OsmoBSCNAT VTY Reference

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COLLABORATORS

	TITLE : OsmoBSCNAT VTY Reference		
ACTION	NAME	DATE	SIGNATURE
WRITTEN BY		March 21, 2023	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME
v1	13th August 2012	Initial	hf
v2	5th March 2014	Update to match osmo-bsc version 0.13.0-305	hf

Contents

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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

1.1.1 close bsc connection BSC_NR

Command

```
close bsc connection BSC_NR
```

Parameters

close

> Close

bsc

> A-link

connection

> Connection

BSC_NR

> Identifier of the BSC

1.1.2 echo .MESSAGE

Command

```
echo .MESSAGE
```

Parameters

echo

> Echo a message back to the vty

.MESSAGE

> The message to echo

1.1.3 enable

Command

```
enable
```

Parameters

enable

> Turn on privileged mode command

1.1.4 exit

Command

```
exit
```

Parameters

exit

> Exit current mode and down to previous mode

1.1.5 help

Command

```
help
```

Parameters

help

Description of the interactive help system

1.1.6 list

Command

```
list
```

Parameters

list

Print command list

1.1.7 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

1.1.8 logging disable

Command

```
logging disable
```

Parameters

logging

Configure log message to this terminal

disable

Disables logging to this vty

1.1.9 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

1.1.10 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

1.1.11 logging level (all|rll|cc|mm|rr|rsl|nm|mncc|pag|meas|sccp|msc|mgcp|ho|db|ref|gpr...

Command

```
logging level (all|rll|cc|mm|rr|rsl|nm|mncc|pag|meas|sccp|msc|mgcp|ho|db|ref|gprs|ns| ←↩
    bssgp|llc|sndcp|nat|ctrl|smpp|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

rll

    A-bis Radio Link Layer (RLL)

cc

    Layer3 Call Control (CC)

mm

    Layer3 Mobility Management (MM)

rr

    Layer3 Radio Resource (RR)

rsl

    A-bis Radio Siganlling Link (RSL)

nm

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

mncc

    MNCC API for Call Control application

pag

    Paging Subsystem

meas

    Radio Measurement Processing

sccp

    SCCP Protocol

msc

    Mobile Switching Center

mgcp

    Media Gateway Control Protocol

ho

    Hand-Over

db

    Database Layer

ref

    Reference Counting

gprs

    GPRS Packet Service

ns

    GPRS Network Service (NS)

bssgp

    GPRS BSS Gateway Protocol (BSSGP)

llc

    GPRS Logical Link Control Protocol (LLC)

sndcp

    GPRS Sub-Network Dependent Control Protocol (SNDCP)

nat

    GSM 08.08 NAT/Multiplexer

ctrl

    Control interface

smpp

    SMPP interface for external SMS apps

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)

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

1.1.12 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

1.1.13 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

1.1.14 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

1.1.15 show access-list NAME

Command

```
show access-list NAME
```

Parameters

show

    Show running system information

access-list

    IMSI access list

NAME

    Name of the access list

1.1.16 show alarms

Command

```
show alarms
```

Parameters

show

    Show running system information

alarms

    Show current logging configuration

1.1.17 show bsc config

Command

```
show bsc config
```

Parameters

show

    Show running system information

bsc

    Information about BSCs

config

    Configuration of BSCs

1.1.18 show bsc connections

Command

```
show bsc connections
```

Parameters

show
    Show running system information

bsc
    Information about BSCs

connections
    All active connections

1.1.19 show bsc mgcp NR

Command

```
show bsc mgcp NR
```

Parameters

show
    Show running system information

bsc
    Information about BSCs

mgcp
    MGCP related status

NR
    Identifier of the BSC

1.1.20 show history

Command

```
show history
```

Parameters

show
    Show running system information

history
    Display the session command history

1.1.21   show imsi-black-list

Command

```
show imsi-black-list
```

Parameters

show

Show running system information

imsi-black-list

IMSIs barred from the network

1.1.22   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

1.1.23   show mgcp [stats]

Command

```
show mgcp [stats]
```

Parameters

show

Show running system information

mgcp

Display information about the MGCP Media Gateway

[stats]

Include Statistics

1.1.24   **show msc connection**

Command

```
show msc connection
```

Parameters

show

  Show running system information

msc

  MSC related information

connection

  Status of the A-link connection

1.1.25   **show online-help**

Command

```
show online-help
```

Parameters

show

  Show running system information

online-help

  Online help

1.1.26   **show prefix-tree**

Command

```
show prefix-tree
```

Parameters

show

  Show running system information

prefix-tree

  Prefix tree for number rewriting

1.1.27 **show sccp connections**

Command

