

OsmoBTS VTY Reference

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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 sismocom 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

1.1.1 echo .MESSAGE

Command

```
echo .MESSAGE
```

Parameters

echo

Echo a message back to the vty

.MESSAGE

The message to echo

1.1.2 enable

Command

```
enable
```

Parameters

enable

Turn on privileged mode command

1.1.3 exit

Command

```
exit
```

Parameters

exit

Exit current mode and down to previous mode

1.1.4 help

Command

```
help
```

Parameters

help

Description of the interactive help system

1.1.5 list

Command

```
list
```

Parameters

list

Print command list

1.1.6 logging color (0|1)

Command

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

Parameters

logging

Configure log message to this terminal

color

Configure color-printing for log messages

0

Don't use color for printing messages

1

Use color for printing messages

1.1.7 logging disable

Command

```
logging disable
```

Parameters

logging

Configure log message to this terminal

disable

Disables logging to this vty

1.1.8 logging enable

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

Command

```
logging enable
```

Parameters

logging

Configure log message to this terminal

enable

Enables logging to this vty

1.1.9 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 log message to this terminal

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

1.1.10 logging level (all|rs|oml|rl|rr|meas|pag|llc|llp|dsp|pcu|ho|abis|rtp|lglobal|l...

Command

```
logging level (all|rs|oml|rl|rr|meas|pag|llc|llp|dsp|pcu|ho|abis|rtp|lglobal|llapd| ↵
linp|lmux|lmi|lmib|lsms|lctrl|lgtp) (everything|debug|info|notice|error|fatal)
```

Parameters

logging

Configure log message to this terminal

level

Set the log level for a specified category

all

Global setting for all subsystems

rsl

A-bis Radio Signalling Link (RSL)

oml

A-bis Network Management / O&M (NM/OML)

rll

A-bis Radio Link Layer (RLL)

rr

Layer3 Radio Resource (RR)

meas

Radio Measurement Processing

pag

Paging Subsystem

l1c

Layer 1

l1p

Layer 1 Primitives

dsp

DSP Trace Messages

pcu

PCU interface

ho

Handover

abis

A-bis Input Subsystem

rtp

Realtime Transfer Protocol

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
everything	Don't use. It doesn't log anything
debug	Log debug messages and higher levels
info	Log informational messages and higher levels
notice	Log noticable messages and higher levels
error	Log error messages and higher levels
fatal	Log only fatal messages

1.1.11 logging print category (0|1)

Command

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

Parameters

logging

Configure log message to this terminal

print

Log output settings

category

Configure log message

0

Don't prefix each log message

1

Prefix each log message with category/subsystem name

1.1.12 logging print extended-timestamp (0|1)

Command

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

Parameters

logging

Configure log message to this terminal

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

1.1.13 logging set log mask MASK

Command

```
logging set log mask MASK
```

Parameters

logging

Configure log message to this terminal

set

Decide which categories to output.

log

Log commands

mask

Mask commands

MASK

The logmask to use

1.1.14 logging set-log-mask MASK

Command

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

Parameters

logging

Configure log message to this terminal

set-log-mask

Set the logmask of this logging target

MASK

The logmask to use

1.1.15 logging timestamp (0|1)

Command

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

Parameters

logging

Configure log message to this terminal

timestamp

Configure log message timestamping

0

Don't prefix each log message

1

Prefix each log message with current timestamp

1.1.16 no trx <0-0> dsp-trace-flag (debug|l1_warning|error|l1_rx_msg|l1_rx_msg_byte|l1_...

Command

```
no trx <0-0> dsp-trace-flag (debug|l1_warning|error|l1_rx_msg|l1_rx_msg_byte|l1_tx_msg| ↔  
l1_tx_msg_byte|mph_cnf|mph_ind|mph_req|ph_ind|ph_req|phy_rf|phy_msg_byte|mode| ↔  
tdma_info|bad_crc|ph_ind_byte|ph_req_byte|device_msg|rach_info|log_ch_info|memory| ↔  
profiling|test_comment|test|status)
```

Parameters

no

Negate a command or set its defaults

trx
 Transceiver related commands

<0-0>
 TRX number

dsp-trace-flag
 DSP Trace Flag

debug
 Debug Region

l1_warning
 L1 Warning Region

error
 Error Region

l1_rx_msg
 L1_RX_MSG Region

l1_rx_msg_byte
 L1_RX_MSG_BYTE Region

l1_tx_msg
 L1_TX_MSG Region

l1_tx_msg_byte
 L1_TX_MSG_BYTE Region

mph_cnf
 MphConfirmation Region

mph_ind
 MphIndication Region

mph_req
 MphRequest Region

ph_ind
 PhIndication Region

ph_req
 PhRequest Region

phy_rf
 PhyRF Region

phy_msg_byte
 PhyRF Message Region

mode
 Mode Region

tdma_info
 TDMA Info Region

bad_crc
 Bad CRC Region

ph_ind_byte
 PH_IND_BYTE

ph_req_byte
 PH_REQ_BYTE

device_msg
 Device Message Region

rach_info
 RACH Info

log_ch_info
 LOG_CH_INFO

memory
 Memory Region

profiling
 Profiling Region

test_comment
 Test Comments

test
 Test Region

status
 Status Region

1.1.17 show alarms

Command

```
show alarms
```

Parameters

show

Show running system information

alarms

Show current logging configuration

1.1.18 show bts <0-255>

Command

```
show bts <0-255>
```

Parameters

show

Show running system information

bts

Display information about a BTS

<0-255>

BTS number

1.1.19 show e1_driver

Command

```
show e1_driver
```

Parameters

show

Show running system information

e1_driver

Display information about available E1 drivers

1.1.20 show e1_line [line_nr] [stats]

