O2 TG587n v2
CLI Reference Guide r8.4.3.K-BL

This PDF is produced with the assistance of the community, in the expectation of helping users to more expertly configure their Thomson / Technicolor router. The CLI Commands + Help within these pages have been extracted directly from the relevant model by one of it's users.

For this PDF, you can thank the work of *npr + Alex Kemp*.
1 August 2012
http://www.modem-help.co.uk/

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http://forums.modem-help.co.uk/

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CLI Reference PDF thread (Modem-Help forums)

Version History:
1 August 2012: v2.0 Added in *hidden* notification for groups, commands & optional parameters, plus extended the *help* section.
29 June 2012:   v1.0 First version

Contents:

help

Each ST/TD/TG router is a GPL Linux micro computer.In addition to all the generic functions provided by the OS, the router contains a proprietary Thomson module designed to interface between.CLI (*"Command-Line Interface"*) commands & the whole of the router. These commands are used to configure the router in specific ways, the end result of which is that—dependant only on the hardware in the specific model, and it's design purpose—each router can be configured to connect via any ISP throughout the world.

This document is a compendium of all the CLI Commands available within a specific ST/TD/TG router with a specific firmware release. This section concerns the `:help` command; other commands then follow in alphabetical order. Following the sentiment of the *help* command, these pages will first specify how to access CLI command interfaces, then will get into the meat of the command itself, and finish with a miscellany of ancillary issues.

Access via Web Browser:

The main method suggested for configuring a ST/TD/TG router is via a web browser. The following are the most common access defaults:

IP	Username	Password
192.168.1.254	Administrator	Modem Access Code, or Serial Number
10.0.0.138		(printed on the product label, usually fixed to the base or side)
dsldevice.lan	Admin	
speedtouch.lan		Pre-r8 : (blank) (no password)

The IP used for access via Telnet and/or HTTP/HTTPS and/or FTP can be changed within the router, as indeed—although most rare—can the ports used; if in doubt, contact your supplier.

The Serial Number (s/n) is the most common password with r8 firmware, although the Modem Access Code is sometimes used (see also Access via Telnet for more info). Each is found on the product label, usually fixed to the base or side of the model. Here is an example, drawn from Plusnet web-support:

SN: CP0752SFB4J (38)

Ignore any numbers in brackets. Thus, with this example, the default password would be:- "`CP0752SFB4J`".

Below the hood, the router web-pages translate the actions requested into CLI commands, and translate the results of those commands back into further web-pages to show to you. Whilst this process is nice & simple, the range of possible actions via web browser is most limited.

help Commands

Access via FTP:

CLI commands can also be issued via FTP (access defaults are generally identical to those via a browser, but on port 21 rather than port 80). The ftp client *"arbitrary ftp command"* should be used ('quote' with the Windows' generic FTP client), followed by *"site CLI-command"*. Here is a short example using a ST585v6 under Windows XP:

```
C:\>ftp 192.168.1.254
Connected to 192.168.1.254.
220 Inactivity timer = 120 seconds. Use 'site idle <secs>' to change.
User (192.168.1.254:(none)): Administrator
331 SpeedTouch Password required.
Password:
230 OK
ftp> quote site help env
200- Following commands are available :
200-
200- set            : Sets an environment variable.
200- get            : Gets an environment variable.
200- unset          : Deletes an environment variable.
200- list           : List all environment variables.
200- flush          : Remove all non-system environment variables.
200-
200-
200 CLI command "help env" executed
ftp> bye
221 Goodbye.  You uploaded 0 and downloaded 0 kbytes.
C:\>
```

Access via Telnet:

Each ST/TD/TG router contains a Telnet Server, and that is the most complete interface with which to interactively configure the device. That means using a Telnet client program (Modem-Help recommends PuTTY for use under Windows) to connect to the same URL as the web-config pages (access defaults are generally identical to those via a browser or by FTP, but on port 23 rather than port 80 or port 21)

The first thing after access will be a demand for a *username*, followed by the *password* for that username:
- The first important thing to know is that each is cAsE-sEnsItIve.
- The second important thing is that each is normally identical to the username/passwords that can be used for web access & configuration (see above).
- The third important thing is that, whilst web-config pages may give auto-access to a default user with a blank password, Telnet (and FTP) will not. You always have to enter each, even if the password is blank.

Once again, these access IDs can both be changed within the router. Further, different *levels* of access-rights can be granted to different users, allowing those users to be able to see and/or use all, or less than all (including none), of the Commands listed in this reference (this is controlled by the *MLAP* system – see the *:mlp commands* for further information).

help Commands

If the username + password are accepted, then you will see the following Splash Screen, with the cursor positioned ready to accept commands (note that, by default, the command prompt includes the username, which here is *"Administrator"*):

```
------------------------------------------------------------------------
                               _____      Thomson TG587n v2
                         /_____/\
                        /____/\\   /\\   O2 8.4.3.K.BL
                       /____\/  /   /\ \\
                      /_____/\  /\_____/___ \   Copyright (c) 1999-2011, THOMSON
                    _/____/\/\/ \_____/__ \/ \
                   / \____\/ \  \      \/  / /\_\/___ /\
                  /  /    / \  \  \     /  / /      /\
                 /__/    /   \  _____\/  / /__   /  /\__
                 \  \\    \   \  \      /\  \/   \ /  /  /\
                  \_ \ \    \   \/       \  \ \___\/  /  /
                   \  \ \    \   _____/\  \ \    \/  /
                    \__\/      \   \      /\  \  \___\/
                       _____/\   \    /  / \  \__\/
                        \ \    / \   \  /  /   \  \/
                         \__\  /   \  \/  /  ___\/
                          \ \ /      \  \/  /   \_\/
                           \_\/        \  \/___\/
                            \ \        / \  \/
                             \ \      /   \  \/
                              \_\____/  \  /___\/
                               \  \    / \/___\/
                                \__\  /
                                 \ \ /
                                  \_\/
------------------------------------------------------------------------
{Administrator}=>
```

Your very first command could be the following, to stop the system dropping you out after a few minutes of inactivity:

```
{Administrator}=>:env set var=SESSIONTIMEOUT value=0
```

Typing either "*:help*" or "*?*" (no quotes) at the command prompt as above, and pressing the <Enter> key, will produce the following assistance:

```
{Administrator}=>:help
Following commands are available :

help             : Displays this help information
menu             : Displays menu
?                : Displays this help information
exit             : Exits this shell.
..               : Exits group selection.
saveall          : Saves current configuration.
ping             : Send ICMP ECHO_REQUEST packets.
traceroute       : Send ICMP/UDP packets to trace the ip path.

Following command groups are available :

contentsharing   firewall       printersharing   pwr            service
connection       dhcp           dns              dsd            dyndns
eth              atm            config           debug          env
expr             grp            hostmgr          ids            igmp
interface        ip             ipqos            label          language
mbus             memm           mlp              mobile         nat
ppp              pptp           ptrace           script         sntp
software         statecheck     syslog           system         tls
upnp             user           vfs              wansensing     webserver
wireless         xdsl
```

The same command can be used to precede any *command group* or individual command to produce more detailed information on that group and/or specific command. In similar fashion, "*:menu*" can be used alone, or preceding a *command group* or individual

command, and will lead into a very useful menu system. Use the arrow + <Tab> keys to navigate the `menu` commands, and `Ctrl-C` (both keys at the same time) will back out of it.

One of the more important commands to make note of above is the *":`saveall`"* command. Unlike web-config pages, the results of Telnet commands will NOT be permanently saved to the router, and discarded on restart, until `saveall` is issued.

Missing Groups, Commands & Optional-Parameters:

There are command groups missing from the listing above. Perhaps the best example is "`ar`" (the very first command grouping after this section). In similar fashion, some command groups will then have sub-groups missing from their group help listing and, perhaps even worse, some commands may be missing from the help command-listing itself. If a missing group, sub-group or command is known, then "`:help missing-group`", etc. will show a normal result (although further sub-groups and/or commands and/or optional-parameters may be missing).

Pleased be reassured that, because of the way in which the commands were acquired from the router (and to the best of the author's knowledge), that this document contains *all* of the groups + commands & parameters within the model at the firmware shown. For this v2 version of the PDF, all missing groups + commands have been added into the Groups and Sub-Group help + missing optional-parameters are added into the command help (each is shown as a "hidden" group/command/parameter – by *italics* or explicitly).

Important Note: You cannot rely on a 'missing' group or command appearing within future firmware updates. A good example is the `:adsl` group of commands. That group was superseded when the `:xdsl` group of commands were introduced, yet the *adsl* group was maintained (as a 'hidden' group) as late as r8.2.7.7 firmware (e.g. TG784), but is absent from recent model's firmware. Further, ISP-customised firmware may prevent access to certain commands via Telnet (also to certain web-config pages and/or FTP); default Thomson / Technicolor firmware is *"Access all areas"* to an *Administrator* from LAN, but many ISPs commission customised firmware that locks *Administrator*s out from certain areas (hence the term: *'Locked router'*). This has been experienced on this *O2* TG587n v2 r8.4.3.K, where the `:mlp interaction` command stated that the `:cwmp` group of commands was present, but Telnet responded *"Unknown command"* to each one. The *mlap* permissions system allows full control over every aspect of access to every feature of the router. Many ISPs lock users out from Telnet & FTP access completely, though it can also be fine-grained, as with this 587nv2.

One further issue to make note of is that some group and/or command and/or parameter help is so succinct (including in one or two cases being completely absent) as to be most unhelpful, which rather defeats the name of the command. If you want to play a pointless game, you can try to guess the common author of various commands from the nature of the help provided. An even better game to play will be to write your own help-with-useful-links to add to various sections. Refer to Feedback (page 2), and they can be added to all future *Modem-Help* CLI Command PDFs.

The obvious question to ask about these missing commands is, *"Why?"*. There are three obvious answers:- either it is deliberate, or a mistake, or a mixture of both. This author plumps for the latter (never dismiss the 'cock-up' element of history). One feature of Alcatel, and even of Thomson/Technicolor routers, is their superb fine-grained control & debug capabilities, available through these CLI Commands. The downside of that control is

help Commands

the scope that it offers to half-trained fools (like this author) to wreak havoc upon the router, and possibly even upon the attached network (LAN or WAN). That can, and has, caused difficult backwash from ISPs towards Thomson in past history, and has led to restriction in the scope of some of these commands (`:debug exec` is the prime example). The fail-safe behaviour for users of these routers is to be sure to make a backup before any changes, and to keep it safe. A combination of reset-to-factory-default + load-config-file will completely restore any ST/TD/TG router back to it's previous state.

user.ini:

The router config file (default name: *user.ini*) consists entirely of CLI groups + CLI commands. Together with a small selection of binary and/or text-files—always present in the firmware and, occasionally, also within the router */dl* directory (accessible via FTP), which is where the config file lives—the *user.ini* completely describes the router setup. It is loaded, and the enclosed CLI Commands are run, on every router startup (which means that the `mlp` problems of the previous section do not apply). In the opinion of many—including this author—the *user.ini* is the best method of running most ST/TD/TG CLI Commands. On a related note, see the `:wizard` and `:language` groups for commands that affect Setup Wizards (the end result of a Setup Wizard is to produce a *user.ini*).

The *user.ini* is most easily saved & restored via web-config (go *Home > SpeedTouch > Configuration > Backup & Restore*). Issuing `:saveall` from Telnet will drop various default config files from firmware into the `/dl` directory (that dir is the only read-write, user-accessible directory in the router). The *user.ini* & *security.cfg* are two prime examples of these files; each will appear within */dl* if any changes are made to the default router setup (user.ini) or *mlp* setup (security.cfg). See this user.ini topic for a fuller explanation.

Important Note: some ISPs prevent access to pages that allow the user to save/restore their *user.ini*. That file is so important to the router & a user's peace of mind, that I would advise boycotting any ISP that acts in such a fashion. Saving the *user.ini* from a working router means that, whatever happens in the future, it can always be restored to a fully-functioning state. Not having access to that function means that any future glitch, no matter how small, can render your router useless, & worthless & non-recoverable.

Telnet Interface Peculiarities:

You can NOT use most of the the *Extended* keyboard (<Home>, <Delete>, etc.).

Use of the *back-delete/back-space* (by default, 'delete the character at the left') key is peculiar: cursor first to the left-most character that you wish to delete, and then use the *back-delete* key until all are deleted.

A *'directory'* system is maintained, and shown as part of the command prompt; these *'directories'* are the *command groupings* (the base groups were shown earlier). When within one of the *groups* there is no need to enter the base of the group command, but only the rest of the command + any parameters. Wherever your place within these groupings, it is always possible to issue a command from another group by preceding that full-command with a colon (*":"*) (note that this technique is neither necessary, nor can it be used, via FTP).

Finally, the CLI `:help` command was used to retrieve these Command listings.

ar

Following command groups are available :

```
group
```

Note: ar is missing from the ':help' group list

ar

ar group

Following command groups are available :

```
member
```

ar group

ar group member

Following commands are available :

add	:	add member
delete	:	delete member
list	:	members

ar group member add

add member

Syntax:

```
add username = <{}>
```

Parameters:

username	Required

ar group member add

ar group member delete

delete member

Syntax:

```
delete username = <{}>
```

Parameters:

username	Required

ar group member list

members

Syntax:

```
list [groupname = <{(see Parameters)}>]
```

Parameters:

groupname	Optional
Options: <{root|daemon|bin|sys|adm|tty|disk|lp| mail|news|uucp|proxy|kmem|dialout|fax|voice| cdrom|floppy|tape|sudo|audio|dip|postgres|www-data|backup|operator|list|irc|src|gnats|shadow| utmp|video|staff|games|users|nogroup| SuperUser|TechnicalSupport|Administrator| LAN_Admin|PowerUser|WAN_Admin| WebsevUser}>	

atm

Following commands are available :

`ifadd`	:	Create a new ATM interface.
`ifdelete`	:	Delete an ATM interface.
`ifattach`	:	Attach an ATM interface.
`ifdetach`	:	Detach an ATM interface.
`ifconfig`	:	Modify an ATM interface.
`iflist`	:	Display the ATM interfaces.
`flush`	:	Flush all ATM interfaces.

Following command groups are available :

`cac`	`debug`	`oam`	`phonebook`
`qosbook`			

atm cac

Following commands are available :

config	:	Configure ATM connection admission control.
overbooking	:	Configure ATM overbooking parameters.
list	:	List all CAC parameters.

atm cac config

Configure ATM connection admission control.

Syntax:

```
config port = <{(see Parameters)}>
       state = <{disabled|enabled}>
```

Parameters:

port	The port for which CAC is configured. Options: <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>	Required
state	Enable/disable CAC for an ATM port.	Required

atm cac list

List all CAC parameters.

Syntax:

```
list
```

atm cac overbooking

Configure ATM overbooking parameters.

Syntax:

```
overbooking [nrt = <number{0-1000}>]
            [rt = <number{0-1000}>]
```

Parameters:

nrt	The non-realtime overbooking percentage.	Optional
rt	The realtime overbooking percentage.	Optional

atm Commands

atm debug

Following commands are available :

traceconfig   :   Display/Modify AAL5 debug trace configuration.
portstats   :   Display port specific atm statistics.
aal5stats   :   Display AAL5 port specific atm statistics.
gstats   :   Display ATM global statistics.

atm debug aal5stats

Display AAL5 port specific atm statistics.

Syntax:

```
aal5stats port = <{(see Parameters)}>
             vpi = <number{0-31}>
        [clear = <{disabled|enabled}>]
           [vci = <number{0-511}>]
```

Parameters:

port	The port number for which statistics will be retrieved. Options: <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>	Required
vpi	The VPI number for which statistics will be retrieved.	Required
clear	Clear the statistics after request.	Optional
vci	The VCI number for which statistics will be retrieved.	Optional

atm debug gstats

Display ATM global statistics.

Syntax:

```
gstats [clear = <{disabled|enabled}>]
```

Parameters:

clear	Clear the statistics after request.	Optional

atm debug portstats

Display port specific atm statistics.

Syntax:

```
portstats port = <{(see Parameters)}>
         [clear = <{disabled|enabled}>]
```

Parameters:

port	The port for which statistics will be retrieved. Options: <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>	Required
clear	Clear the statistics after the request.	Optional

atm debug traceconfig

Display/Modify AAL5 debug trace configuration.

Syntax:

```
traceconfig [intf = <{atm_ppp|atm_dyn|atm_static}>]
            [len = <number>]
          [state = <{disabled|enabled}>]
```

Parameters:

intf	The name of the ATM interface to configure.	Optional
len	Maximum number of AAL5 payload bytes that will be shown (0-2000, global setting).	Optional
state	Enable/disable AAL5 debug tracing.	Optional

atm flush

Flush all ATM interfaces.

Syntax:

```
flush
```

atm ifadd

Create a new ATM interface.

Syntax:
```
ifadd intf = <string>
```

Parameters:

intf	The name for the new ATM interface. If not specified, the destination will double as interface name.	Required

atm ifattach

Attach an ATM interface.

Syntax:

```
ifattach intf = <{}>
```

Parameters:

intf	The name of the ATM interface.	Required

atm ifconfig

Modify an ATM interface.

Syntax:

```
ifconfig intf = <{atm_ppp|atm_dyn|atm_static}>
         [clp = <{0|1|classification}>]
   [clpthresh = <number{0-15}>]
        [dest = <{}>]
      [encaps = <{llc|vcmux}>]
         [fcs = <{disabled|enabled|auto}>]
         [qos = <{default}>]
       [retry = <number{0-65535}>]
         [ulp = <{mac|ip|ppp}>]
```

Parameters:

intf	The name of the ATM interface to configure.	Required
clp	The mode used to determine the CLP bit value.	Optional
clpthresh	Priority class threshold where CLP becomes 0 (for all classes >= threshold).	Optional
dest	The WAN destination for this ATM interface. Typically, a phonebook entry.	Optional
encaps	The WAN protocol encapsulation to be used on this interface.	Optional
fcs	Whether or not to include the Ethernet FCS in the packet header (only used for llc encapsulation for mac).	Optional
qos	The name of a qosbook entry defining the QoS parameters for the WAN link.	Optional
retry	The number of times the WAN connection setup should retry before giving up.	Optional
ulp	The upper layer protocol.	Optional

atm ifdelete

Delete an ATM interface.

Syntax:

```
ifdelete intf = <{}>
```

Parameters:

intf	The name of the ATM interface.	Required

atm ifdetach

Detach an ATM interface.

Syntax:

```
ifdetach intf = <{}>
```

Parameters:

intf	The name of the ATM interface.	Required

atm iflist

Display the ATM interfaces.

Syntax:

```
iflist [intf = <{atm_ppp|atm_dyn|atm_static}>]
```

Parameters:

intf	The name of an ATM interface.	Optional

atm oam

Following commands are available :

```
ping            :   Send ATM loopback cells.
config          :   Modify the ATM OAM settings.
modify          :   Modify the ATM OAM data blocking mode.
list            :   Display the ATM OAM settings.
```

Following command groups are available :

```
cc              vclb
```

atm oam cc

Following commands are available :

modify   :   Modify CC on the connection.
send   :   Send CC activate/deactivate to connection.
list   :   Display CC configuration.

atm oam cc list

Display CC configuration.

Syntax:

```
list
```

atm oam cc modify

Modify CC on the connection.

Syntax:

```
modify port = <{(see Parameters)}>
        vpi = <number{0-31}>
      [auto = <{disabled|enabled}>]
   [receive = <{disabled|enabled}>]
      [span = <{segment|end2end}>]
  [transmit = <{disabled|enabled}>]
       [vci = <number{0-511}>]
```

Parameters:

port	The ATM port number. Options: <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>	Required
vpi	The Virtual Path Identifier.	Required
auto	Enable/disable remote CC activation/deactivation.	Optional
receive	Enable/disable loss of continuity.	Optional
span	End2end or segment continuity check.	Optional
transmit	Enable/disable transmission of CC cells.	Optional
vci	The Virtual Channel Identifier.	Optional

atm oam cc send

Send CC activate/deactivate to connection.

Syntax:

```
send  port = <{(see Parameters)}>
        vpi = <number{0-31}>
   [action = <{activate|deactivate}>]
[direction = <{source|sink|both}>]
     [span = <{segment|end2end}>]
      [vci = <number{0-511}>]
```

Parameters:

port	The ATM port number. Options: <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>	Required
vpi	The Virtual Path Identifier.	Required
action	The CC action.	Optional
direction	Source, sink or both (default: both).	Optional
span	Send CC action end2end or segment.	Optional
vci	The Virtual Channel Identifier.	Optional

atm oam config

Modify the ATM OAM settings.

Syntax:

```
config [clp = <number{0-1}>]
[loopbackid = <string>]
```

Parameters:

clp	The CLP bit value of the OAM cells.	Optional
loopbackid	The loopback id (hexadecimal string) for processing of segment loopback cells.	Optional

atm oam list

Display the ATM OAM settings.

Syntax:

```
list
```

atm oam modify

Modify the ATM OAM data blocking mode.

Syntax:

```
modify blocking = <{disabled|enabled}>
          port = <{(see Parameters)}>
```

Parameters:

blocking	Enable/disable OAM blocking.	Required
port	The port for which OAM blocking is configured. Options: <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>	Required

atm oam ping

Send ATM loopback cells.

Syntax:

```
ping dest = <{pvc_ppp|pvc_dyn|pvc_static}>
    [count = <number{1-1000000}>]
[interval = <number{100-1000000}>]
```

Parameters:

dest	The destination address for the request.	Required
count	The number of pings to send.	Optional
interval	The interval in milliseconds between packets.	Optional

atm oam vclb

Following commands are available :

add   :   Create a loopback connection for VC
del   :   Delete a loopback connection for VC
list   :   List all VC loopback connections

atm oam vclb add

Create a loopback connection for VC

Syntax:

```
add port = <{(see Parameters)}>
     vpi = <number{0-31}>
    [vci = <number{0-511}>]
```

Parameters:

port	The ATM port number. Options: <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>	Required
vpi	The Virtual Path Identifier.	Required
vci	The Virtual Channel Identifier.	Optional

atm oam vclb del

Delete a loopback connection for VC

Syntax:

```
del port = <{(see Parameters)}>
     vpi = <number{0-31}>
    [vci = <number{0-511}>]
```

Parameters:

port	The ATM port number. Options: <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>	Required
vpi	The Virtual Path Identifier.	Required
vci	The Virtual Channel Identifier.	Optional

atm oam vclb list

List all VC loopback connections

Syntax:

```
list
```

atm phonebook

Following commands are available :

`list`	:	Display the phonebook.
`add`	:	Add a new phonebook entry.
`delete`	:	Delete a phonebook entry.
`flush`	:	Flush all phonebook entries.

atm phonebook add

Add a new phonebook entry.

Syntax:
```
add addr = <{(see Parameters)}>
    name = <string>
```

Parameters:

addr	The address for this destination. Options: <atmchannel : PVC syntax is [port.]vpi.vci port=dsl0|dsl1|...>	Required
name	The phonebook name for this destination.	Required

atm phonebook delete

Delete a phonebook entry.

Syntax:

```
delete name = <{}>
```

Parameters:

name	The name of the phonebook to delete.	Required

atm phonebook delete

atm phonebook flush

Flush all phonebook entries.

Syntax:

```
flush
```

atm phonebook list

Display the phonebook.

Syntax:

```
list
```

atm qosbook

Following commands are available :

config	:	Modify the qosbook configuration.
ctdlist	:	Display all connection traffic descriptors.
ctdadd	:	Add a new connection traffic descriptor.
ctddelete	:	Delete a connection traffic descriptor.
list	:	Display the qosbook.
add	:	Add a new qosbook entry.
delete	:	Delete a qosbook entry.
flush	:	Flush all qosbook entries.

atm qosbook add

Add a new qosbook entry.

Syntax:

```
add name = <string>
   [rxctd = <{default}>]
   [txctd = <{default}>]
```

Parameters:

name	The name for the new QoS entry.	Required
rxctd	The name of the CTD for receive (downstream) direction.	Optional
txctd	The name of the CTD for transmit (upstream) direction.	Optional

atm qosbook config

Modify the qosbook configuration.

Syntax:

```
config [format = <{bytes|cells}>]
```

Parameters:

format	The input, output format of the qosbook.	Optional

atm qosbook ctdadd

Add a new connection traffic descriptor.

Syntax:

```
ctdadd conformance = <{(see Parameters)}>
               name = <string>
         [celldelay = <number>]
      [framediscard = <{enabled|disabled}>]
          [maxburst = <number{48-12240}>]
          [maxframe = <number{0-255}>]
           [minrate = <number{0-27786}>]
          [peakrate = <number{0-27786}>]
          [realtime = <{enabled|disabled}>]
          [sustrate = <number{0-27786}>]
```

Parameters:

conformance	The ATM service conformance definition. Options: <{UBR|CBR|VBR|UBR.1|UBR.2| UBR.mdcr|CBR.1|VBR.1|VBR.2|VBR.3|VBR.c| VBR.nt|VBR.t|GFR.1|GFR.2}>	Required
name	The name for the new CTD entry.	Required
celldelay	Cell delay variation in tenths of microseconds.	Optional
framediscard	Enable/disable frame discard.	Optional
maxburst	The maximum burst size (in bytes). (VBR or GFR)	Optional
maxframe	The maximum frame size (in bytes). (GFR only)	Optional
minrate	The minimum rate (in kilobits per second). (UBR.m or GFR)	Optional
peakrate	The peak rate (in kilobits per second). Use '0' to indicate linerate for UBR.	Optional
realtime	Enable/disable realtime traffic (VBR only).	Optional
sustrate	The sustainable rate (in kilobits per second). (VBR only)	Optional

atm qosbook ctddelete

Delete a connection traffic descriptor.

Syntax:

```
ctddelete name = <{default}>
        [force = <{disabled|enabled}>]
```

Parameters:

name	The name of the CTD entry to delete.	Required
force	Force delete even when the entry is still in use.	Optional

atm qosbook ctdlist

Display all connection traffic descriptors.

Syntax:

```
ctdlist
```

atm qosbook delete

Delete a qosbook entry.

Syntax:

```
delete name = <{default}>
      [force = <{disabled|enabled}>]
```

Parameters:

name	The name of the qosbook entry to delete.	Required
force	Force delete even when the entry is still in use.	Optional

atm qosbook flush

Flush all qosbook entries.

Syntax:

```
flush
```

atm qosbook list

Display the qosbook.

Syntax:

```
list
```

config

Following commands are available :

save	:	Store current configuration to backup file
load	:	Load saved or default configuration.
delete	:	Delete a user configuration file.
flush	:	Flush the loaded configuration.
list	:	Show the current configuration set
dump	:	Show the saved configuration file

config delete

Delete a user configuration file.

Syntax:
```
delete [filename = <user configuration filename>]
```

Parameters:

filename	configuration file to erase	Optional

config dump

Show the saved configuration file

Syntax:

```
dump
```

config flush

Flush the loaded configuration.

Syntax:

```
flush [flush_ip = <{enabled|disabled}>]
```

Parameters:

flush_ip	Flush IP settings or not.	Optional

config list

Show the current configuration set

Syntax:

```
list [templates = <{disabled|enabled}>]
```

Parameters:

templates	list template files	Optional

config load

Load saved or default configuration.

Syntax:

```
load [defaults <{disabled|enabled}>]
          [echo = <{disabled|enabled}>]
      [filename = <string>]
          [flush = <{enabled|disabled}>]
        [load_ip = <{enabled|disabled}>]
    [persistent = <{(missing)}>]
```

Parameters:

defaults	Load default instead of saved configuration.	Optional
echo	Echo each command string when loaded.	Optional
filename	Configuration filename.	Optional
flush	Flush current configuration before loading new one.	Optional
load_ip	Load IP settings or not.	Optional
persistent		Hidden

config save

Store current configuration to backup file

Syntax:

```
save filename = <user configuration filename>
```

Parameters:

filename	Filename for backupfile of current configuration	Required

connection

Following commands are available :

config	:	Modify global connection configuration.
timerconfig	:	Modify connection timeout handling.
timerclear	:	Clear connection timeout to default.
info	:	Display all modules with some info.
list	:	Display the currently known connections.
describe	:	Describe the streams of a connection.
refresh	:	Invalidate all cached decisions.
clear	:	Kill all connections.
clean	:	Clean connection database by forcing timeouts.
stats	:	Display connection and stream statistics.
reserve	:	Reserve connections.
release	:	Release connections.
applist	:	Display the available CONN/NAT application helpers.
appconfig	:	Modify a CONN/NAT application helper configuration
appinfo	:	Display CONN/NAT application specific info
bindlist	:	Display the CONN/NAT application helper/port bindings.
bind	:	Create a CONN/NAT application helper/port binding.
unbind	:	Delete a CONN/NAT application helper/port binding.
flush	:	Flush the connection configuration.
debug	:	Connection debug commands.