```
show sccp connections
```

Parameters

show

Show running system information

sccp

Display information about SCCP

connections

All active connections

1.1.28 **show statistics [NR]**

Command

```
show statistics [NR]
```

Parameters

show

Show running system information

statistics

Display network statistics

[NR]

Number of the BSC

1.1.29 **show statistics-by-lac <0-65535>**

Command

```
show statistics-by-lac <0-65535>
```

Parameters

show

Show running system information

statistics-by-lac

Display network statistics by lac

<0-65535>

The lac of the BSC

1.1.30 show ussd-connection

Command

```
show ussd-connection
```

Parameters

show
    Show running system information

ussd-connection
    USSD connection related information

1.1.31 show version

Command

```
show version
```

Parameters

show
    Show running system information

version
    Displays program version

1.1.32 terminal length <0-512>

Command

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

Parameters

terminal
    Set terminal line parameters

length
    Set number of lines on a screen

<0-512>
    Number of lines on screen (0 for no pausing)

1.1.33 terminal no length

Command

```
terminal no length
```

Parameters

terminal
> Set terminal line parameters

no
> Negate a command or set its defaults

length
> Set number of lines on a screen

1.1.34 test regex PATTERN STRING

Command

```
test regex PATTERN STRING
```

Parameters

test
> Test utilities

regex
> Regexp testing

PATTERN
> The regexp pattern

STRING
> The string to match

1.1.35 who

Command

```
who
```

Parameters

who
> Display who is on vty

1.2

1.2.1 close bsc connection BSC_NR

Command

```
close bsc connection BSC_NR
```

Parameters

close

Close

bsc

A-link

connection

Connection

BSC_NR

Identifier of the BSC

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 free-endpoint <0-64> NUMBER

Command

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

Parameters

free-endpoint

Free the given endpoint

<0-64>

Trunk number

NUMBER

Endpoint number in hex.

1.2.8 help

Command

```
help
```

Parameters

help

Description of the interactive help system

1.2.9 list

Command

```
list
```

Parameters

list

Print command list

1.2.10 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

1.2.11 logging disable

Command

```
logging disable
```

Parameters

logging

Configure log message to this terminal

disable

Disables logging to this vty

1.2.12 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

1.2.13 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

1.2.14 logging level (all|rll|cc|mm|rr|rsl|nm|mncc|pag|meas|sccp|msc|mgcp|ho|db|ref|gpr...

Command

```
logging level (all|rll|cc|mm|rr|rsl|nm|mncc|pag|meas|sccp|msc|mgcp|ho|db|ref|gprs|ns| ←
    bssgp|llc|sndcp|nat|ctrl|smpp|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

rll

   A-bis Radio Link Layer (RLL)

cc

   Layer3 Call Control (CC)

mm

   Layer3 Mobility Management (MM)

rr

   Layer3 Radio Resource (RR)

rsl

   A-bis Radio Siganlling Link (RSL)

nm

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

mncc

   MNCC API for Call Control application

pag

   Paging Subsystem

meas

   Radio Measurement Processing

sccp

   SCCP Protocol

msc

   Mobile Switching Center

mgcp

   Media Gateway Control Protocol

ho

   Hand-Over

db

   Database Layer

ref

   Reference Counting

gprs

   GPRS Packet Service

ns

  GPRS Network Service (NS)

bssgp

  GPRS BSS Gateway Protocol (BSSGP)

llc

  GPRS Logical Link Control Protocol (LLC)

sndcp

  GPRS Sub-Network Dependent Control Protocol (SNDCP)

nat

  GSM 08.08 NAT/Multiplexer

ctrl

  Control interface

smpp

  SMPP interface for external SMS apps

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)

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

1.2.15 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

1.2.16 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

1.2.17 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

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

Command

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

Parameters

loop-endpoint

Loop a given endpoint

<0-64>

Trunk number

NAME

The name in hex of the endpoint

0

Disable the loop

1

Enable the loop

1.2.19 nat-block (block|unblock)

Command

```
nat-block (block|unblock)
```

Parameters

nat-block

Block the NAT for new connections

block

Block

unblock

Unblock

1.2.20 reset-all-endpoints

Command

```
reset-all-endpoints
```

Parameters

reset-all-endpoints
  Reset all endpoints

1.2.21 reset-endpoint <0-64> NUMBER

Command

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

Parameters

reset-endpoint
  Reset the given endpoint

<0-64>
  Trunk number

NUMBER
  Endpoint number in hex.