Command

```
show e1_line [line_nr] [stats]
```

Parameters

show

Show running system information

e1_line

Display information about a E1 line

[line_nr]

E1 Line Number

[stats]

Include statistics

1.1.21 show e1_timeslot [line_nr] [ts_nr]

Command

```
show e1_timeslot [line_nr] [ts_nr]
```

Parameters

show

Show running system information

e1_timeslot

Display information about a E1 timeslot

[line_nr]

E1 Line Number

[ts_nr]

E1 Timeslot Number

1.1.22 show history

Command

```
show history
```

Parameters

show

Show running system information

history

Display the session command history

1.1.23 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

1.1.24 show online-help

Command

```
show online-help
```

Parameters

show

Show running system information

online-help

Online help

1.1.25 show trx <0-0> clock-source

Command

```
show trx <0-0> clock-source
```

Parameters

show

Show running system information

trx

Transceiver related commands

<0-0>

TRX number

clock-source

Display the clock source for this TRX

1.1.26 show trx <0-0> dsp-trace-flags

Command

```
show trx <0-0> dsp-trace-flags
```

Parameters

show

Show running system information

trx

Transceiver related commands

<0-0>

TRX number

dsp-trace-flags

Display the current setting of the DSP trace flags

1.1.27 show trx <0-0> system-information

Command

```
show trx <0-0> system-information
```

Parameters

show

Show running system information

trx

Transceiver related commands

<0-0>

TRX number

system-information

Display information about system

1.1.28 show version

Command

```
show version
```

Parameters

show

Show running system information

version

Displays program version

1.1.29 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)

1.1.30 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

1.1.31 trx <0-0> dsp-trace-flag (debug|l1_warning|error|l1_rx_msg|l1_rx_msg_byte|l1_tx_...

Command

```
trx <0-0> dsp-trace-flag (debug|l1_warning|error|l1_rx_msg|l1_rx_msg_byte|l1_tx_msg| ↔
l1_tx_msg_byte|mph_cnf|mph_ind|mph_req|ph_ind|ph_req|phy_rf|phy_msg_byte|mode| ↔
tdma_info|bad_crc|ph_ind_byte|ph_req_byte|device_msg|rach_info|log_ch_info|memory| ↔
profiling|test_comment|test|status)
```

Parameters

trx

Transceiver related commands

<0-0>

TRX number

dsp-trace-flag

DSP Trace Flag

debug

Debug Region

l1_warning

L1 Warning Region

error

Error Region

l1_rx_msg

L1_RX_MSG Region

l1_rx_msg_byte

L1_RX_MSG_BYTE Region

l1_tx_msg

L1_TX_MSG Region

l1_tx_msg_byte
L1_TX_MSG_BYTE Region

mph_cnf
MphConfirmation Region

mph_ind
MphIndication Region

mph_req
MphRequest Region

ph_ind
PhIndication Region

ph_req
PhRequest Region

phy_rf
PhyRF Region

phy_msg_byte
PhyRF Message Region

mode
Mode Region

tdma_info
TDMA Info Region

bad_crc
Bad CRC Region

ph_ind_byte
PH_IND_BYTE

ph_req_byte
PH_REQ_BYTE

device_msg
Device Message Region

rach_info
RACH Info

log_ch_info
LOG_CH_INFO

memory
Memory Region

profiling
Profiling Region

test_comment
Test Comments

test

Test Region

status

Status Region

1.1.32 who

Command

```
who
```

Parameters

who

Display who is on vty

1.2

1.2.1 bts <0-0> trx <0-0> ts <0-7> lchan <0-1> rtp jitter-buffer <0-10000>

Command

```
bts <0-0> trx <0-0> ts <0-7> lchan <0-1> rtp jitter-buffer <0-10000>
```

Parameters

bts

BTS related commands

<0-0>

BTS number

trx

TRX related commands

<0-0>

TRX number

ts

timeslot related commands

<0-7>

timeslot number

lchan

logical channel commands

<0-1>

logical channel number

rtp

RTP settings

jitter-buffer

Jitter buffer

<0-10000>

Size of jitter buffer in (ms)

1.2.2 configure terminal

Command

```
configure terminal
```

Parameters

configure

Configuration from vty interface

terminal

Configuration terminal

1.2.3 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)

1.2.4 disable

Command

```
disable
```

Parameters

disable

Turn off privileged mode command

1.2.5 echo .MESSAGE

Command

```
echo .MESSAGE
```

Parameters

echo

Echo a message back to the vty

.MESSAGE

The message to echo

1.2.6 exit

Command

```
exit
```

Parameters

exit

Exit current mode and down to previous mode

1.2.7 help

Command

```
help
```

Parameters

help

Description of the interactive help system

1.2.8 list

Command

```
list
```

Parameters

list

Print command list

1.2.9 logging color (0|1)

Command

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

Parameters

logging

Configure log message to this terminal

color

Configure color-printing for log messages

0

Don't use color for printing messages

1

Use color for printing messages

1.2.10 logging disable

Command

```
logging disable
```

Parameters

logging

Configure log message to this terminal

disable

Disables logging to this vty

1.2.11 logging enable

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

Command

```
logging enable
```

Parameters

logging

Configure log message to this terminal

enable

Enables logging to this vty

1.2.12 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 log message to this terminal

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

1.2.13 logging level (all|rs|oml|rll|rr|meas|pag|llc|llp|dsp|pcu|ho|abis|rtp|lglobal|l...