Following command groups are available :

bindblacklist   flow

connection appconfig

Modify a CONN/NAT application helper configuration

Syntax:

```
appconfig application = <{(see Parameters)}>
            [childqos = <{(see Parameters)}>]
            [floating = <{disabled|enabled}>]
              [proxy = <{disabled|enabled}>]
            [SIP_ALG = <{(missing)}>]
           [snooping = <{disabled|enabled}>]
            [timeout = <number{0-32000}>]
              [trace = <{disabled|enabled}>]
         [tracelevel = <number{1-4}>]
  [translate-predict = <{disabled|enabled}>]
```

Parameters:

application	The name of a CONN/NAT application helper as listed by ':connection applist'. Options: <{IP6TO4|PPTP|ESP|IKE|SIP|JABBER| CU/SeeMe|RAUDIO(PNA)|RTSP|ILS|H245| H323|IRC|DHCP|GAME(UDP)|CONE(UDP)| LOOSE(UDP)|SNMP_TRAP|FTP}>	Required
childqos	Used QOS label for the predicted child connections. Options: <{None|Blank|DSCP|Interactive| Management|Video|VoIP-RTP|VoIP-Signal| default}>	Optional
floating	Enable/disabled floating port for IKE helper.	Optional
proxy	Enable/disable FTP proxy support.	Optional
SIP_ALG		Hidden
snooping	SIP only: Enable/disable snooping	Optional
timeout	The maximum timeout in seconds to keep predicted child connections around.	Optional
trace	Enable/disable CONN/NAT application helper traces.	Optional
tracelevel	SIP only: SIP trace level: 1=feature errors; 2=feature traces; 3=all errors; 4=all traces.	Optional
translate-predict	SIP only: Enable/disable prediction	Optional

connection appinfo

Display CONN/NAT application specific info

Syntax:

```
appinfo application = <{(see Parameters)}>
```

Parameters:

application	The name of a CONN/NAT application helper as listed by ':connection applist'. Options: <{IP6TO4|PPTP|ESP|IKE|SIP|JABBER|CU/SeeMe|RAUDIO(PNA)|RTSP|ILS|H245|H323|IRC|DHCP|GAME(UDP)|CONE(UDP)|LOOSE(UDP)|SNMP_TRAP|FTP}>	Required

connection applist

Display the available CONN/NAT application helpers.

Syntax:

```
applist
```

connection bind

Create a CONN/NAT application helper/port binding.

Syntax:

```
bind application = <{(see Parameters)}>
           [port = <port-range>]
```

Parameters:

application	The name of a CONN/NAT application helper as listed by ':connection applist'. Options: <{IP6TO4|PPTP|ESP|IKE|SIP|JABBER| CU/SeeMe|RAUDIO(PNA)|RTSP|ILS|H245| H323|IRC|DHCP|GAME(UDP)|CONE(UDP)| LOOSE(UDP)|SNMP_TRAP|FTP}>	Required
port	The port number or range this application handler should work on.	Optional

connection bindblacklist

Following commands are available :

add	:	Add bind blacklist entry.
delete	:	Delete bind blacklist entry.
list	:	List all bind blacklist entries.

connection bindblacklist add

Add bind blacklist entry.

Syntax:

```
add ip = <ip-address>
 [port = <port-range>]
[proto = <{(see Parameters)}>]
```

Parameters:

ip	The source or destination IP address.	Required
port	The port number or range.	Optional
proto	The IP protocol (name or number). Options: <{ah|egp|esp|ggp|gre|hmp|icmp|igmp| pup|rdp|rsvp|tcp|udp|vines|xns-idp|6to4|ipip} or number>	Optional

connection bindblacklist delete

Delete bind blacklist entry.

Syntax:

```
delete ip = <ip-address>
    [port = <port-range>]
    [proto = <{(see Parameters)}>]
```

Parameters:

ip	The source or destination IP address.	Required
port	The port number or range.	Optional
proto	The IP protocol (name or number). Options: <{ah|egp|esp|ggp|gre|hmp|icmp|igmp| pup|rdp|rsvp|tcp|udp|vines|xns-idp|6to4|ipip} or number>	Optional

connection bindblacklist list

List all bind blacklist entries.

Syntax:

```
list
```

connection bindlist

Display the CONN/NAT application helper/port bindings.

Syntax:

```
bindlist
```

connection clean

Clean connection database by forcing timeouts.

Syntax:

```
clean [level = <number{0-9}>]
```

Parameters:

level	Scrubbing level.	Optional

connection clear

Kill all connections.

Syntax:

```
clear
```

connection config

Modify global connection configuration.

Syntax:

```
config [configchangemode = <{immediate|delayed}>]
                [probes = <{disabled|enabled}>]
          [safepredicts = <{disabled|enabled}>]
          [udptrackmode = <{strict|loose}>]
```

Parameters:

config changemode	Select how config changes are handled.	Optional
probes	Enable/disable alive probes on idle connections.	Optional
safepredicts	Enable/disable safe CONN/NAT application helper predictions (predicted connection must have same IP addresses as its parent).	Optional
udptrackmode	UDP connection tracking mode.	Optional

connection debug

Connection debug commands.

Syntax:

```
debug [trace = <{disabled|enabled}>]
```

Parameters:

trace	Enable/disable traces.	Optional

connection describe

Describe the streams of a connection.

Syntax:

```
describe id = <number{0-4095}>
```

Parameters:

id	The connection ID to describe.	Required

connection flow

Following commands are available :

add	:	Add flow
delete	:	Delete flow
qoslabeladd	:	Assign qos label to flow
qoslabeldel	:	Remove qos label from flow
list	:	List all flows
flush	:	Flush flow configuration

connection flow add

Add flow

Syntax:
```
add [name = <string>]
```

Parameters:

name	Flow name.	Optional

connection flow add

connection flow delete

Delete flow

Syntax:

```
delete [flow = <{CWMP|}>]
```

Parameters:

flow	Flow name.	Optional

connection flow flush

Flush flow configuration

Syntax:

```
flush
```

connection flow list

List all flows

> *Syntax:*
>
> ```
> list
> ```

connection flow qoslabeladd

Assign qos label to flow

Syntax:

```
qoslabeladd [flow = <{CWMP|}>]
            [qoslabel = <{(see Parameters)}>]
```

Parameters:

flow	Flow name.	Optional
qoslabel	Qos label name. Options: <{None|Blank|DSCP|Interactive| Management|Video|VoIP-RTP|VoIP-Signal| default}>	Optional

connection flow qoslabeldel

Remove qos label from flow

Syntax:

```
qoslabeldel [flow = <{CWMP|}>]
        [qoslabel = <{(see Parameters)}>]
```

Parameters:

flow	Flow name.	Optional
qoslabel	Qos label name. Options: <{None|Blank|DSCP|Interactive| Management|Video|VoIP-RTP|VoIP-Signal| default}>	Optional

connection flush

Flush the connection configuration.

Syntax:

```
flush
```

connection info

Display all modules with some info.

Syntax:

```
info
```

connection list

Display the currently known connections.

Syntax:

```
list [accelerated = <{false|true}>]
     [application = <{(see Parameters)}>]
         [history = <{disabled|enabled}>]
              [id = <number{0-4095}>]
            [intf = <{(see Parameters)}>]
              [ip = <ip-range>]
              [nr = <number{1-4096}>]
            [port = <port-range>]
     [prioritized = <{false|true}>]
           [proto = <{(see Parameters)}>]
        [qoslabel = <{(see Parameters)}>]
        [reserved = <{false|true}>]
       [routelabel = <{(see Parameters)}>]
```

Parameters:

accelerated	Filter on "A" stream flag.	Optional
application	The name of CONN/NAT application helper. Options: <{IP6TO4|PPTP|ESP|IKE|SIP|JABBER| CU/SeeMe|RAUDIO(PNA)|RTSP|ILS|H245| H323|IRC|DHCP|GAME(UDP)|CONE(UDP)| LOOSE(UDP)|SNMP_TRAP|FTP}>	Optional
history	If enabled, show history.	Optional
id	The connection ID.	Optional
intf	The IP interface name. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Optional
ip	The IP address or range.	Optional
nr	The maximum number of connections to display (30 by default).	Optional
port	The port number or range.	Optional
prioritized	Filter on "P" stream flag.	Optional
proto	The IP protocol (name or number). Options: <{ah|egp|esp|ggp|gre|hmp|icmp|igmp| pup|rdp|rsvp|tcp|udp|vines|xns-idp|6to4|ipip} or number>	Optional
qoslabel	The QoS label name. Options: <{None|Blank|DSCP|Interactive|	Optional

	Management|Video|VoIP-RTP|VoIP-Signal|default}>	
reserved	Filter on "R" connection flag .	Optional
routelabel	The route label name. Options: <{None|Blank|DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|default}>	Optional

connection refresh

Invalidate all cached decisions.

Syntax:

```
refresh
```

connection release

Release connections.

Syntax:

```
release [flow = <{CWMP|}>]
```

Parameters:

flow	Flow name.	Optional

connection reserve

Reserve connections.

Syntax:

```
reserve [amount = <number>]
        [flow = <{CWMP|}>]
```

Parameters:

amount	Number of connections to reserve for this flow.	Optional
flow	Flow name.	Optional

connection stats

Display connection and stream statistics.

Syntax:

```
stats
```

connection timerclear

Clear connection timeout to default.

Syntax:

```
timerclear [timer = <{(see Parameters)}>]
```

Parameters:

timer	The name of the connection idle timer. Options: <{tcpidle|tcpneg|tcpkill|udpidle|udpkill| icmpidle|icmpkill|ipidle|ipkill}>	Optional

connection timerconfig

Modify connection timeout handling.

Syntax:

```
timerconfig [timer = <{(see Parameters)}>]
            [value = <number{0-86400}>]
```

Parameters:

timer	The name of the connection idle timer. Options: <{tcpidle|tcpneg|tcpkill|udpidle|udpkill| icmpidle|icmpkill|ipidle|ipkill}>	Optional
value	The timer expire value in seconds.	Optional

connection unbind

Delete a CONN/NAT application helper/port binding.

Syntax:

```
unbind application = <{(see Parameters)}>
              [port = <port-range>]
```

Parameters:

application	The name of a CONN/NAT application helper as listed by ':connection applist'. Options: <{IP6TO4|PPTP|ESP|IKE|SIP|JABBER|CU/SeeMe|RAUDIO(PNA)|RTSP|ILS|H245|H323|IRC|DHCP|GAME(UDP)|CONE(UDP)|LOOSE(UDP)|SNMP_TRAP|FTP}>	Required
port	The port number or range this application handler should work on.	Optional

contentsharing

Following command groups are available :

```
cifs              ftp              upnpav              upnp
```

contentsharing cifs

Following commands are available :

config   :   To set CIFS service name, to define CIFS service workgroup
                        and to enable/disable CIFS service.
list   :   To display CIFS service context.

contentsharing cifs config

To set CIFS service name, to define CIFS service workgroup and to enable/disable CIFS service.

Syntax:

```
config [comment = <quoted string>]
         [name = <quoted string>]
        [state = <{enabled|disabled}>]
    [workgroup = <quoted string>]
```

Parameters:

comment	CIFS service description.	Optional
name	CIFS service name.	Optional
state	Enabled/disabled CIFS service.	Optional
workgroup	CIFS workgroup definition.	Optional

contentsharing cifs list

To display CIFS service context.

Syntax:

```
list
```

contentsharing ftp

Following commands are available :

```
config              :  To enable/disable FTP service.
list                :  To display FTP service context.
```

contentsharing ftp config

To enable/disable FTP service.

Syntax:

```
config [state = <{enabled|disabled}>]
```

Parameters:

state	Enabled/disabled FTP service.	Optional

contentsharing ftp list

To display FTP service context.

Syntax:

```
list
```

contentsharing upnp

Following commands are available :

config   :   To enable/disable UPnPAV service, to set the friendly name.
list   :   To display UPnPAV service context.

Following command groups are available :

radiostation

Note: contentsharing upnp is missing from the ':help contentsharing' group list

contentsharing upnp config

To enable/disable UPnPAV service, to set the friendly name.

Syntax:

```
config [friendlyname = <quoted string>]
               [state = <{enabled|disabled}>]
```

Parameters:

friendlyname	upnpav friendly name.	Optional
state	Enable/disable UPnPAV service.	Optional

contentsharing upnp list

To display UPnPAV service context.

Syntax:

```
list
```

contentsharing upnp radiostation

Following commands are available :

config   : To enable/disable radiostations service.
list   : To display radiostations service context.

Following command groups are available :

station

contentsharing upnp radiostation config

To enable/disable radiostations service.

Syntax:

```
config [state = <{disabled|enabled}>]
```

Parameters:

state	Enabled/disabled radiostations service.	Optional

contentsharing upnp radiostation list

To display radiostations service context.

> *Syntax:*
> ```
> list
> ```

contentsharing upnp radiostation station

Following commands are available :

add	:	Add an option.
delete	:	Delete an option.
list	:	List all options.

contentsharing upnp radiostation station add

Add an option.

Syntax:
```
add name = <string>
    url = <string>
```

Parameters:

name	station name.	Required
url	station url	Required

contentsharing upnp radiostation station delete

Delete an option.

Syntax:

```
delete name = <string>
```

Parameters:

name	station name.	Required

contentsharing upnp radiostation station list

List all options.

Syntax:

```
list
```

contentsharing upnpav

Following commands are available :

```
config              :   To enable/disable UPnPAV service, to set the friendly name.
list                :   To display UPnPAV service context.
```

Following command groups are available :

```
radiostation
```

contentsharing upnpav config

To enable/disable UPnPAV service, to set the friendly name.

Syntax:

```
config [friendlyname = <quoted string>]
                [state = <{enabled|disabled}>]
```

Parameters:

friendlyname	upnpav friendly name.	Optional
state	Enable/disable UPnPAV service.	Optional

contentsharing upnpav list

To display UPnPAV service context.

Syntax:

```
list
```

contentsharing upnpav radiostation

Following commands are available :

config   :   To enable/disable radiostations service.
list   :   To display radiostations service context.

Following command groups are available :

station

contentsharing upnpav radiostation config

To enable/disable radiostations service.

Syntax:

```
config [state = <{disabled|enabled}>]
```

Parameters:

state	Enabled/disabled radiostations service.	Optional

contentsharing upnpav radiostation list

To display radiostations service context.

> *Syntax:*
>
> ```
> list
> ```

contentsharing upnpav radiostation station

Following commands are available :

add   : Add an option.
delete   : Delete an option.
list   : List all options.

contentsharing upnpav radiostation station add

Add an option.

Syntax:

```
add name = <string>
    url = <string>
```

Parameters:

name	station name.	Required
url	station url	Required

contentsharing upnpav radiostation station delete

Delete an option.

Syntax:

```
delete name = <string>
```

Parameters:

name	station name.	Required

contentsharing upnpav radiostation station list

List all options.

Syntax:

```
list
```

cwmp

Following commands are available :

cmd	:	Unknown command.(command is hidden)
config	:	Unknown command.(command is hidden)
runtimevar	:	Unknown command.(command is hidden)

Following command groups are available :

debug   *notification*   *server*

Note: cwmp is missing from the ':help' group list

cwmp cmd

Unknown command.(command is hidden)

Syntax:

```
cmd
```

cwmp config

Unknown command.(command is hidden)

Syntax:

```
config
```

cwmp debug

Following commands are available :

traceconfig   :   Unknown command.(command is hidden)

Note: cwmp debug is missing from the ':help cwmp' group list

cwmp debug traceconfig

Unknown command.(command is hidden)

Syntax:

```
traceconfig
```

cwmp notification

Following commands are available :

notifiedparameter : Unknown command.(command is hidden)
rule   : Unknown command.(command is hidden)

Note: cwmp notification is missing from the ':help cwmp' group list

cwmp notification notifiedparameter

Unknown command.(command is hidden)

Syntax:

```
notifiedparameter [name = <{(Missing)}>]
```

Parameters:

name	Hidden

cwmp notification rule

Unknown command.(command is hidden)

Syntax:

```
rule [keystring = <{(Missing)}>]
          [name = <{(Missing)}>]
   [notification = <{(Missing)}>]
```

Parameters:

notification	Hidden
name	Hidden
notification	Hidden

cwmp runtimevar

Unknown command.(command is hidden)

Syntax:

```
runtimevar
```

cwmp server

Following commands are available :

config   :   Unknown command.(command is hidden)

Note: cwmp server is missing from the ':help cwmp' group list

cwmp server config

Unknown command.(command is hidden)

Syntax:

```
config
```

debug

Following commands are available :

`exec`	:	Execute a 'Trace & Debug' command. For qualified personnel only.
`dmesg`	:	Show the Linux kernel messages. For qualifies personnel only. (command is hidden)

debug dmesg

Show the Linux kernel messages. For qualifies personnel only.(command is hidden)

Syntax:

```
dmesg
```

debug exec

Execute a 'Trace & Debug' command. For qualified personnel only.

Syntax:

```
exec cmd = <quoted string>
```

Parameters:

cmd	Quoted 'Trace & Debug' command string	Required

dhcp

Following command groups are available :

```
client          relay           rule            server
spoofing
```

dhcp client

Following commands are available :

ifadd	:	Create a DHCP client.
ifattach	:	Activate a DHCP client.
ifconfig	:	Configure a DHCP client.
ifdelete	:	Delete a DHCP client.
ifdetach	:	De-activate a DHCP client and releases its lease.
iflist	:	List DHCP clients.
ifrenew	:	Renew a DHCP lease.
flush	:	Delete all DHCP clients.

Following command groups are available :

debug	rqoptions	txoptions

dhcp client debug

Following commands are available :

traceconfig   :   Modify DHCP client trace configuration
stats   :   Print DHCP client statistics
clear   :   Clear DHCP client statistics

dhcp client debug clear

Clear DHCP client statistics

Syntax:

```
clear
```

dhcp client debug stats

Print DHCP client statistics

Syntax:

```
stats
```

dhcp client debug traceconfig

Modify DHCP client trace configuration

Syntax:

```
traceconfig [state = <{disabled|enabled}>]
```

Parameters:

state	Enable/Disable tracing.	Optional

dhcp client flush

Delete all DHCP clients.

Syntax:

```
flush
```

dhcp client ifadd

Create a DHCP client.

Syntax:

```
ifadd intf = <{O2_ADSL|LocalNetwork|Hotspot}>
```

Parameters:

intf	The name of the interface on which a DHCP Client is defined.	Required

dhcp client ifattach

Activate a DHCP client.

Syntax:

```
ifattach intf = <>
```

Parameters:

intf	The name of the interface on which a DHCP Client is defined.	Required

dhcp client ifconfig

Configure a DHCP client.

Syntax:

```
ifconfig intf = <>
        [addr = <{(missing)}>]
   [broadcast = <{disabled|enabled}>]
    [clientid = <{(missing)}>]
         [dns = <{(missing)}>]
   [dnsmetric = <number{0-100}>]
      [domain = <{(missing)}>]
 [followlabel = <{disabled|enabled}>]
     [gateway = <{(missing)}>]
    [hostname = <{(missing)}>]
       [label = <{(see Parameters)}>]
   [leasetime = <{(missing)}>]
      [metric = <number{0-255}>]
 [serverroute = <{disabled|enabled}>]
       [statrt = <{(missing)}>]
       [userid = <{(missing)}>]
       [vendor = <{(missing)}>]
```

Parameters:

intf	The name of the dynamic interface to be configured.	Required
addr		Hidden
broadcast	Operate client in unicast/broadcast mode.	Optional
clientid		Hidden
dns		Hidden
dnsmetric	DNS route metric.	Optional
domain		Hidden
followlabel	If enabled the DHCP client's unicast traffic will follow the route label specified. If disabled DHCP unicast traffic will follow standard routes	Optional
gateway		Hidden
hostname		Hidden
label	Label for default gateway and static routes. Options: <{None|Blank|DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|default}>	Optional
leasetime		Hidden

dhcp Commands

metric	Route metric for default gateway and static routes.	Optional
serverroute	Insert a route for the DHCP server IP	Optional
statrt		Hidden
userid		Hidden
vendor		Hidden

dhcp client ifdelete

Delete a DHCP client.

Syntax:

```
ifdelete intf = <{O2_ADSL2plus|O2_Static}>
```

Parameters:

intf	The name of the interface on which a DHCP Client is defined.	Required

dhcp client ifdetach

De-activate a DHCP client and releases its lease.

Syntax:

```
ifdetach intf = <{O2_ADSL2plus|O2_Static}>
```

Parameters:

intf	The name of the interface on which a DHCP Client is defined.	Required

dhcp client iflist

List DHCP clients.

Syntax:

```
iflist [expand = <{disabled|enabled}>]
        [intf = <{O2_ADSL2plus|O2_Static}>]
```

Parameters:

expand	Expand enabled/disabled.	Optional
intf	The name of the interface on which a DHCP Client is defined.	Optional

dhcp client ifrenew

Renew a DHCP lease.

Syntax:
```
ifrenew intf = <{O2_ADSL2plus|O2_Static}>
```

Parameters:

intf	The name of the interface on which a DHCP Client is defined.	Required

dhcp client rqoptions

Following commands are available :

add	:	Add a DHCP Option Code to the Parameter Request List.
delete	:	Delete a DHCP Option Code from the Parameter Request List.
list	:	List all DHCP Option Codes in the Parameter Request List.
optionlist	:	List all DHCP Option Codes that can be used in the Parameter Request List.

dhcp client rqoptions add

Add a DHCP Option Code to the Parameter Request List.

Syntax:

```
add intf = <>
   option = <{(see Parameters)}>
   [index = <number{0-255}>]
```

Parameters:

intf	The name of the interface on which a DHCP Client is defined.	Required
option	The name or number of the option. Options: <{subnet-mask|time-offset|default-routers|time-servers|ien116-name-servers|domain-name-servers|log-servers|cookie-servers|lpr-servers|impress-servers|resource-location-servers|host-name|boot-file-size|merit-dump|domain-name|swap-server|root-path|extensions-path|ip-forwarding|non-local-source-routing|policy-filter|max-dgram-reassembly|default-ip-ttl|path-mtu-aging-timeout|path-mtu-plateau-table|interface-mtu|all-subnets-local|broadcast-address|perform-mask-discovery|mask-supplier|router-discovery|router-solicitation-address|classfull-static-routes|trailer-encapsulation|arp-cache-timeout|ieee802-3-encapsulation|default-tcp-ttl|tcp-keepalive-interval|tcp-keepalive-garbage|nis-domain|nis-servers|ntp-servers|vendor-specific_info|netbios-name-servers|netbios-dd-server|netbios-node-type|netbios-scope|font-servers|x-display-manager|dhcp-lease-time|dhcp-server-identifier|dhcp-parameter-request-list|dhcp-renewal-time|dhcp-rebinding-time|nwip-domain|nwip-suboptions|nisplus-domain|nisplus-servers|tftp-server-name|bootfile-name|mobile-ip-home-agent|smtp-server|pop-server|nntp-server|www-server|finger-server|irc-server|streettalk-server|streettalk-directory-assistance-server|slp-directory-agent|slp-service-scope|rapid_commit|client-fqdn|internet-storage-name-servers|#84|nds-servers|nds-tree-name|nds-context|#88|#89|dhcp-msg-authentication|client-last-transaction-time|...} or number>	Required
index	The index of the option.	Optional

dhcp client rqoptions delete

Delete a DHCP Option Code from the Parameter Request List.

Syntax:

```
delete intf = <>
      option = <{(see Parameters)}>
```

Parameters:

intf	The name of the interface on which a DHCP Client is defined.	Required
option	The name or number of the option. Options: <{subnet-mask|time-offset|default-routers|time-servers|ien116-name-servers|domain-name-servers|log-servers|cookie-servers|lpr-servers|impress-servers|resource-location-servers| host-name|boot-file-size|merit-dump|domain-name|swap-server|root-path|extensions-path|ip-forwarding|non-local-source-routing|policy-filter| max-dgram-reassembly|default-ip-ttl|path-mtu-aging-timeout|path-mtu-plateau-table|interface-mtu|all-subnets-local|broadcast-address|perform-mask-discovery|mask-supplier|router-discovery| router-solicitation-address|classfull-static-routes| trailer-encapsulation|arp-cache-timeout|ieee802-3-encapsulation|default-tcp-ttl|tcp-keepalive-interval|tcp-keepalive-garbage|nis-domain|nis-servers|ntp-servers|vendor-specific_info|netbios-name-servers|netbios-dd-server|netbios-node-type|netbios-scope|font-servers|x-display-manager|dhcp-lease-time|dhcp-server-identifier| dhcp-parameter-request-list|dhcp-renewal-time| dhcp-rebinding-time|nwip-domain|nwip-suboptions|nisplus-domain|nisplus-servers|tftp-server-name|bootfile-name|mobile-ip-home-agent|smtp-server|pop-server|nntp-server|www-server|finger-server|irc-server|streettalk-server| streettalk-directory-assistance-server|slp-directory-agent|slp-service-scope|rapid_commit| client-fqdn|internet-storage-name-servers|#84| nds-servers|nds-tree-name|nds-context|#88|#89| dhcp-msg-authentication|client-last-transaction-time|...} or number>	Required

dhcp client rqoptions list

List all DHCP Option Codes in the Parameter Request List.

Syntax:

```
list [intf = <{O2_ADSL2plus|O2_Static}>]
```

Parameters:

intf	The name of the interface on which a DHCP Client is defined.	Optional

dhcp client rqoptions optionlist

List all DHCP Option Codes that can be used in the Parameter Request List.

Syntax:

```
optionlist
```

dhcp client txoptions

Following commands are available :

add	:	Add an option.
delete	:	Delete an option.
list	:	List all options.
optionlist	:	Lists all DHCP Option Codes that can be used.

dhcp client txoptions add

Add an option.

Syntax:

```
add      intf = <>
       option = <{(see Parameters)}>
        value = <{(see Parameters)}>
[enterprise = <number{1-2147483647}>]
       [index = <number{0-255}>]
  [suboption = <number{1-254}>]
```

Parameters:

intf	The name of the interface on which a DHCP Client is defined.	Required
option	The name or number of the option. Options: <{subnet-mask|time-offset|default-routers|time-servers|ien116-name-servers|domain-name-servers|log-servers|cookie-servers|lpr-servers|impress-servers|resource-location-servers| host-name|boot-file-size|merit-dump|domain-name|swap-server|root-path|extensions-path|ip-forwarding|non-local-source-routing|policy-filter| max-dgram-reassembly|default-ip-ttl|path-mtu-aging-timeout|path-mtu-plateau-table|interface-mtu|all-subnets-local|broadcast-address|perform-mask-discovery|mask-supplier|router-discovery| router-solicitation-address|classfull-static-routes| trailer-encapsulation|arp-cache-timeout|ieee802-3-encapsulation|default-tcp-ttl|tcp-keepalive-interval|tcp-keepalive-garbage|nis-domain|nis-servers|ntp-servers|netbios-name-servers|netbios-dd-server|netbios-node-type|netbios-scope|font-servers|x-display-manager|dhcp-requested-address|dhcp-lease-time|dhcp-option-overload| dhcp-max-message-size|dhcp-renewal-time|dhcp-rebinding-time|vendor-class-id|dhcp-client-identifier|nwip-domain|nwip-suboptions|nisplus-domain|nisplus-servers|tftp-server-name|bootfile-name|mobile-ip-home-agent|smtp-server|pop-server|nntp-server|www-server|finger-server|irc-server|streettalk-server|streettalk-directory-assistance-server|user-class-identifier|slp-directory-agent|slp-service-scope|rapid_commit| client-fqdn|internet-storage-name-servers|#84| nds-servers|nds-tree-name|nds-context|#88|	Required

	#89|...} or number>	
value	The value of the option. Options: <Value : (type)value; type being 8-bit, 16-bit, 32-bit, addr,ascii, byte_array, clientid, env>	Required
enterprise	The enterprise number (see http://www.iana.org/assignments/enterprise-numbers)	Optional
index	The index of the (sub)option/enterprise number in the Option List.	Optional
suboption	The suboption number	Optional

dhcp client txoptions delete

Delete an option.

Syntax:

```
delete intf = <>
      option = <{(see Parameters)}>
[enterprise = <number{1-2147483647}>]
  [suboption = <number{1-254}>]
```

Parameters:

intf	The name of the interface on which a DHCP Client is defined.	Required
option	The name or number of the option. Options: <{subnet-mask|time-offset|default-routers|time-servers|ien116-name-servers|domain-name-servers|log-servers|cookie-servers|lpr-servers|impress-servers|resource-location-servers| host-name|boot-file-size|merit-dump|domain-name|swap-server|root-path|extensions-path|ip-forwarding|non-local-source-routing|policy-filter| max-dgram-reassembly|default-ip-ttl|path-mtu-aging-timeout|path-mtu-plateau-table|interface-mtu|all-subnets-local|broadcast-address|perform-mask-discovery|mask-supplier|router-discovery| router-solicitation-address|classfull-static-routes| trailer-encapsulation|arp-cache-timeout|ieee802-3-encapsulation|default-tcp-ttl|tcp-keepalive-interval|tcp-keepalive-garbage|nis-domain|nis-servers|ntp-servers|netbios-name-servers|netbios-dd-server|netbios-node-type|netbios-scope|font-servers|x-display-manager|dhcp-requested-address|dhcp-lease-time|dhcp-option-overload| dhcp-max-message-size|dhcp-renewal-time|dhcp-rebinding-time|vendor-class-id|dhcp-client-identifier|nwip-domain|nwip-suboptions|nisplus-domain|nisplus-servers|tftp-server-name|bootfile-name|mobile-ip-home-agent|smtp-server|pop-server|nntp-server|www-server|finger-server|irc-server|streettalk-server|streettalk-directory-assistance-server|user-class-identifier|slp-directory-agent|slp-service-scope|rapid_commit| client-fqdn|internet-storage-name-servers|#84| nds-servers|nds-tree-name|nds-context|#88| #89|...} or number>	Required
enterprise	The enterprise number (see	

	http://www.iana.org/assignments/enterprise-numbers)	Optional
suboption	The suboption number	Optional

dhcp client txoptions list

List all options.

Syntax:

```
list [expand = <{disabled|enabled}>]
     [intf = <{O2_ADSL2plus|O2_Static}>]
```

Parameters:

expand	Expand enabled/disabled.	Optional
intf	The name of the interface on which a DHCP Client is defined.	Optional

dhcp client txoptions optionlist

Lists all DHCP Option Codes that can be used.

Syntax:

```
optionlist
```

dhcp relay

Following commands are available :

ifconfig	:	Configure a relay interface.
iflist	:	Show the configuration of the relay interfaces.
add	:	Add an entry to the DHCP forward list.
delete	:	Delete an entry from the DHCP forward list.
modify	:	Modify an entry from the DHCP forward list.
list	:	List the DHCP forward list.
ruleadd	:	Add a selection rule to a DHCP forward entry
ruledelete	:	Delete a selection rule from a DHCP forward entry
config	:	Sets the relay configuration settings.
flush	:	Flushes the DHCP relay settings.