1.2.22 set bsc last-used-endpoint <0-9999999999> <0-1024>

Command

```
set bsc last-used-endpoint <0-9999999999> <0-1024>
```

Parameters

set
  Set a value

bsc
  Operate on a BSC

last-used-endpoint
  Last used endpoint for an assignment

<0-9999999999>
  BSC configuration number

<0-1024>
  Endpoint number used

1.2.23 show access-list NAME

Command

```
show access-list NAME
```

Parameters

show
> Show running system information

access-list
> IMSI access list

NAME
> Name of the access list

1.2.24 show alarms

Command

```
show alarms
```

Parameters

show
> Show running system information

alarms
> Show current logging configuration

1.2.25 show bsc config

Command

```
show bsc config
```

Parameters

show
> Show running system information

bsc
> Information about BSCs

config
> Configuration of BSCs

1.2.26 show bsc connections

Command

```
show bsc connections
```

Parameters

show
> Show running system information

bsc
> Information about BSCs

connections
> All active connections

1.2.27 show bsc mgcp NR

Command

```
show bsc mgcp NR
```

Parameters

show
> Show running system information

bsc
> Information about BSCs

mgcp
> MGCP related status

NR
> Identifier of the BSC

1.2.28 show history

Command

```
show history
```

Parameters

show
> Show running system information

history
> Display the session command history

1.2.29 show imsi-black-list

Command

```
show imsi-black-list
```

Parameters

show
    Show running system information

imsi-black-list
    IMSIs barred from the network

1.2.30 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

1.2.31 show mgcp [stats]

Command

```
show mgcp [stats]
```

Parameters

show
    Show running system information

mgcp
    Display information about the MGCP Media Gateway

[stats]
    Include Statistics

1.2.32 **show msc connection**

Command

```
show msc connection
```

Parameters

show
    Show running system information

msc
    MSC related information

connection
    Status of the A-link connection

1.2.33 **show online-help**

Command

```
show online-help
```

Parameters

show
    Show running system information

online-help
    Online help

1.2.34 **show prefix-tree**

Command

```
show prefix-tree
```

Parameters

show
    Show running system information

prefix-tree
    Prefix tree for number rewriting

1.2.35 show running-config

Command

```
show running-config
```

Parameters

show
> Show running system information

running-config
> running configuration

1.2.36 show sccp connections

Command

```
show sccp connections
```

Parameters

show
> Show running system information

sccp
> Display information about SCCP

connections
> All active connections

1.2.37 show startup-config

Command

```
show startup-config
```

Parameters

show
> Show running system information

startup-config
> Contentes of startup configuration

1.2.38   show statistics [NR]

Command

```
show statistics [NR]
```

Parameters

show

Show running system information

statistics

Display network statistics

[NR]

Number of the BSC

1.2.39   show statistics-by-lac <0-65535>

Command

```
show statistics-by-lac <0-65535>
```

Parameters

show

Show running system information

statistics-by-lac

Display network statistics by lac

<0-65535>

The lac of the BSC

1.2.40   show ussd-connection

Command

```
show ussd-connection
```

Parameters

show

Show running system information

ussd-connection

USSD connection related information

1.2.41 show version

Command

```
show version
```

Parameters

show

> Show running system information

version

> Displays program version

1.2.42 tap-call <0-64> ENDPOINT (bts-in|bts-out|net-in|net-out) A.B.C.D <0-65534>

Command

```
tap-call <0-64> ENDPOINT (bts-in|bts-out|net-in|net-out) A.B.C.D <0-65534>
```

Parameters

tap-call

> Forward data on endpoint to a different system

<0-64>

> Trunk number

ENDPOINT

> The endpoint in hex

bts-in

> Forward the data coming from the bts

bts-out

> Forward the data coming from the bts leaving to the network

net-in

> Forward the data coming from the net

net-out

> Forward the data coming from the net leaving to the bts

A.B.C.D

> destination IP of the data

<0-65534>

> destination port

1.2.43   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)

1.2.44   terminal monitor

Command

```
terminal monitor
```

Parameters

terminal

> Set terminal line parameters

monitor

> Copy debug output to the current terminal line

1.2.45   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

1.2.46   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

1.2.47   test regex PATTERN STRING

Command

```
test regex PATTERN STRING
```

Parameters

test

>   Test utilities

regex

>   Regexp testing

PATTERN

>   The regexp pattern

STRING

>   The string to match

1.2.48   who

Command

```
who
```

Parameters

who

>   Display who is on vty

1.2.49   write

Command

```
write
```

Parameters

write

> Write running configuration to memory, network, or terminal

1.2.50   write file

Command

```
write file
```

Parameters

write

> Write running configuration to memory, network, or terminal

file

> Write to configuration file

1.2.51   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)

1.2.52   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 mgcp

Command

```
mgcp
```

Parameters

mgcp

Configure the MGCP

1.3.17 nat

Command

```
nat
```

Parameters

nat

Configure the NAT

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|rll|cc|mm|rr|rsl|nm|mncc|pag|meas|sccp|msc|mgcp|ho|db|ref|gpr...

