

OsmoPCU 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|csn1|l1if|rlcmac|rlcmacdata|rlcmacd|rlcmacul|rlcmacsched|rlc...

Command

```
logging level (all|csn1|l1if|rlcmac|rlcmacdata|rlcmacd|rlcmacul|rlcmacsched|rlcmacmeas ↔  
|bssgp|pcu|lglobal|llapd|linp|lmux|lmi|lmib|lsms) (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

csn1

Concrete Syntax Notation One (CSN1)

l1if

GPRS PCU L1 interface (L1IF)

rlcmac

GPRS RLC/MAC layer (RLCMAC)

rlcmacdata

GPRS RLC/MAC layer Data (RLCMAC)

rlcmacd1

GPRS RLC/MAC layer Downlink (RLCMAC)

rlmacul

GPRS RLC/MAC layer Uplink (RLCMAC)

rlmacsched

GPRS RLC/MAC layer Scheduling (RLCMAC)

rlmacmeas

GPRS RLC/MAC layer Measurements (RLCMAC)

bssgp

GPRS BSS Gateway Protocol (BSSGP)

pcu

GPRS Packet Control Unit (PCU)

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)

everything

Log simply everything

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 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

1.1.12 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

1.1.13 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

1.1.14 show alarms

Command

```
show alarms
```

Parameters

show

Show running system information

alarms

Show current logging configuration

1.1.15 show bts statistics

Command

```
show bts statistics
```

Parameters

show

Show running system information

bts

BTS related functionality

statistics

Statistics

1.1.16 show history

Command

```
show history
```

Parameters

show

Show running system information

history

Display the session command history

1.1.17 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

1.1.18 show online-help

Command

```
show online-help
```

Parameters

show

Show running system information

online-help

Online help

1.1.19 show tbf all

Command

```
show tbf all
```

Parameters

show

Show running system information

tbf

information about all current TBFs

all

(null)

1.1.20 show version

Command

```
show version
```

Parameters

show

Show running system information

version

Displays program version

1.1.21 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)

1.1.22 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

1.1.23 who

Command

```
who
```

Parameters

who

Display who is on vty

1.2

1.2.1 configure terminal

Command

```
configure terminal
```

Parameters

configure

Configuration from vty interface

terminal

Configuration terminal

1.2.2 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)

1.2.3 disable

Command

```
disable
```

Parameters

disable

Turn off privileged mode command

1.2.4 echo .MESSAGE

Command

```
echo .MESSAGE
```

Parameters

echo

Echo a message back to the vty

.MESSAGE

The message to echo

1.2.5 exit

Command

```
exit
```

Parameters

exit

Exit current mode and down to previous mode

1.2.6 help

Command

```
help
```

Parameters

help

Description of the interactive help system

1.2.7 list

Command

```
list
```

Parameters

list

Print command list

1.2.8 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

1.2.9 logging disable

Command

```
logging disable
```

Parameters

logging

Configure log message to this terminal

disable

Disables logging to this vty

1.2.10 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

1.2.11 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

1.2.12 logging level (all|csn1|l1if|rlcmac|rlcmacdata|rlcmacd|rlcmacul|rlcmacsched|rlc...

Command

```
logging level (all|csn1|l1if|rlcmac|rlcmacdata|rlcmacd|rlcmacul|rlcmacsched|rlcmacmeas ↔  
|bssgp|pcu|lglobal|llapd|linp|lmux|lmi|lmib|lsms) (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

csn1

Concrete Syntax Notation One (CSN1)

l1if

GPRS PCU L1 interface (L1IF)

rlcmac
GPRS RLC/MAC layer (RLCMAC)

rlmacdata
GPRS RLC/MAC layer Data (RLCMAC)

rlmacdl
GPRS RLC/MAC layer Downlink (RLCMAC)

rlmacul
GPRS RLC/MAC layer Uplink (RLCMAC)

rlmacsched
GPRS RLC/MAC layer Scheduling (RLCMAC)

rlmacmeas
GPRS RLC/MAC layer Measurements (RLCMAC)

bssgp
GPRS BSS Gateway Protocol (BSSGP)

pcu
GPRS Packet Control Unit (PCU)