Following command groups are available :

debug

dhcp relay add

Add an entry to the DHCP forward list.

Syntax:
```
add name = <string>
```

Parameters:

name	The forward entry name.	Required

dhcp relay config

Sets the relay configuration settings.

Syntax:

```
config [agentinfo = <{disabled|enabled}>]
    [agentmismatch = <{disabled|enabled}>]
```

Parameters:

agentinfo	Set the relay agent info status (RFC3046).	Optional
agentmismatch	Forward/Drop DHCP reply packet when a relay agent info mismatch is detected (RFC3046).	Optional

dhcp relay debug

Following commands are available :

traceconfig   :   Modify DHCP relay trace configuration
stats   :   Print DHCP relay statistics.

dhcp relay debug stats

Print DHCP relay statistics.

Syntax:

```
stats
```

dhcp relay debug traceconfig

Modify DHCP relay trace configuration

Syntax:

```
traceconfig [state = <{disabled|enabled}>]
```

Parameters:

state	Enable/Disable tracing.	Optional

dhcp relay delete

Delete an entry from the DHCP forward list.

Syntax:

```
delete name = <{(see Parameters)}>
```

Parameters:

name	The forward entry name. Options: <{LocalNetwork_to_127.0.0.1| Hotspot_to_Local}>	Required

dhcp relay flush

Flushes the DHCP relay settings.

Syntax:

```
flush
```

dhcp relay ifconfig

Configure a relay interface.

Syntax:

```
ifconfig intf = <{(see Parameters)}>
     [maxhops = <number{0-16}>]
       [relay = <{disabled|enabled}>]
   [remoteid = <password>]
     [trusted = <{disabled|enabled}>]
```

Parameters:

intf	The name of the relay interface to configure. Options: <{Hotspot|O2_Static|O2_ADSL2plus|LocalNetwork|O2_ADSL}>	Required
maxhops	Set the maximum number of hops allowed in the DHCP packet.	Optional
relay	Set the relay status.	Optional
remoteid	Set the remote id as specified in RFC3046.	Optional
trusted	Drop/Forward DHCP request packet when a relay agent info option is present and the giaddr field is 0 (RFC3046).	Optional

dhcp relay iflist

Show the configuration of the relay interfaces.

Syntax:

```
iflist [intf = <{(see Parameters)}>]
```

Parameters:

intf	The name of the relay interface. Options: <{Hotspot|O2_Static|O2_ADSL2plus| LocalNetwork|O2_ADSL}>	Optional

dhcp relay list

List the DHCP forward list.

Syntax:

```
list [name = <{(see Parameters)}>]
```

Parameters:

name	The forward entry name. Options: <{LocalNetwork_to_127.0.0.1| Hotspot_to_Local}>	Optional

dhcp relay modify

Modify an entry from the DHCP forward list.

Syntax:

```
modify name = <{(see Parameters)}>
      [addr = <ip-address>]
    [giaddr = <ip-address>]
      [intf = <{(see Parameters)}>]
    [script = <>]
```

Parameters:

name	The forward entry name. Options: <{LocalNetwork_to_127.0.0.1| Hotspot_to_Local}>	Required
addr	The DHCP server IP address.	Optional
giaddr	The giaddr field to be used in relayed DHCP packets.	Optional
intf	The name of the relay interface, 'None' to indicate no interface is specified. Options: <{None|Hotspot|O2_Static| O2_ADSL2plus|LocalNetwork|O2_ADSL}>	Optional
script	Script to be run when the forward entry is hit.	Optional

dhcp relay ruleadd

Add a selection rule to a DHCP forward entry

Syntax:

```
ruleadd name = <{(see Parameters)}>
     rulename = <>
         [key = <{or|and}>]
```

Parameters:

name	The name of the forward entry. Options: <{LocalNetwork_to_127.0.0.1| Hotspot_to_Local}>	Required
rulename	The name of the DHCP selection rule.	Required
key	The logical key of the selection rule.	Optional

dhcp relay ruledelete

Delete a selection rule from a DHCP forward entry

Syntax:
```
ruledelete name = <{(see Parameters)}>
        rulename = <>
```

Parameters:

name	The name of the forward entry. Options: <{LocalNetwork_to_127.0.0.1| Hotspot_to_Local}>	Required
rulename	The name of the DHCP selection rule.	Required

dhcp rule

Following commands are available :

add	:	Add a rule for DHCP conditional selection
delete	:	Delete a DHCP rule
list	:	List all DHCP rules
flush	:	Flush all DHCP rules

Following command groups are available :

debug

dhcp rule add

Add a rule for DHCP conditional selection

Syntax:

```
add      mac [!]= <{(see Parameters)}>
        name    = <string>
      option [!]= <{(see Parameters)}>
     subrule    = <>
        type    = <{option|mac|root}>
[enterprise     = <number{1-2147483647}>]
      [key      = <{or|and}>]
    [match      = <{exactly|as_substring}>]
 [suboption     = <number{1-254}>]
    [value      = <{(see Parameters)}>]
```

Parameters:

mac	The mac address. (Can optionally use "!=") Options: <hardware-address with wildcard ex: '00:9f:aa:*:*:*'>	Required
name	The name of the DHCP rule.	Required
option	The name or number of the option. (Can optionally use "!=") Options: <{subnet-mask|time-offset|default-routers|time-servers|ien116-name-servers|domain-name-servers|log-servers|cookie-servers|lpr-servers|impress-servers|resource-location-servers|host-name|boot-file-size|merit-dump|domain-name|swap-server|root-path|extensions-path|ip-forwarding|non-local-source-routing|policy-filter|max-dgram-reassembly|default-ip-ttl|path-mtu-aging-timeout|path-mtu-plateau-table|interface-mtu|all-subnets-local|broadcast-address|perform-mask-discovery|mask-supplier|router-discovery|router-solicitation-address|classfull-static-routes|trailer-encapsulation|arp-cache-timeout|ieee802-3-encapsulation|default-tcp-ttl|tcp-keepalive-interval|tcp-keepalive-garbage|nis-domain|nis-servers|ntp-servers|vendor-specific_info|netbios-name-servers|netbios-dd-server|netbios-node-type|netbios-scope|font-servers|x-display-manager|requested-ip|dhcp-lease-time|dhcp-overload-indication|dhcp-msg-type|dhcp-server-identifier|dhcp-parameter-request-list|dhcp-text-msg|dhcp-max-msg-size|dhcp-renewal-time|dhcp-	Required

	rebinding-time|vendor-class-identifier|client-identifier|nwip-domain|nwip-suboptions|nisplus-domain|nisplus-servers|tftp-server-name|bootfile-name|mobile-ip-home-agent|smtp-server|pop-server|nntp-server|www-server|finger-server|irc-server|streettalk-server|streettalk-directory-assistance-server|user-class-identifier|slp-directory-agent|slp-service-scope|...} or number>	
subrule	The name of the DHCP subrule.	Required
type	Specify the DHCP rule type.	Required
enterprise	The enterprise number (see http://www.iana.org/assignments/enterprise-numbers)	Optional
key	The logical key of the subrule.	Optional
match	The option value matching.	Optional
suboption	The suboption number	Optional
value	The value of the option. Options: <Value : (type)value; type being addr, ascii, byte_array,clientid, env>	Optional

dhcp rule debug

Following commands are available :

traceconfig   :   Modify DHCP rule trace configuration

dhcp rule debug traceconfig

Modify DHCP rule trace configuration

Syntax:

```
traceconfig [state = <{disabled|enabled}>]
```

Parameters:

state	Enable/Disable tracing.	Optional

dhcp rule delete

Delete a DHCP rule

Syntax:

```
delete name = <>
     subrule = <>
```

Parameters:

name	The name of the DHCP rule.	Required
subrule	The name of the DHCP subrule.	Required

dhcp rule flush

Flush all DHCP rules

Syntax:

```
flush
```

dhcp rule list

List all DHCP rules

> *Syntax:*

```
list
```

dhcp server

Following commands are available :

config	:	Print DHCP server configuration settings
policy	:	Print DHCP server policy settings
flush	:	Flush all DHCP server pool and lease entries

Following command groups are available :

debug	lease	option	pool

dhcp server config

Print DHCP server configuration settings

Syntax:

```
config [state = <{disabled|enabled}>]
```

Parameters:

state	Enable/Disable the DHCP server.	Optional

dhcp server debug

Following commands are available :

traceconfig	:	Modify DHCP server trace configuration
stats	:	Print DHCP server statistics
clear	:	Clear DHCP server statistics

dhcp server debug clear

Clear DHCP server statistics

Syntax:

```
clear
```

dhcp server debug stats

Print DHCP server statistics

Syntax:

```
stats
```

dhcp server debug traceconfig

Modify DHCP server trace configuration

Syntax:

```
traceconfig [state = <{disabled|enabled}>]
```

Parameters:

state	Enable/Disable tracing.	Optional

dhcp server flush

Flush all DHCP server pool and lease entries

Syntax:

```
flush
```

dhcp server lease

Following commands are available :

add	:	Add a DHCP server lease
delete	:	Delete a DHCP server lease
flush	:	Flush all DHCP server leases
list	:	List all DHCP server leases

dhcp server lease add

Add a DHCP server lease

Syntax:

```
add clientid = <clientid>
        pool = <{(see Parameters)}>
       [addr = <ip-address>]
 [allocation = <{automatic|manual}>]
 [expirytime = <{(missing)}>]
    [gateway = <ip-address|0|none>]
  [leasetime = <number>]
   [lifetime = <number>]
    [macaddr = <hardware-address>]
     [offset = <number>]
```

Parameters:

clientid	The DHCP client identification string.	Required
pool	The name of the DHCP server pool. Options: <{LAN_private|LAN_Virt| Hotspot_Pool}>	Required
addr	The IP address for this client.	Optional
allocation	Define the client IP address allocation method (tip : automatic means the lease can be recycled).	Optional
expirytime		Hidden
gateway	The IP address of the default router for this client.	Optional
leasetime	The time in seconds the client is allowed to use an address (tip: 0 means infinite leasetime).	Optional
lifetime	The time in seconds the DHCP server keeps the lease reserved (tip: 0 means infinite lifetime).	Optional
macaddr	The host MAC address.	Optional
offset	The IP address offset in the pool preserved for this client.	Optional

dhcp server lease delete

Delete a DHCP server lease

Syntax:
```
delete [clientid = <clientid>]
       [index = <number>]
```

Parameters:

clientid	The DHCP client identification string.	Optional
index	The DHCP server lease table index.	Optional

dhcp server lease flush

Flush all DHCP server leases

Syntax:
```
flush [pool = <{(see Parameters)}>]
```

Parameters:

pool	The name of the DHCP server pool. Only the leases belonging to this pool will be deleted. Options: <{LAN_private|LAN_Virt| Hotspot_Pool}>	Optional

dhcp server lease list

List all DHCP server leases

Syntax:

```
list [clientid = <clientid>]
      [expand = <{disabled|enabled}>]
        [index = <number>]
```

Parameters:

clientid	The DHCP client identification string.	Optional
expand	Expand enabled/disabled.	Optional
index	The DHCP server lease table index.	Optional

dhcp server option

Following commands are available :

tmpladd	:	Add a DHCP server option template
tmpldelete	:	Delete a DHCP server option template
tmpllist	:	List all DHCP server option templates
instadd	:	Add a DHCP server option instance
instdelete	:	Delete a DHCP server option instance
instlist	:	List all DHCP server option instances
ruleadd	:	Add a selection rule to a DHCP server option instance
ruledelete	:	Delete a selection rule from a DHCP server option instance
flush	:	Flush all DHCP server option templates and instances

dhcp server option flush

Flush all DHCP server option templates and instances

Syntax:

```
flush
```

dhcp server option instadd

Add a DHCP server option instance

Syntax:

```
instadd name = <string>
    tmplname = <>
       value = <{(see Parameters)}>
    [dynamic = <{disabled|enabled}>]
  [enterprise = <number{1-2147483647}>]
      [maxuse = <number{1-255}>]
      [policy = <{requested|always|rules}>]
   [suboption = <number{1-254}>]
```

Parameters:

name	The name of the DHCP server option instance.	Required
tmplname	The name of the DHCP server option template.	Required
value	The value of the DHCP server option instance. Options: <Value : (type)value; type being 8-bit, 16-bit, 32-bit, addr,ascii, byte_array, env>	Required
dynamic	Enable/Disable option instance as dynamic.	Optional
enterprise	The enterprise number (see http://www.iana.org/assignments/enterprise-numbers)	Optional
maxuse	Maximum number of times an option instance can be used in DHCP pools	Optional
policy	The transmit policy type for the DHCP server option instance.	Optional
suboption	The suboption number	Optional

dhcp server option instdelete

Delete a DHCP server option instance

Syntax:
```
instdelete name = <>
     [enterprise = <number{1--1}>]
      [suboption = <number{1-254}>]
```

Parameters:

name	The name of the DHCP server option instance.	Required
enterprise	The enterprise number (see http://www.iana.org/assignments/enterprise-numbers)	Optional
suboption	The suboption number	Optional

dhcp server option instlist

List all DHCP server option instances

Syntax:
```
instlist [name = <>]
```

Parameters:

name	The name of the DHCP server option instance.	Optional

dhcp server option ruleadd

Add a selection rule to a DHCP server option instance

Syntax:

```
ruleadd name = <>
    rulename = <>
        [key = <{or|and}>]
```

Parameters:

name	The name of the DHCP server option instance.	Required
rulename	The name of the DHCP selection rule.	Required
key	The logical key of the selection rule.	Optional

dhcp server option ruledelete

Delete a selection rule from a DHCP server option instance

Syntax:

```
ruledelete name = <>
        rulename = <>
```

Parameters:

name	The name of the DHCP server option instance.	Required
rulename	The name of the DHCP selection rule.	Required

dhcp server option tmpladd

Add a DHCP server option template

Syntax:

```
tmpladd name = <string>
    optionid = <number{1-254}>
    [dynamic = <{disabled|enabled}>]
        [type = <{(missing)}>]
```

Parameters:

name	The name of the DHCP server option template.	Required
optionid	Specify the DHCP server option code.	Required
dynamic	Enable/Disable option template as dynamic.	Optional
type		Hidden

dhcp server option tmpldelete

Delete a DHCP server option template

Syntax:
```
tmpldelete name = <>
```

Parameters:

name	The name of the DHCP server option template.	Required

dhcp server option tmpllist

List all DHCP server option templates

Syntax:

```
tmpllist
```

dhcp server policy

Print DHCP server policy settings

Syntax:

```
policy [ackinform = <{disabled|enabled}>]
       [rtbehaviour = <{traditional|standard|msft}>]
       [trustclient = <{disabled|enabled}>]
       [verifyfirst = <{disabled|enabled}>]
```

Parameters:

ackinform	Enable/Disable DHCP inform acknowledgement for an unknown lease	Optional
rtbehaviour	Define the DHCP Server's route options behaviour. The options that are involved are: 3, 33, 121 and 249. "Traditional" will return 3 and/or 33; "standard" will return 3 and/or 33 or 121; "msft" will return 3 and/or 33 or 121 or 249	Optional
trustclient	Whether or not the IP address suggested by a DHCP client should be taken into account.	Optional
verifyfirst	Enable/Disable IP address conflict network probing before handing out an address to a client.	Optional

dhcp server pool

Following commands are available :

add	:	Add a DHCP server pool
config	:	Configure a DHCP server pool
delete	:	Delete a DHCP server pool
rtadd	:	Add a route to the DHCP server pool
rtdelete	:	Delete a route from the DHCP server pool
optadd	:	Add an option instance to the DHCP server pool
optdelete	:	Delete an option instance from the DHCP server pool
ruleadd	:	Add a selection rule to the DHCP server pool
ruledelete	:	Delete a selection rule from the DHCP server pool
flush	:	Flush all DHCP server pools
list	:	List all DHCP server pools

dhcp server pool add

Add a DHCP server pool

Syntax:

```
add name = <string>
   [index = <number>]
```

Parameters:

name	The name of the DHCP server pool.	Required
index	The number of the pool before which you want the new pool to be added.	Optional

dhcp server pool config

Configure a DHCP server pool

Syntax:

```
config  name = <{(see Parameters)}>
  [allocation = <{dynamic|automatic}>]
   [dnsmetric = <{(missing)}>]
     [gateway = <ip-address|0|none>]
        [index = <number>]
         [intf = <{(see Parameters)}>]
   [leasetime = <number{0-1814400}>]
    [localdns = <{disabled|enabled}>]
     [localgw = <{disabled|enabled}>]
[lockouttime = <number{0-1814400}>]
     [netmask = <ip-mask(dotted or cidr)>]
     [poolend = <ip-address>]
   [poolstart = <ip-address>]
     [primdns = <ip-address|none>]
    [primwins = <ip-address|none>]
  [rebindtime = <number{0-1814400}>]
   [renewtime = <number{0-1814400}>]
      [secdns = <ip-address|none>]
     [secwins = <ip-address|none>]
      [server = <ip-address|none>]
       [state = <{disabled|enabled}>]
  [unnumbered = <{disabled|enabled}>]
```

Parameters:

name	The name of the DHCP server pool. Options: <{LAN_private|LAN_Virt| Hotspot_Pool}>	Required
allocation	Define the DHCP Server's pool allocation method (tip : automatic means the IP address becomes reserved for the lease).	Optional
dnsmetric		Hidden
gateway	The IP address of the default router for DHCP clients.	Optional
index	The number of the pool before which you want the new pool to be added.	Optional
intf	The interface for which the pool is allowed to lease IP addresses. Options: <{O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Optional

dhcp Commands

leasetime	The time in seconds a client is allowed to use an address (tip: 0 means infinite lease).	Optional
localdns	Enable/Disable the transmission of the local DNS server in the DNS server option.	Optional
localgw	Proxy for a virtual default gateway residing in same subnet of DHCP client instead of the remote peer address.	Optional
lockouttime	The time in seconds before a stopped lease becomes available again (tip: 0 means infinite lockout time).	Optional
netmask	The DHCP server pool netmask.	Optional
poolend	The DHCP server pool end IP address.	Optional
poolstart	The DHCP server pool start IP address.	Optional
primdns	The IP address of the primary DNS server for DHCP clients.	Optional
primwins	The IP address of the primary WINS server for DHCP clients.	Optional
rebindtime	The time in seconds before a client switches to rebinding.	Optional
renewtime	The time in seconds before a client switches to renewing.	Optional
secdns	The IP address of the secondary DNS server for DHCP clients.	Optional
secwins	The IP address of the secondary WINS server for DHCP clients.	Optional
server	The IP address of the DHCP server for DHCP clients.	Optional
state	Enable/Disable the DHCP server pool admin state.	Optional
unnumbered	Assign an IP address from this pool to the DHCP server or not (ppp pools only).	Optional

dhcp server pool delete

Delete a DHCP server pool

Syntax:

```
delete name = <{LAN_private|LAN_Virt|Hotspot_Pool}>
```

Parameters:

name	The name of the DHCP server pool.	Required

dhcp server pool flush

Flush all DHCP server pools

Syntax:

```
flush
```

dhcp server pool list

List all DHCP server pools

Syntax:
```
list [name = <{LAN_private|LAN_Virt|Hotspot_Pool}>]
```

Parameters:

name	The name of the DHCP server pool.	Optional

dhcp server pool optadd

Add an option instance to the DHCP server pool

Syntax:
```
optadd instname = <>
          name = <{(see Parameters)}>
```

Parameters:

instname	The name of the DHCP server option instance.	Required
name	The name of the DHCP server pool. Options: <{LAN_private|LAN_Virt|Hotspot_Pool}>	Required

dhcp server pool optdelete

Delete an option instance from the DHCP server pool

Syntax:

```
optdelete instname = <>
              name = <{(see Parameters)}>
```

Parameters:

instname	The name of the DHCP server option instance.	Required
name	The name of the DHCP server pool. Options: <{LAN_private|LAN_Virt| Hotspot_Pool}>	Required

dhcp server pool rtadd

Add a route to the DHCP server pool

Syntax:

```
rtadd dst = <ip-address>
      name = <{LAN_private|LAN_Virt|Hotspot_Pool}>
   [dstmsk = <ip-mask(dotted or cidr)>]
  [gateway = <ip-address|0>]
```

Parameters:

dst	The IP destination address of the route for DHCP clients.	Required
name	The name of the DHCP server pool.	Required
dstmsk	The destination IP address mask.	Optional
gateway	The IP address of the next hop. Must be directly connected to the DHCP client	Optional

dhcp server pool rtdelete

Delete a route from the DHCP server pool

Syntax:

```
rtdelete dst = <ip-address>
        name = <{(see Parameters)}>
     [dstmsk = <ip-mask(dotted or cidr)>]
     [gateway = <ip-address|0>]
```

Parameters:

dst	The IP destination address of the route for DHCP clients.	Required
name	The name of the DHCP server pool. Options: <{LAN_private|LAN_Virt| Hotspot_Pool}>	Required
dstmsk	The destination IP address mask.	Optional
gateway	The IP address of the next hop. Must be directly connected to the DHCP client	Optional

dhcp server pool ruleadd

Add a selection rule to the DHCP server pool

Syntax:

```
ruleadd name = <{(see Parameters)}>
    rulename = <>
        [key = <{or|and}>]
```

Parameters:

name	The name of the DHCP server pool. Options: <{LAN_private|LAN_Virt| Hotspot_Pool}>	Required
rulename	The name of the DHCP selection rule.	Required
key	The logical key of the selection rule.	Optional

dhcp server pool ruledelete

Delete a selection rule from the DHCP server pool

Syntax:

```
ruledelete name = <{(see Parameters)}>
        rulename = <>
```

Parameters:

name	The name of the DHCP server pool. Options: <{LAN_private|LAN_Virt| Hotspot_Pool}>	Required
rulename	The name of the DHCP selection rule.	Required

dhcp spoofing

Following commands are available :

config	:	Display/modify dhcp spoofing state
add	:	Add a Spoofing-Association
delete	:	Delete a Spoofing-Association
attach	:	Enable a Spoofing-Association
detach	:	Disable a Spoofing-Association
list	:	List the available Spoofing-Associations
option-add	:	Add a DHCP Option Code to a Spoofing-Association.
option-delete	:	Delete a DHCP Option Code from a Spoofing-Association.
flush	:	Flush all the associations and the options.

Following command groups are available :

debug

dhcp spoofing add

Add a Spoofing-Association

Syntax:

```
add ifname = <{O2_ADSL2plus|O2_Static}>
      name = <string>
 pool_name = <{LAN_private|LAN_Virt|Hotspot_Pool}>
```

Parameters:

ifname	The name of the interface on which a DHCP Client is defined.	Required
name	The name of the Association.	Required
pool_name	The name of the pool to be associated.	Required

dhcp spoofing attach

Enable a Spoofing-Association

Syntax:

```
attach name = <{|||}>
```

Parameters:

name	The name of the Association.	Required

dhcp spoofing config

Display/modify dhcp spoofing state

Syntax:

```
config [state = <{enabled|disabled}>]
```

Parameters:

state	Enable/Disable spoofing.	Optional

dhcp spoofing debug

Following commands are available :

traceconfig   :   Display/modify DHCP spoofing trace configuratin

dhcp spoofing debug traceconfig

Display/modify DHCP spoofing trace configuratin

Syntax:

```
traceconfig [state = <{disabled|enabled}>]
```

Parameters:

state	Enable/Disable tracing.	Optional

dhcp spoofing delete

Delete a Spoofing-Association

Syntax:

```
delete name = <{|||}>
```

Parameters:

name	The name of the Association.	Required

dhcp spoofing detach

Disable a Spoofing-Association

Syntax:

```
detach name = <{|||}>
```

Parameters:

name	The name of the Association.	Required

dhcp spoofing flush

Flush all the associations and the options.

Syntax:

```
flush
```

dhcp spoofing list

List the available Spoofing-Associations

Syntax:

```
list [name = <{|||}>]
```

Parameters:

name	The name of the Association.	Optional

dhcp spoofing option-add

Add a DHCP Option Code to a Spoofing-Association.

Syntax:

```
option-add name = <{|||}>
         option = <number>
```

Parameters:

name	The name of the Association.	Required
option	The option id.	Required

dhcp spoofing option-delete

Delete a DHCP Option Code from a Spoofing-Association.

Syntax:

```
option-delete name = <{|||}>
            option = <number>
```

Parameters:

name	The name of the Association.	Required
option	The option id.	Required

diag

Following commands are available :

config	:	Configure diagnostics settings
ifhide	:	Specify interfaces to hide
iflist	:	List (dynamically generated at webpage load) of all interfaces to be diagnosed (debug command)
ifconfig	:	Configure pingoption and/or ip-address for connection
flush	:	Flush all hidden interfaces and ifconfigurations

Note: diag is missing from the ':help' group list

diag config

Configure diagnostics settings

Syntax:

```
config [pingpacketsize = <number>]
       [pingtimeout = <number>]
```

Parameters:

pingpacketsize	ping packet size (in bytes incl.icmp header)	Optional
pingtimeout	pingtimeout (in msec.)	Optional

diag flush

Flush all hidden interfaces and ifconfigurations

Syntax:

```
flush
```

diag ifconfig

Configure pingoption and/or ip-address for connection

Syntax:

```
ifconfig ifname = <string>
     [ipaddress = <ip-address>]
          [ping = <{yes|no}>]
```

Parameters:

ifname	interfacename	Required
ipaddress	ping ipaddress	Optional
ping	pingoption	Optional

diag ifhide

Specify interfaces to hide

Syntax:

```
ifhide ifname = <string>
```

Parameters:

ifname	interfacename	Required

diag iflist

List (dynamically generated at webpage load) of all interfaces to be diagnosed (debug command)

Syntax:

```
iflist
```

dns

Following command groups are available :

```
client          server
```

dns client

Following commands are available :

dnsadd	:	Add a DNS server.
dnsdelete	:	Delete a DNS server.
dnslist	:	List all DNS servers.
config	:	Modify the DNS resolver configuration.
nslookup	:	DNS lookup for a domain name or an address.
flush	:	Remove all DNS servers.

dns client config

Modify the DNS resolver configuration.

Syntax:

```
config [list = <string>]
       [retry = <number{0-10}>]
     [search = <{disabled|enabled}>]
      [state = <{disabled|enabled}>]
    [timeout = <number{1-900}>]
      [trace = <{disabled|enabled}>]
```

Parameters:

list	Slash separated list of domain name suffixes.	Optional
retry	The number of query retries before giving up.	Optional
search	Use the searchlist to construct fully qualified domain names.	Optional
state	Enable/disable the DNS client.	Optional
timeout	The query timeout in seconds.	Optional
trace	Enable or disable verbose logging.	Optional

dns client dnsadd

Add a DNS server.

Syntax:

```
dnsadd addr = <string>
       [port = <number>]
```

Parameters:

addr	The DNS server IP address.	Required
port	The DNS server port number.	Optional

dns client dnsdelete

Delete a DNS server.

Syntax:

```
dnsdelete index = <number{1-99}>
```

Parameters:

index	The index number (shown by the 'list' command) of the server to delete.	Required

dns client dnslist

List all DNS servers.

Syntax:

```
dnslist
```

dns client flush

Remove all DNS servers.

Syntax:

```
flush
```

dns client nslookup

DNS lookup for a domain name or an address.

Syntax:

```
nslookup host = <string>
```

Parameters:

host	The DNS domain name string to query.	Required

dns server

Following commands are available :

config   :   DNS server configuration settings
flush   :   Flush all local DNS hosts and routes.

Following command groups are available :

debug   host   route

dns server config

DNS server configuration settings

Syntax:

```
config    [domain = <string>]
            [state = <{disabled|enabled}>]
        [suppress = <number{0-400}>]
          [syslog = <{disabled|enabled}>]
         [timeout = <number{0-120}>]
           [trace = <{disabled|enabled}>]
[WANDownSpoofing = <{disabled|enabled}>]
    [WDSpoofedIP = <ip-address>]
```

Parameters:

domain	The DNS server domain name.	Optional
state	Enable/disable the local DNS server/forwarder.	Optional
suppress	Suppress not more than specified amount of remote DNS server errors.	Optional
syslog	Enable/disable SYSLOG for DNS events.	Optional
timeout	The forwarded DNS query timeout.	Optional
trace	Enable/disable verbose console logging.	Optional
WANDownSpoofing	Enable/disable DNS spoofing when no applicable forwarding route present.	Optional
WDSpoofedIP	IP address used for spoofing when WANDownSpoofing enabled.	Optional

dns server debug

Following commands are available :

stats   :   Print the DNS server/forwarder statistics.
clear   :   Clear the DNS server/forwarder statistics.

Following command groups are available :

spoof

dns server debug clear

Clear the DNS server/forwarder statistics.

Syntax:

```
clear
```

dns server debug spoof

Following commands are available :

clear	:	Clear the intercept cache table
list	:	List the intercept cache table.
getflags	:	Get the error flags for the given spoofed ip
getaddress	:	Get the real ip for the given spoofed ip
update	:	update the intercept cache table

dns server debug spoof clear

Clear the intercept cache table

Syntax:

```
clear
```

dns server debug spoof getaddress

Get the real ip for the given spoofed ip

Syntax:

```
getaddress addr = <ip-address>
```

Parameters:

addr	The spoofed ip to look up.	Required

dns server debug spoof getflags

Get the error flags for the given spoofed ip

Syntax:

```
getflags addr = <ip-address>
```

Parameters:

addr	The spoofed ip to look up.	Required

dns server debug spoof list

List the intercept cache table.

Syntax:

```
list
```

dns server debug spoof update

update the intercept cache table

Syntax:

```
update
```

dns server debug stats

Print the DNS server/forwarder statistics.

Syntax:

```
stats
```

dns server flush

Flush all local DNS hosts and routes.