Command

```
logging level (all|rs|oml|rll|rr|meas|pag|llc|llp|dsp|pcu|ho|abis|rtp|lglobal|llapd| ←  
linp|lmux|lmi|lmib|lsms|lctrl|lgtp) (everything|debug|info|notice|error|fatal)
```

Parameters

logging

Configure log message to this terminal

level

Set the log level for a specified category

all

Global setting for all subsystems

rs

A-bis Radio Signalling Link (RSL)

oml

A-bis Network Management / O&M (NM/OML)

rl1
A-bis Radio Link Layer (RLL)

rr
Layer3 Radio Resource (RR)

meas
Radio Measurement Processing

pag
Paging Subsystem

l1c
Layer 1

l1p
Layer 1 Primitives

dsp
DSP Trace Messages

pcu
PCU interface

ho
Handover

abis
A-bis Input Subsystem

rtp
Realtime Transfer Protocol

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

everything

Don't use. It doesn't log anything

debug

Log debug messages and higher levels

info

Log informational messages and higher levels

notice

Log noticable messages and higher levels

error

Log error messages and higher levels

fatal

Log only fatal messages

1.2.14 logging print category (0|1)

Command

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

Parameters**logging**

Configure log message to this terminal

print

Log output settings

category

Configure log message

0

Don't prefix each log message

1

Prefix each log message with category/subsystem name

1.2.15 logging print extended-timestamp (0|1)

Command

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

Parameters

logging

Configure log message to this terminal

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

1.2.16 logging set log mask MASK

Command

```
logging set log mask MASK
```

Parameters

logging

Configure log message to this terminal

set

Decide which categories to output.

log

Log commands

mask

Mask commands

MASK

The logmask to use

1.2.17 logging set-log-mask MASK

Command

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

Parameters

logging

Configure log message to this terminal

set-log-mask

Set the logmask of this logging target

MASK

The logmask to use

1.2.18 logging timestamp (0|1)

Command

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

Parameters

logging

Configure log message to this terminal

timestamp

Configure log message timestamping

0

Don't prefix each log message

1

Prefix each log message with current timestamp

1.2.19 no trx <0-0> <0-7> loopback <0-1>

Command

```
no trx <0-0> <0-7> loopback <0-1>
```

Parameters

no

Negate a command or set its defaults

trx

Transceiver related commands

<0-0>

TRX number

<0-7>

Timeslot number

loopback

Set TCH loopback

<0-1>

Logical Channel Number

1.2.20 no trx <0-0> dsp-trace-flag (debug|l1_warning|error|l1_rx_msg|l1_rx_msg_byte|l1_...

Command

```
no trx <0-0> dsp-trace-flag (debug|l1_warning|error|l1_rx_msg|l1_rx_msg_byte|l1_tx_msg| ↔  
l1_tx_msg_byte|mph_cnf|mph_ind|mph_req|ph_ind|ph_req|phy_rf|phy_msg_byte|mode| ↔  
tdma_info|bad_crc|ph_ind_byte|ph_req_byte|device_msg|rach_info|log_ch_info|memory| ↔  
profiling|test_comment|test|status)
```

Parameters

no

Negate a command or set its defaults

trx

Transceiver related commands

<0-0>

TRX number

dsp-trace-flag

DSP Trace Flag

debug

Debug Region

l1_warning

L1 Warning Region

error

Error Region

l1_rx_msg

L1_RX_MSG Region

l1_rx_msg_byte

L1_RX_MSG_BYTE Region

l1_tx_msg

L1_TX_MSG Region

l1_tx_msg_byte

L1_TX_MSG_BYTE Region

mph_cnf

MphConfirmation Region

mph_ind

MphIndication Region

mph_req

MphRequest Region

ph_ind

PhIndication Region

ph_req
PhRequest Region

phy_rf
PhyRF Region

phy_msg_byte
PhyRF Message Region

mode
Mode Region

tdma_info
TDMA Info Region

bad_crc
Bad CRC Region

ph_ind_byte
PH_IND_BYTE

ph_req_byte
PH_REQ_BYTE

device_msg
Device Message Region

rach_info
RACH Info

log_ch_info
LOG_CH_INFO

memory
Memory Region

profiling
Profiling Region

test_comment
Test Comments

test
Test Region

status
Status Region

1.2.21 show alarms

Command

```
show alarms
```

Parameters

show

Show running system information

alarms

Show current logging configuration

1.2.22 show bts <0-255>

Command

```
show bts <0-255>
```

Parameters

show

Show running system information

bts

Display information about a BTS

<0-255>

BTS number

1.2.23 show e1_driver

Command

```
show e1_driver
```

Parameters

show

Show running system information

e1_driver

Display information about available E1 drivers

1.2.24 show e1_line [line_nr] [stats]

