameters

pcap
> PCAP related functions

filter
> filter string in pcap syntax

.NAME
> filter

1.8.17 pcap snaplen <1-262144>

Command

```
pcap snaplen <1-262144>
```

Parameters

pcap
> PCAP related functions

snaplen
> snapshot length

<1-262144>
> Bytes

1.8.18 pcap-store-connection .NAME

Command

```
pcap-store-connection .NAME
```

Parameters

pcap-store-connection

  Configure additional PCAP store server

.NAME

  Name of server

1.8.19 protocol (osmo-pcap|ipip)

Command

```
protocol (osmo-pcap|ipip)
```

Parameters

protocol

  Configure the Protocol used for transfer

osmo-pcap

  OsmoPCAP protocol (over TCP)

ipip

  IPIP encapsulation (for real-time streaming to wireshark)

1.8.20 server ip A.B.C.D

Command

```
server ip A.B.C.D
```

Parameters

server

  Server string

ip

  IP Address of the server

A.B.C.D

  IP

1.8.21 server port <1-65535>

Command

```
server port <1-65535>
```

Parameters

server

 Server string

port

 Port

<1-65535>

 Number

1.8.22 source ip A.B.C.D

Command

```
source ip A.B.C.D
```

Parameters

source

 Server string

ip

 Source IP Address

A.B.C.D

 IP

1.8.23 tls capath .PATH

Command

```
tls capath .PATH
```

Parameters

tls

 Transport Layer Security

capath

 Trusted root certificates

.PATH

 Filename

1.8.24   tls client-cert .PATH

Command

```
tls client-cert .PATH
```

Parameters

tls

   Transport Layer Security

client-cert

   Client certificate for authentication

.PATH

   Filename

1.8.25   tls client-key .PATH

Command

```
tls client-key .PATH
```

Parameters

tls

   Transport Layer Security

client-key

   Client private key

.PATH

   Filename

1.8.26   tls hostname NAME

Command

```
tls hostname NAME
```

Parameters

tls

   Transport Layer Security

hostname

   hostname for certificate validation

NAME

   name

1.8.27 tls log-level <0-255>

Command

```
tls log-level <0-255>
```

Parameters

tls

Transport Layer Security

log-level

Log-level

<0-255>

GNUtls debug level

1.8.28 tls priority STR

Command

```
tls priority STR
```

Parameters

tls

Transport Layer Security

priority

Priority string for GNUtls

STR

Priority string

1.8.29 tls verify-cert

Command

```
tls verify-cert
```

Parameters

tls

Transport Layer Security

verify-cert

Verify certificates

1.8.30 wqueue max-length <1-4294967295>

Command

```
wqueue max-length <1-4294967295>
```

Parameters

wqueue
> Configure the write-queue used for transfer

max-length
> Configure the maximum amount of packets to be stored in the write-queue

<1-4294967295>
> Maximum amount of packets before dropping starts

1.9 server

1.9.1 connect

Command

```
connect
```

Parameters

connect
> Connect to the storage

1.9.2 disable tls

Command

```
disable tls
```

Parameters

disable
> Disable

tls
> Transport Layer Security

1.9.3 disconnect

Command

```
disconnect
```

Parameters

disconnect

>   Disconnect to the storage

1.9.4 enable tls

Command

```
enable tls
```

Parameters

enable

>   Enable

tls

>   Transport Layer Security

1.9.5 no tls capath

Command

```
no tls capath
```

Parameters

no

>   Negate a command or set its defaults

tls

>   Transport Layer Security

capath

>   Trusted root certificates

1.9.6 no tls client-cert

Command

```
no tls client-cert
```

Parameters

no

Negate a command or set its defaults

tls

Transport Layer Security

client-cert

Client certificate for authentication

1.9.7 no tls client-key

Command

```
no tls client-key
```

Parameters

no

Negate a command or set its defaults

tls

Transport Layer Security

client-key

Client private key

1.9.8 no tls hostname

Command

```
no tls hostname
```

Parameters

no

Negate a command or set its defaults

tls

Transport Layer Security

hostname

hostname for certificate validation

1.9.9 no tls priority

Command

```
no tls priority
```

Parameters

no

    Negate a command or set its defaults

tls

    Transport Layer Security

priority

    Priority string for GNUtls

1.9.10 no tls verify-cert

Command

```
no tls verify-cert
```

Parameters

no

    Negate a command or set its defaults

tls

    Transport Layer Security

verify-cert

    Verify certificates

1.9.11 protocol (osmo-pcap|ipip)

Command

```
protocol (osmo-pcap|ipip)
```

Parameters

protocol

    Configure the Protocol used for transfer

osmo-pcap

    OsmoPCAP protocol (over TCP)

ipip

    IPIP encapsulation (for real-time streaming to wireshark)

1.9.12 server ip A.B.C.D

Command

```
server ip A.B.C.D
```

Parameters

server
    Server string

ip
    IP Address of the server

A.B.C.D
    IP

1.9.13 server port <1-65535>

Command

```
server port <1-65535>
```

Parameters

server
    Server string

port
    Port

<1-65535>
    Number

1.9.14 source ip A.B.C.D

Command

```
source ip A.B.C.D
```

Parameters

source
    Server string

ip
    Source IP Address

A.B.C.D
    IP

1.9.15 tls capath .PATH

Command

```
tls capath .PATH
```

Parameters

tls

Transport Layer Security

capath

Trusted root certificates

.PATH

Filename

1.9.16 tls client-cert .PATH

Command

```
tls client-cert .PATH
```

Parameters

tls

Transport Layer Security

client-cert

Client certificate for authentication

.PATH

Filename

1.9.17 tls client-key .PATH

Command

```
tls client-key .PATH
```

Parameters

tls

Transport Layer Security

client-key

Client private key

.PATH

Filename

1.9.18   tls hostname NAME

Command

```
tls hostname NAME
```

Parameters

tls

Transport Layer Security

hostname

hostname for certificate validation

NAME

name

1.9.19   tls log-level <0-255>

Command

```
tls log-level <0-255>
```

Parameters

tls

Transport Layer Security

log-level

Log-level

<0-255>

GNUtls debug level

1.9.20   tls priority STR

Command

```
tls priority STR
```

Parameters

tls

Transport Layer Security

priority

Priority string for GNUtls

STR

Priority string

1.9.21 tls verify-cert

Command

```
tls verify-cert
```

Parameters

tls

  Transport Layer Security

verify-cert

  Verify certificates