Command

```
logging level (all|rll|cc|mm|rr|rsl|nm|mncc|pag|meas|sccp|msc|mgcp|ho|db|ref|gprs|ns| ←
    bssgp|llc|sndcp|nat|ctrl|smpp|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

rll

A-bis Radio Link Layer (RLL)

cc

Layer3 Call Control (CC)

mm

Layer3 Mobility Management (MM)

rr

Layer3 Radio Resource (RR)

rsl

A-bis Radio Siganlling Link (RSL)

nm

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

mncc

MNCC API for Call Control application

pag

Paging Subsystem

meas

Radio Measurement Processing

sccp

SCCP Protocol

msc

Mobile Switching Center

mgcp

Media Gateway Control Protocol

ho

Hand-Over

db

Database Layer

ref

Reference Counting

gprs

GPRS Packet Service

ns

GPRS Network Service (NS)

bssgp

GPRS BSS Gateway Protocol (BSSGP)

llc

GPRS Logical Link Control Protocol (LLC)

sndcp

GPRS Sub-Network Dependent Control Protocol (SNDCP)

nat

GSM 08.08 NAT/Multiplexer

ctrl

> Control interface

smpp

> SMPP interface for external SMS apps

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)

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 MGCP Commands

This node allows to configure global MGCP settings. These include the various port numbers.

1.5.1 bind early (0|1)

Command

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

Parameters

bind

> Listen/Bind related socket option

early

> Bind local ports on start up

0

> Bind on demand

1

> Bind on startup

1.5.2 bind ip A.B.C.D

Command

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

Parameters

bind

Listen/Bind related socket option

ip

IP information

A.B.C.D

IPv4 Address to bind to

1.5.3 bind port <0-65534>

Command

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

Parameters

bind

Listen/Bind related socket option

port

Port information

<0-65534>

UDP port to listen for MGCP messages

1.5.4 bts ip A.B.C.D

Command

```
bts ip A.B.C.D
```

Parameters

bts

BTS Audio source/destination options

ip

IP information

A.B.C.D

IPv4 Address of the BTS

1.5.5 call agent ip A.B.C.D

Command

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

Parameters

call

 Callagent information

agent

 Callagent information

ip

 IP information

A.B.C.D

 IPv4 Address of the callagent

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

Command

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

Parameters

call-agent

 Callagent information

ip

 IP information

A.B.C.D

 IPv4 Address of the callagent

1.5.7 end

Command

```
end
```

Parameters

end

 End current mode and change to enable mode.

1.5.8 exit

Command

```
exit
```

Parameters

exit

Exit current mode and down to previous mode

1.5.9 help

Command

```
help
```

Parameters

help

Description of the interactive help system

1.5.10 list

Command

```
list
```

Parameters

list

Print command list

1.5.11 local ip A.B.C.D

Command

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

Parameters

local

Local options for the SDP record

ip

IP information

A.B.C.D

IPv4 Address to use in SDP record

1.5.12   loop (0|1)

Command

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

Parameters

loop

　　Loop audio for all endpoints on main trunk

0

　　Don't Loop

1

　　Loop

1.5.13   no rtcp-omit

Command

```
no rtcp-omit
```

Parameters

no

　　Negate a command or set its defaults

rtcp-omit

　　Drop RTCP packets in both directions

1.5.14   no rtp keep-alive

Command

```
no rtp keep-alive
```

Parameters

no

　　Negate a command or set its defaults

rtp

　　RTP configuration

keep-alive

　　Send dummy UDP packet to net RTP destination

1.5.15 no rtp-patch

Command

```
no rtp-patch
```

Parameters

no

Negate a command or set its defaults

rtp-patch

Modify RTP packet header in both directions

1.5.16 no rtp-patch ssrc

Command

```
no rtp-patch ssrc
```

Parameters

no

Negate a command or set its defaults

rtp-patch

Modify RTP packet header in both directions

ssrc

Force a fixed SSRC

1.5.17 no rtp-patch timestamp

Command

```
no rtp-patch timestamp
```

Parameters

no

Negate a command or set its defaults

rtp-patch

Modify RTP packet header in both directions

timestamp

Adjust RTP timestamp

1.5.18 no sdp audio-payload send-ptime

Command

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

Parameters

no

Negate a command or set its defaults

sdp

SDP File related options

audio-payload

Audio payload options

send-ptime

Send SDP ptime (packet duration) attribute

1.5.19 no transcoder-mgw

Command

```
no transcoder-mgw
```

Parameters

no

Negate a command or set its defaults

transcoder-mgw

Disable the transcoding

1.5.20 number endpoints <0-65534>

Command

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

Parameters

number

Number options

endpoints

Endpoints available

<0-65534>

Number endpoints

1.5.21 rtcp-omit

Command