Syntax:

```
flush
```

dns server host

Following commands are available :

add	:	Add a local DNS host
delete	:	Delete a local DNS host
flush	:	Flush all local DNS hosts
list	:	List all local DNS hosts

dns server host add

Add a local DNS host

Syntax:

```
add name = <string>
    [addr = <ip-address>]
     [ttl = <number>]
```

Parameters:

name	The name of an IP host to add.	Required
addr	The IP address of the host.	Optional
ttl	The lifetime of the host.	Optional

dns server host delete

Delete a local DNS host

Syntax:

```
delete name = <string>
```

Parameters:

name	The name of an IP host to delete.	Required

dns server host flush

Flush all local DNS hosts

Syntax:

```
flush
```

dns server host list

List all local DNS hosts

Syntax:

```
list
```

dns server route

Following commands are available :

add	:	Creates a DNS forwarding entry or template
delete	:	Deletes a DNS forwarding entry or template
flush	:	Removes all DNS forwarding entries and templates
list	:	Lists all DNS forwarding entries and templates

dns server route add

Creates a DNS forwarding entry or template

Syntax:

```
add  dns = <ip-address>
 [domain = <string>]
   [intf = <{(see Parameters)}>]
  [label = <{(see Parameters)}>]
 [metric = <number{0-100}>]
    [src = <ip-address>]
[srcmask = <ip-mask(dotted or cidr)>]
```

Parameters:

dns	The IP address of a DNS server. If 0.0.0.0 is used, the entry becomes a DNS-Template which is instantiated if DNS Server IPs are configured on an IP interface.	Required
domain	Domain matching string. If configured, only those DNS queries of which the domain name in the query matches with the string configured for the entry will be forwarded to the corresponding DNS Server. Maximum string length: 62 characters	Optional
intf	The interface associated with the DNS entry or DNS Template. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Optional
label	The label associated with the DNS entry or DNS Template. Options: <{None|Blank|DSCP|Interactive| Management|Video|VoIP-RTP|VoIP-Signal| default}>	Optional
metric	The metric for the DNS entry. The DNS Entry List is sorted on DNS Metric; the lower the metric, the higher the priority of the entry.	Optional
src	If specified, only DNS queries from machines of which the source IP address matches the source prefix of the DNS entry will be forwarded to the corresponding DNS server.	Optional
srcmask	The IP address mask for the source prefix.	Optional

dns server route delete

Deletes a DNS forwarding entry or template

Syntax:

```
delete dns = <ip-address>
    [domain = <string>]
      [intf = <{(see Parameters)}>]
```

Parameters:

dns	The IP address of a DNS server.	Required
domain	The DNS domain string.	Optional
intf	The interface associated with the DNS entry or DNS Template. Options: <{loop|O2_ADSL|LocalNetwork|O2_ADSL2plus|O2_Static|Hotspot}>	Optional

dns server route flush

Removes all DNS forwarding entries and templates

Syntax:

```
flush
```

dns server route list

Lists all DNS forwarding entries and templates

> *Syntax:*

```
list
```

dsd

Following commands are available :

config   :   Display/modify DSD framework configuration

Following command groups are available :

debug   intercept   syslog   urlfilter

dsd config

Display/modify DSD framework configuration

Syntax:

```
config [state = <{disabled|enabled|automatic}>]
```

Parameters:

state	DSD framework operation mode	Optional

dsd debug

Following commands are available :

config	:	Display/modify DSD debug settings
stats	:	Display/clear DSD framework and module statistics
recycling	:	Display/modify HTTPI recycling settings
proxy	:	Display/modify HTTPI fixed proxy settings

Following command groups are available :

connection

dsd debug config

Display/modify DSD debug settings

Syntax:

```
config [turbomode = <{disabled|enabled}>]
```

Parameters:

turbomode	Enable/disable turbomode	Optional

dsd debug connection

Following commands are available :

list   :   Display internal connection pool usage

dsd debug connection list

Display internal connection pool usage

Syntax:
```
list [expand = <{disabled|enabled}>]
```

Parameters:

expand	Expanded listing.	Optional

dsd debug proxy

Display/modify HTTPI fixed proxy settings

Syntax:

```
proxy [dest = <ip-address>]
      [port = <{(see Parameters)}>]
      [state = <{disabled|enabled}>]
```

Parameters:

dest	Destination IP where requests will be forwarded to	Optional
port	Port used for connecting to the proxy IP Options: <{undefined|at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen| clearcase|daytime|discard|dns|domain|doom| echo|exec|finger|ftp|ftp-data|gopher|h323| httpproxy|ike|ils|imap2|imap3|ingres-net| ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login| netbios-dgm|netbios-ns|netbios-ssn|netwall| netware-ip|new-rwho|nfds|nicname|nntp|ntalk| ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio| rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp| sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat| talk|telnet|time|timed|tftp|ulistserv|utime|uucp| uucp-rlogin|who|www-http|whoami|xwindows} or number>	Optional
state	Enable/disable fixed proxy redirecting	Optional

dsd debug recycling

Display/modify HTTPI recycling settings

Syntax:

```
recycling [httpidle = <number>]
          [interval = <number>]
        [otheridle = <number>]
              [state = <{disabled|enabled}>]
```

Parameters:

httpidle	Minimal idle count for recycling (filtered) http streams	Optional
interval	Time between successive activity checks	Optional
otheridle	Minimal idle count for recycling other streams	Optional
state	Enable/disable stream recycling	Optional

dsd debug stats

Display/clear DSD framework and module statistics

Syntax:

```
stats [clear = <{no|yes}>]
       [name = <{(see Parameters)}>]
```

Parameters:

clear	Clear the specified statistics	Optional
name	Specify the name of a module Options: <{intercept|urlfilter|recycling|syslog|all}>	Optional

dsd intercept

Following commands are available :

config : Display/modify HTTP Intercept configuration

dsd intercept config

Display/modify HTTP Intercept configuration

Syntax:

```
config  [alwaysuseip = <{disabled|enabled}>]
    [categoryerrorurl = <string>]
     [connecterrorurl = <string>]
       [imageredirect = <{disabled|enabled}>]
    [imageredirecturl = <string>]
[monitorintercepturl = <string>]
       [servertimeout = <number>]
 [unauthorizedrequrl = <string>]
         [WDSpoofedIP = <ip-address>]
```

Parameters:

alwaysuseip	Always use ip address when redirecting to a local page	Optional
categoryerrorurl	Destination url when connection to category server failed	Optional
connecterrorurl	Destination url when connection to server failed	Optional
imageredirect	Enable/disable substituting blocked images	Optional
imageredirecturl	URL of image used when substituting blocked images	Optional
monitorintercept url	Destination url when request is intercepted by monitor thread	Optional
servertimeout	Server timeout for redirect action	Optional
unauthorizedreq url	Destination url when requested url is blocked by some rule or setting	Optional
WDSpoofedIP	IP address indicating unavailable WAN connection.	Optional

dsd syslog

Following commands are available :

config   :   Display/modify HTTPI logging configuration
list   :   Display HTTPI log file

dsd syslog config

Display/modify HTTPI logging configuration

Syntax:

```
config [syslog = <{(see Parameters)}>]
```

Parameters:

syslog	Define which type of events to log Options: <{none|unauthorized|errors|intercepted|all}>	Optional

dsd syslog list

Display HTTPI log file

Syntax:

```
list
```

dsd urlfilter

Following commands are available :

config   :   Display/modify url filtering configuration

Following command groups are available :

rule

dsd urlfilter config

Display/modify url filtering configuration

Syntax:

```
config [blockipaddress = <{disabled|enabled}>]
       [blockobscuredip = <{disabled|enabled}>]
             [blockproxy = <{disabled|enabled}>]
          [defaultaction = <{block|accept}>]
                  [state = <{disabled|enabled}>]
```

Parameters:

blockipaddress	Block HTTP requests if host name is IP address	Optional
blockobscuredip	Block HTTP requests if host name is believed to be an IP address	Optional
blockproxy	Block HTTP requests via a proxy server	Optional
defaultaction	Action to perform when no filter applicable.	Optional
state	Enable/disable url filtering	Optional

dsd urlfilter rule

Following commands are available :

add	:	Add a rule
delete	:	Remove a rule
modify	:	Modify an existing rule
list	:	Display a list of current rules
flush	:	Remove all current rules

dsd urlfilter rule add

Add a rule

Syntax:

```
add action = <{block|accept|redirect}>
  redirect = <string>
       url = <string>
```

Parameters:

action	Action to perform when url matches url	Required
redirect	Redirection url	Required
url	Definition of the url filter	Required

dsd urlfilter rule delete

Remove a rule

Syntax:

```
delete index = <number>
       [url = <string>]
```

Parameters:

index	Insertion position in the list	Required
url	Definition of the url filter	Optional

dsd urlfilter rule flush

Remove all current rules

Syntax:

```
flush
```

dsd urlfilter rule list

Display a list of current rules

Syntax:

```
list
```

dsd urlfilter rule modify

Modify an existing rule

Syntax:

```
modify action = <{block|accept|redirect}>
        index = <number>
     redirect = <string>
      [newurl = <string>]
```

Parameters:

action	Action to perform when url matches url	Required
index	Insertion position in the list	Required
redirect	Redirection url	Required
newurl	Definition of the new url filter	Optional

dyndns

Following commands are available :

add	:	Add a dynamic DNS client.
modify	:	Modify a dynamic DNS client.
delete	:	Delete a dynamic DNS client.
flush	:	Delete all dynamic DNS clients.
list	:	List all dynamic DNS clients.

Following command groups are available :

host   service

dyndns add

Add a dynamic DNS client.

Syntax:

```
add name = <string>
```

Parameters:

name	The dynamic DNS client name.	Required

dyndns delete

Delete a dynamic DNS client.

Syntax:
```
delete name = <>
```

Parameters:

name	The dynamic DNS client name.	Required

dyndns flush

Delete all dynamic DNS clients.

Syntax:

```
flush
```

dyndns host

Following commands are available :

add   :   Add a fully qualified host name
delete   :   Delete a host name
flush   :   Delete all host names
list   :   List all host names

dyndns host add

Add a fully qualified host name

Syntax:

```
add group = <>
     name = <string>
```

Parameters:

group	The dynamic DNS host group.	Required
name	The name of an IP host to add.	Required

dyndns host delete

Delete a host name

Syntax:

```
delete name = <>
```

Parameters:

name	The name of an IP host to delete.	Required

dyndns host flush

Delete all host names

Syntax:

```
flush
```

dyndns host list

List all host names

Syntax:

```
list
```

dyndns list

List all dynamic DNS clients.

Syntax:

```
list
```

dyndns modify

Modify a dynamic DNS client.

Syntax:

```
modify name = <>
     [backmx = <{disabled|enabled}>]
      [group = <>]
       [intf = <{O2_ADSL|O2_ADSL2plus|O2_Static}>]
          [mx = <string>]
    [offline = <{disabled|enabled}>]
   [password = <password>]
    [service = <{(see Parameters)}>]
     [status = <{disabled|enabled}>]
      [trace = <{disabled|enabled}>]
       [user = <string>]
   [wildcard = <{disabled|enabled}>]
```

Parameters:

name	The dynamic DNS client name.	Required
backmx	Set up the mail exchanger as a backup MX.	Optional
group	The dynamic DNS host group.	Optional
intf	The dynamic DNS client interface.	Optional
mx	The mail exchanger.	Optional
offline	Set the host to offline mode.	Optional
password	The password for dynamic DNS authentication.	Optional
service	The dynamic DNS service. Options: <{dyndns|statdns|custom|No-IP|DtDNS|gnudip}>	Optional
status	Enable/Disable the dynamic DNS client.	Optional
trace	Enable/Disable the verbose console logging for the dynamic DNS client.	Optional
user	The username for dynamic DNS authentication.	Optional
wildcard	Allow use of hostname wildcards.	Optional

dyndns service

Following commands are available :

`modify`	:	Modify specific dynamic DNS service settings
`list`	:	List all dynamic DNS services

dyndns service list

List all dynamic DNS services

Syntax:

```
list
```

dyndns service modify

Modify specific dynamic DNS service settings

Syntax:

```
modify     name = <{(see Parameters)}>
     [max_retry = <number{1-5}>]
          [port = <{(see Parameters)}>]
       [request = <string>]
 [retryinterval = <number{0-600}>]
        [server = <string>]
[updateinterval = <number{0-2097120}>]
```

Parameters:

name	The dynamic DNS service. Options: <{dyndns|statdns|custom|No-IP|DtDNS|gnudip}>	Required
max_retry	The maximum number of retries if communication with the dynamic DNS server fails.	Optional
port	The dynamic DNS server port. Options: <{undefined|at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-0|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|xwindows} or number>	Optional
request	The dynamic DNS request string.	Optional
retryinterval	Number of seconds between retries if communication with the dynamic DNS server fails (The value 0 means disabled).	Optional
server	The dynamic DNS server hostname.	Optional
updateinterval	Number of seconds before a dynamic update is sent to the dynamic DNS server (The value 0 means disabled).	Optional

env

Following commands are available :

set	:	Sets an environment variable.
get	:	Gets an environment variable.
unset	:	Deletes an environment variable.
list	:	List all environment variables.
flush	:	Remove all non-system environment variables.
def	:	Define an environment variable(command is hidden)
hash	:	Transfer variable by hash algrithm.(command is hidden)

env def

Define an environment variable(command is hidden)

Syntax:

```
def type = <{(see Parameters)}>
      var = <string>
  [alias = <translated string>]
   [calc = <quoted string>]
 [dalias = <translated string>]
   [data = <quoted string>]
[default = <quoted string>]
   [desc = <translated string>]
    [grp = <string>]
   [help = <translated string>]
[linkvar = <string>]
    [max = <number>]
    [min = <number>]
    [req <{no|yes}>]
```

Parameters:

type	type of the variable Options: <{string|passw|integer|combo|list| radioset|bool|ipaddr|ipmask|passwcheck|label| hex|grp}>	Required
var	Variable name : name of variable or group	Required
alias	user friendly name for field or group	Optional
calc	host wizard related stuff, ignored here	Optional
dalias	user friendly names for data values	Optional
data	list of values, used in configuration file	Optional
default	a default value field for variable	Optional
desc	Description text, help text	Optional
grp	Group name in case variable is defined	Optional
help	Addtional help text (only for group description	Optional
linkvar	to which variable this variable is linked to (only for passwcheck)	Optional
max	maximum value in case type is integer	Optional
min	minumum value in case type is integer	Optional
req	parameter without value: to indicate a required field	Optional

env flush

Remove all non-system environment variables.

Syntax:

```
flush
```

env get

Gets an environment variable.

Syntax:

```
get var = <{(see Parameters)}>
```

Parameters:

var	The name of the variable. Options: <{_SW_FLAG|_ETHERNET| _COMPANY_NAME|_COMPANY_URL| _PROD_NAME|_BRAND_NAME|_PROD_URL| _PROD_DESCRIPTION|_PROD_NUMBER| _SSID_SERIAL_PREFIX| _BOARD_SERIAL_NBR|_PROD_SERIAL_NBR| _FII|_BUILD|_BOOTLOADER_VERSION| _BUILDVARIANT|_OUI|_CUSTOVARIANT| _PHYSLAYERTYPE|_BUILDNAME|_PRL|_FIA| _BOARD_NAME|_COMPANY_ID| _COPYRIGHT|_TPVERSION|_PROD_ID| _PROD_FRIENDLY_NAME|_VARIANT_ID| _VARIANT_FRIENDLY_NAME|_MACADDR| _LMACADDR|_WL_VERSION_0| _WL_VERSION|_WL0_WEPKEY_SERIAL| _WL0_WPAKEY_SERIAL|_WL0_SSID_SERIAL| _WL0_SSID_PREFIX|_WL0_BASE52_SERIAL| _WL0_MAC_POSTFIX|_WL0_PIN_SERIAL| _WL0_UUID_E_SERIAL| _WL0_UUID_R_SERIAL| _WL1_WEPKEY_SERIAL| _WL1_WPAKEY_SERIAL|_WL1_SSID_SERIAL| _WL1_BASE52_SERIAL|_WL1_PIN_SERIAL| _WL1_UUID_E_SERIAL| _WL1_UUID_R_SERIAL| _WL2_WEPKEY_SERIAL| _WL2_WPAKEY_SERIAL|_WL2_SSID_SERIAL| _WL2_BASE52_SERIAL|_WL2_PIN_SERIAL| _WL2_UUID_E_SERIAL| _WL2_UUID_R_SERIAL| _WL3_WEPKEY_SERIAL| _WL3_WPAKEY_SERIAL|_WL3_SSID_SERIAL| _WL3_BASE52_SERIAL|_WL3_PIN_SERIAL| _WL3_UUID_E_SERIAL| _WL3_UUID_R_SERIAL| _SSID_WL_MACADDR_POSTFIX| _SSID_POSTFIX_LEGACY_OR_MAC|	Required

_WL_MACADDR|_LWL_MACADDR|
_MODEMLABEL|_WIZ_AUTOPOPUP|
CONF_COND_ENCRYPT|
_SNTPPOLL_POST_SYNC|
_SNTPPOLL_PRE_SYNC|
_ADSL_EOC_VERSION|_EOC_MSG|
CONF_REGION|CONF_PROVIDER|
CONF_DESCRIPTION|HOST_SETUP|
HOST_LANGUAGE|CONF_VERSION|
COLUMNS|ROWS|CONF_SERVICE|
@CWMPUSER|WL0_SSID_PREFIX_CUSTOM|
WL1_SSID_PREFIX_CUSTOM|
@WL2_SSID_PREFIX_CUSTOM|
@WL3_SSID_PREFIX_CUSTOM|@WL0_SSID|
@WL1_SSID|@WL2_SSID}>

env hash

Transfer variable by hash algrithm.(command is hidden)

Syntax:

```
hash crypto = <{MD2|MD5|SHA1|SHA256|SHA512}>
        dest = <string>
         len = <number{0-128}>
         src = <string>
```

Parameters:

crypto	The selection of encryption.	Required
dest	The name of the destinate variable.	Required
len	The length to get.	Required
src	The values of the source	Required

env list

List all environment variables.

Syntax:

```
list
```

env set

Sets an environment variable.

Syntax:
```
set value = <translated string>
      var = <string>
```

Parameters:

value	A translated quoted string defining the variable value.	Required
var	The name of the variable.	Required

env unset

Deletes an environment variable.

Syntax:

```
unset var = <{(see Parameters)}>
```

Parameters:

var	The name of the variable. Options: <{_SW_FLAG|_ETHERNET| _COMPANY_NAME|_COMPANY_URL| _PROD_NAME|_BRAND_NAME|_PROD_URL| _PROD_DESCRIPTION|_PROD_NUMBER| _SSID_SERIAL_PREFIX| _BOARD_SERIAL_NBR|_PROD_SERIAL_NBR| _FII|_BUILD|_BOOTLOADER_VERSION| _BUILDVARIANT|_OUI|_CUSTOVARIANT| _PHYSLAYERTYPE|_BUILDNAME|_PRL|_FIA| _BOARD_NAME|_COMPANY_ID| _COPYRIGHT|_TPVERSION|_PROD_ID| _PROD_FRIENDLY_NAME|_VARIANT_ID| _VARIANT_FRIENDLY_NAME|_MACADDR| _LMACADDR|_WL_VERSION_0| _WL_VERSION|_WL0_WEPKEY_SERIAL| _WL0_WPAKEY_SERIAL|_WL0_SSID_SERIAL| _WL0_SSID_PREFIX|_WL0_BASE52_SERIAL| _WL0_MAC_POSTFIX|_WL0_PIN_SERIAL| _WL0_UUID_E_SERIAL| _WL0_UUID_R_SERIAL| _WL1_WEPKEY_SERIAL| _WL1_WPAKEY_SERIAL|_WL1_SSID_SERIAL| _WL1_BASE52_SERIAL|_WL1_PIN_SERIAL| _WL1_UUID_E_SERIAL| _WL1_UUID_R_SERIAL| _WL2_WEPKEY_SERIAL| _WL2_WPAKEY_SERIAL|_WL2_SSID_SERIAL| _WL2_BASE52_SERIAL|_WL2_PIN_SERIAL| _WL2_UUID_E_SERIAL| _WL2_UUID_R_SERIAL| _WL3_WEPKEY_SERIAL| _WL3_WPAKEY_SERIAL|_WL3_SSID_SERIAL| _WL3_BASE52_SERIAL|_WL3_PIN_SERIAL| _WL3_UUID_E_SERIAL| _WL3_UUID_R_SERIAL| _SSID_WL_MACADDR_POSTFIX| _SSID_POSTFIX_LEGACY_OR_MAC|	Required

_WL_MACADDR|_LWL_MACADDR|
_MODEMLABEL|_WIZ_AUTOPOPUP|
CONF_COND_ENCRYPT|
_SNTPPOLL_POST_SYNC|
_SNTPPOLL_PRE_SYNC|
_ADSL_EOC_VERSION|_EOC_MSG|
CONF_REGION|CONF_PROVIDER|
CONF_DESCRIPTION|HOST_SETUP|
HOST_LANGUAGE|CONF_VERSION|
COLUMNS|ROWS|CONF_SERVICE|
@CWMPUSER|WL0_SSID_PREFIX_CUSTOM|
WL1_SSID_PREFIX_CUSTOM|
@WL2_SSID_PREFIX_CUSTOM|
@WL3_SSID_PREFIX_CUSTOM|@WL0_SSID|
@WL1_SSID|@WL2_SSID}>

eth

Following commands are available :

ifadd	:	Create a new ETH interface.
ifdelete	:	Delete an ETH interface.
ifattach	:	Attach an ETH interface.
ifdetach	:	Detach an ETH interface.
ifconfig	:	Modify an ETH interface.
iflist	:	Display the ETH interfaces.
flush	:	Flush all ETH interfaces.

Following command groups are available :

device	filter	bridge	switch
vlan			

eth bridge

Following commands are available :

config	:	Modify/Display the bridge configuration settings.
ippriomap	:	Modify the IP priority mappings for a bridge.
ippriomapreset	:	Reset the IP priority mappings to its defaults.
list	:	Display the current bridge instances.
add	:	Add a new bridge instance.
delete	:	Delete a bridge instance.
select	:	Select the default bridge for configuring interfaces from (if not setting bridge name, for legacy purposes).
ifadd	:	Add a new bridge interface.
ifdelete	:	Delete a bridge interface.
ifattach	:	Attach a bridge interface.
ifdetach	:	Detach a bridge interface.
ifconfig	:	Modify a bridge interface configuration.
ifflush	:	flush the bridge interfaces: detach/delete all interfaces.
iflist	:	Display the current bridge interfaces.
macadd	:	Add a static MAC address to a bridge interface.
maclist	:	Display the MAC address database.
macdelete	:	Remove a MAC address from the database.
clear	:	Clear bridge statistics.
flush	:	Flush all bridge instances with their interfaces and properties.

Following command groups are available :

dynvlan	filter	igmpsnooping	rule
unknownvlan	vlan	xtratag	*dyngroup*
group			

eth bridge add

Add a new bridge instance.

Syntax:

```
add brname = <string>
```

Parameters:

brname	The name of the new bridge instance.	Required

eth bridge clear

Clear bridge statistics.

Syntax:

```
clear [brname = <{bridge}>]
```

Parameters:

brname	The name of a bridge instance.	Optional

eth bridge config

Modify/Display the bridge configuration settings.

Syntax:

```
config    [age = <number{10-1000000}>]
       [brname = <{bridge}>]
       [filter = <{none|no_WAN_broadcast}>]
[precedencemap = <{(missing)}>]
          [vlan = <{disabled|enabled}>]
```

Parameters:

age	The lifetime (in seconds) of a dynamically learned MAC address.	Optional
brname	The name of a bridge instance.	Optional
filter	The bridge filter to be applied for all WAN bridge interfaces.	Optional
precedencemap		Hidden
vlan	Enable/disable the use of the VLAN id of the received VLAN packets.	Optional

eth bridge delete

Delete a bridge instance.

Syntax:

```
delete brname = <{bridge}>
```

Parameters:

brname	The name of a bridge instance.	Required

eth bridge dyngroup

Following commands are available :

add   : Add a dynamic group membership entry.
config   : Modify the dynamic group membership configuration.

Note: eth bridge dyngroup is missing from the ':help eth bridge' group list

eth bridge dyngroup add

Add a dynamic group membership entry.

Syntax:

```
add group = <{default}>
  [dynamic = <{(missing)}>]
    [rgroup = <{default}>]
```

Parameters:

group	The group for the dynamic group membership entry.	Required
dynamic		Hidden
rgroup	The group that is to be removed from the port.	Optional

eth bridge dyngroup config

Modify the dynamic group membership configuration.

Syntax:

```
config [timeout = <number{0-100000}>]
```

Parameters:

timeout	Timeout in seconds for the dynamic entries.	Optional

eth bridge dynvlan

Following commands are available :

add	:	Add a dynamic VLAN membership entry.
delete	:	Delete a dynamic VLAN membership entry.
list	:	Display a dynamic VLAN membership entry.
flush	:	Flush all dynamic VLAN membership entries.
config	:	Modify the dynamic VLAN membership configuration.
actlist	:	Display the active MAC entries for the dynamic VLAN membership.

eth bridge dynvlan actlist

Display the active MAC entries for the dynamic VLAN membership.

Syntax:

```
actlist
```

eth bridge dynvlan add

Add a dynamic VLAN membership entry.

Syntax:

```
add hwaddr = <masked-hardware-address>
        vlan = <{default}>
   [dynamic = <{(missing)}>]
        [id = <number{0-100000}>]
      [mode = <{none|vid|prio|both}>]
      [prio = <number{0-7}>]
   [remvlan = <{(missing)}>]
```

Parameters:

hwaddr	The (masked) ethernet MAC address of the dynamic VLAN membership entry.	Required
vlan	The VLAN for the dynamic VLAN membership entry.	Required
dynamic		Hidden
id	The id of the dynamic VLAN membership entry.	Optional
mode	The flexiport mode of operation.	Optional
prio	The new port priority to be set.	Optional
remvlan		Hidden

eth bridge dynvlan config

Modify the dynamic VLAN membership configuration.

Syntax:

```
config [timeout = <number{0-100000}>]
```

Parameters:

timeout	Timeout in seconds for the dynamic entries.	Optional

eth bridge dynvlan delete

Delete a dynamic VLAN membership entry.

Syntax:

```
delete id = <number{0-100000}>
```

Parameters:

id	Required

eth bridge dynvlan flush

Flush all dynamic VLAN membership entries.

Syntax:

```
flush
```

eth bridge dynvlan flush

eth bridge dynvlan list

Display a dynamic VLAN membership entry.

Syntax:

```
list
```

eth bridge filter

Following commands are available :

add	:	Add a filter.
list	:	Display the bridge filters.
delete	:	Delete a filter.
config	:	Change filter configuration
attach	:	Enable a filter.
detach	:	Disable a filter.
forwarding	:	Action: set forwarding configuration.
ifadd	:	Connect an interface with a filter.
ifdel	:	Remove an interface from a filter.
fwdintfadd	:	Add Forwarding interface: filter action.
fwdintfdel	:	Remove Forwarding interface: filter action.

eth bridge filter add

Add a filter.

Syntax:

```
add brname = <{bridge}>
       name = <string>
    [filter = <{}>]
```

Parameters:

brname	The name of an bridge.	Required
name	The name of the filter.	Required
filter	Ethernet filter to used	Optional

eth bridge filter attach

Enable a filter.

Syntax:

```
attach brname = <{bridge}>
         name = <{}>
```

Parameters:

brname	The name of an bridge.	Required
name	The name of the filter to configure.	Required

eth bridge filter config

Change filter configuration

Syntax:

```
config brname = <{bridge}>
        name = <{}>
      [filter = <{}>]
```

Parameters:

brname	The name of an bridge.	Required
name	The name of the filter to configure.	Required
filter	Ethernet filter to used	Optional

eth bridge filter delete

Delete a filter.

Syntax:

```
delete brname = <{bridge}>
       name = <{}>
```

Parameters:

brname	The name of an bridge.	Required
name	The name of the filter to configure.	Required

eth bridge filter detach

Disable a filter.

Syntax:

```
detach brname = <{bridge}>
        name = <{}>
```

Parameters:

brname	The name of an bridge.	Required
name	The name of the filter to configure.	Required

eth bridge filter forwarding

Action: set forwarding configuration.

Syntax:

```
forwarding brname = <{bridge}>
            mode = <{(see Parameters)}>
            name = <{}>
```

Parameters:

brname	The name of an bridge.	Required
mode	The forwarding type to set. Options: <{ToFwdIntfsOnly|AlsoToFwdIntfs| NotToFwdIntfs|Drop}>	Required
name	The name of the filter to configure.	Required

eth bridge filter fwdintfadd

Add Forwarding interface: filter action.

Syntax:

```
fwdintfadd brname = <{bridge}>
            intf = <{(see Parameters)}>
            name = <{}>
```

Parameters:

brname	The name of an bridge.	Required
intf	The name of the bridge interface to add. Options: <{OBC|ethport1|ethport2|ethport3| ethport4|WLAN|virt}>	Required
name	The name of the filter to configure.	Required

eth bridge filter fwdintfdel

Remove Forwarding interface: filter action.

Syntax:

```
fwdintfdel brname = <{bridge}>
            intf = <{(see Parameters)}>
            name = <{}>
```

Parameters:

brname	The name of an bridge.	Required
intf	The name of the bridge interface to remove. Options: <{OBC|ethport1|ethport2|ethport3| ethport4|WLAN|virt}>	Required
name	The name of the filter to configure.	Required

eth bridge filter ifadd

Connect an interface with a filter.

Syntax:

```
ifadd brname = <{bridge}>
        intf = <{(see Parameters)}>
        name = <{}>
```

Parameters:

brname	The name of an bridge.	Required
intf	The name of the bridge interface to add. Options: <{OBC|ethport1|ethport2|ethport3| ethport4|WLAN|virt}>	Required
name	The name of the filter to configure.	Required

eth bridge filter ifdel

Remove an interface from a filter.