Command

```
show e1_line [line_nr] [stats]
```

Parameters

show

Show running system information

e1_line

Display information about a E1 line

[line_nr]

E1 Line Number

[stats]

Include statistics

1.2.25 show e1_timeslot [line_nr] [ts_nr]

Command

```
show e1_timeslot [line_nr] [ts_nr]
```

Parameters

show

Show running system information

e1_timeslot

Display information about a E1 timeslot

[line_nr]

E1 Line Number

[ts_nr]

E1 Timeslot Number

1.2.26 show history

Command

```
show history
```

Parameters

show

Show running system information

history

Display the session command history

1.2.27 show logging vty

Command

```
show logging vty
```

Parameters

show

Show running system information

logging

Show current logging configuration

vtty

Show current logging configuration for this vty

1.2.28 show online-help

Command

```
show online-help
```

Parameters

show

Show running system information

online-help

Online help

1.2.29 show running-config

Command

```
show running-config
```

Parameters

show

Show running system information

running-config

running configuration

1.2.30 show startup-config

Command

```
show startup-config
```

Parameters

show

Show running system information

startup-config

Contentes of startup configuration

1.2.31 show trx <0-0> clock-source

Command

```
show trx <0-0> clock-source
```

Parameters

show

Show running system information

trx

Transceiver related commands

<0-0>

TRX number

clock-source

Display the clock source for this TRX

1.2.32 show trx <0-0> dsp-trace-flags

Command

```
show trx <0-0> dsp-trace-flags
```

Parameters

show

Show running system information

trx

Transceiver related commands

<0-0>

TRX number

dsp-trace-flags

Display the current setting of the DSP trace flags

1.2.33 show trx <0-0> system-information

Command

```
show trx <0-0> system-information
```

Parameters

show

Show running system information

trx

Transceiver related commands

<0-0>

TRX number

system-information

Display information about system

1.2.34 show version

Command

```
show version
```

Parameters

show

Show running system information

version

Displays program version

1.2.35 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)

1.2.36 terminal monitor

Command

```
terminal monitor
```

Parameters

terminal

Set terminal line parameters

monitor

Copy debug output to the current terminal line

1.2.37 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

1.2.38 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

1.2.39 `trx <0-0> <0-7> (activate|deactivate) <0-7>`

Command

```
trx <0-0> <0-7> (activate|deactivate) <0-7>
```

Parameters

trx

Transceiver related commands

<0-0>

TRX number

<0-7>

Timeslot number

activate

Activate Logical Channel

deactivate

Deactivate Logical Channel

<0-7>

Logical Channel Number

1.2.40 `trx <0-0> <0-7> loopback <0-1>`

Command

```
trx <0-0> <0-7> loopback <0-1>
```

Parameters

trx

Transceiver related commands

<0-0>

TRX number

<0-7>

Timeslot number

loopback

Set TCH loopback

<0-1>

Logical Channel Number

1.2.41 `trx <0-0> dsp-trace-flag (debug|l1_warning|error|l1_rx_msg|l1_rx_msg_byte|l1_tx_...`

Command

```
trx <0-0> dsp-trace-flag (debug|l1_warning|error|l1_rx_msg|l1_rx_msg_byte|l1_tx_msg| ↵  
l1_tx_msg_byte|mph_cnf|mph_ind|mph_req|ph_ind|ph_req|phy_rf|phy_msg_byte|mode| ↵  
tdma_info|bad_crc|ph_ind_byte|ph_req_byte|device_msg|rach_info|log_ch_info|memory| ↵  
profiling|test_comment|test|status)
```

Parameters

trx

Transceiver related commands

<0-0>

TRX number

dsp-trace-flag

DSP Trace Flag

debug

Debug Region

l1_warning

L1 Warning Region

error

Error Region

l1_rx_msg

L1_RX_MSG Region

l1_rx_msg_byte

L1_RX_MSG_BYTE Region

l1_tx_msg

L1_TX_MSG Region

l1_tx_msg_byte

L1_TX_MSG_BYTE Region

mph_cnf

MphConfirmation Region

mph_ind

MphIndication Region

mph_req

MphRequest Region

ph_ind

PhIndication Region

ph_req

PhRequest Region

phy_rf
PhyRF Region

phy_msg_byte
PhyRF Message Region

mode
Mode Region

tdma_info
TDMA Info Region

bad_crc
Bad CRC Region

ph_ind_byte
PH_IND_BYTE

ph_req_byte
PH_REQ_BYTE

device_msg
Device Message Region

rach_info
RACH Info

log_ch_info
LOG_CH_INFO

memory
Memory Region

profiling
Profiling Region

test_comment
Test Comments

test
Test Region

status
Status Region

1.2.42 **trx <0-0> rf-clock-info correct**

Command

```
trx <0-0> rf-clock-info correct
```

Parameters

trx

Transceiver related commands

<0-0>

TRX number

rf-clock-info

RF Clock Information

correct

Apply

1.2.43 **trx <0-0> rf-clock-info reset**

Command

```
trx <0-0> rf-clock-info reset
```

Parameters

trx

Transceiver related commands

<0-0>

TRX number

rf-clock-info

RF Clock Information

reset

Reset the counter

1.2.44 **trx <0-0> tx-power <-110-100>**

Command

```
trx <0-0> tx-power <-110-100>
```

Parameters

trx

Transceiver related commands

<0-0>

TRX number

tx-power

Set transmit power (override BSC)