```
rtcp-omit
```

Parameters

rtcp-omit

Drop RTCP packets in both directions

1.5.22 rtp base <0-65534>

Command

```
rtp base <0-65534>
```

Parameters

rtp

RTP configuration

base

First UDP port allocated for the BTS side

<0-65534>

UDP Port number

1.5.23 rtp bts-base <0-65534>

Command

```
rtp bts-base <0-65534>
```

Parameters

rtp

RTP configuration

bts-base

First UDP port allocated for the BTS side

<0-65534>

UDP Port number

1.5.24   rtp bts-range <0-65534> <0-65534>

Command

```
rtp bts-range <0-65534> <0-65534>
```

Parameters

rtp

> RTP configuration

bts-range

> Range of ports to use for the BTS side

<0-65534>

> Start of the range of ports

<0-65534>

> End of the range of ports

1.5.25   rtp ip-dscp <0-255>

Command

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

Parameters

rtp

> RTP configuration

ip-dscp

> Apply IP_TOS to the audio stream

<0-255>

> The DSCP value

1.5.26   rtp ip-tos <0-255>

Command

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

Parameters

rtp

> RTP configuration

ip-tos

> Apply IP_TOS to the audio stream

<0-255>

> The DSCP value

1.5.27 rtp keep-alive <1-120>

Command

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

Parameters

rtp

>RTP configuration

keep-alive

>Send dummy UDP packet to net RTP destination

<1-120>

>Keep alive interval in secs

1.5.28 rtp keep-alive once

Command

```
rtp keep-alive once
```

Parameters

rtp

>RTP configuration

keep-alive

>Send dummy UDP packet to net RTP destination

once

>Send dummy packet only once after CRCX/MDCX

1.5.29 rtp net-base <0-65534>

Command

```
rtp net-base <0-65534>
```

Parameters

rtp

>RTP configuration

net-base

>First UDP port allocated for the NET side

<0-65534>

>UDP Port number

1.5.30   rtp net-range <0-65534> <0-65534>

Command

```
rtp net-range <0-65534> <0-65534>
```

Parameters

rtp

  RTP configuration

net-range

  Range of ports to use for the NET side

<0-65534>

  Start of the range of ports

<0-65534>

  End of the range of ports

1.5.31   rtp transcoder-base <0-65534>

Command

```
rtp transcoder-base <0-65534>
```

Parameters

rtp

  RTP configuration

transcoder-base

  First UDP port allocated for the Transcoder side

<0-65534>

  UDP Port number

1.5.32   rtp transcoder-range <0-65534> <0-65534>

Command

```
rtp transcoder-range <0-65534> <0-65534>
```

Parameters

rtp

  RTP configuration

transcoder-range

  Range of ports to use for the Transcoder

<0-65534>

  Start of the range of ports

<0-65534>

  End of the range of ports

1.5.33 rtp-patch ssrc

Command

```
rtp-patch ssrc
```

Parameters

rtp-patch
>   Modify RTP packet header in both directions

ssrc
>   Force a fixed SSRC

1.5.34 rtp-patch timestamp

Command

```
rtp-patch timestamp
```

Parameters

rtp-patch
>   Modify RTP packet header in both directions

timestamp
>   Adjust RTP timestamp

1.5.35 sdp audio fmtp-extra .NAME

Command

```
sdp audio fmtp-extra .NAME
```

Parameters

sdp
>   Add extra fmtp for the SDP file

audio
>   Audio

fmtp-extra
>   Fmtp-extra

.NAME
>   Extra Information

1.5.36   sdp audio payload name NAME

Command

```
sdp audio payload name NAME
```

Parameters

sdp

   SDP File related options

audio

   Audio payload options

payload

   Audio payload options

name

   Name

NAME

   Payload name

1.5.37   sdp audio payload number <1-255>

Command

```
sdp audio payload number <1-255>
```

Parameters

sdp

   SDP File related options

audio

   Audio payload options

payload

   Audio payload options

number

   Number

<1-255>

   Payload number

1.5.38 sdp audio-payload name NAME

Command

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

Parameters

sdp
> SDP File related options

audio-payload
> Audio payload options

name
> Name

NAME
> Payload name

1.5.39 sdp audio-payload number <1-255>

Command

```
sdp audio-payload number <1-255>
```

Parameters

sdp
> SDP File related options

audio-payload
> Audio payload options

number
> Number

<1-255>
> Payload number

1.5.40 sdp audio-payload send-ptime

Command

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

Parameters

sdp
> SDP File related options

audio-payload
> Audio payload options

send-ptime
> Send SDP ptime (packet duration) attribute

1.5.41   show running-config

Command