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)

everything
Log simply everything

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

1.2.13 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

1.2.14 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

1.2.15 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

1.2.16 show alarms

Command

```
show alarms
```

Parameters

show

Show running system information

alarms

Show current logging configuration

1.2.17 show bts statistics

Command

```
show bts statistics
```

Parameters

show

Show running system information

bts

BTS related functionality

statistics

Statistics

1.2.18 show history

Command

```
show history
```

Parameters

show

Show running system information

history

Display the session command history

1.2.19 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

1.2.20 show online-help

Command

```
show online-help
```

Parameters

show

Show running system information

online-help

Online help

1.2.21 show running-config

Command

```
show running-config
```

Parameters

show

Show running system information

running-config

running configuration

1.2.22 show startup-config

Command

```
show startup-config
```

Parameters

show

Show running system information

startup-config

Contentes of startup configuration

1.2.23 show tbf all

Command

```
show tbf all
```

Parameters

show

Show running system information

tbf

information about all current TBFs

all

(null)

1.2.24 show version

Command

```
show version
```

Parameters

show

Show running system information

version

Displays program version

1.2.25 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)

1.2.26 terminal monitor

Command

```
terminal monitor
```

Parameters

terminal

Set terminal line parameters

monitor

Copy debug output to the current terminal line

1.2.27 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

1.2.28 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

1.2.29 who

Command

```
who
```

Parameters

who

Display who is on vty

1.2.30 write

Command

```
write
```

Parameters

write

Write running configuration to memory, network, or terminal

1.2.31 write file

Command

```
write file
```

Parameters

write

Write running configuration to memory, network, or terminal

file

Write to configuration file

1.2.32 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)

1.2.33 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 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

1.3.4 enable password LINE

Command

```
enable password LINE
```

Parameters

enable

Modify enable password parameters

password

Assign the privileged level password

LINE

The UNENCRYPTED (cleartext) 'enable' password

1.3.5 end

Command

```
end
```

Parameters

end

End current mode and change to enable mode.

1.3.6 exit

Command

```
exit
```

Parameters

exit

Exit current mode and down to previous mode

1.3.7 help

Command

```
help
```

Parameters

help

Description of the interactive help system

1.3.8 hostname WORD

Command

```
hostname WORD
```

Parameters

hostname

Set system's network name

WORD

This system's network name

1.3.9 line vty

Command

```
line vty
```

Parameters

line

Configure a terminal line

vty

Virtual terminal

1.3.10 list

Command

```
list
```

Parameters

list

Print command list

1.3.11 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

1.3.12 log file .FILENAME

Command

```
log file .FILENAME
```

Parameters

log

Configure logging sub-system

file

Logging to text file

.FILENAME

Filename

1.3.13 log stderr

Command

```
log stderr
```

Parameters

log

Configure logging sub-system

stderr

Logging via STDERR of the process

1.3.14 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

1.3.15 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

1.3.16 no banner motd

Command

```
no banner motd
```

Parameters

no

Negate a command or set its defaults

banner

Set banner string

motd

Strings for motd

1.3.17 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

1.3.18 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

1.3.19 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

1.3.20 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

1.3.21 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

1.3.22 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

1.3.23 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

1.3.24 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)

1.3.25 password (8|) WORD

Command

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

Parameters

password

Assign the terminal connection password

8

Specifies a HIDDEN password will follow

dummy string

WORD

The HIDDEN line password string

1.3.26 password LINE

Command

```
password LINE
```

Parameters

password

Assign the terminal connection password

LINE

The UNENCRYPTED (cleartext) line password

1.3.27 pcu

Command

```
pcu
```

Parameters

pcu

BTS specific configure

1.3.28 service advanced-vty

Command

```
service advanced-vty
```

Parameters

service

Set up miscellaneous service

advanced-vty

Enable advanced mode vty interface

1.3.29 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)

1.3.30 show history

Command

```
show history
```

Parameters

show

Show running system information

history

Display the session command history

1.3.31 show running-config

Command

```
show running-config
```

Parameters

show

Show running system information

running-config

running configuration

1.3.32 write

Command

```
write
```

Parameters

write

Write running configuration to memory, network, or terminal

1.3.33 write file

Command

```
write file
```

Parameters

write

Write running configuration to memory, network, or terminal

file

Write to configuration file

1.3.34 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)

1.3.35 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|csn1|l1if|rlcmac|rlcmacdata|rlcmacdl|rlcmacul|rlcmacsched|rlc...