Syntax:

```
ifdel brname = <{bridge}>
      intf = <{(see Parameters)}>
      name = <{}>
```

Parameters:

brname	The name of an bridge.	Required
intf	The name of the bridge interface to remove. Options: <{OBC|ethport1|ethport2|ethport3|ethport4|WLAN|virt}>	Required
name	The name of the filter to configure.	Required

eth bridge filter list

Display the bridge filters.

Syntax:

```
list brname = <{bridge}>
    [expand = <{disabled|enabled}>]
      [name = <{}>]
```

Parameters:

brname	The name of an bridge.	Required
expand	Expanded listing.	Optional
name	The name of an filter.	Optional

eth bridge flush

Flush all bridge instances with their interfaces and properties.

Syntax:

```
flush [brname = <{bridge}>]
```

Parameters:

brname	The name of a bridge instance.	Optional

eth bridge group

Following commands are available :

add	:	Add a new bridge group.
move	:	Move a bridge interface to a specified bridge group.

Note: eth bridge group is missing from the ':help eth bridge' group list

eth bridge group add

Add a new bridge group.

Syntax:

```
add  id = <number{2-4094}>
[brname = <{bridge}>]
  [name = <string>]
```

Parameters:

id	The bridge group id.	Required
brname	The name of a bridge instance.	Optional
name	The new group name. If left blank, a default name will be used.	Optional

eth bridge group move

Move a bridge interface to a specified bridge group.

Syntax:

```
move intf = <{(see Parameters)}>
      name = <{(see Parameters)}>
   [brname = <{bridge}>]
```

Parameters:

intf	The name of the bridge interface to move to the bridge group. Options: <{OBC|ethport1|ethport2|ethport3|ethport4|WLAN|virt}>	Required
name	The name of the bridge group. Options: <BC|ethport1|ethport2|ethport3|ethport4|WLAN|virt}> >	Required
brname	The name of a bridge instance.	Optional

eth bridge ifadd

Add a new bridge interface.

Syntax:

```
ifadd intf = <string>
    [brname = <{bridge}>]
```

Parameters:

intf	The new bridge interface name.	Required
brname	The name of a bridge instance.	Optional

eth bridge ifattach

Attach a bridge interface.

Syntax:

```
ifattach intf = <{}>
        [brname = <{bridge}>]
```

Parameters:

intf	The name of the bridge interface.	Required
brname	The name of a bridge instance.	Optional

eth bridge ifconfig

Modify a bridge interface configuration.

Syntax:

```
ifconfig      intf = <{(see Parameters)}>
   [acceptvlanonly = <{disabled|enabled}>]
     [bpdufiltering = <{disabled|enabled}>]
            [brname = <{bridge}>]
              [dest = <{}>]
          [dyngroup = <{(missing)}>]
           [dynvlan = <{disabled|enabled|switched}>]
     [igmpsnooping = <{disabled|enabled}>]
[ingressfiltering = <{disabled|enabled}>]
            [ipprec = <{disabled|precedence|dscp}>]
      [mcastfilter = <{disabled|enabled}>]
         [portstate = <{(see Parameters)}>]
         [prioconfig = <{(see Parameters)}>]
          [priority = <number{0-7}>]
            [priotag = <{disabled|enabled}>]
  [priotransparent = <{disabled|enabled}>]
          [regenprio = <string>]
              [retry = <number{0-65535}>]
               [vlan = <{default}>]
                [wan = <{disabled|enabled}>]
        [xtratagging = <{none|c-vlan|s-vlan}>]
```

Parameters:

intf	The name of the bridge interface to configure. Options: <{OBC|ethport1|ethport2|ethport3|ethport4|WLAN|virt}>	Required
acceptvlanonly	Enable/disable receipt of tagged ingress packets.	Optional
bpdufiltering	Enable/disable BPDU filtering for this interface.	Optional
brname	The name of a bridge instance.	Optional
dest	The destination for this interface. Typically an ATM or a physical interface name.	Optional
dyngroup		Hidden
dynvlan	Change dynamic VLAN membership checking mechanism for this interface.	Optional
igmpsnooping	Enable/disable IGMP snooping for this interface.	Optional
ingressfiltering	Enable/disable discard of tagged ingress packets if the interface is not part of the VLAN.	Optional
ipprec	The IP precedence for this interface.	Optional

mcastfilter	Enable/disable discard of multicast packets for this interface.	Optional
portstate	The bridge portstate for this interface. Options: <{disabled|learning|forwarding}>	Optional
prioconfig	The priority configuration for this interface. Options: <{disabled|overwrite|increase}>	Optional
priority	The default priority for untagged ingress packets.	Optional
priotag	Enable/Disable priority tagging.	Optional
priotransparent	Enable/disable priority preservation for this interface.	Optional
regenprio	The priority regeneration table for tagged ingress packets.	Optional
retry	The number of WAN connection setup retries before giving up.	Optional
vlan	The default VLAN.	Optional
wan	Enable/disable WAN for this interface.	Optional
xtratagging	The 'extra tagging mode' for this interface (none, c-vlan or s-vlan).	Optional

eth bridge ifdelete

Delete a bridge interface.

Syntax:

```
ifdelete intf = <{(see Parameters)}>
       [brname = <{bridge}>]
```

Parameters:

intf	The name of the bridge interface. Options: <{ethport1|ethport2|ethport3|ethport4| WLAN|virt}>	Required
brname	The name of a bridge instance.	Optional

eth bridge ifdetach

Detach a bridge interface.

Syntax:

```
ifdetach intf = <{(see Parameters)}>
        [brname = <{bridge}>]
```

Parameters:

intf	The name of the bridge interface.	Required
	Options: <{ethport1|ethport2|ethport3|ethport4| WLAN|virt}>	
brname	The name of a bridge instance.	Optional

eth bridge ifflush

flush the bridge interfaces: detach/delete all interfaces.

Syntax:

```
ifflush [brname = <{bridge}>]
```

Parameters:

brname	The name of a bridge instance.	Optional

eth bridge iflist

Display the current bridge interfaces.

Syntax:

```
iflist [brname = <{bridge}>]
        [intf = <{(see Parameters)}>]
```

Parameters:

brname	The name of a bridge instance.	Optional
intf	The name of a bridge interface. Options: <{OBC|ethport1|ethport2|ethport3| ethport4|WLAN|virt}>	Optional

eth bridge igmpsnooping

Following commands are available :

config	:	Configure bridge instance IGMP Snooping flags.
list	:	Display bridge instance snooped groups.
ifconfig	:	Configure bridge interface IGMP snooping flags and mode.
iflist	:	Display bridge interface IGMP status.
clear	:	Clear snooping statistics.

eth bridge igmpsnooping clear

Clear snooping statistics.

Syntax:

```
clear [brname = <{bridge}>]
      [intf = <{(see Parameters)}>]
```

Parameters:

brname	The name of a bridge instance.	Optional
intf	The bridge interface currently to be cleared. Options: <{OBC|ethport1|ethport2|ethport3|ethport4|WLAN|virt}>	Optional

eth bridge igmpsnooping config

Configure bridge instance IGMP Snooping flags.

Syntax:

```
config [brname = <{bridge}>]
    [floodmcast = <{disabled|enabled}>]
        [floodrp = <{disabled|enabled}>]
        [queryto = <number{0-31744}>]
            [state = <{disabled|enabled}>]
```

Parameters:

brname	The name of a bridge instance.	Optional
floodmcast	Enable/Disable flooding unregistered multicasts.	Optional
floodrp	Enable/Disable flooding reports to all ports.	Optional
queryto	IGMP Snooping Query Interval.	Optional
state	Enable/Disable the IGMP Snooping.	Optional

eth bridge igmpsnooping ifconfig

Configure bridge interface IGMP snooping flags and mode.

Syntax:

```
ifconfig intf = <{(see Parameters)}>
      [brname = <{bridge}>]
    [exptrack = <{disabled|enabled}>]
   [fastleave = <{disabled|enabled}>]
        [mrdp = <{disabled|enabled}>]
    [portmode = <{Host|Router|Auto|None}>]
        [rgmp = <{disabled|enabled}>]
```

Parameters:

intf	The bridge interface currently to be configured. Options: <{OBC|ethport1|ethport2|ethport3| ethport4|WLAN|virt}>	Required
brname	The bridge instance currently to be configured.	Optional
exptrack	Enable/Disable Explicit Host Tracking.	Optional
fastleave	Enable/Disable Fast Immediate Leave.	Optional
mrdp	Enable/Disable MRDP support.	Optional
portmode	Mode of the bridge port.	Optional
rgmp	Enable/Disable RGMP support.	Optional

eth bridge igmpsnooping iflist

Display bridge interface IGMP status.

Syntax:

```
iflist [brname = <{bridge}>]
       [intf = <{(see Parameters)}>]
```

Parameters:

brname	The name of a bridge instance.	Optional
intf	The name of the bridge interface. Options: <{OBC|ethport1|ethport2|ethport3| ethport4|WLAN|virt}>	Optional

eth bridge igmpsnooping list

Display bridge instance snooped groups.

Syntax:

```
list [brname = <{bridge}>]
```

Parameters:

brname	The name of a bridge instance.	Optional

eth bridge igmpsnooping list

eth bridge ippriomap

Modify the IP priority mappings for a bridge.

Syntax:

```
ippriomap dscpidx = <{(see Parameters)}>
    precedencemap = <string>
        tostable = <{(see Parameters)}>
            type = <{tos|dscp}>
          [brname = <{bridge}>]
```

Parameters:

dscpidx	Index in the DSCP table to edit. Options: <{dscp_0_7|dscp_8_15|dscp_16_23| dscp_24_31|dscp_32_39|dscp_40_47| dscp_48_55|dscp_56_63}>	Required
precedencemap	The IP priority precedence mapping values.	Required
tostable	TOS table type to edit. Options: <{Default|MinimizeDelay| MaximizeThroughput|MaximizeReliability| MinimizeCost}>	Required
type	For which IP priority type to adapt the precedencemap.	Required
brname	The name of a bridge instance.	Optional

eth bridge ippriomapreset

Reset the IP priority mappings to its defaults.

Syntax:

```
ippriomapreset type = <{tos|dscp}>
                [brname = <{bridge}>]
```

Parameters:

type	For which IP priority type to reset the precedencemap.	Required
brname	The name of a bridge instance.	Optional

eth bridge list

Display the current bridge instances.

Syntax:

```
list [brname = <{bridge}>]
```

Parameters:

brname	The name of a bridge instance.	Optional

eth bridge macadd

Add a static MAC address to a bridge interface.

Syntax:

```
macadd hwaddr = <hardware-address>
         intf = <{(see Parameters)}>
      [brname = <{bridge}>]
        [vlan = <{default}>]
```

Parameters:

hwaddr	The ethernet MAC address of the new entry.	Required
intf	The name of the bridge interface. Options: <{OBC|ethport1|ethport2|ethport3|ethport4|WLAN|virt}>	Required
brname	The name of a bridge instance.	Optional
vlan	The VLAN.	Optional

eth bridge macdelete

Remove a MAC address from the database.

Syntax:

```
macdelete hwaddr = <hardware-address>
        [brname = <{bridge}>]
          [vlan = <{default}>]
```

Parameters:

hwaddr	The ethernet MAC address of the entry.	Required
brname	The name of a bridge instance.	Optional
vlan	The VLAN.	Optional

eth bridge maclist

Display the MAC address database.

Syntax:

```
maclist [brname = <{bridge}>]
```

Parameters:

brname	The name of a bridge instance.	Optional

eth bridge rule

Following commands are available :

add   : Add a new constraint to the VLAN learning system.
delete   : Delete a constraint from the VLAN learning system.
list   : Display all constraints from the VLAN learning system.
flush   : Flush all constraints from the VLAN learning system.

eth bridge rule add

Add a new constraint to the VLAN learning system.

Syntax:

```
add type = <{shared|independant}>
    vlan = <{default}>
    [isi = <number{0-32}>]
  [vlan2 = <{default}>]
```

Parameters:

type	Type of constraint.	Required
vlan	The VLAN where the constraint belongs to.	Required
isi	The indenpendent set id for an independent constraint.	Optional
vlan2	The second VLAN for a shared constraint.	Optional

eth bridge rule delete

Delete a constraint from the VLAN learning system.

Syntax:

```
delete index = <number{0-32}>
```

Parameters:

index	Index of the constraint.	Required

eth bridge rule flush

Flush all constraints from the VLAN learning system.

Syntax:

```
flush
```

eth bridge rule list

Display all constraints from the VLAN learning system.

Syntax:

```
list
```

eth bridge select

Select the default bridge for configuring interfaces from (if not setting bridge name, for legacy purposes).

Syntax:

```
select brname = <{bridge}>
```

Parameters:

brname	The name of a bridge instance.	Required

eth bridge unknownvlan

Following commands are available :

`ifadd`	:	Add bridge interface to unknown 'VLAN'.
`ifdelete`	:	Delete bridge interface from unknown 'VLAN'.
`ifconfig`	:	Modify bridge interface from unknown 'VLAN'.
`iflist`	:	Display all interfaces of the unknown 'VLAN'.

eth bridge unknownvlan ifadd

Add bridge interface to unknown 'VLAN'.

Syntax:

```
ifadd intf = <{(see Parameters)}>
   [brname = <{bridge}>]
 [untagged = <{disabled|enabled}>]
```

Parameters:

intf	The name of the bridge interface to add to the unknown 'VLAN'. Options: <{OBC|ethport1|ethport2|ethport3|ethport4|WLAN|virt}>	Required
brname	The name of a bridge instance.	Optional
untagged	Enable/disable interface as untagged for this unknown 'VLAN'.	Optional

eth bridge unknownvlan ifconfig

Modify bridge interface from unknown 'VLAN'.

Syntax:

```
ifconfig intf = <{(see Parameters)}>
      [brname = <{bridge}>]
    [untagged = <{disabled|enabled}>]
```

Parameters:

intf	The bridge interface from the unknown 'VLAN' to configure. Options: <{OBC|ethport1|ethport2|ethport3|ethport4|WLAN|virt}>	Required
brname	The name of a bridge instance.	Optional
untagged	Enable/disable interface as untagged for this unknown 'VLAN'.	Optional

eth bridge unknownvlan ifdelete

Delete bridge interface from unknown 'VLAN'.

Syntax:

```
ifdelete intf = <{(see Parameters)}>
       [brname = <{bridge}>]
```

Parameters:

intf	The name of the bridge interface to remove from the unknown 'VLAN'. Options: <{OBC|ethport1|ethport2|ethport3|ethport4|WLAN|virt}>	Required
brname	The name of a bridge instance.	Optional

eth bridge unknownvlan iflist

Display all interfaces of the unknown 'VLAN'.

Syntax:

```
iflist
```

eth bridge vlan

Following commands are available :

ifadd   :   Add bridge interface to virtual LAN.
ifdelete   :   Delete bridge interface from virtual LAN.
ifconfig   :   Modify bridge interface from virtual LAN.
iflist   :   Display all vitual LAN's.

eth bridge vlan ifadd

Add bridge interface to virtual LAN.

Syntax:

```
ifadd intf = <{(see Parameters)}>
      name = <{default}>
 [untagged = <{disabled|enabled}>]
```

Parameters:

intf	The name of the bridge interface to add to the VLAN. Options: <{OBC|ethport1|ethport2|ethport3|ethport4|WLAN|virt}>	Required
name	The VLAN name.	Required
untagged	Enable/disable interface as untagged for this VLAN.	Optional

eth bridge vlan ifconfig

Modify bridge interface from virtual LAN.

Syntax:

```
ifconfig intf = <{(see Parameters)}>
         name = <{default}>
     untagged = <{disabled|enabled}>
```

Parameters:

intf	The bridge interface from the VLAN to configure. Options: <{OBC|ethport1|ethport2|ethport3| ethport4|WLAN|virt}>	Required
name	The VLAN name.	Required
untagged	Enable/disable interface as untagged for this VLAN.	Required

eth bridge vlan ifdelete

Delete bridge interface from virtual LAN.

Syntax:

```
ifdelete intf = <{(see Parameters)}>
         name = <{default}>
```

Parameters:

intf	The name of the bridge interface to remove from the VLAN. Options: <{OBC|ethport1|ethport2|ethport3|ethport4|WLAN|virt}>	Required
name	The VLAN name.	Required

eth bridge vlan iflist

Display all vitual LAN's.

Syntax:

```
iflist
```

eth bridge xtratag

Following commands are available :

add	:	Add an extra tag mapping entry.
delete	:	Delete an extra tag mapping entry.
config	:	Configure an extra tag mapping entry.
list	:	Display all extra tag mapping entries.
flush	:	Flush all extra tag mapping entries.

eth bridge xtratag add

Add an extra tag mapping entry.

Syntax:

```
add innervid = <{[1-4094]|all|}>
        intf = <{(see Parameters)}>
     outervid = <{[1-4094]|notag|transparent|}>
      [brname = <{bridge}>]
```

Parameters:

innervid	The inner VLAN id [all,1-4094] (all = all inner vid will be translated to the outer vid).	Required
intf	The name of the bridge interface. Options: <{OBC|ethport1|ethport2|ethport3| ethport4|WLAN|virt}>	Required
outervid	The outer VLAN id [notag,1-4094,transparent] (notag: outer not tagged, transparent: tagged as inner).	Required
brname	The name of a bridge instance.	Optional

eth bridge xtratag config

Configure an extra tag mapping entry.

Syntax:

```
config innervid = <{[1-4094]|all|}>
           intf = <{(see Parameters)}>
       outervid = <{[1-4094]|notag|transparent|}>
         [brname = <{bridge}>]
```

Parameters:

innervid	The inner VLAN id [all,1-4094] (all = all inner vid will be translated to the outer vid).	Required
intf	The name of the bridge interface. Options: <{OBC|ethport1|ethport2|ethport3| ethport4|WLAN|virt}>	Required
outervid	The outer VLAN id [notag,1-4094,transparent] (notag: outer not tagged, transparent: tagged as inner).	Required
brname	The name of a bridge instance.	Optional

eth bridge xtratag delete

Delete an extra tag mapping entry.

Syntax:

```
delete innervid = <{[1-4094]|all|}>
          intf = <{(see Parameters)}>
        [brname = <{bridge}>]
```

Parameters:

innervid	The inner VLAN id [all,1-4094] (all = all inner vid will be translated to the outer vid).	Required
intf	The name of the bridge interface. Options: <{OBC|ethport1|ethport2|ethport3|ethport4|WLAN|virt}>	Required
brname	The name of a bridge instance.	Optional

eth bridge xtratag flush

Flush all extra tag mapping entries.

Syntax:

```
flush
```

eth bridge xtratag list

Display all extra tag mapping entries.

Syntax:

```
list
```

eth device

Following commands are available :

`ifconfig`	:	Configure an Ethernet port's type setting (disable/enable autonegotiation).
`ifrestart`	:	Reset an Ethernet port and restart autonegotiation.
`ifautoneg`	:	Adapt/list an Ethernet port's autonegotiation parameters (if autonegotiation is enabled).
`iflist`	:	Show all Ethernet ports' operational status.

eth device ifautoneg

Adapt/list an Ethernet port's autonegotiation parameters (if autonegotiation is enabled).

Syntax:

```
ifautoneg intf = <{ethif1|ethif2|ethif3|ethif4|}>
       [duplex = <{auto|half|full}>]
         [pause = <{none|asym|sym|both}>]
         [speed = <{auto|10Mb|100Mb|1Gb}>]
```

Parameters:

intf	The Ethernet port's name to adapt or show info from.	Required
duplex	The duplex mode.	Optional
pause	The flow-control mode.	Optional
speed	The speed mode.	Optional

eth device ifconfig

Configure an Ethernet port's type setting (disable/enable autonegotiation).

Syntax:

```
ifconfig intf = <{ethif1|ethif2|ethif3|ethif4|}>
          [mtu = <number{1518-1534}>]
       [state = <{enabled|disabled}>]
         [type = <{(see Parameters)}>]
```

Parameters:

intf	The Ethernet port's name.	Required
mtu	The MTU for this Ethernet port.	Optional
state	The port's administrative state.	Optional
type	The port's type setting. If auto, then autonegotiation will be used, if something else, then autonegotiation will be disabled. Be careful with using this command: a wrong type setting make you loose the link. Use the autonegotian settings command instead: this is much more reliable! Options: <{auto|10BaseTHD|10BaseTFD|100BaseTHD|100BaseTFD}>	Optional

eth device iflist

Show all Ethernet ports' operational status.

Syntax:

```
iflist
```

eth device ifrestart

Reset an Ethernet port and restart autonegotiation.

Syntax:
```
ifrestart intf = <{ethif1|ethif2|ethif3|ethif4|}>
```

Parameters:

intf	The Ethernet port's to be reset (restart autonegotiation).	Required

eth filter

Following command groups are available :

```
operand          template
```

eth filter operand

Following commands are available :

add	:	Add a filter operand.
config	:	Set the operand to a certain type (will reset content first).
delete	:	Delete a filter operand.
reset	:	Reset an operand to its default initial state (removes all content, set to undefined type).
list	:	Display the filter operands.
vidadd	:	Add another VID in the set.
viddelete	:	Delete a VID from the set.
frameclassadd	:	Add another frameclass in the set.
frameclassdelete	:	Delete a frameclasse from the set.
ipprotoadd	:	Add another ip protocol in the set.
ipprotodelete	:	Delete a ip protocol from the set.
priorityadd	:	Add another priority in the set.
prioritydelete	:	Delete a ip priority from the set.
flush	:	Remove all filter operands (this will only delete the ones not in use: flush filters first).

eth filter operand add

Add a filter operand.

Syntax:

```
add operand = <string>
```

Parameters:

operand	The name of the new operand operand.	Required

eth filter operand config

Set the operand to a certain type (will reset content first).

Syntax:

```
config action = <{Delete|Insert|Modify}>
       daclass = <{Unicast|Multicast|Broadcast}>
        length = <number>
          mask = <string>
        offset = <number>
       operand = <{}>
      operator = <{Equal|Less|LessEqual|InSet}>
      protocol = <{IP|UpperLayer}>
 protocollevel = <{(see Parameters)}>
          size = <number>
          type = <{(see Parameters)}>
         value = <string>
  [frameclass = <{(see Parameters)}>]
  [ipprotocol = <number{0-254}>]
    [priority = <number{0-7}>]
         [vid = <number{1-4095}>]
```

Parameters:

action	The action to undertake with matching filter..	Required
daclass	The destination address class.	Required
length	The length of the compare value/mask combination in bytes..	Required
mask	The mask to be used on the value.	Required
offset	At which offset from protocol level in bytes the Match/Modify action should start (in bytes).	Required
operand	The name of an operand.	Required
operator	The compare operator.	Required
protocol	The protocol level of the checksum.	Required
protocollevel	The protocol level from where to start offset/size calculations. Options: <{EthernetFrame|Protocol|EthernetPayload|ULPHeader|ULPPayload}>	Required
size	The size of the frame at this protocol level.	Required
type	The type to set. Options: <{CheckDAClass|CheckFrameClass|CheckVLANPriority|CheckVID|CheckIPProto|CheckSize|Match|Modify|CheckCheckSum|	Required

	UpdateCheckSum}>	
value	The value.	Required
frameclass	The Ethernet frame class to filter on. Options: <{Eth2|SNAPEType|SNAP8021H| SNAPOther|LLCNLPID|LLCOther}>	Optional
ipprotocol	The IP protocol to filter on.	Optional
priority	The VLAN priority to filter on.	Optional
vid	The VID to filter on.	Optional

eth filter operand delete

Delete a filter operand.

Syntax:

```
delete operand = <{}>
```

Parameters:

operand	The name of the operand to delete.	Required

eth filter operand flush

Remove all filter operands (this will only delete the ones not in use: flush filters first).

Syntax:

```
flush
```

eth filter operand frameclassadd

Add another frameclass in the set.

Syntax:

```
frameclassadd frameclass = <{(see Parameters)}>
                operand = <{}>
```

Parameters:

frameclass	The frame class to add. Options: <{Eth2|SNAPEType|SNAP8021H| SNAPOther|LLCNLPID|LLCOther}>	Required
operand	The name of an operand.	Required

eth filter operand frameclassdelete

Delete a frameclasse from the set.

Syntax:

```
frameclassdelete frameclass = <{(see Parameters)}>
                    operand = <{}>
```

Parameters:

frameclass	The frameclass to remove. Options: <{Eth2|SNAPEType|SNAP8021H| SNAPOther|LLCNLPID|LLCOther}>	Required
operand	The name of an operand.	Required

eth filter operand ipprotoadd

Add another ip protocol in the set.

Syntax:

```
ipprotoadd ipprotocol = <number{0-255}>
              operand = <{}>
```

Parameters:

ipprotocol	The IP protocol to add.	Required
operand	The name of an operand.	Required

eth filter operand ipprotodelete

Delete a ip protocol from the set.

Syntax:

```
ipprotodelete ipprotocol = <{}>
              operand = <{}>
```

Parameters:

ipprotocol	The IP protocol to remove.	Required
operand	The name of an operand.	Required

eth filter operand list

Display the filter operands.

Syntax:

```
list [expand = <{disabled|enabled}>]
     [operand = <{}>]
```

Parameters:

expand	Expanded listing.	Optional
operand	The name of an operand.	Optional

eth filter operand priorityadd

Add another priority in the set.

Syntax:

```
priorityadd operand = <{}>
          priority = <number{0-7}>
```

Parameters:

operand	The name of an operand.	Required
priority	The vlan priority to add.	Required

eth filter operand prioritydelete

Delete a ip priority from the set.

Syntax:

```
prioritydelete operand = <{}>
               priority = <{}>
```

Parameters:

operand	The name of an operand.	Required
priority	The vlan priority to remove.	Required

eth filter operand reset

Reset an operand to its default initial state (removes all content, set to undefined type).

Syntax:

```
reset operand = <{}>
```

Parameters:

operand	The name of an operand.	Required

eth filter operand vidadd

Add another VID in the set.

Syntax:

```
vidadd operand = <{}>
          vid = <number{1-4095}>
```

Parameters:

operand	The name of an operand.	Required
vid	The VID to add.	Required

eth filter operand viddelete

Delete a VID from the set.

Syntax:

```
viddelete operand = <{}>
              vid = <{}>
```

Parameters:

operand	The name of an operand.	Required
vid	The VID to remove.	Required

eth filter template

Following commands are available :

add	:	Add a filter.
list	:	Display the filters.
delete	:	Delete a filter.
config	:	Config a filter.
setvid	:	Action: enable/disable VID derivation
setpriority	:	Action: enable/disable priority derivation
ruleadd	:	Connect an operand rule with a filter.
rulemodify	:	Modify an operand rule from a filter.
ruledel	:	Remove an operand rule from a filter.
flush	:	Remove all filters.

eth filter template add

Add a filter.

Syntax:

```
add filter = <string>
    [level = <number{0-65535}>]
  [location = <{Ingress|Egress|VID|Priority}>]
      [mark = <{disabled|enabled}>]
   [tracing = <{disabled|enabled}>]
```

Parameters:

filter	The name of the filter.	Required
level	The filter level (lower level is processed first = priority)	Optional
location	The filter location.	Optional
mark	Enable/disabled marking of packets	Optional
tracing	Enable/disabled tracing of packets	Optional

eth filter template config

Config a filter.

Syntax:

```
config filter = <{}>
        [level = <number{0-65535}>]
    [location = <{Ingress|Egress|VID|Priority}>]
          [mark = <{disabled|enabled}>]
       [tracing = <{disabled|enabled}>]
```

Parameters:

filter	The name of an filter.	Required
level	The filter level (lower level is processed first = priority)	Optional
location	The filter location.	Optional
mark	Enable/disabled marking of packets	Optional
tracing	Enable/disabled tracing of packets	Optional

eth filter template delete

Delete a filter.

Syntax:

```
delete filter = <{}>
```

Parameters:

filter	The name of an filter.	Required

eth filter template flush

Remove all filters.

Syntax:

```
flush
```

eth filter template list

Display the filters.

Syntax:
```
list [expand = <{disabled|enabled}>]
     [filter = <{}>]
```

Parameters:

expand	Expanded listing.	Optional
filter	The name of an filter.	Optional

eth filter template ruleadd

Connect an operand rule with a filter.

Syntax:

```
ruleadd filter = <{}>
        operand = <{}>
        [negate = <{disabled|enabled}>]
     [operator = <{Ignore|AND|OR}>]
          [order = <number{-100-100}>]
```

Parameters:

filter	The name of an filter.	Required
operand	The name of the operand to connect with.	Required
negate	negate or not the operand outcome.	Optional
operator	Operand operator.	Optional
order	The operand order in thes filter (lower order is processed first = priority)	Optional

eth filter template ruledel

Remove an operand rule from a filter.

Syntax:

```
ruledel filter = <{}>
        ruleid = <{}>
```

Parameters:

filter	The name of an filter.	Required
ruleid	The name of the operand to remove.	Required

eth filter template rulemodify

Modify an operand rule from a filter.

Syntax:

```
rulemodify filter = <{}>
          ruleid = <{}>
         [negate = <{disabled|enabled}>]
        [operand = <{}>]
       [operator = <{Ignore|AND|OR}>]
          [order = <number{-100-100}>]
```

Parameters:

filter	The name of an filter.	Required
ruleid	The name of the operand to remove.	Required
negate	negate or not the operand outcome.	Optional
operand	The name of the operand to connect with.	Optional
operator	Operand operator.	Optional
order	The operand order in thes filter (lower order is processed first = priority)	Optional

eth filter template setpriority

Action: enable/disable priority derivation

Syntax:

```
setpriority filter = <{}>
          priority = <number{0-15}>
             [state = <{disabled|enabled}>]
```

Parameters:

filter	The name of an filter.	Required
priority	The priority to set in the derivation.	Required
state	Enable/disabled priority derivation for this filters	Optional

eth filter template setvid

Action: enable/disable VID derivation

Syntax:

```
setvid filter = <{}>
          vid = <number{1-4095}>
       [state = <{disabled|enabled}>]
```

Parameters:

filter	The name of an filter.	Required
vid	The VID to set in the derivation.	Required
state	Enable/disabled VID derivation for this filters	Optional

eth flush

Flush all ETH interfaces.