<-110-100>

Transmit power in dBm

1.2.45 who

Command

```
who
```

Parameters

who

Display who is on vty

1.2.46 write

Command

```
write
```

Parameters

write

Write running configuration to memory, network, or terminal

1.2.47 write file

Command

```
write file
```

Parameters

write

Write running configuration to memory, network, or terminal

file

Write to configuration file

1.2.48 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)

1.2.49 write terminal

Command

```
write terminal
```

Parameters

write

Write running configuration to memory, network, or terminal

terminal

Write to terminal

1.3

1.3.1 banner motd default

Command

```
banner motd default
```

Parameters

banner

Set banner string

motd

Strings for motd

default

Default string

1.3.2 banner motd file [FILE]

Command

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

Parameters

banner

Set banner

motd

Banner for motd

file

Banner from a file

[FILE]

Filename

1.3.3 bts BTS_NR

Command

```
bts BTS_NR
```

Parameters

bts

Select a BTS to configure

BTS_NR

BTS Number

1.3.4 e1_input

Command

```
e1_input
```

Parameters

e1_input

Configure E1/T1/J1 TDM input

1.3.5 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

1.3.6 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

1.3.7 end

Command

```
end
```

Parameters

end

End current mode and change to enable mode.

1.3.8 exit

Command

```
exit
```

Parameters

exit

Exit current mode and down to previous mode

1.3.9 help

Command

```
help
```

Parameters

help

Description of the interactive help system

1.3.10 hostname WORD

Command

```
hostname WORD
```

Parameters

hostname

Set system's network name

WORD

This system's network name

1.3.11 line vty

Command

```
line vty
```

Parameters

line

Configure a terminal line

vtty

Virtual terminal

1.3.12 list

Command

```
list
```

Parameters

list

Print command list

1.3.13 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

1.3.14 log file .FILENAME

Command

```
log file .FILENAME
```

Parameters

log

Configure logging sub-system

file

Logging to text file

.FILENAME

Filename

1.3.15 log stderr

Command

```
log stderr
```

Parameters

log

Configure logging sub-system

stderr

Logging via STDERR of the process

1.3.16 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

1.3.17 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

1.3.18 no banner motd

Command

```
no banner motd
```

Parameters

no
 Negate a command or set its defaults

banner
 Set banner string

motd
 Strings for motd

1.3.19 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

1.3.20 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

1.3.21 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

1.3.22 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

1.3.23 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

1.3.24 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

1.3.25 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

1.3.26 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)

1.3.27 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

1.3.28 password LINE

Command

```
password LINE
```

Parameters

password

Assign the terminal connection password

LINE

The UNENCRYPTED (cleartext) line password

1.3.29 service advanced-vty

Command

```
service advanced-vty
```

Parameters

service

Set up miscellaneous service

advanced-vty

Enable advanced mode vty interface

1.3.30 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)

1.3.31 show history

Command

```
show history
```

Parameters

show

Show running system information

history

Display the session command history

1.3.32 show running-config

Command

```
show running-config
```

Parameters

show

Show running system information

running-config

running configuration

1.3.33 write

Command

```
write
```

Parameters

write

Write running configuration to memory, network, or terminal

1.3.34 write file

Command

```
write file
```

Parameters

write

Write running configuration to memory, network, or terminal

file

Write to configuration file

1.3.35 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)

1.3.36 write terminal

Command

```
write terminal
```

Parameters

write

Write running configuration to memory, network, or terminal

terminal

Write to terminal

1.4

1.4.1 end

Command

```
end
```

Parameters

end

End current mode and change to enable mode.

1.4.2 exit

Command

```
exit
```

Parameters

exit

Exit current mode and down to previous mode

1.4.3 help

Command

```
help
```

Parameters

help

Description of the interactive help system

1.4.4 list

Command

```
list
```

Parameters

list

Print command list

1.4.5 logging color (0|1)

Command

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

Parameters

logging

Configure log message to this terminal

color

Configure color-printing for log messages

0

Don't use color for printing messages

1

Use color for printing messages

1.4.6 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 log message to this terminal

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

1.4.7 logging level (all|rs|oml|rll|rr|meas|pag|l1c|l1p|dsp|pcu|ho|abis|rtp|lglobal|l...