```
show running-config
```

Parameters

show

Show running system information

running-config

running configuration

1.5.42   transcoder-mgw A.B.C.D

Command

```
transcoder-mgw A.B.C.D
```

Parameters

transcoder-mgw

Use a MGW to detranscoder RTP

A.B.C.D

The IP address of the MGW

1.5.43   transcoder-remote-base <0-65534>

Command

```
transcoder-remote-base <0-65534>
```

Parameters

transcoder-remote-base

Set the base port for the transcoder

<0-65534>

The RTP base port on the transcoder

1.5.44   trunk <1-64>

Command

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

Parameters

trunk

Configure a SS7 trunk

<1-64>

Trunk Nr

1.5.45 write

Command

```
write
```

Parameters

write

Write running configuration to memory, network, or terminal

1.5.46 write file

Command

```
write file
```

Parameters

write

Write running configuration to memory, network, or terminal

file

Write to configuration file

1.5.47 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)

1.5.48 write terminal

Command

```
write terminal
```

Parameters

write

Write running configuration to memory, network, or terminal

terminal

Write to terminal

1.6 NAT Commands

This node allows to configure the global NAT settings. These include the destination address of the MSC, the filter and rewriting rules to use.

1.6.1 access-list NAME imsi-allow [REGEXP]

Command

```
access-list NAME imsi-allow [REGEXP]
```

Parameters

access-list
  Access list commands

NAME
  Name of the access list

imsi-allow
  Add allowed IMSI to the list

[REGEXP]
  Regexp for IMSIs

1.6.2 access-list NAME imsi-deny [REGEXP] (<0-256>) (<0-256>)

Command

```
access-list NAME imsi-deny [REGEXP] (<0-256>) (<0-256>)
```

Parameters

access-list
  Access list commands

NAME
  Name of the access list

imsi-deny
  Add denied IMSI to the list

[REGEXP]
  Regexp for IMSIs

<0-256>
  CM Service Reject reason

<0-256>
  LU Reject reason

1.6.3 access-list-name NAME

Command

```
access-list-name NAME
```

Parameters

access-list-name

Set the name of the access list to use.

NAME

The name of the to be used access list.

1.6.4 bsc BSC_NR

Command

```
bsc BSC_NR
```

Parameters

bsc

BSC configuration

BSC_NR

Identifier of the BSC

1.6.5 end

Command

```
end
```

Parameters

end

End current mode and change to enable mode.

1.6.6 exit

Command

```
exit
```

Parameters

exit

Exit current mode and down to previous mode

1.6.7 help

Command

```
help
```

Parameters

help
    Description of the interactive help system

1.6.8 imsi-black-list-file-name NAME

Command

```
imsi-black-list-file-name NAME
```

Parameters

imsi-black-list-file-name
    IMSI black listing

NAME
    Filename IMSI and reject-cause

1.6.9 ip-dscp <0-255>

Command

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

Parameters

ip-dscp
    Set the IP DSCP for the BSCs to use

<0-255>
    Set the IP_TOS attribute

1.6.10 ip-tos <0-255>

Command

```
ip-tos <0-255>
```

Parameters

ip-tos
    Use ip-dscp in the future.

<0-255>
    Set the DSCP

1.6.11 list

Command

```
list
```

Parameters

list

   Print command list

1.6.12 msc ip A.B.C.D

Command

```
msc ip A.B.C.D
```

Parameters

msc

   MSC related configuration

ip

   Configure the IP address

A.B.C.D

   IP information

1.6.13 msc port <1-65500>

Command

```
msc port <1-65500>
```

Parameters

msc

   MSC related configuration

port

   Configure the port

<1-65500>

   Port number

1.6.14 no access-list NAME

Command

```
no access-list NAME
```

Parameters

no

Negate a command or set its defaults

access-list

Remove an access-list by name

NAME

The access-list to remove

1.6.15 no access-list-name

Command

```
no access-list-name
```

Parameters

no

Negate a command or set its defaults

access-list-name

Remove the access list from the NAT.

1.6.16 no imsi-black-list-file-name

Command

```
no imsi-black-list-file-name
```

Parameters

no

Negate a command or set its defaults

imsi-black-list-file-name

Remove the imsi-black-list

1.6.17 no number-rewrite

Command

```
no number-rewrite
```

Parameters

no

Negate a command or set its defaults

number-rewrite

Set the file with rewriting rules.

1.6.18 no number-rewrite-post

Command

```
no number-rewrite-post
```

Parameters

no

Negate a command or set its defaults

number-rewrite-post

Set the file with post-routing rewriting rules.

1.6.19 no paging-group <0-1000>

Command