> *Syntax:*
>
> | |
> |---|
> | flush |

eth ifadd

Create a new ETH interface.

Syntax:
```
ifadd intf = <string>
```

Parameters:

intf	The name for the new ETH interface.	Required

eth ifattach

Attach an ETH interface.

Syntax:

```
ifattach intf = <{}>
```

Parameters:

intf	The name of the ETH interface.	Required

eth ifconfig

Modify an ETH interface.

Syntax:

```
ifconfig intf = <{eth_dyn|eth_static|eth_WLAN2}>
        [dest = <{(see Parameters)}>]
       [group = <{(missing)}>]
     [priotag = <{disabled|enabled}>]
       [retry = <number{0-65535}>]
        [vlan = <{default}>]
         [wan = <{disabled|enabled}>]
```

Parameters:

intf	The name of the ETH interface to configure.	Required
dest	The destination interface for this ETH interface. Options: <{bridge|eth_dyn|eth_static| eth_WLAN2}>	Optional
group		Hidden
priotag	Enable/Disable VLAN priority tagging.	Optional
retry	The number of times the ETH connection setup should retry before giving up.	Optional
vlan	The VLAN for this ETH interface.	Optional
wan	Enable/Disable WAN for this ETH interface.	Optional

eth ifdelete

Delete an ETH interface.

Syntax:

```
ifdelete intf = <{eth_dyn|eth_static|eth_WLAN2}>
```

Parameters:

intf	The name of the ETH interface.	Required

eth ifdetach

Detach an ETH interface.

Syntax:

```
ifdetach intf = <{eth_dyn|eth_static|eth_WLAN2}>
```

Parameters:

intf	The name of the ETH interface.	Required

eth iflist

Display the ETH interfaces.

Syntax:

```
iflist [intf = <{eth_dyn|eth_static|eth_WLAN2}>]
```

Parameters:

intf	The name of an ETH interface.	Optional

eth switch

Following commands are available :

info   :   Display switch capabilities

Following command groups are available :

group   mirror   qos   shaper
share   storm

eth switch group

Following commands are available :

list	:	List all configured groups.
move	:	Move a specified port to a specified group.
delete	:	Delete a specified port from a specified group.
flush	:	To set all ports to the default settings (all ports in group 0).

eth switch group delete

Delete a specified port from a specified group.

Syntax:

```
delete group = <number{0-3}>
        port = <number{1-4}>
```

Parameters:

group	The group id.	Required
port	The port.	Required

eth switch group flush

To set all ports to the default settings (all ports in group 0).

Syntax:

```
flush
```

eth switch group list

List all configured groups.

Syntax:

```
list
```

eth switch group move

Move a specified port to a specified group.

Syntax:

```
move group = <number{0-3}>
       port = <number{1-4}>
```

Parameters:

group	The group id.	Required
port	The port.	Required

eth switch info

Display switch capabilities

Syntax:

```
info
```

eth switch mirror

Following commands are available :

capture   :   Define the specified port to be the Mirror Capture Port.
ingress   :   Enable or disable the specified port to be a Received Port
                     Mirroring.
egress   :   Enable or disable the specified port to be a Transmitted Port
                     Mirroring.

eth switch mirror capture

Define the specified port to be the Mirror Capture Port.

Syntax:

```
capture port = <number{1-4}>
```

Parameters:

port	The port.	Required

eth switch mirror egress

Enable or disable the specified port to be a Transmitted Port Mirroring.

Syntax:

```
egress port = <number{1-4}>
      [state = <{enabled|disabled}>]
```

Parameters:

port	The port.	Required
state	Enable/disable state.	Optional

eth switch mirror ingress

Enable or disable the specified port to be a Received Port Mirroring.

Syntax:

```
ingress port = <number{1-4}>
       [state = <{enabled|disabled}>]
```

Parameters:

port	The port.	Required
state	Enable/disable state.	Optional

eth switch qos

Following commands are available :

config   : Configure common qos parameters.
weights   : Configure the queue weights.
ifconfig   : Configure per port qos parameters.
list   : Display qos configuration.

eth switch qos config

Configure common qos parameters.

Syntax:

```
config    state = <{enabled|disabled}>
   [nbrOfQueues = <number{0-4}>]
      [realtime = <{enabled|disabled}>]
[rxbackpressure = <{(missing)}>]
     [threshold = <number{0-15}>]
[txbackpressure = <{(missing)}>]
```

Parameters:

state	Enable/disable QoS.	Required
nbrOfQueues	Number of queues.	Optional
realtime	Enable/disable realtime.	Optional
rxbackpressure		Hidden
threshold	Tx Qos threshold.	Optional
txbackpressure		Hidden

eth switch qos ifconfig

Configure per port qos parameters.

Syntax:

```
ifconfig mode = <{(see Parameters)}>
        port = <number{1-4}>
  [flowcontrol = <{disabled|enabled}>]
```

Parameters:

mode	Classifier. Options: <[+/-]flag[+/-flag...]{802.1p high diffserv tos}>	Required
port	The port.	Required
flowcontrol	Enable/disable flow-control.	Optional

eth switch qos list

Display qos configuration.

Syntax:

```
list
```

eth switch qos weights

Configure the queue weights.

Syntax:

```
weights queue0 = <number{0-100}>
        queue1 = <number{0-100}>
        queue2 = <number{0-100}>
        queue3 = <number{0-100}>
```

Parameters:

queue0	Weight of queue 0 in WFQ (in %).	Required
queue1	Weight of queue 1 in WFQ (in %).	Required
queue2	Weight of queue 2 in WFQ (in %).	Required
queue3	Weight of queue 3 in WFQ (in %).	Required

eth switch shaper

Following commands are available :

config	:	Configure common ingress shaper parameters.
ifconfig	:	Configure per port shaper parameters.
iflist	:	Display shaper configuration per port.

eth switch shaper config

Configure common ingress shaper parameters.

Syntax:

```
config shaper = <number{0--1}>
    [broadcast = <{enabled|disabled}>]
      [control = <{enabled|disabled}>]
      [discard = <{enabled|disabled}>]
 [exclude_ipg = <{enabled|disabled}>]
    [multicast = <{enabled|disabled}>]
    [normalize = <{enabled|disabled}>]
      [unicast = <{enabled|disabled}>]
      [unknown = <{enabled|disabled}>]
```

Parameters:

shaper	The shaper instance.	Required
broadcast	Shape broadcast traffic.	Optional
control	Shape MAC control traffic.	Optional
discard	Discard frame at overflow (else attempt for flow control).	Optional
exclude_ipg	Exclude the Inter Packet Gap in the speed calculations.	Optional
multicast	Shape multicast traffic.	Optional
normalize	Use relative speed calculations.	Optional
unicast	Shape unicast traffic.	Optional
unknown	Shape traffic with unknown destination address.	Optional

eth switch shaper ifconfig

Configure per port shaper parameters.

Syntax:

```
ifconfig ingress = <{enabled|disabled}>
            port = <number{1-4}>
          shaper = <number{0--1}>
      [burstsize = <{}>]
          [speed = <number{64000-1000000000}>]
          [state = <{enabled|disabled}>]
```

Parameters:

ingress	Ingress port = enabled; egress port = disabled.	Required
port	The port.	Required
shaper	The shaper instance.	Required
burstsize	Burst size in KBytes.	Optional
speed	Speed in bits/sec.	Optional
state	Enable/disable shaping.	Optional

eth switch shaper iflist

Display shaper configuration per port.

Syntax:

```
iflist
```

eth switch share

Following commands are available :

add   : Add a port to be shared.
delete   : Delete a shared port.
list   : Display shared ports.

eth switch share add

Add a port to be shared.

Syntax:

```
add port = <number{1-4}>
   shared = <number{1-4}>
```

Parameters:

port	The port.	Required
shared	The shared port.	Required

eth switch share delete

Delete a shared port.

Syntax:

```
delete port = <number{1-4}>
      shared = <number{1-4}>
```

Parameters:

port	The port.	Required
shared	The shared port.	Required

eth switch share list

Display shared ports.

Syntax:

```
list
```

eth switch storm

Following commands are available :

```
ifconfig          :   Configure per port storm control parameters.
iflist            :   Display storm control configuration per port.
```

eth switch storm ifconfig

Configure per port storm control parameters.

Syntax:

```
ifconfig port = <number{1-4}>
    [broadcast = <{enabled|disabled}>]
    [burstsize = <{2|4|6|8}>]
    [multicast = <{enabled|disabled}>]
         [rate = <{100|200|300|400}>]
        [state = <{enabled|disabled}>]
      [unknown = <{enabled|disabled}>]
```

Parameters:

port	The port.	Required
broadcast	Storm control for broadcast traffic.	Optional
burstsize	Burst size in KBytes.	Optional
multicast	Storm control for multicast traffic.	Optional
rate	Rate in 10ths of percent.	Optional
state	Enable/disable storm control.	Optional
unknown	Storm control for traffic with unknown destination address.	Optional

eth switch storm iflist

Display storm control configuration per port.

Syntax:

```
iflist
```

eth vlan

Following commands are available :

add	:	Add a new virtual LAN.
delete	:	Delete a virtual LAN.
list	:	Display all virtual LAN's.
flush	:	Flush all virtual LAN's.

Following command groups are available :

priomap

eth vlan add

Add a new virtual LAN.

Syntax:

```
add name = <string>
     vid = <number{2-4094}>
[addrule = <{disabled|enabled}>]
```

Parameters:

name	The new VLAN name.	Required
vid	The new VLAN id.	Required
addrule	Add the default bridge constraint.	Optional

eth vlan delete

Delete a virtual LAN.

Syntax:

```
delete name = <{default}>
```

Parameters:

name	The VLAN name.	Required

eth vlan flush

Flush all virtual LAN's.

Syntax:

```
flush
```

eth vlan list

Display all virtual LAN's.

Syntax:

```
list
```

eth vlan priomap

Following commands are available :

config   :   Change a VLAN/DE to/from internalpriority mapping.
list   :   Display the VLAN/DE to/from internal priority mappings.

eth vlan priomap config

Change a VLAN/DE to/from internalpriority mapping.

Syntax:

```
config entry = <{(see Parameters)}>
      priomap = <string>
```

Parameters:

entry	Which prioritymap entry to edit. Options: <{prio_0_7_2vlan|prio_8_15_2vlan| prio_0_7_2de|prio_8_15_2de|vlan2prio_de_0| vlan2prio_de_1}>	Required
priomap	The 8 priority mapping values.	Required

eth vlan priomap list

Display the VLAN/DE to/from internal priority mappings.

Syntax:

```
list
```

expr

Following commands are available :

add	:	Add an expression.
delete	:	Delete an expression.
modify	:	Modify an expression.
list	:	List expressions.
flush	:	Flush all expressions.

expr

expr add

Add an expression.

Syntax:

```
add         addr [!]= <ip-range>
      iplengthmin [!]= <number>
              mac [!]= <hardware-address>
             name    = <{(see Parameters)}>
      [bridgeport    = <{(missing)}>]
             [dscp [!]= <{(see Parameters)}>]
          [dstport [!]= <{(see Parameters)}>]
        [dstportend    = <{(see Parameters)}>]
          [icmpcode [!]= <number{0-15}>]
        [icmpcodeend    = <number{0-15}>]
          [icmptype [!]= <{(see Parameters)}>]
             [intf [!]= <{(see Parameters)}>]
         [intfgroup [!]= <{(see Parameters)}>]
        [iplengthmax    = <number>]
             [mask    = <{(missing)}>]
             [mask    [ <ip-mask(dotted or cidr)>]]
       [precedence [!]= <{(see Parameters)}>]
            [proto [!]= <{(see Parameters)}>]
           [srcport [!]= <{(see Parameters)}>]
         [srcportend    = <{(see Parameters)}>]
              [tos [!]= <number{0-255}>]
             [type    = <{intf|ip|serv|mac|length}>]
```

Parameters:

addr	The IP address or range. (Can optionally use "!=")	Required
iplengthmin	The minimum IP length in bytes (header inclusive). (Can optionally use "!=")	Required
mac	The MAC address. (Can optionally use "!=")	Required
name	The name of an expression to add. Options: <{wan|local|lan|tunnel|dmz|guest| private|ssdp_ip|mdap_ip|192.68.1.253|icmp| igmp|ftp|telnet|http|httpproxy|https|RPC|NBT| SMB|imap|imap3|imap4-ssl|imaps|pop2|pop3| pop3s|smtp|ssh|dns|nntp|ipsec|esp|ah|ike| DiffServ|sip|h323|dhcp|rtsp|ssdp_serv| mdap_serv|syslog}>	Required
bridgeport		Hidden

dscp	The diffserv code point in the IP packet (part of tos). (Can optionally use "!=") Options: <{ef|af11|af12|af13|af21|af22|af23|af31|af32|af33|af41|af42|af43|cs0|cs1|cs2|cs3|cs4|cs5|cs6|cs7} or number>	Optional
dstport	The TCP/UDP destination port number or range begin. (Can optionally use "!=") Options: <{undefined|at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|xwindows} or number>	Optional
dstportend	The TCP/UDP destination port range end. Options: <{undefined|at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|xwindows} or number>	Optional
icmpcode	The ICMP code or range begin. (Can optionally use "!=")	Optional
icmpcodeend	The ICMP code range end. (inclusive)	Optional
icmptype	The ICMP type (name or number) of the packet. (Can optionally use "!=") Options: <{echo-reply|destination-unreachable|source-quench|redirect|echo-request|router-advertisement|router-solicitation|time-exceeded|parameter-problems|timestamp-request|timestamp-reply|information-request|information-reply|address-mask-request|address-mask-reply} or number>	Optional

expr Commands

intf	The IP interface name. (Can optionally use "!=") Options: <{loop|O2_ADSL|LocalNetwork|O2_ADSL2plus|O2_Static|Hotspot}>	Optional
intfgroup	The IP interface group. (Can optionally use "!=") Options: <{wan|local|lan|tunnel|dmz|guest} or number>	Optional
iplengthmax	The maximum IP length including header in bytes (header inclusive).	Optional
mask		Hidden
mask	The IP mask (ignored if an IP range is provided).	Optional
precedence	The precedence in the IP packet (part of tos). (Can optionally use "!=") Options: <{routine|priority|immediate|flash|flash-override|CRITIC-ECP|internetwork-control|network-control} or number>	Optional
proto	The IP protocol (name or number) in the IP packet. (Can optionally use "!=") Options: <{icmp|igmp|ipinip|tcp|udp|ah|esp|ipcomp} or number>	Optional
srcport	The TCP/UDP source port number or range begin. (Can optionally use "!=") Options: <{undefined|at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|xwindows} or number>	Optional
srcportend	The source TCP/UDP source port range end. (inclusive) Options: <{undefined|at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|	Optional

	sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat| talk|telnet|time|timed|tftp|ulistserv|utime|uucp| uucp-rlogin|who|www-http|whoami|xwindows} or number>	
tos	The Type Of Service specification in the IP packet. (Can optionally use "!=")	Optional
type	The type of an expression.	Optional

expr delete

Delete an expression.

Syntax:

```
delete name = <{(see Parameters)}>
      [index = <number>]
```

Parameters:

name	The name of an expression to delete. Options: <{wan|local|lan|tunnel|dmz|guest| private|ssdp_ip|mdap_ip|192.68.1.253|icmp| igmp|ftp|telnet|http|httpproxy|https|RPC|NBT| SMB|imap|imap3|imap4-ssl|imaps|pop2|pop3| pop3s|smtp|ssh|dns|nntp|ipsec|esp|ah|ike| DiffServ|sip|h323|dhcp|rtsp|ssdp_serv| mdap_serv|syslog}>	Required
index	The index of a subexpression.	Optional

expr flush

Flush all expressions.

Syntax:

```
flush
```

expr list

List expressions.

Syntax:

```
list [dynamic = <{(missing)}>]
     [format = <{pretty|cli}>]
        [name = <{(see Parameters)}>]
        [type = <{intf|ip|serv|mac|length}>]
```

Parameters:

dynamic		Hidden
format	The format of the expression list.	Optional
name	The name of an expression to list. Options: <{_intf_0|_intf_1|_intf_2|_intf_3|_intf_4|_intf_5|DHCP-R_if_0|wan|local|lan|tunnel|dmz|guest|DNS-S_if_0|MDAP_if_0|PPTPD_if_0|PPTPGRE_if_0|HTTP_if_0|FTP_if_0|TELNET_if_0|DHCP-S_if_0|PING_RESPONDER_if_0|SSDP_if_0|UPnP-HTTP_if_0|_addr_127_0_0_1|_addr_192_168_10_254|_addr_10_0_0_138|_addr_192_168_1_254|private|ssdp_ip|mdap_ip|192.68.1.253|_addr_188_222_212_205|DHCP-R_sv_0|icmp|igmp|ftp|telnet|http|httpproxy|https|RPC|NBT|SMB|imap|imap3|imap4-ssl|imaps|pop2|pop3|pop3s|smtp|ssh|dns|nntp|ipsec|esp|ah|ike|DiffServ|sip|h323|dhcp|rtsp|ssdp_serv|mdap_serv|syslog|IGMP-Proxy_sv_0|DNS-S_sv_0|MDAP_sv_0|PPTPD_sv_0|PPTPGRE_sv_0|HTTP_sv_0|FTP_sv_0|TELNET_sv_0|DHCP-S_sv_0|PING_RESPONDER_sv_0|SSDP_sv_0|UPnP-HTTP_sv_0}>	Optional
type	The type of an expression.	Optional

expr modify

Modify an expression.

Syntax:

```
modify        addr [!]= <ip-range>
             index    = <number>
       iplengthmin [!]= <number>
               mac [!]= <hardware-address>
              name    = <{(see Parameters)}>
      [bridgeport    = <{(missing)}>]
            [dscp [!]= <{(see Parameters)}>]
         [dstport [!]= <{(see Parameters)}>]
       [dstportend    = <{(see Parameters)}>]
        [icmpcode [!]= <number{0-15}>]
     [icmpcodeend    = <number{0-15}>]
        [icmptype [!]= <{(see Parameters)}>]
            [intf [!]= <{(see Parameters)}>]
       [intfgroup [!]= <{(see Parameters)}>]
     [iplengthmax    = <number>]
            [mask    = <{(missing)}>]
            [mask    [ <ip-mask(dotted or cidr)>]]
      [precedence [!]= <{(see Parameters)}>]
           [proto [!]= <{(see Parameters)}>]
         [srcport [!]= <{(see Parameters)}>]
       [srcportend    = <{(see Parameters)}>]
             [tos [!]= <number{0-255}>]
            [type    = <{intf|ip|serv|mac|length}>]
```

Parameters:

addr	The IP address or range. (Can optionally use "!=")	Required
index	The index of a subexpression.	Required
iplengthmin	The minimum IP length in bytes (header inclusive). (Can optionally use "!=")	Required
mac	The MAC address. (Can optionally use "!=")	Required
name	The name of an expression to modify. Options: <{wan|local|lan|tunnel|dmz|guest| private|ssdp_ip|mdap_ip|192.68.1.253|icmp| igmp|ftp|telnet|http|httpproxy|https|RPC|NBT| SMB|imap|imap3|imap4-ssl|imaps|pop2|pop3| pop3s|smtp|ssh|dns|nntp|ipsec|esp|ah|ike| DiffServ|sip|h323|dhcp|rtsp|ssdp_serv| mdap_serv|syslog}>	Required

expr Commands

bridgeport		Hidden
dscp	The diffserv code point in the IP packet (part of tos). (Can optionally use "!=") Options: <{ef|af11|af12|af13|af21|af22|af23|af31|af32|af33|af41|af42|af43|cs0|cs1|cs2|cs3|cs4|cs5|cs6|cs7} or number>	Optional
dstport	The TCP/UDP destination port number or range begin. (Can optionally use "!=") Options: <{undefined|at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-0|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|xwindows} or number>	Optional
dstportend	The TCP/UDP destination port range end. Options: <{undefined|at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-0|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|xwindows} or number>	Optional
icmpcode	The ICMP code or range begin. (Can optionally use "!=")	Optional
icmpcodeend	The ICMP code range end. (inclusive)	Optional
icmptype	The ICMP type (name or number) of the packet. (Can optionally use "!=") Options: <{echo-reply|destination-unreachable|source-quench|redirect|echo-request|router-advertisement|router-solicitation|time-exceeded|parameter-problems|timestamp-request|timestamp-reply|information-request|information-reply|address-mask-request|address-mask-reply}	Optional

	or number>	
intf	The IP interface name. (Can optionally use "!=") Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Optional
intfgroup	The IP interface group. (Can optionally use "!=") Options: <{wan|local|lan|tunnel|dmz|guest} or number>	Optional
iplengthmax	The maximum IP length including header in bytes (header inclusive).	Optional
mask		Hidden
mask	The IP mask (ignored if an IP range is provided).	Optional
precedence	The precedence in the IP packet (part of tos). (Can optionally use "!=") Options: <{routine|priority|immediate|flash|flash- override|CRITIC-ECP|internetwork-control| network-control} or number>	Optional
proto	The IP protocol (name or number) in the IP packet. (Can optionally use "!=") Options: <{icmp|igmp|ipinip|tcp|udp|ah|esp| ipcomp} or number>	Optional
srcport	The TCP/UDP source port number or range begin. (Can optionally use "!=") Options: <{undefined|at-echo|at-nbp|at-rtmp|at- zis|auth|bgp|biff|bootpc|bootps|chargen| clearcase|daytime|discard|dns|domain|doom| echo|exec|finger|ftp|ftp-data|gopher|h323| httpproxy|ike|ils|imap2|imap3|ingres-net| ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login| netbios-dgm|netbios-ns|netbios-ssn|netwall| netware-ip|new-rwho|nfds|nicname|nntp|ntalk| ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio| rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp| sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat| talk|telnet|time|timed|tftp|ulistserv|utime|uucp| uucp-rlogin|who|www-http|whoami|xwindows} or number>	Optional
srcportend	The source TCP/UDP source port range end. (inclusive) Options: <{undefined|at-echo|at-nbp|at-rtmp|at- zis|auth|bgp|biff|bootpc|bootps|chargen| clearcase|daytime|discard|dns|domain|doom| echo|exec|finger|ftp|ftp-data|gopher|h323| httpproxy|ike|ils|imap2|imap3|ingres-net| ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login| netbios-dgm|netbios-ns|netbios-ssn|netwall| netware-ip|new-rwho|nfds|nicname|nntp|ntalk| ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|	Optional

	rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp| sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat| talk|telnet|time|timed|tftp|ulistserv|utime|uucp| uucp-rlogin|who|www-http|whoami|xwindows} or number>	
tos	The Type Of Service specification in the IP packet. (Can optionally use "!=")	Optional
type	The type of an expression.	Optional

firewall

Following commands are available :

config	:	Display/Modify firewall configuration.
clear	:	Clear firewall configuration.
list	:	Display firewall configuration.

Following command groups are available :

chain	debug	level	rule

firewall chain

Following commands are available :

add   :   Add a chain.
delete   :   Delete a chain.
list   :   Display a list of chains.
flush   :   Flush all chains.
modify   :   Modify a chain.(command is hidden)

firewall chain add

Add a chain.

Syntax:

```
add chain = <string>
   [policy = <{(missing)}>]
```

Parameters:

chain	The name of the chain to add.	Required
policy		Hidden

firewall chain delete

Delete a chain.

Syntax:

```
delete chain = <chain name>
```

Parameters:

chain	The name of the chain to delete.	Required

firewall chain flush

Flush all chains.

Syntax:

```
flush
```

firewall chain list

Display a list of chains.

Syntax:

```
list [format = <{pretty|cli}>]
```

Parameters:

format	The format of the chain list.	Optional

firewall chain modify

Modify a chain.(command is hidden)

Syntax:

```
modify chain = <chain name>
      [policy = <{(missing)}>]
```

Parameters:

chain	The name of the chain to modify.	Required
policy		Hidden

firewall clear

Clear firewall configuration.

Syntax:

```
clear
```

firewall config

Display/Modify firewall configuration.

Syntax:

```
config [icmpchecks = <{disabled|enabled}>]
              [keep = <{disabled|enabled}>]
        [logdefault = <{disabled|enabled}>]
      [logthreshold = <{disabled|enabled}>]
             [state = <{disabled|enabled}>]
         [tcpchecks = <{none|fast|exact}>]
         [tcpwindow = <number{0-1073725440}>]
              [test = <{(missing)}>]
         [udpchecks = <{disabled|enabled}>]
```

Parameters:

icmpchecks	Disable/Enable ICMP checks.	Optional
keep	Disable/Enable keeping existing connections when firewall rules change.	Optional
logdefault	Disable/Enable logging of default firewall rule.	Optional
logthreshold	Disable/Enable log thresholding.	Optional
state	Disable/Enable the firewall.	Optional
tcpchecks	Select level of TCP checks.	Optional
tcpwindow	Modify the tcpwindow for fast TCP checks	Optional
test		Hidden
udpchecks	Disable/Enable UDP checks.	Optional

firewall debug

Following commands are available :

traceconfig	:	Display/Modify firewall trace configuration.
stats	:	Display firewall statistics.
clear	:	Clear firewall statistics.

firewall debug clear

Clear firewall statistics.

Syntax:

```
clear
```

firewall debug stats

Display firewall statistics.

Syntax:

```
stats
```

firewall debug traceconfig

Display/Modify firewall trace configuration.

Syntax:

```
traceconfig [forward = <{(see Parameters)}>]
        [icmpchecks = <{disabled|enabled}>]
             [sink = <{(see Parameters)}>]
           [source = <{(see Parameters)}>]
        [tcpchecks = <{disabled|enabled}>]
        [udpchecks = <{disabled|enabled}>]
```

Parameters:

forward	The action the firewall traces for forward traffic. Options: <{none|all|accept|deny|drop|reset} or number>	Optional
icmpchecks	Disable/Enable icmpchecks traces.	Optional
sink	The action the firewall traces for sink traffic. Options: <{none|all|accept|deny|drop|reset} or number>	Optional
source	The action the firewall traces for source traffic. Options: <{none|all|accept|deny|drop|reset} or number>	Optional
tcpchecks	Disable/Enable tcpchecks traces.	Optional
udpchecks	Disable/Enable udpchecks traces.	Optional

firewall level

Following commands are available :

add : Add a new security level.
delete : Delete a security level.
modify : Modify a security level.
list : List all security levels.
set : Set/Display active security level.
flush : Flush security level configuration.

firewall level add

Add a new security level.

Syntax:

```
add        name = <string>
         [index = <number>]
        [policy = <{(see Parameters)}>]
         [proxy = <{disabled|enabled}>]
     [readonly = <{disabled|enabled}>]
      [service = <{disabled|enabled}>]
         [text = <quoted string>]
[udptrackmode = <{strict|loose}>]
```

Parameters:

name	The name of the security level to add.	Required
index	The index of the security level.	Optional
policy	Select default policy of this security level. Options: <{default|drop|accept|strict|loose}>	Optional
proxy	Enable/Disable proxy system services for this security level.	Optional
readonly	Select whether the security level is readonly.	Optional
service	Enable/Disable host service definitions for this security level.	Optional
text	The description of this security level.	Optional
udptrackmode	Select UDP connection tracking mode.	Optional

firewall level delete

Delete a security level.

Syntax:

```
delete name = <security level name>
```

Parameters:

name	The name of the security level to delete.	Required

firewall level flush

Flush security level configuration.

Syntax:

```
flush
```

firewall level list

List all security levels.

Syntax:

```
list [format = <{pretty|cli}>]
```

Parameters:

format	The format of the security level list.	Optional

firewall level modify

Modify a security level.

Syntax:

```
modify   name = <security level name>
       [index = <number>]
      [policy = <{(see Parameters)}>]
       [proxy = <{disabled|enabled}>]
    [readonly = <{disabled|enabled}>]
     [service = <{disabled|enabled}>]
        [text = <quoted string>]
[udptrackmode = <{strict|loose}>]
```

Parameters:

name	The name of the security level to modify.	Required
index	The index of this security level.	Optional
policy	Select default policy of this security level. Options: <{default|drop|accept|strict|loose}>	Optional
proxy	Enable/Disable proxy system services for this security level.	Optional
readonly	Select whether the security level is readonly.	Optional
service	Enable/Disable service definitions for this security level.	Optional
text	The description of this security level.	Optional
udptrackmode	Select UDP connection tracking mode.	Optional

firewall level set

Set/Display active security level.

Syntax:
```
set [name = <security level name>]
```

Parameters:

name	The name of the security level to set active.	Optional

firewall list

Display firewall configuration.

Syntax:

```
list [format = <{pretty|cli}>]
```

Parameters:

format	The format of the firewall list.	Optional

firewall rule

Following commands are available :

add	:	Add a rule.
delete	:	Delete a rule.
modify	:	Modify a rule.
list	:	Display a list of rules.
flush	:	Flush all rules.

Following command groups are available :

debug

firewall rule add

Add a rule.