Command

```
logging level (all|rs|oml|rll|rr|meas|pag|l1c|l1p|dsp|pcu|ho|abis|rtp|lglobal|llapd| ←  
linp|lmux|lmi|lmib|lsms|lctrl|lgtp) (everything|debug|info|notice|error|fatal)
```

Parameters

logging

Configure log message to this terminal

level

Set the log level for a specified category

all

Global setting for all subsystems

rs

A-bis Radio Signalling Link (RSL)

oml

A-bis Network Management / O&M (NM/OML)

rl1
A-bis Radio Link Layer (RLL)

rr
Layer3 Radio Resource (RR)

meas
Radio Measurement Processing

pag
Paging Subsystem

l1c
Layer 1

l1p
Layer 1 Primitives

dsp
DSP Trace Messages

pcu
PCU interface

ho
Handover

abis
A-bis Input Subsystem

rtp
Realtime Transfer Protocol

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

everything

Don't use. It doesn't log anything

debug

Log debug messages and higher levels

info

Log informational messages and higher levels

notice

Log noticable messages and higher levels

error

Log error messages and higher levels

fatal

Log only fatal messages

1.4.8 logging print category (0|1)

Command

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

Parameters**logging**

Configure log message to this terminal

print

Log output settings

category

Configure log message

0

Don't prefix each log message

1

Prefix each log message with category/subsystem name

1.4.9 logging print extended-timestamp (0|1)

Command

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

Parameters

logging

Configure log message to this terminal

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

1.4.10 logging timestamp (0|1)

Command

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

Parameters

logging

Configure log message to this terminal

timestamp

Configure log message timestamping

0

Don't prefix each log message

1

Prefix each log message with current timestamp

1.4.11 show running-config

Command

```
show running-config
```

Parameters

show

Show running system information

running-config

running configuration

1.4.12 write

Command

```
write
```

Parameters

write

Write running configuration to memory, network, or terminal

1.4.13 write file

Command

```
write file
```

Parameters

write

Write running configuration to memory, network, or terminal

file

Write to configuration file

1.4.14 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)

1.4.15 write terminal

Command

```
write terminal
```

Parameters

write

Write running configuration to memory, network, or terminal

terminal

Write to terminal

1.5 E1/J1/T1 Configuration Node

This is the configuration for E1/J1/T1/IP configuration for mISDN, DAHDI or IP based connectivity.

1.5.1 e1_line <0-255> driver (misdn|misdn_lapd|dahdi|ipa)

Command

```
e1_line <0-255> driver (misdn|misdn_lapd|dahdi|ipa)
```

Parameters

e1_line

Configure E1/T1/J1 Line

<0-255>

Line Number

driver

Set driver for this line

misdn

mISDN supported E1 Card (kernel LAPD)

misdn_lapd

mISDN supported E1 Card (userspace LAPD)

dahdi

DAHDI supported E1/T1/J1 Card

ipa

IPA TCP/IP input

1.5.2 e1_line <0-255> keepalive

Command

```
e1_line <0-255> keepalive
```

Parameters

e1_line

Configure E1/T1/J1 Line

<0-255>

Line Number

keepalive

Enable keep-alive probing

1.5.3 e1_line <0-255> keepalive <1-300> <1-20> <1-300>

Command

```
e1_line <0-255> keepalive <1-300> <1-20> <1-300>
```

Parameters

e1_line

Configure E1/T1/J1 Line

<0-255>

Line Number

keepalive

Enable keep-alive probing

<1-300>

Idle interval in seconds before probes are sent

<1-20>

Number of probes to sent

<1-300>

Delay between probe packets in seconds

1.5.4 e1_line <0-255> name .LINE

Command

```
e1_line <0-255> name .LINE
```

Parameters

e1_line

Configure E1/T1/J1 Line

<0-255>

Line Number

name

Set name for this line

.LINE

Human readable name

1.5.5 e1_line <0-255> port <0-255>

Command

```
e1_line <0-255> port <0-255>
```

Parameters

e1_line

Configure E1/T1/J1 Line

<0-255>

Line Number

port

Set physical port/span/card number

<0-255>

E1/T1 Port/Span/Card number

1.5.6 end

Command

```
end
```

Parameters

end

End current mode and change to enable mode.

1.5.7 exit

Command

```
exit
```

Parameters

exit

Exit current mode and down to previous mode

1.5.8 help

Command

```
help
```

Parameters

help

Description of the interactive help system

1.5.9 list

Command

```
list
```

Parameters

list

Print command list

1.5.10 no e1_line <0-255> keepalive

Command

```
no e1_line <0-255> keepalive
```

Parameters

no

Negate a command or set its defaults

e1_line

Configure E1/T1/J1 Line

<0-255>

Line Number

keepalive

Enable keep-alive probing

1.5.11 show running-config

Command

```
show running-config
```

Parameters

show

Show running system information

running-config

running configuration

1.5.12 write

Command

```
write
```

Parameters

write

Write running configuration to memory, network, or terminal

1.5.13 write file

Command

```
write file
```

Parameters

write

Write running configuration to memory, network, or terminal

file

Write to configuration file

1.5.14 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)

1.5.15 write terminal

Command

```
write terminal
```

Parameters

write

Write running configuration to memory, network, or terminal

terminal

Write to terminal

1.6

1.6.1 agch-queue-mgmt default

Command

```
agch-queue-mgmt default
```

Parameters

agch-queue-mgmt

AGCH queue mgmt

default

Reset clean parameters to default values

1.6.2 agch-queue-mgmt threshold <0-100> low <0-100> high <0-100000>

Command

```
agch-queue-mgmt threshold <0-100> low <0-100> high <0-100000>
```

Parameters

agch-queue-mgmt

AGCH queue mgmt

threshold

Threshold to start cleanup

<0-100>

in %% of the maximum queue length

low

Low water mark for cleanup

<0-100>

in %% of the maximum queue length

high

High water mark for cleanup

<0-100000>

in %% of the maximum queue length

1.6.3 auto-band

Command

```
auto-band
```

Parameters

auto-band

Automatically select band for ARFCN based on configured band

1.6.4 band (450|GSM450|480|GSM480|750|GSM750|810|GSM810|850|GSM850|900|GSM900|1800|DCS...