```
no paging-group <0-1000>
```

Parameters

no

Negate a command or set its defaults

paging-group

Delete paging-group

<0-1000>

Paging-group number

1.6.20 no prefix-tree

Command

```
no prefix-tree
```

Parameters

no

Negate a command or set its defaults

prefix-tree

Prefix tree for number rewriting

1.6.21 no sms-clear-tp-srr

Command

```
no sms-clear-tp-srr
```

Parameters

no

Negate a command or set its defaults

sms-clear-tp-srr

SMS TPDU Sender Report Request clearing

1.6.22 no sms-number-rewrite

Command

```
no sms-number-rewrite
```

Parameters

no

Negate a command or set its defaults

sms-number-rewrite

Disable SMS TP-DA rewriting

1.6.23 number-rewrite FILENAME

Command

```
number-rewrite FILENAME
```

Parameters

number-rewrite

Set the file with rewriting rules.

FILENAME

Filename

1.6.24 number-rewrite-post FILENAME

Command

```
number-rewrite-post FILENAME
```

Parameters

number-rewrite-post
  Set the file with post-routing rewriting rules.

FILENAME
  Filename

1.6.25 paging-group <0-1000>

Command

```
paging-group <0-1000>
```

Parameters

paging-group
  Create a Paging Group

<0-1000>
  Number of the Group

1.6.26 prefix-tree FILENAME

Command

```
prefix-tree FILENAME
```

Parameters

prefix-tree
  Prefix tree for number rewriting

FILENAME
  File to load

1.6.27 rewrite-smsc addr FILENAME

Command

```
rewrite-smsc addr FILENAME
```

Parameters

rewrite-smsc
SMSC Rewriting

addr
The SMSC Address to match and replace in RP-DATA

FILENAME
File with rules for the SMSC Address replacing

1.6.28 rewrite-smsc tp-dest-match FILENAME

Command

```
rewrite-smsc tp-dest-match FILENAME
```

Parameters

rewrite-smsc
SMSC Rewriting

tp-dest-match
Match TP-Destination of a SMS.

FILENAME
File with rules for matching MSISDN and TP-DEST

1.6.29 show running-config

Command

```
show running-config
```

Parameters

show
Show running system information

running-config
running configuration

1.6.30 sms-clear-tp-srr FILENAME

Command

```
sms-clear-tp-srr FILENAME
```

Parameters

sms-clear-tp-srr
    SMS TPDU Sender Report Request clearing

FILENAME
    Files with rules for matching MSISDN

1.6.31 sms-number-rewrite FILENAME

Command

```
sms-number-rewrite FILENAME
```

Parameters

sms-number-rewrite
    SMS TP-DA Number rewriting

FILENAME
    Files with rules for matching MSISDN

1.6.32 timeout auth <1-256>

Command

```
timeout auth <1-256>
```

Parameters

timeout
    Timeout configuration

auth
    Authentication timeout

<1-256>
    Timeout in seconds

1.6.33 timeout ping NR

Command

```
timeout ping NR
```

Parameters

timeout

   Timeout configuration

ping

   Time between two pings

NR

   Timeout in seconds

1.6.34 timeout pong NR

Command

```
timeout pong NR
```

Parameters

timeout

   Timeout configuration

pong

   Waiting for pong timeout

NR

   Timeout in seconds

1.6.35 token TOKEN

Command

```
token TOKEN
```

Parameters

token

   Authentication token configuration

TOKEN

   Token of the BSC, currently transferred in cleartext

1.6.36 use-msc-ipa-for-mgcp

Command

```
use-msc-ipa-for-mgcp
```

Parameters

use-msc-ipa-for-mgcp

This needs to be set at start. Handle MGCP messages through the IPA protocol and not through the UDP socket.

1.6.37 ussd-list-name NAME

Command

```
ussd-list-name NAME
```

Parameters

ussd-list-name

Set the name of the access list to check for IMSIs for USSD message

NAME

The name of the access list for HLR USSD handling

1.6.38 ussd-local-ip A.B.C.D

Command

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

Parameters

ussd-local-ip

Set the IP to listen for the USSD Provider

A.B.C.D

IP Address

1.6.39 ussd-query REGEXP

Command

```
ussd-query REGEXP
```

Parameters

ussd-query

Set the USSD query to match with the ussd-list-name

REGEXP

The query to match

1.6.40 ussd-token TOKEN

Command

```
ussd-token TOKEN
```

Parameters

ussd-token

 Set the token used to identify the USSD module

TOKEN

 Secret key

1.6.41 write

Command

```
write
```

Parameters

write

 Write running configuration to memory, network, or terminal

1.6.42 write file

Command

```
write file
```

Parameters

write

 Write running configuration to memory, network, or terminal

file

 Write to configuration file

1.6.43 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)

1.6.44 write terminal

Command