Syntax:

```
add action    = <{(see Parameters)}>
     chain    = <chain name>
    [clink    = <chain name>]
[connstate    = <{(missing)}>]
  [dstintf [!]= <{wan|local|lan|tunnel|dmz|guest}>]
    [dstip [!]= <{(see Parameters)}>]
    [index    = <number>]
   [length [!]= <{}>]
      [log    = <{disabled|enabled}>]
     [name    = <string>]
 [newindex    = <{(missing)}>]
     [serv [!]= <{(see Parameters)}>]
  [srcintf [!]= <{wan|local|lan|tunnel|dmz|guest}>]
    [srcip [!]= <{(see Parameters)}>]
   [srcmac    = <{(missing)}>]
    [state    = <{disabled|enabled}>]
```

Parameters:

action	The action to be taken when this rule applies ('link' when clink is used). Options: <{accept|deny|drop|reset|count|link}>	Required
chain	The name of the chain which contains the rule.	Required
clink	The name of the chain to be parsed when this rule applies.	Optional
connstate		Hidden
dstintf	The name of the destination interface expression. (Can optionally use "!=")	Optional
dstip	The name of the destination ip expression. (Can optionally use "!=") Options: <{private|ssdp_ip|mdap_ip|192.68.1.253}>	Optional
index	The index of the rule in the chain.	Optional
length	The name of the length expression. (Can optionally use "!=")	Optional
log	Disable/Enable logging when this rule applies.	Optional
name	The name of the new rule.	Optional
newindex		Hidden

serv	The name of the service expression. (Can optionally use "!=") Options: <{icmp|igmp|ftp|telnet|http|httpproxy| https|RPC|NBT|SMB|imap|imap3|imap4-ssl| imaps|pop2|pop3|pop3s|smtp|ssh|dns|nntp| ipsec|esp|ah|ike|DiffServ|sip|h323|dhcp|rtsp| ssdp_serv|mdap_serv|syslog}>	Optional
srcintf	The name of the source interface expression. (Can optionally use "!=")	Optional
srcip	The name of the source ip expression. (Can optionally use "!=") Options: <{private|ssdp_ip|mdap_ip| 192.68.1.253}>	Optional
srcmac		Hidden
state	Disable/Enable this rule.	Optional

firewall rule debug

Following commands are available :

traceconfig   :   Display/Modify rule trace configuration.
stats   :   Display rule statistics.
clear   :   Clear rule statistics.

firewall rule debug clear

Clear rule statistics.

Syntax:

```
clear [chain = <chain name>]
      [index = <number>]
```

Parameters:

chain	The name of the chain.	Optional
index	The index of the rule in the chain.	Optional

firewall rule debug stats

Display rule statistics.

Syntax:

```
stats [chain = <chain name>]
      [index = <number>]
```

Parameters:

chain	The name of the chain.	Optional
index	The index of the rule in the chain.	Optional

firewall rule debug traceconfig

Display/Modify rule trace configuration.

Syntax:

```
traceconfig [state = <{disabled|enabled}>]
```

Parameters:

state	Disable/Enable rule traces.	Optional

firewall rule delete

Delete a rule.

Syntax:

```
delete chain = <chain name>
       index = <number>
```

Parameters:

chain	The name of the chain in which to delete the rule.	Required
index	The number of the rule in the chain.	Required

firewall rule flush

Flush all rules.

Syntax:

```
flush [chain = <chain name>]
```

Parameters:

chain	The name of the chain to flush.	Optional

firewall rule list

Display a list of rules.

Syntax:

```
list [chain = <chain name>]
     [format = <{pretty|cli}>]
```

Parameters:

chain	The name of the chain to list the rules of.	Optional
format	The format of the rule list.	Optional

firewall rule modify

Modify a rule.

Syntax:

```
modify chain = <chain name>
     [action = <{(see Parameters)}>]
      [clink = <chain name>]
  [connstate = <{(missing)}>]
 [[!]dstintf]
   [[!]dstip]
      [index = <number>]
  [[!]length]
        [log = <{disabled|enabled}>]
       [name = <string>]
   [newindex = <number>]
    [[!]serv]
 [[!]srcintf]
   [[!]srcip]
     [srcmac = <{(missing)}>]
      [state = <{disabled|enabled}>]
```

Parameters:

chain	The name of the chain which contains the rule.	Required
action	The action to be taken when this rule applies ('link' when clink is used). Options: <{accept|deny|drop|reset|count|link}>	Optional
clink	The name of the chain to be parsed when this rule applies.	Optional
connstate		Hidden
dstintf	The name of the destination interface expression. (Optionally prepend a "!" to mean NOT)	Optional
dstip	The name of the destination ip expression. (Optionally prepend a "!" to mean NOT)	Optional
index	The index of the rule in the chain.	Optional
length	The name of the length expression. (Optionally prepend a "!" to mean NOT)	Optional
log	Disable/Enable logging when this rule applies.	Optional
name	The name of the new rule.	Optional
newindex	The new index of the rule in the chain.	Optional
serv	The name of the service expression. (Optionally prepend a "!" to mean NOT)	Optional

srcintf	The name of the source interface expression. (Optionally prepend a "!" to mean NOT)	Optional
srcip	The name of the source ip expression. (Optionally prepend a "!" to mean NOT)	Optional
srcmac		Hidden
state	Disable/Enable this rule.	Optional

grp

Following commands are available :

rtlist   : Show the current routes in the grp routing table.
config   : Set the grp configuration settings.
flush   : Flush grp interface settings and parameters.

Following command groups are available :

rip

grp config

Set the grp configuration settings.

Syntax:

```
config [cdistance = <number{0-255}>]
       [kdistance = <number{0-255}>]
       [rdistance = <number{0-255}>]
            [trace = <{disabled|enabled}>]
```

Parameters:

cdistance	Set the distance of the connected route type. Default distance is 0.	Optional
kdistance	Set the distance of the kernel route type. Default distance is 1.	Optional
rdistance	Set the distance of the RIP route type. Default distance is 120.	Optional
trace	Enable/Disable tracing.	Optional

grp flush

Flush grp interface settings and parameters.

Syntax:

```
flush
```

grp rip

Following commands are available :

ifconfig	:	Configure a RIP interface.
config	:	Set the RIP configuration settings.
show	:	Show the RIP settings and the routes in the RIP database.
flush	:	Flush RIP interface settings and global parameters.

grp rip config

Set the RIP configuration settings.

Syntax:

```
config state = <{disabled|enabled}>
  [updatetime = <number{1-3600}>]
     [version = <{rip_unspec|rip_v1|rip_v2}>]
```

Parameters:

state	Enable/Disable the RIP daemon.	Required
updatetime	Set the routing table update timer value. Default is 30 seconds.	Optional
version	Set the RIP version.	Optional

grp rip flush

Flush RIP interface settings and global parameters.

Syntax:

```
flush
```

grp rip ifconfig

Configure a RIP interface.

Syntax:

```
ifconfig intf = <{(see Parameters)}>
     [authmode = <{none|cleartext}>]
      [authstr = <password>]
           [rip = <{disabled|enabled}>]
    [rxversion = <{(see Parameters)}>]
[splithorizon = <{disabled|enabled}>]
```

Parameters:

intf	The name of the RIP interface to configure. Options: <{Hotspot|O2_Static|O2_ADSL2plus| LocalNetwork|O2_ADSL}>	Required
authmode	Set the RIP authentication mode.	Optional
authstr	Set the RIP authentication password.	Optional
rip	Enable/Disable the RIP status.	Optional
rxversion	Set the RIP receive version. Options: <{rip_unspec|rip_v1|rip_v2|rip_v1-2}>	Optional
splithorizon	Enable/Disable the split horizon status.	Optional

grp rip show

Show the RIP settings and the routes in the RIP database.

Syntax:

```
show
```

modem
help.UK

grp rtlist

Show the current routes in the grp routing table.

Syntax:

```
rtlist [dst = <ip-address>]
      [dstmsk = <ip-mask(dotted or cidr)>]
```

Parameters:

dst	The destination IP address using this route. Supports ip/mask notation.	Optional
dstmsk	The destination IP address mask.	Optional

hostmgr

Following commands are available :

clear	:	Remove all host devices
flush	:	Flush Device Discovery configuration (i.e. clear & to defaults)
config	:	Configure Device Discovery deamon
add	:	Add host device
update	:	Update host device parameters
delete	:	Delete host device
list	:	List all host devices

hostmgr add

Add host device

Syntax:

```
add         mac_addr = <hardware-address>
           [dns_name = <string>]
          [host_name = <string>]
          [host_type = <{(see Parameters)}>]
          [interface = <string>]
            [ip_intf = <string>]
                [type = <{(see Parameters)}>]
[user_friendly_name = <quoted string>]
           [user_set = <{(missing)}>]
```

Parameters:

mac_addr	Host MAC address	Required
dns_name	Host DNS name	Optional
host_name	Host name	Optional
host_type	Host type Options: <{Generic|Desktop|Laptop|STB|PDA|GS|Phone|GSM|Printer|MassStorage|None}>	Optional
interface	Host Ethernet interface XREF	Optional
ip_intf	Host IP interface XREF	Optional
type	Host connection type Options: <{Unknown|L2-FXS|L2-USB|L2-BT|L3-IP|L7-UPNP|L2-PPPOERELAY|L2-WLAN}>	Optional
user_friendly_name	Host user friendly name	Optional
user_set		Hidden

hostmgr clear

Remove all host devices

Syntax:

```
clear
```

hostmgr config

Configure Device Discovery deamon

Syntax:

```
config [autosave = <{(missing)}>]
       [scantime = <{(missing)}>]
          [state = <{disabled|enabled}>]
          [trace = <{disabled|enabled}>]
```

Parameters:

autosave		Hidden
scantime		Hidden
state	Enable/disable Device Discovery deamon	Optional
trace	Enable/disable Device Discovery traces	Optional

hostmgr delete

Delete host device

Syntax:

```
delete mac_addr = <hardware-address>
        [index = <number>]
         [type = <{(see Parameters)}>]
```

Parameters:

mac_addr	Host MAC address	Required
index	Host index	Optional
type	Host connection type Options: <{Unknown|L2-FXS|L2-USB|L2-BT|L3-IP|L7-UPNP|L2-PPPOERELAY|L2-WLAN}>	Optional

hostmgr flush

Flush Device Discovery configuration (i.e. clear & to defaults)

Syntax:

```
flush
```

hostmgr list

List all host devices

Syntax:

```
list [expand = <{disabled|enabled}>]
```

Parameters:

expand	Expanded listing.	Optional

hostmgr update

Update host device parameters

Syntax:

```
update      mac_addr = <hardware-address>
           [dns_name = <string>]
         [host_name = <string>]
         [host_type = <{(see Parameters)}>]
         [interface = <string>]
           [ip_intf = <string>]
               [type = <{(see Parameters)}>]
[user_friendly_name = <quoted string>]
           [user_set = <{(missing)}>]
```

Parameters:

mac_addr	Host MAC address	Required
dns_name	Host DNS name	Optional
host_name	Host name	Optional
host_type	Host type Options: <{Generic|Desktop|Laptop|STB|PDA|GS|Phone|GSM|Printer|MassStorage|None}>	Optional
interface	Host Ethernet interface XREF	Optional
ip_intf	Host IP interface XREF	Optional
type	Host connection type Options: <{Unknown|L2-FXS|L2-USB|L2-BT|L3-IP|L7-UPNP|L2-PPPOERELAY|L2-WLAN}>	Optional
user_friendly_ name	Host user friendly name	Optional
user_set		Hidden

ids

Following commands are available :

config   :   Display/Modify IDS configuration.
clear   :   Clear IDS statistics.

Following command groups are available :

parser   pattern   signature   threshold
conntrack

ids clear

Clear IDS statistics.

Syntax:

```
clear
```

ids config

Display/Modify IDS configuration.

Syntax:

```
config [state = <{disabled|enabled}>]
       [trace = <{disabled|enabled}>]
```

Parameters:

state	Enable/Disable ids checks.	Optional
trace	Enable/Disable ids traces.	Optional

ids conntrack

Following commands are available :

list   :   Display connections in connection tracker.
stats   :   Display connection tracker statistics.
clear   :   Reset connection tracker.

Note: ids conntrack is missing from the ':help ids' group list

ids conntrack clear

Reset connection tracker.

Syntax:

```
clear
```

ids conntrack list

Display connections in connection tracker.

Syntax:

```
list [size = <{10|100|full} or number>]
```

Parameters:

size	Modify the size of connection tracker list.	Optional

ids conntrack list

ids conntrack stats

Display connection tracker statistics.

Syntax:

```
stats
```

ids parser

Following commands are available :

list   :   Display ids parser configuration.
modify   :   Modify ids parser configuration.

ids parser list

Display ids parser configuration.

Syntax:

```
list [parser = <parser>]
```

Parameters:

parser	The name of the parser.	Optional

ids parser modify

Modify ids parser configuration.

Syntax:

```
modify state = <{disabled|enabled}>
      [parser = <parser>]
```

Parameters:

state	The state of the parser.	Required
parser	The name of the parser.	Optional

ids pattern

Following commands are available :

list	:	Display patterns in pattern tracker.
stats	:	Display pattern tracker statistics.
clear	:	Reset pattern tracker.

ids pattern clear

Reset pattern tracker.

Syntax:

```
clear
```

ids pattern list

Display patterns in pattern tracker.

Syntax:

```
list [size = <{10|100|full} or number>]
```

Parameters:

size	Modify the size of pattern tracker list.	Optional

ids pattern stats

Display pattern tracker statistics.

Syntax:

```
stats
```

ids signature

Following commands are available :

list	:	Display ids signature configuration.
modify	:	Modify ids signature configuration.

ids signature list

Display ids signature configuration.

Syntax:

```
list [signature = <{(see Parameters)}>]
```

Parameters:

signature	The name of the signature. Options: <fragment_sweep|zero-length_fragment_size|small_fragment_size| fragment_size_overrun|fragment_overlap| fragment_out-of-order|ip_protocol_scan| tcp_port_scan|tcp_syn_scan| stealth_tcp_null_scan|stealth_tcp_fin_scan| stealth_tcp_xmas_scan| stealth_tcp_full_xmas_scan| stealth_tcp_vecna_scan|stealth_tcp_syn-fin_scan|udp_port_scan|ping_sweep_scan| tcp_syn_flood|udp_flood|ping_flood| icmp_unreachable_storm| smurf_broadcast_attack|smurf_storm_attack| fraggle_broadcast_attack|fraggle_storm_attack| land_attack|spoofed_packet|tcp_null_port| tcp_data_on_syn_segment| tcp_invalid_urgent_offset|udp_null_port| icmp_type_unknown|icmp_code_unknown| ip_zero_payload|tcp_rate_limiting| udp_rate_limiting|icmp_rate_limiting| ip_rate_limiting}>	Optional

ids signature modify

Modify ids signature configuration.

Syntax:

```
modify state = <{disabled|enabled}>
   [signature = <{(see Parameters)}>]
```

Parameters:

state	The state of the sign.	Required
signature	The name of the signature. Options: <fragment_sweep|zero-length_fragment_size|small_fragment_size|fragment_size_overrun|fragment_overlap|fragment_out-of-order|ip_protocol_scan|tcp_port_scan|tcp_syn_scan|stealth_tcp_null_scan|stealth_tcp_fin_scan|stealth_tcp_xmas_scan|stealth_tcp_full_xmas_scan|stealth_tcp_vecna_scan|stealth_tcp_syn-fin_scan|udp_port_scan|ping_sweep_scan|tcp_syn_flood|udp_flood|ping_flood|icmp_unreachable_storm|smurf_broadcast_attack|smurf_storm_attack|fraggle_broadcast_attack|fraggle_storm_attack|land_attack|spoofed_packet|tcp_null_port|tcp_data_on_syn_segment|tcp_invalid_urgent_offset|udp_null_port|icmp_type_unknown|icmp_code_unknown|ip_zero_payload|tcp_rate_limiting|udp_rate_limiting|icmp_rate_limiting|ip_rate_limiting}>	Optional

ids threshold

Following commands are available :

list   :   Display IDS thresholds.
modify   :   Modify IDS threshold.
clear   :   Reset IDS thresholds.

ids threshold clear

Reset IDS thresholds.

Syntax:

```
clear
```

ids threshold list

Display IDS thresholds.

Syntax:

```
list
```

ids threshold modify

Modify IDS threshold.

Syntax:

```
modify index = <number>
      [limit = <number>]
    [scaling = <{disabled|enabled}>]
      [window = <number>]
```

Parameters:

index	The index of the threshold.	Required
limit	The limit of the threshold.	Optional
scaling	Scaling of the threshold window.	Optional
window	The time window of the threshold.	Optional

igmp

Following command groups are available :

host   proxy

igmp

igmp host

Following commands are available :

config   :   Display/Modify global IGMP configuration.
ifconfig   :   Configure an IGMP interface.
iflist   :   Show the configuration of the IGMP interfaces.
list   :   Show the IGMP groups.
flush   :   Flush the IGMP settings.

Following command groups are available :

debug

igmp host config

Display/Modify global IGMP configuration.

Syntax:

```
config [requirera = <{disabled|enabled}>]
```

Parameters:

requirera	Enable/Disable the router alert IP option check.	Optional

igmp host debug

Following commands are available :

stats	:	Print IGMP statistics.
clear	:	Clear IGMP statistics.

igmp host debug

igmp host debug clear

Clear IGMP statistics.

Syntax:

```
clear
```

igmp host debug stats

Print IGMP statistics.

Syntax:

```
stats
```

igmp host flush

Flush the IGMP settings.

Syntax:

```
flush
```

igmp host ifconfig

Configure an IGMP interface.

Syntax:

```
ifconfig intf = <{(see Parameters)}>
       version = <{none|IGMPv1|IGMPv2|IGMPv3}>
```

Parameters:

intf	The IP interface name. Options: <{loop|O2_ADSL|LocalNetwork|O2_ADSL2plus|O2_Static|Hotspot}>	Required
version	The IGMP version of the IP interface.	Required

igmp host iflist

Show the configuration of the IGMP interfaces.

Syntax:

```
iflist [expand = <{disabled|enabled}>]
```

Parameters:

expand	Expanded listing.	Optional

igmp host list

Show the IGMP groups.

Syntax:

```
list [expand = <{disabled|enabled}>]
     [intf = <{(see Parameters)}>]
```

Parameters:

expand	Expanded listing.	Optional
intf	The IP interface name. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Optional

igmp proxy

Following commands are available :

config	:	Configure the IGMP proxy.
ifconfig	:	Configure an IGMP proxy interface.
iflist	:	Show the configuration of an IGMP proxy interface.
grouplist	:	Show the learned groups on an IGMP proxy interface.
mbslist	:	Show the IGMP proxy membership database (merge of all learned groups).
flush	:	Flush all IGMP proxy settings and learned groups

Following command groups are available :

debug

igmp proxy config

Configure the IGMP proxy.

Syntax:

```
config [advinter = <number{4-180}>]
    [initadvcount = <number{1-10}>]
    [initadvinter = <number{1-4}>]
            [lmqi = <number{1-3175}>]
      [localgroup = <{disabled|enabled}>]
              [qi = <number{1-31744}>]
             [qri = <number{1-3175}>]
      [requirera = <{disabled|enabled}>]
              [rv = <number{2-7}>]
           [state = <{disabled|enabled}>]
```

Parameters:

advinter	The interval in seconds for unsolicited MRD advertisements (see rfc4286).	Optional
initadvcount	The maximum number of initial unsolicited MRD advertisements (see rfc4286).	Optional
initadvinter	The interval in seconds for initial unsolicited MRD advertisements (see rfc4286).	Optional
lmqi	The maximum response time in seconds for an IGMP client in reply to group specific queries.	Optional
localgroup	Enable/Disable the processing of a local multicast group in an IGMP packet.	Optional
qi	The interval in seconds between general queries sent by the querier.	Optional
qri	The maximum response time in seconds for an IGMP client in reply to general queries.	Optional
requirera	Enable/Disable the router alert IP option check.	Optional
rv	The robustness variable allows tuning for expected IGMP packet loss.	Optional
state	Enable/Disable the IGMP proxy.	Optional

igmp proxy debug

Following commands are available :

traceconfig	:	Modify IGMP proxy trace configuration
stats	:	Print IGMP proxy statistics
clear	:	Clear IGMP proxy statistics

igmp proxy debug clear

Clear IGMP proxy statistics

Syntax:

```
clear
```

igmp proxy debug stats

Print IGMP proxy statistics

Syntax:

```
stats
```

igmp proxy debug traceconfig

Modify IGMP proxy trace configuration

Syntax:
```
traceconfig [state = <{disabled|enabled}>]
```

Parameters:

state	Enable/Disable tracing.	Optional

igmp proxy flush

Flush all IGMP proxy settings and learned groups

Syntax:

```
flush
```

igmp proxy grouplist

Show the learned groups on an IGMP proxy interface.

Syntax:

```
grouplist [expand = <{disabled|enabled}>]
          [intf = <{LocalNetwork}>]
```

Parameters:

expand	Expanded listing.	Optional
intf	The name of the IGMP proxy interface to be listed.	Optional

igmp proxy ifconfig

Configure an IGMP proxy interface.

Syntax:

```
ifconfig intf = <{(see Parameters)}>
    [exptrack = <{disabled|enabled}>]
   [fastleave = <{disabled|enabled}>]
         [mrd = <{disabled|enabled}>]
    [spoofing = <{disabled|enabled}>]
       [state = <{inactive|downstream|upstream}>]
     [version = <{IGMPv1|IGMPv2|IGMPv3}>]
```

Parameters:

intf	The name of the IGMP proxy interface to be configured. Options: <{Hotspot|O2_Static|O2_ADSL2plus|LocalNetwork|O2_ADSL}>	Required
exptrack	Enable/Disable explicit host tracking.	Optional
fastleave	Enable/Disable the immediate deletion of a group when a leave is received.	Optional
mrd	Enable/Disable sending multicast router advertisements (rfc 4286).	Optional
spoofing	Enable/Disable spoofing of IGMP packets on upstream interfaces.	Optional
state	The state of the IGMP proxy interface.	Optional
version	The IGMP version of the IGMP proxy interface.	Optional

igmp proxy iflist

Show the configuration of an IGMP proxy interface.

Syntax:

```
iflist [expand = <{disabled|enabled}>]
```

Parameters:

expand	Expanded listing.	Optional

igmp proxy mbslist

Show the IGMP proxy membership database (merge of all learned groups).

Syntax:

```
mbslist
```

interface

Following commands are available :

list   :   Display interfaces.

interface list

Display interfaces.

Syntax:

```
list [expand = <{disabled|enabled}>]
     [reverse = <{disabled|enabled}>]
```

Parameters:

expand	Expanded listing.	Optional
reverse	Reverse listing (lower layer iso. upper layer).	Optional

ip

Following commands are available :

ifadd	:	Create an IP interface.
ifdelete	:	Delete an IP interface.
ifattach	:	Attach an IP interface.
ifdetach	:	Detach an IP interface.
ifconfig	:	Modify an IP interface configuration.
iflist	:	Display all IP interfaces.
ifwait	:	Wait for a status change of an IP interface.
ipadd	:	Assign an IP address to an IP interface.
ipdelete	:	Remove an IP address from an IP interface.
ipconfig	:	Modify an IP address configuration.
iplist	:	Display all configured IP addresses.
rtadd	:	Add a route to the routing table.
rtconfig	:	Modify a route of the routing table.
rtdelete	:	Delete a route from the routing table.
rtlist	:	Display the routing table.
arpadd	:	Add an entry to the ARP cache of a broadcast IP interface.
arpdelete	:	Delete an ARP entry.
arplist	:	Display the ARP cache.
config	:	Display/Modify global IP stack configuration.
flush	:	Flush all static IP parameters. Dynamic info (e.g. from PPP links) remains.

Following command groups are available :

auto	debug	mcast

ip arpadd

Add an entry to the ARP cache of a broadcast IP interface.

Syntax:

```
arpadd intf = <{(see Parameters)}>
          ip = <ip-range>
     [hwaddr = <hardware-address>]
```

Parameters:

intf	The IP interface name. Options: <{LocalNetwork|O2_ADSL2plus| O2_Static|Hotspot}>	Required
ip	The IP address [range] of the entry to add.	Required
hwaddr	The hardware address (e.g. Ethernet MAC address) of the entry to add.	Optional

ip arpdelete

Delete an ARP entry.

Syntax:

```
arpdelete intf = <{(see Parameters)}>
              ip = <ip-range>
         [hwaddr = <hardware-address>]
```

Parameters:

intf	The IP interface name. Options: <{LocalNetwork|O2_ADSL2plus| O2_Static|Hotspot}>	Required
ip	The IP address [range] of the entry to delete.	Required
hwaddr	The hardware address (e.g. Ethernet MAC address) of the entry to delete.	Optional

ip arplist

Display the ARP cache.

Syntax:

```
arplist
```

ip auto

Following commands are available :

`ifadd`	:	Creates a new autoIP interface.
`ifdelete`	:	Deletes an existing autoIP interface.
`ifattach`	:	Select and assign a link-local address to an autoIP interface.
`ifdetach`	:	Release the link-local address for the given autoIP interface.
`ifconfig`	:	Configures an autoIP interface.
`iflist`	:	Shows the autoIP interfaces.
`flush`	:	Flushes autoIP interfaces.

Following command groups are available :

`debug`

ip auto debug

Following commands are available :

`traceconfig`   :   Modify autoIP trace configuration

ip auto debug traceconfig

Modify autoIP trace configuration

Syntax:

```
traceconfig [state = <{disabled|enabled}>]
```

Parameters:

state	Enable/Disable verbose logging.	Optional

ip auto flush

Flushes autoIP interfaces.

Syntax:

```
flush
```

ip auto ifadd

Creates a new autoIP interface.

Syntax:

```
ifadd intf = <{(see Parameters)}>
      [addr = <ip-address>]
```

Parameters:

intf	The name of the IP interface for which a link-local address has to be allocated. Options: <{LocalNetwork|O2_ADSL2plus|O2_Static|Hotspot}>	Required
addr	The preferred link-local IP address.	Optional

ip auto ifattach

Select and assign a link-local address to an autoIP interface.

Syntax:

```
ifattach intf = <>
```

Parameters:

intf	The name of the autoIP interface.	Required

ip auto ifconfig

Configures an autoIP interface.

Syntax:

```
ifconfig intf = <>
        [addr = <ip-address>]
       [claim = <number{0-65535}>]
     [defence = <number{0-65535}>]
    [interval = <number{1-65535}>]
     [netmask = <ip-mask(dotted or cidr)>]
     [poolend = <ip-address>]
   [poolstart = <ip-address>]
       [probe = <number{0-65535}>]
```

Parameters:

intf	The name of the autoIP interface to configure.	Required
addr	The preferred link-local IP address.	Optional
claim	The number of link-local address selection retries before giving up.	Optional
defence	The number of times the link-local address is defended before releasing the address.	Optional
interval	The time interval between two ARP probe transmissions.	Optional
netmask	The netmask of the link-local IP address pool.	Optional
poolend	The end IP address of the link-local address pool.	Optional
poolstart	The start IP address of the link-local address pool.	Optional
probe	The number of ARP probes to be sent before accepting a link-local address.	Optional

ip auto ifdelete

Deletes an existing autoIP interface.

Syntax:

```
ifdelete intf = <>
```

Parameters:

intf	The name of the autoIP interface.	Required

ip auto ifdetach

Release the link-local address for the given autoIP interface.

Syntax:

```
ifdetach intf = <>
```

Parameters:

intf	The name of the autoIP interface.	Required

ip auto iflist

Shows the autoIP interfaces.

Syntax:

```
iflist [intf = <>]
```

Parameters:

intf	The name of a autoIP interface.	Optional

ip config

Display/Modify global IP stack configuration.

Syntax:

```
config [acceleration = <{disabled|enabled}>]
           [addrcheck = <{off|own|static|dynamic}>]
    [arpcachetimeout = <number{10-7200}>]
            [arpclass = <{(see Parameters)}>]
[bitrate-window(sec) = <{(missing)}>]
        [checkoptions = <{(see Parameters)}>]
          [defragmode = <{disabled|enabled}>]
          [forwarding = <{disabled|enabled}>]
           [fraglimit = <number{1-1024}>]
          [mssclamping = <{disabled|enabled}>]
          [natloopback = <{disabled|enabled}>]
       [netbroadcasts = <{disabled|enabled}>]
    [randomdatagramids = <{disabled|enabled}>]
            [redirects = <{disabled|enabled}>]
                  [ttl = <number{0-255}>]
```

Parameters:

acceleration	Disable/Enable IP acceleration.	Optional
addrcheck	Sets the level of ip address checks.	Optional
arpcachetimeout	Set the global ARP cache timeout.	Optional
arpclass	The prio class of the ARP packets. Options: <{0|1|2|3|4|5|6|7|8|9|10|11|12|13|14|15}>	Optional
bitrate-window(sec)		Hidden
checkoptions	Disallow/Allow packets with IP options. Options: <{disabled|enabled|transparent}>	Optional
defragmode	Disallow/Allow defragmenting IP fragments.	Optional
forwarding	Disable/Enable IP routing functionality.	Optional
fraglimit	Set the maximum number of IP fragments waiting for completion. (Avoids buffer depletion).	Optional
mssclamping	Disable/Enable mss clamping for low mtu interfaces.	Optional
natloopback	Disable/Enable NAT loopback.	Optional
netbroadcasts	Disallow/Allow net directed broadcasts.	Optional

ip Commands

random datagramids	Disable/Enable random datagram IDs for packets generated locally.	Optional
redirects	Disable/Enable sending of ICMP redirect messages.	Optional
ttl	Set the default time-to-live for locally generated IP packets.	Optional

ip debug

Following commands are available :

`stats`	:	Display statistics.
`traceconfig`	:	Display/Modify IP stack trace configuration.
`sendto`	:	Send UDP packets.
`httpprobe`	:	Send HTTP probe to measure the round trip time taken to connect and access data from a HTTP server

ip debug httpprobe

Send HTTP probe to measure the round trip time taken to connect and access data from a HTTP server

Syntax:

```
httpprobe url = <string>
       [version = <{1.0|1.1}>]
```

Parameters:

url	The Uniform Resource Locator identifying the HTTP server.	Required
version	The version of the HTTP server.	Optional

ip debug sendto

Send UDP packets.