Command

```
logging level (all|csn1|l1if|rlcmac|rlcmacdata|rlcmacdl|rlcmacul|rlcmacsched|rlcmacmeas ↔
|bssgp|pcu|lglobal|llapd|linp|lmux|lmi|lmib|lms) (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

csn1

Concrete Syntax Notation One (CSN1)

l1if

GPRS PCU L1 interface (L1IF)

rlcmac

GPRS RLC/MAC layer (RLCMAC)

rlcmacdata

GPRS RLC/MAC layer Data (RLCMAC)

rlcmacdl

GPRS RLC/MAC layer Downlink (RLCMAC)

rlcmacul

GPRS RLC/MAC layer Uplink (RLCMAC)

rlcmacsched

GPRS RLC/MAC layer Scheduling (RLCMAC)

rlcmacmeas

GPRS RLC/MAC layer Measurements (RLCMAC)

bssgp

GPRS BSS Gateway Protocol (BSSGP)

pcu
GPRS Packet Control Unit (PCU)

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)

everything
Log simply everything

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 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

1.4.9 show running-config

Command

```
show running-config
```

Parameters

show

Show running system information

running-config

running configuration

1.4.10 write

Command

```
write
```

Parameters

write

Write running configuration to memory, network, or terminal

1.4.11 write file

Command

```
write file
```

Parameters

write

Write running configuration to memory, network, or terminal

file

Write to configuration file

1.4.12 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)

1.4.13 write terminal

Command

```
write terminal
```

Parameters

write

Write running configuration to memory, network, or terminal

terminal

Write to terminal

1.5 PCU Configuration Node

The main PCU configuration including the timeslot assignment algorithm and other parameters.

1.5.1 alloc-algorithm (a|b)

Command

```
alloc-algorithm (a|b)
```

Parameters

alloc-algorithm

Select slot allocation algorithm to use when assigning timeslots on PACCH

a

Single slot is assigned only

b

Multiple slots are assigned for semi-duplex operation

1.5.2 alpha <0-10>

Command

```
alpha <0-10>
```

Parameters

alpha

Alpha parameter for MS power control in units of 0.1 (see TS 05.08) NOTE: Be sure to set Alpha value at System information 13 too.

<0-10>

Alpha in units of 0.1

1.5.3 cs <1-4> [<1-4>]

Command

```
cs <1-4> [<1-4>]
```

Parameters

cs

Set the Coding Scheme to be used, (overrides BTS config)

<1-4>

Initial CS used

[<1-4>]

Alternative uplink CS

1.5.4 end

Command

```
end
```

Parameters

end

End current mode and change to enable mode

1.5.5 flow-control-interval <1-10>

Command

```
flow-control-interval <1-10>
```

Parameters

flow-control-interval

Interval between sending subsequent Flow Control PDUs

<1-10>

Interval time in seconds

1.5.6 gamma <0-62>

Command

```
gamma <0-62>
```

Parameters

gamma

Gamma parameter for MS power control in units of dB (see TS 05.08)

<0-62>

Gamma in even unit of dBs

1.5.7 help

Command

```
help
```

Parameters

help

Description of the interactive help system

1.5.8 list

Command

```
list
```

Parameters

list

Print command list

1.5.9 no cs

Command

```
no cs
```

Parameters

no

Negate a command or set its defaults

cs

Don't force given Coding Scheme, (use BTS config)

1.5.10 no queue lifetime

Command

```
no queue lifetime
```

Parameters

no

Negate a command or set its defaults

queue

Packet queue options

lifetime

Disable lifetime limit of LLC frame (use value given by SGSN)

1.5.11 no two-phase-access

Command

```
no two-phase-access
```

Parameters

no

Negate a command or set its defaults

two-phase-access

Only use two phase access when requested my MS

1.5.12 queue lifetime <1-65534>

Command

```
queue lifetime <1-65534>
```

Parameters

queue

Packet queue options

lifetime

Set lifetime limit of LLC frame in centi-seconds (overrides the value given by SGSN)

<1-65534>

Lifetime in centi-seconds

1.5.13 queue lifetime infinite

Command

```
queue lifetime infinite
```

Parameters

queue

Packet queue options

lifetime

Set lifetime limit of LLC frame in centi-seconds (overrides the value given by SGSN)

infinite

Infinite lifetime

1.5.14 show running-config

Command

```
show running-config
```

Parameters

show

Show running system information

running-config

running configuration

1.5.15 two-phase-access

Command

```
two-phase-access
```

Parameters

two-phase-access

Force two phase access when MS requests single phase access

1.5.16 write

Command

```
write
```

Parameters

write

Write running configuration to memory, network, or terminal

1.5.17 write file

Command

```
write file
```

Parameters

write

Write running configuration to memory, network, or terminal

file

Write to configuration file

1.5.18 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)

1.5.19 write terminal

Command

```
write terminal
```

Parameters

write

Write running configuration to memory, network, or terminal

terminal

Write to terminal