```
write terminal
```

Parameters

write
>   Write running configuration to memory, network, or terminal

terminal
>   Write to terminal

1.7 BSC Commands

This node allows to configure a BSC. A BSC has a list of LACs, an access token associated to it.

1.7.1 access-list-name NAME

Command

```
access-list-name NAME
```

Parameters

access-list-name
>   Set the name of the access list to use.

NAME
>   The name of the to be used access list.

1.7.2 description DESC

Command

```
description DESC
```

Parameters

description
>   Provide a description for the given BSC.

DESC
>   Description

1.7.3 end

Command

```
end
```

Parameters

end

    End current mode and change to enable mode.

1.7.4 exit

Command

```
exit
```

Parameters

exit

    Exit current mode and down to previous mode

1.7.5 help

Command

```
help
```

Parameters

help

    Description of the interactive help system

1.7.6 list

Command

```
list
```

Parameters

list

    Print command list

1.7.7 location_area_code <0-65535>

Command

```
location_area_code <0-65535>
```

Parameters

location_area_code

Add the Location Area Code (LAC) of this BSC

<0-65535>

LAC

1.7.8 max-endpoints <1-1024>

Command

```
max-endpoints <1-1024>
```

Parameters

max-endpoints

Highest endpoint to use (exclusively)

<1-1024>

Number of ports

1.7.9 no access-list-name

Command

```
no access-list-name
```

Parameters

no

Negate a command or set its defaults

access-list-name

Do not use an access-list for the BSC.

1.7.10 no location_area_code <0-65535>

Command

```
no location_area_code <0-65535>
```

Parameters

no

Negate a command or set its defaults

location_area_code

Remove the Location Area Code (LAC) of this BSC

<0-65535>

LAC

1.7.11 no paging group

Command

```
no paging group
```

Parameters

no

Negate a command or set its defaults

paging

Paging

group

Disable the usage of a paging group.

1.7.12 paging forbidden (0|1)

Command

```
paging forbidden (0|1)
```

Parameters

paging

Paging

forbidden

Forbid sending PAGING REQUESTS to the BSC.

0

Do not forbid

1

Forbid

1.7.13   paging group <0-1000>

Command

```
paging group <0-1000>
```

Parameters

paging

   Paging

group

   Use a paging group

<0-1000>

   Paging Group to use

1.7.14   paging-group <0-1000>

Command

```
paging-group <0-1000>
```

Parameters

paging-group

   Use a paging group

<0-1000>

   Paging Group to use

1.7.15   show running-config

Command

```
show running-config
```

Parameters

show

   Show running system information

running-config

   running configuration

1.7.16   token TOKEN

Command

```
token TOKEN
```

Parameters

token

Authentication token configuration

TOKEN

Token of the BSC, currently transferred in cleartext

1.7.17   write

Command

```
write
```

Parameters

write

Write running configuration to memory, network, or terminal

1.7.18   write file

Command

```
write file
```

Parameters

write

Write running configuration to memory, network, or terminal

file

Write to configuration file

1.7.19   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)

1.7.20   write terminal

Command

```
write terminal
```

Parameters

write

>   Write running configuration to memory, network, or terminal

terminal

>   Write to terminal

1.8   Paging Group Commands

This node allows to configure a Paging Group. A Paging Group holds the LACs of several destinations and a BSC can refer to a Paging Group. This way several BSCs can receive the paging for a shared LAC.

1.8.1   end

Command

```
end
```

Parameters

end

>   End current mode and change to enable mode.

1.8.2   exit

Command

```
exit
```

Parameters

exit

>   Exit current mode and down to previous mode

1.8.3   help

Command

```
help
```

Parameters

help

>   Description of the interactive help system

1.8.4 list

Command

```
list
```

Parameters

list

Print command list

1.8.5 location_area_code <0-65535>

Command

```
location_area_code <0-65535>
```

Parameters

location_area_code

Add the Location Area Code (LAC)

<0-65535>

LAC

1.8.6 no location_area_code <0-65535>

Command

```
no location_area_code <0-65535>
```

Parameters

no

Negate a command or set its defaults

location_area_code

Remove the Location Area Code (LAC)

<0-65535>

LAC

1.8.7 show running-config

Command

```
show running-config
```

Parameters

show

Show running system information

running-config

running configuration

1.8.8 write

Command

```
write
```

Parameters

write

> Write running configuration to memory, network, or terminal

1.8.9 write file

Command

```
write file
```

Parameters

write

> Write running configuration to memory, network, or terminal

file

> Write to configuration file

1.8.10 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)

1.8.11 write terminal

Command

```
write terminal
```

Parameters

write

> Write running configuration to memory, network, or terminal

terminal

> Write to terminal