Command

```
band (450|GSM450|480|GSM480|750|GSM750|810|GSM810|850|GSM850|900|GSM900|1800|DCS1800 ↔  
|1900|PCS1900)
```

Parameters

band

Set the frequency band of this BTS

450

Alias for GSM450

GSM450

450Mhz

480

Alias for GSM480

GSM480

480Mhz

750

Alias for GSM750

GSM750

750Mhz

810

Alias for GSM810

GSM810

810Mhz

850

Alias for GSM850

GSM850

850Mhz

900

Alias for GSM900

GSM900

900Mhz

1800

Alias for DCS1800

DCS1800

1800Mhz

1900

Alias for PCS1900

PCS1900

1900Mhz

1.6.5 description .TEXT

Command

```
description .TEXT
```

Parameters

description

Save human-readable description of the object

.TEXT

Text until the end of the line

1.6.6 help

Command

```
help
```

Parameters

help

Description of the interactive help system

1.6.7 ipa unit-id <0-65534> <0-255>

Command

```
ipa unit-id <0-65534> <0-255>
```

Parameters

ipa

ip.access RSL commands

unit-id

Set the Unit ID of this BTS

<0-65534>

Site ID

<0-255>

Unit ID

1.6.8 list

Command

```
list
```

Parameters

list

Print command list

1.6.9 no auto-band

Command

```
no auto-band
```

Parameters

no

Negate a command or set its defaults

auto-band

Automatically select band for ARFCN based on configured band

1.6.10 no description

Command

```
no description
```

Parameters

no

Negate a command or set its defaults

description

Remove description of the object

1.6.11 oml remote-ip A.B.C.D

Command

```
oml remote-ip A.B.C.D
```

Parameters

oml

OML Parameters

remote-ip

OML IP Address

A.B.C.D

OML IP Address

1.6.12 paging lifetime <0-60>

Command

```
paging lifetime <0-60>
```

Parameters

paging

Paging related parameters

lifetime

Maximum lifetime of a paging record

<0-60>

Maximum lifetime of a paging record (seconds)

1.6.13 paging queue-size <1-1024>

Command

```
paging queue-size <1-1024>
```

Parameters

paging

Paging related parameters

queue-size

Maximum length of BTS-internal paging queue

<1-1024>

Maximum length of BTS-internal paging queue

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

Command

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

Parameters

rtp

RTP parameters

bind-ip

RTP local bind IP Address

A.B.C.D

RTP local bind IP Address

1.6.15 rtp jitter-buffer <0-10000>

Command

```
rtp jitter-buffer <0-10000>
```

Parameters

rtp

RTP parameters

jitter-buffer

RTP jitter buffer

<0-10000>

jitter buffer in ms

1.6.16 show running-config

Command

```
show running-config
```

Parameters

show

Show running system information

running-config

running configuration

1.6.17 trx <0-0>

Command

```
trx <0-0>
```

Parameters

trx

Select a TRX to configure

<0-0>

TRX number

1.6.18 write

Command

```
write
```

Parameters

write

Write running configuration to memory, network, or terminal

1.6.19 write file

Command

```
write file
```

Parameters

write

Write running configuration to memory, network, or terminal

file

Write to configuration file

1.6.20 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)

1.6.21 write terminal

Command

```
write terminal
```

Parameters

write

Write running configuration to memory, network, or terminal

terminal

Write to terminal

1.7

1.7.1 clock-calibration <-4095-4095>

Command

```
clock-calibration <-4095-4095>
```

Parameters

clock-calibration

Set the clock calibration value

<-4095-4095>

Offset in PPB

1.7.2 clock-calibration default

Command

```
clock-calibration default
```

Parameters

clock-calibration

Set the clock calibration value

default

Default Clock DAC value

1.7.3 clock-calibration eeprom

Command

```
clock-calibration eeprom
```

Parameters

clock-calibration

Use the eeprom clock calibration value

eeprom

(null)

1.7.4 clock-source (tcxo|ocxo|ext|gps)

Command

```
clock-source (tcxo|ocxo|ext|gps)
```

Parameters

clock-source

Set the clock source value

tcxo

Use the TCXO

ocxo

Use the OCXO

ext

Use an external clock

gps

Use the GPS pps

1.7.5 gsmtap-sapi (idle|fcch|sch|sacch|sdccch|bcch|pch|agch|cbch|rach|tch/f|facch/f|tch...

Command

```
gsmtap-sapi (idle|fcch|sch|sacch|sdccch|bcch|pch|agch|cbch|rach|tch/f|facch/f|tch/h| ←  
facch/h|nch|pdtch|pacch|pbccch|pagch|ppch|pnch|ptccch|prach)
```

Parameters

gsmtap-sapi

GSMTAP SAPI

idle

IDLE

fcch

FCCH

sch

SCH

sacch

SACCH

sdccch

SDCCH

bcch

BCCH

pch
PCH

agch
AGCH

cbch
CBCH

rach
RACH

tch/f
TCH/F

facch/f
FACCH/F

tch/h
TCH/H

facch/h
FACCH/H

nch
NCH

pdtech
PDTCH

pacch
PACCH

pbccch
PBCCH

pagch
PAGCH

ppch
PPCH

pnch
PNCH

ptcch
PTCCH

prach
PRACH

1.7.6 help

Command

```
help
```

Parameters

help

Description of the interactive help system

1.7.7 list

Command

```
list
```

Parameters

list

Print command list

1.7.8 min-qual-norm <-100-100>

Command

```
min-qual-norm <-100-100>
```

Parameters

min-qual-norm

Set the minimum quality level of normal burst to be accpeted

<-100-100>

C/I level in tenth of dB

1.7.9 min-qual-rach <-100-100>

Command

```
min-qual-rach <-100-100>
```

Parameters

min-qual-rach

Set the minimum quality level of RACH burst to be accpeted

<-100-100>

C/I level in tenth of dB

1.7.10 ms-power-control (dsp|osmo)

Command

```
ms-power-control (dsp|osmo)
```

Parameters

ms-power-control

Mobile Station Power Level Control (change requires restart)

dsp

Handled by DSP

osmo

Handled by OsmoBTS

1.7.11 no gsmtap-sapi (idle|fcch|sch|sacch|sdccch|bcch|pch|agch|cbch|rach|tch/f|facch/f|...

Command

```
no gsmtap-sapi (idle|fcch|sch|sacch|sdccch|bcch|pch|agch|cbch|rach|tch/f|facch/f|tch/h| ↔  
facch/h|nch|pdtch|pacch|pbccch|pagch|ppch|pnch|ptcch|prach)
```

Parameters

no

Negate a command or set its defaults

gsmtap-sapi

GSMTAP SAPI

idle

IDLE

fcch

FCCH

sch

SCH

sacch

SACCH

sdccch

SDCCH

bcch

BCCH

pch

PCH

agch

AGCH

cbch

CBCH

rach

RACH

tch/f

TCH/F

facch/f

FACCH/F

tch/h

TCH/H

facch/h

FACCH/H

nch

NCH

pdтч

PDTCH

pacch

PACCH

pbccч

PBCCH

pagch

PAGCH

ppch

PPCH

pncч

PNCH

ptccч

PTCCH

prach

PRACH

1.7.12 nominal-tx-power <0-100>

Command

```
nominal-tx-power <0-100>
```

Parameters

nominal-tx-power

Set the nominal transmit output power in dBm

<0-100>

Nominal transmit output power level in dBm

1.7.13 power-ramp max-initial <0-100000> (dBm|mdBm)

Command

```
power-ramp max-initial <0-100000> (dBm|mdBm)
```

Parameters

power-ramp

Power-Ramp settingsMaximum initial power

max-initial

Value

<0-100000>

Unit is dB (decibels)

dBm

Unit is mdB (milli-decibels, or rather 1/10000 bel)

mdBm

(null)

1.7.14 power-ramp step-interval <1-100>

Command

```
power-ramp step-interval <1-100>
```

Parameters

power-ramp

Power-Ramp settingsPower increase by step

step-interval

Step time in seconds

<1-100>

(null)

1.7.15 power-ramp step-size <1-100000> (dB|mdB)

Command

```
power-ramp step-size <1-100000> (dB|mdB)
```

Parameters

power-ramp

Power-Ramp settings Power increase by step

step-size

Step size

<1-100000>

Unit is dB (decibels)

dB

Unit is mdB (milli-decibels, or rather 1/10000 bel)

mdB

(null)

1.7.16 show running-config

Command

```
show running-config
```

Parameters

show

Show running system information

running-config

running configuration

1.7.17 trx-calibration-path PATH

Command

```
trx-calibration-path PATH
```

Parameters

trx-calibration-path

Set the path name to TRX calibration data

PATH

Path name

1.7.18 uplink-power-target <-110-0>

Command

```
uplink-power-target <-110-0>
```

Parameters

uplink-power-target

Set the nominal target Rx Level for uplink power control loop

<-110-0>

Target uplink Rx level in dBm

1.7.19 user-gain <-100000-100000> (dB|mdB)

Command

```
user-gain <-100000-100000> (dB|mdB)
```

Parameters

user-gain

Inform BTS about additional, user-provided gain or attenuation at TRX output

<-100000-100000>

Value of user-provided external gain(+)/attenuation(-)

dB

Unit is dB (decibels)

mdB

Unit is mdB (milli-decibels, or rather 1/10000 bel)

1.7.20 write

Command

```
write
```

Parameters

write

Write running configuration to memory, network, or terminal

1.7.21 write file

Command

```
write file
```

Parameters

write

Write running configuration to memory, network, or terminal

file

Write to configuration file

1.7.22 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)

1.7.23 write terminal

Command

```
write terminal
```

Parameters

write

Write running configuration to memory, network, or terminal

terminal

Write to terminal