Syntax:

```
sendto addr = <ip-address>
    dstport = <number{1-65535}>
      [count = <number{1-1000000}>]
   [dffield = <{disabled|enabled}>]
   [dstintf = <{(see Parameters)}>]
  [interval = <number{1-1000000}>]
    [listen = <{disabled|enabled}>]
      [size = <number{0-20000}>]
   [srcaddr = <ip-address>]
   [srcport = <number{1-65535}>]
```

Parameters:

addr	The destination IP address.	Required
dstport	The UDP destination port number to send to.	Required
count	The number of datagrams to send.	Optional
dffield	Enables setting of the don't fragment flag in the IP headers of the ping packet(s).	Optional
dstintf	The IP interface name. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Optional
interval	The interval in milliseconds between datagrams.	Optional
listen	Don't send, just listen for incoming datagrams.	Optional
size	The size of the datagram.	Optional
srcaddr	The IP source address to use.	Optional
srcport	The UDP source port number to use.	Optional

ip debug stats

Display statistics.

Syntax:

```
stats proto = <{ip|udp|tcp|icmp}>
```

Parameters:

proto	The protocol for which to display the statistics.	Required

ip debug traceconfig

Display/Modify IP stack trace configuration.

Syntax:

```
traceconfig [arp = <{none|all}>]
            [drop = <{(see Parameters)}>]
         [forward = <{(see Parameters)}>]
           [input = <{(see Parameters)}>]
            [mode = <{line|dump}>]
          [output = <{(see Parameters)}>]
            [path = <{(see Parameters)}>]
```

Parameters:

arp	Define the arp packets that will be traced.	Optional
drop	Define the packet drops that will be traced. Options: <{none|label|-telnet|-host|-broadcast|all}>	Optional
forward	Define the packets that will be traced. Options: <{none|label|-telnet|-host|-broadcast|all}>	Optional
input	Define the packets that will be traced. Options: <{none|label|-telnet|-host|-broadcast|all}>	Optional
mode	Packet dump method.	Optional
output	Define the packets that will be traced. Options: <{none|label|-telnet|-host|-broadcast|all}>	Optional
path	Define the packet that will be path-traced. Options: <{none|label|-telnet|-host|-broadcast|all}>	Optional

ip flush

Flush all static IP parameters. Dynamic info (e.g. from PPP links) remains.

Syntax:

```
flush
```

ip ifadd

Create an IP interface.

Syntax:
```
ifadd dest = <{}>
      intf = <string>
```

Parameters:

dest	An network interface name.	Required
intf	An IP interface name.	Required

ip ifattach

Attach an IP interface.

Syntax:

```
ifattach intf = <{}>
```

Parameters:

intf	An IP interface name.	Required

ip ifconfig

Modify an IP interface configuration.

Syntax:

```
ifconfig    intf = <{(see Parameters)}>
[arpcachetimeout = <number{0-7200}>]
       [arpprobe = <{unicast|broadcast}>]
          [group = <{(see Parameters)}>]
         [hwaddr = <hardware-address>]
    [linksensing = <{disabled|enabled}>]
      [mcastmode = <{(missing)}>]
   [mcastpromisc = <{disabled|enabled}>]
            [mtu = <number{68-65535}>]
        [primary = <{disabled|enabled}>]
         [status = <{down|up}>]
      [symmetric = <{disabled|enabled}>]
```

Parameters:

intf	An IP interface name. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Required
arpcachetimeout	Set the ARP cache timeout to be used for this interface (0 = use global ARP cache timeout).	Optional
arpprobe	The ARP mode of the interface.	Optional
group	The group this interface belongs to. Can be used by e.g. firewalling. Options: <{wan|local|lan|tunnel|dmz|guest} or number>	Optional
hwaddr	The hardware address (e.g. Ethernet MAC address) of this interface.	Optional
linksensing	The IP interface's awareness of link state transitions.	Optional
mcastmode		Hidden
mcastpromisc	Make the IP interface multicast promiscuous.	Optional
mtu	The maximum packet size (including IP header) to use on this interface.	Optional
primary	Make the IP interface the primary interface.	Optional
status	The administrative state of the interface.	Optional
symmetric	The routing mode of the IP interface.	Optional

ip ifdelete

Delete an IP interface.

Syntax:

```
ifdelete intf = <{(see Parameters)}>
```

Parameters:

intf	An IP interface name.	Required
	Options: <{LocalNetwork|O2_ADSL2plus|	
	O2_Static|Hotspot}>	

ip ifdetach

Detach an IP interface.

Syntax:

```
ifdetach intf = <{(see Parameters)}>
```

Parameters:

intf	An IP interface name. Options: <{loop|LocalNetwork|O2_ADSL2plus| O2_Static|Hotspot}>	Required

ip iflist

Display all IP interfaces.

Syntax:

```
iflist [expand = <{disabled|enabled}>]
       [legend = <{disabled|enabled}>]
```

Parameters:

expand	Expanded listing.	Optional
legend	Expanded Legend listing.	Optional

ip ifwait

Wait for a status change of an IP interface.

Syntax:

```
ifwait  intf = <{(see Parameters)}>
[adminstatus = <{down|up}>]
 [linkstatus = <{down|up}>]
 [operstatus = <{down|up}>]
    [timeout = <number{1-600000}>]
```

Parameters:

intf	An IP interface name. Options: <{loop|O2_ADSL|LocalNetwork|O2_ADSL2plus|O2_Static|Hotspot}>	Required
adminstatus	The administrative state of the interface.	Optional
linkstatus	The link state of the interface.	Optional
operstatus	The operational state of the interface.	Optional
timeout	The timeout in seconds.	Optional

ip ipadd

Assign an IP address to an IP interface.

Syntax:

```
ipadd    addr = <ip-address>
         intf = <{(see Parameters)}>
    [addroute = <{disabled|enabled}>]
     [netmask = <ip-mask(dotted or cidr)>]
[pointopoint = <ip-address>]
        [type = <{(missing)}>]
```

Parameters:

addr	The new IP address to add.	Required
intf	The IP interface name. Options: <{loop|O2_ADSL|LocalNetwork|O2_ADSL2plus|O2_Static|Hotspot}>	Required
addroute	Add typical net/subnet routes automatically.	Optional
netmask	The subnetmask associated with this address.	Optional
pointopoint	The remote address in case of a point-to-point link.	Optional
type		Hidden

ip ipconfig

Modify an IP address configuration.

Syntax:

```
ipconfig addr = <ip-address>
    [preferred = <{disabled|enabled}>]
      [primary = <{disabled|enabled}>]
```

Parameters:

addr	The IP address to configure.	Required
preferred	Make IP address the preferred address for that subnet.	Optional
primary	Make IP address the primary address for the interface.	Optional

ip ipdelete

Remove an IP address from an IP interface.

Syntax:

```
ipdelete addr = <ip-address>
```

Parameters:

| addr | The IP address to delete. | Required |

ip iplist

Display all configured IP addresses.

Syntax:

```
iplist [expand = <{disabled|enabled}>]
```

Parameters:

expand	Expanded listing.	Optional

ip mcast

Following commands are available :

rtadd   : Add a multicast route to the multicast routing table.
rtdelete   : Delete a multicast route from the multicast routing table.
rtlist   : Display the multicast routing table.
flush   : Flush the multicast routing table.

ip mcast flush

Flush the multicast routing table.

Syntax:

```
flush
```

ip mcast rtadd

Add a multicast route to the multicast routing table.

Syntax:

```
rtadd dstintf = <{(see Parameters)}>
         grp = <ip-address>
     srcintf = <{(see Parameters)}>
         [src = <ip-address>]
         [ttl = <number{1-255}>]
     [ttlincr = <{disabled|enabled}>]
```

Parameters:

dstintf	The destination IP interface. Options: <{loop|O2_ADSL|LocalNetwork|O2_ADSL2plus|O2_Static|Hotspot}>	Required
grp	The multicast group IP address.	Required
srcintf	The source IP interface. Options: <{loop|O2_ADSL|LocalNetwork|O2_ADSL2plus|O2_Static|Hotspot}>	Required
src	The source IP address.	Optional
ttl	The time-to-live for that destination IP interface.	Optional
ttlincr	Increment TTL before packet is send.	Optional

ip mcast rtdelete

Delete a multicast route from the multicast routing table.

Syntax:

```
rtdelete dstintf = <{(see Parameters)}>
             grp = <ip-address>
         srcintf = <{(see Parameters)}>
             [src = <ip-address>]
```

Parameters:

dstintf	The destination IP interface. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Required
grp	The multicast group IP address.	Required
srcintf	The source IP interface. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Required
src	The source IP address.	Optional

ip mcast rtlist

Display the multicast routing table.

Syntax:
```
rtlist [expand = <{disabled|enabled}>]
```

Parameters:

expand	Expanded listing.	Optional

ip rtadd

Add a route to the routing table.

Syntax:

```
rtadd dst = <ip-address>
  [dstmsk = <ip-mask(dotted or cidr)>]
 [gateway = <ip-address>]
    [intf = <{(see Parameters)}>]
   [label = <{(see Parameters)}>]
  [metric = <number{0-255}>]
 [srcintf = <{(see Parameters)}>]
  [static = <{enabled|disabled}>]
  [status = <{up|down}>]
    [type = <{(missing)}>]
```

Parameters:

dst	The destination IP address(es) using this route. Supports ip/mask notation.	Required
dstmsk	The destination IP address mask.	Optional
gateway	The IP address of the next hop (direct connected gateway or extended route)	Optional
intf	Only for special interface routes : the outgoing IP interface name. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Optional
label	The name of a label. Options: <{None|Blank|DSCP|Interactive| Management|Video|VoIP-RTP|VoIP-Signal| default}>	Optional
metric	The metric for this route (weight factor).	Optional
srcintf	Use this interface for source address selection. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Optional
static	Route persistency: static or dynamic (note that not all routes can be changed).	Optional
status	The administrative state of the route.	Optional
type		Hidden

ip rtconfig

Modify a route of the routing table.

Syntax:

```
rtconfig dst = <ip-address>
     [dstmsk = <ip-mask(dotted or cidr)>]
    [gateway = <ip-address>]
       [intf = <{(see Parameters)}>]
      [label = <{(see Parameters)}>]
     [metric = <number{0-255}>]
    [srcintf = <{(see Parameters)}>]
     [static = <{disabled|enabled}>]
     [status = <{down|up}>]
```

Parameters:

dst	The destination IP address(es) using this route. Supports ip/mask notation.	Required
dstmsk	The destination IP address mask.	Optional
gateway	The IP address of the next hop (direct connected gateway or extended route)	Optional
intf	Only for special interface routes : the outgoing IP interface name. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Optional
label	The name of a label. Options: <{None|Blank|DSCP|Interactive| Management|Video|VoIP-RTP|VoIP-Signal| default}>	Optional
metric	The metric for this route (weight factor).	Optional
srcintf	Use this interface for source address selection. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot|None}>	Optional
static	Route persistency: static or dynamic (note that not all routes can be changed).	Optional
status	The administrative state of the route.	Optional

ip rtdelete

Delete a route from the routing table.

Syntax:

```
rtdelete dst = <ip-address>
      [dstmsk = <ip-mask(dotted or cidr)>]
     [gateway = <ip-address>]
         [intf = <{(see Parameters)}>]
        [label = <{(see Parameters)}>]
```

Parameters:

dst	The destination IP address specification of the route to delete. Supports ip/mask notation.	Required
dstmsk	The destination IP address mask.	Optional
gateway	The IP address of the next hop.	Optional
intf	The outgoing IP interface name. (For special interface routes only). Options: <{loop|O2_ADSL|LocalNetwork|O2_ADSL2plus|O2_Static|Hotspot}>	Optional
label	The name of a label. Options: <{None|Blank|DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|default}>	Optional

ip rtlist

Display the routing table.

Syntax:

```
rtlist [expand = <{disabled|enabled}>]
```

Parameters:

expand	Expanded listing.	Optional

ipqos

Following commands are available :

config   :   Modify the IP QoS configuration for a given destination of an
                      interface.
list   :   Display the IP QoS configuration.

Following command groups are available :

ef   queue

modem
help uk

ipqos config

Modify the IP QoS configuration for a given destination of an interface.

Syntax:

```
config         dest = <{pvc_ppp|pvc_dyn|pvc_static}>
   [backgroundqueue = <{disabled|enabled}>]
         [burstsize = <number{1-64}>]
           [discard = <{tail|early}>]
      [ecnthreshold = <number{1-99}>]
          [maxbytes = <number{0-256}>]
        [maxpackets = <number{0-500}>]
          [priority = <{wfq|strict|wrr}>]
[qtyrealtimequeues = <number{1-3}>]
      [realtimerate = <number{1-100}>]
             [state = <{disabled|enabled}>]
           [weight1 = <number{1-99}>]
           [weight2 = <number{1-99}>]
           [weight3 = <number{0-98}>]
           [weight4 = <number{0-97}>]
           [weight5 = <number{0-96}>]
```

Parameters:

dest	The destination of the interface. Typically, a phonebook entry.	Required
background queue	Enable, disable the best effort background queue.	Optional
burstsize	Burstsize in kilo bytes (KB).	Optional
discard	The packet discard strategy in case of congestion.	Optional
ecnthreshold	The ECN marking threshold.	Optional
maxbytes	The maximum size in kilo bytes (KB) in all queues.	Optional
maxpackets	The maximum number of packets in all queues.	Optional
priority	The subqueue priority algorithm.	Optional
qty realtimequeues	Number of real-time priority queues.	Optional
realtimerate	The percentage of the bandwith.	Optional
state	Enable, disable IP QoS for the interface.	Optional
weight1	The weight of queue 1 used for weighted fair queueing (WFQ) or weighted round robin (WRR).	Optional
weight2	The weight of queue 2 used for weighted fair queueing (WFQ) or weighted round robin (WRR).	Optional

weight3	The weight of queue 3 used for weighted fair queueing (WFQ) or weighted round robin (WRR).	Optional
weight4	The weight of queue 4 used for weighted fair queueing (WFQ) or weigthed round robin (WRR).	Optional
weight5	The weight of queue 5 used for weighted fair queueing (WFQ) or weigthed round robin (WRR).	Optional

ipqos ef

Following commands are available :

config   :   Modify an IP QoS EF timer configuration for an interface.
list   :   Display the IP QoS EF timers.
stats   :   Display the IP QoS EF timer statistics.

ipqos ef config

Modify an IP QoS EF timer configuration for an interface.

Syntax:

```
config intf = <{(see Parameters)}>
        [mtu = <number{68-65535}>]
      [state = <{disabled|enabled}>]
    [timeout = <number{100-10000}>]
```

Parameters:

intf	The IP interface name. Options: <{loop|O2_ADSL|LocalNetwork|O2_ADSL2plus|O2_Static|Hotspot}>	Required
mtu	The MTU of the IP interface in case of EF data.	Optional
state	Enable, disable IP QoS EF timer for the interface.	Optional
timeout	The timeout in mili seconds.	Optional

ipqos ef list

Display the IP QoS EF timers.

Syntax:

```
list
```

ipqos ef stats

Display the IP QoS EF timer statistics.

Syntax:

```
stats
```

ipqos list

Display the IP QoS configuration.

Syntax:

```
list
```

ipqos queue

Following commands are available :

config   : Modify the IP QoS subqueue configuration.
list   : Display the IP QoS subqueue configuration.
stats   : Display the IP QoS subqueue statistics.
clear   : Clear the IP QoS statistics.

ipqos queue clear

Clear the IP QoS statistics.

Syntax:

```
clear
```

ipqos queue config

Modify the IP QoS subqueue configuration.

Syntax:

```
config   dest = <{pvc_ppp|pvc_dyn|pvc_static}>
         queue = <number{0-5}>
[ackfiltering = <{disabled|enabled}>]
     [discard = <{tail|early}>]
   [ecnmarking = <{disabled|enabled}>]
      [hiprio = <number{0-15}>]
        [hold = <number>]
      [loprio = <number{0-15}>]
    [markprob = <number{1-1000}>]
    [maxburst = <number{1-64}>]
    [maxbytes = <number{0-256}>]
   [maxpackets = <number{0-500}>]
     [maxrate = <number{1-100}>]
   [propagate = <{disabled|enabled}>]
    [resbytes = <number{0-256}>]
  [respackets = <number{0-500}>]
```

Parameters:

dest	The destination of the interface. Typically, a phonebook entry.	Required
queue	The number of the subqueue.	Required
ackfiltering	Enable filtering of TCP ACK packets.	Optional
discard	The packet discard strategy in case of congestion.	Optional
ecnmarking	Enable Explicit Congestion Notification for IP packets in this subqueue.	Optional
hiprio	The highest internal priority boundary for entering this queue.	Optional
hold	The hold time in microseconds for early discard strategy.	Optional
loprio	The lowest internal priority boundary for entering this queue.	Optional
markprob	The maximum packet marking probability in parts per mille for early discard strategy.	Optional
maxburst	Burstsize in kilo bytes (KB).	Optional
maxbytes	The maximum subqueue size in kilo bytes (KB).	Optional
maxpackets	The maximum number of packets in the subqueue.	Optional

maxrate	The percentage of the bandwith.	Optional
propagate	Propagate the packets in lower priority queue iso. dropping.	Optional
resbytes	The reserved subqueue size in kilo bytes (KB).	Optional
respackets	The reserved number of packets in the subqueue.	Optional

ipqos queue list

Display the IP QoS subqueue configuration.

Syntax:

```
list [dest = <{pvc_ppp|pvc_dyn|pvc_static}>]
```

Parameters:

dest	The destination of the interface. Typically, a phonebook entry.	Optional

ipqos queue stats

Display the IP QoS subqueue statistics.

Syntax:

```
stats [dest = <{pvc_ppp|pvc_dyn|pvc_static}>]
```

Parameters:

dest	The destination of the interface. Typically, a phonebook entry.	Optional

koa

Following commands are available :

a : Add atomic object key information

Note: koa is missing from the ':help' group list

koa

modem
help UK

koa a

Add atomic object key information

Syntax:

```
a d = <string>
  [l = <{no|yes}>]
```

Parameters:

d	Data blob	Required
l	Last line in koi list	Optional

koi

Following commands are available :

a   :   Add igd object key information

Note: koi is missing from the ':help' group list

koi a

Add igd object key information

Syntax:

```
a d = <string>
  [l = <{no|yes}>]
```

Parameters:

d	Data blob	Required
l	Last line in koi list	Optional

kta

Following commands are available :

a   :   Add atomic type key information

Note: kta is missing from the ':help' group list

kta a

Add atomic type key information

Syntax:
```
a d = <string>
 [l = <{no|yes}>]
```

Parameters:

d	Data blob	Required
l	Last line in koi list	Optional

kti

Following commands are available :

`a`   : Add igd type key information

Note: kti is missing from the ':help' group list

kti a

Add igd type key information

Syntax:

```
a d = <string>
 [l = <{no|yes}>]
```

Parameters:

d	Data blob	Required
l	Last line in koi list	Optional

label

Following commands are available :

add	:	Add a label.
modify	:	Modify a label configuration.
delete	:	Delete a label.
list	:	Display the labels.
flush	:	Flush all label.

Following command groups are available :

chain	rule

label add

Add a label.

Syntax:

```
add name = <string>
```

Parameters:

name	The name of a label to add.	Required

label chain

Following commands are available :

add	:	Add a chain.
delete	:	Delete a chain.
list	:	Display a list of chains.
flush	:	Flush all chains.
modify	:	Modify a chain.(command is hidden)

label chain add

Add a chain.

Syntax:

```
add chain = <string>
   [policy = <{(missing)}>]
```

Parameters:

chain	The name of the chain to add.	Required
policy		Hidden

label chain delete

Delete a chain.

Syntax:

```
delete chain = <chain name>
```

Parameters:

chain	The name of the chain to delete.	Required

label chain flush

Flush all chains.

Syntax:

```
flush
```

label chain list

Display a list of chains.

Syntax:

```
list [format = <{pretty|cli}>]
```

Parameters:

format	The format of the chain list.	Optional

label chain modify

Modify a chain.(command is hidden)

Syntax:

```
modify chain = <chain name>
      [policy = <{(missing)}>]
```

Parameters:

chain	The name of the chain to modify.	Required
policy		Hidden

label delete

Delete a label.

Syntax:

```
delete name = <{(see Parameters)}>
```

Parameters:

name	The name of a label. Options: <{Blank|DSCP|Interactive|Management| Video|VoIP-RTP|VoIP-Signal|default}>	Required

label flush

Flush all label.

> *Syntax:*
> ```
> flush
> ```

label list

Display the labels.

Syntax:

```
list [name = <{(see Parameters)}>]
```

Parameters:

name	The name of a label. Options: <{Blank|DSCP|Interactive|Management| Video|VoIP-RTP|VoIP-Signal|default}>	Optional

label modify

Modify a label configuration.

Syntax:

```
modify     name = <{(see Parameters)}>
     [ackclass = <{(see Parameters)}>]
 [bidirectional = <{disabled|enabled}>]
[classification = <{ignore|overwrite|increase}>]
     [defclass = <{(see Parameters)}>]
         [dscp = <{(see Parameters)}>]
   [inheritance = <{disabled|enabled}>]
    [precedence = <{(see Parameters)}>]
          [tos = <number{0-255}>]
    [tosmarking = <{disabled|enabled}>]
        [trace = <{disabled|enabled}>]
```

Parameters:

name	The name of a label to modify. Options: <{Blank|DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|default}>	Required
ackclass	The class of ACK segments of TCP connection. Options: <{0|1|2|3|4|5|6|7|8|9|10|11|12|13|14|15|prioritize|defclass}>	Optional
bidirectional	The label is also valid for returning stream.	Optional
classification	The Method of classification.	Optional
defclass	The default class of assigned connection. Options: <{0|1|2|3|4|5|6|7|8|9|10|11|12|13|14|15|dscp|default}>	Optional
dscp	The diffserv code point (part of tos, used for tos-marking). Options: <{ef|af11|af12|af13|af21|af22|af23|af31|af32|af33|af41|af42|af43|cs0|cs1|cs2|cs3|cs4|cs5|cs6|cs7} or number>	Optional
inheritance	The label is also valid for corresponding stream of child connection.	Optional
precedence	The precedence (part of tos, used for tos-marking). Options: <{routine|priority|immediate|flash|flash-override|CRITIC-ECP|internetwork-control|network-control} or number>	Optional
tos	The Type Of Service specification in the IP packet (used for tos- marking).	Optional
tosmarking	Enable/disable TOS marking.	Optional

trace	Enable/disable IP tracing for this label.	Optional

label rule

Following commands are available :

add	:	Add a rule.
delete	:	Delete a rule.
modify	:	Modify a rule.
list	:	Display a list of rules.
flush	:	Flush all rules.

Following command groups are available :

debug

label rule add

Add a rule.

Syntax:

```
add  chain   = <chain name>
     label   = <{(see Parameters)}>
   [clink    = <chain name>]
[connstate   = <{(missing)}>]
  [dstintf   = <{(missing)}>]
    [dstip [!]= <{(see Parameters)}>]
    [index   = <number>]
  [length [!]= <{}>]
      [log   = <{disabled|enabled}>]
     [name   = <string>]
 [newindex   = <{(missing)}>]
     [serv [!]= <{(see Parameters)}>]
  [srcintf [!]= <{wan|local|lan|tunnel|dmz|guest}>]
    [srcip [!]= <{(see Parameters)}>]
   [srcmac  = <{(missing)}>]
    [state  = <{disabled|enabled}>]
```

Parameters:

chain	The name of the chain which contains the rule.	Required
label	None, link (when clink is used) or label name. Options: <{None|link|Blank|DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|default}>	Required
clink	The name of the chain to be parsed when this rule applies.	Optional
connstate		Hidden
dstintf		Hidden
dstip	The name of the destination ip expression. (Can optionally use "!=") Options: <{private|ssdp_ip|mdap_ip|192.68.1.253}>	Optional
index	The index of the rule in the chain.	Optional
length	The name of the length expression. (Can optionally use "!=")	Optional
log	Disable/Enable logging when this rule applies.	Optional
name	The name of the new rule.	Optional
newindex		Hidden

serv	The name of the service expression. (Can optionally use "!=") Options: <{icmp|igmp|ftp|telnet|http|httpproxy| https|RPC|NBT|SMB|imap|imap3|imap4-ssl| imaps|pop2|pop3|pop3s|smtp|ssh|dns|nntp| ipsec|esp|ah|ike|DiffServ|sip|h323|dhcp|rtsp| ssdp_serv|mdap_serv|syslog}>	Optional
srcintf	The name of the source interface expression. (Can optionally use "!=")	Optional
srcip	The name of the source ip expression. (Can optionally use "!=") Options: <{private|ssdp_ip|mdap_ip| 192.68.1.253}>	Optional
srcmac		Hidden
state	Disable/Enable this rule.	Optional

label rule debug

Following commands are available :

traceconfig	:	Display/Modify rule trace configuration.
stats	:	Display rule statistics.
clear	:	Clear rule statistics.

label rule debug clear

Clear rule statistics.

Syntax:

```
clear [chain = <chain name>]
      [index = <number>]
```

Parameters:

chain	The name of the chain.	Optional
index	The index of the rule in the chain.	Optional

label rule debug stats

Display rule statistics.

Syntax:

```
stats [chain = <chain name>]
      [index = <number>]
```

Parameters:

chain	The name of the chain.	Optional
index	The index of the rule in the chain.	Optional

label rule debug traceconfig

Display/Modify rule trace configuration.

Syntax:

```
traceconfig [state = <{disabled|enabled}>]
```

Parameters:

state	Disable/Enable rule traces.	Optional

label rule debug traceconfig

label rule delete

Delete a rule.

Syntax:

```
delete chain = <chain name>
       index = <number>
```

Parameters:

chain	The name of the chain in which to delete the rule.	Required
index	The number of the rule in the chain.	Required

label rule flush

Flush all rules.

Syntax:

```
flush [chain = <chain name>]
```

Parameters:

chain	The name of the chain to flush.	Optional

label rule list

Display a list of rules.

Syntax:

```
list [chain = <chain name>]
     [format = <{pretty|cli}>]
```

Parameters:

chain	The name of the chain to list the rules of.	Optional
format	The format of the rule list.	Optional

label rule modify

Modify a rule.

Syntax:

```
modify chain = <chain name>
       [clink = <chain name>]
   [connstate = <{(missing)}>]
     [dstintf = <{(missing)}>]
    [[!]dstip]
       [index = <number>]
       [label = <{(see Parameters)}>]
   [[!]length]
         [log = <{disabled|enabled}>]
        [name = <string>]
   [newindex = <number>]
     [[!]serv]
  [[!]srcintf]
    [[!]srcip]
      [srcmac = <{(missing)}>]
       [state = <{disabled|enabled}>]
```

Parameters:

chain	The name of the chain which contains the rule.	Required
clink	The name of the chain to be parsed when this rule applies.	Optional
connstate		Hidden
dstintf		Hidden
dstip	The name of the destination ip expression. (Optionally prepend a "!" to mean NOT)	Optional
index	The index of the rule in the chain.	Optional
label	None, link (when clink is used) or label name. Options: <{None|link|Blank|DSCP|Interactive| Management|Video|VoIP-RTP|VoIP-Signal| default}>	Optional
length	The name of the length expression. (Optionally prepend a "!" to mean NOT)	Optional
log	Disable/Enable logging when this rule applies.	Optional
name	The name of the new rule.	Optional
newindex	The new index of the rule in the chain.	Optional
serv	The name of the service expression. (Optionally prepend a "!" to mean NOT)	Optional

srcintf	The name of the source interface expression. (Optionally prepend a "!" to mean NOT)	Optional
srcip	The name of the source ip expression. (Optionally prepend a "!" to mean NOT)	Optional
srcmac		Hidden
state	Disable/Enable this rule.	Optional

language

Following commands are available :

`config`	:	Select a language.
`list`	:	List available languages archives.
`delete`	:	Delete one or all language archives.
`exclude`	:	Exclude a file from translation(command is hidden)
`flush`	:	Flush list of files excluded from translation(command is hidden)
`langdef`	:	Setting language definition context(command is hidden)
`t`	:	Add a translation record.(command is hidden)

language config

Select a language.

Syntax:

```
config [complete = <{yes|no}>]
       [language = <string>]
```

Parameters:

complete	Enable translation for expert pages.	Optional
language	Language code : OSI language code (2 chars) for language (en=English)	Optional

language delete

Delete one or all language archives.

Syntax:

```
delete [all <{yes|no}>]
       [file = <string>]
```

Parameters:

all	Deletes all languages archives.	Optional
file	Filename : name of language archive to delete	Optional

language exclude

Exclude a file from translation(command is hidden)

Syntax:
```
exclude file = <string>
```

Parameters:

file	Filename : name of file to exclude from translation	Required

language flush

Flush list of files excluded from translation(command is hidden)

> *Syntax:*

```
flush
```

language langdef

Setting language definition context(command is hidden)

Syntax:

```
langdef lang = <string>
     [charset = <{(missing)}>]
```

Parameters:

lang	Language code : OSI language code (2 chars) for language (en=English)	Required
charset		Hidden

language list

List available languages archives.

Syntax:

```
list
```

language t

Add a translation record.(command is hidden)

Syntax:

```
t r = <quoted string>
```

Parameters:

r	Translation record string "number,text"	Required

mbus

Following commands are available :

listenums	:	Display the registered enumtypes
listtypes	:	Display the registered objecttypes
listobjects	:	Display the object instances
listcontexts	:	Display the context instances
listsubscriptions	:	Display the subscription instances
pluginevent	:	Simulate event from plugin
unregister	:	Unregister a client/plugin context
xmldump	:	Dump the registered datamodel to an XML file

Following command groups are available :

client   debug

mbus client

Following commands are available :

register	:	Register cli client to mbus
unregister	:	Unregister cli client from mbus
config	:	Modify client parameters
exec	:	Execute mbus command
authenticate	:	Authenticate a session
termsession	:	Terminate a session

mbus client authenticate

Authenticate a session

Syntax:

```
authenticate type = <{(see Parameters)}>
            [addr = <ip-address>]
        [password = <password>]
        [username = <quoted string>]
```

Parameters:

type	Authentication type Options: <{cleartext|crypt|digest|defaultuser}>	Required
addr	IP address of peer who inititated the authentication request.	Optional
password	password	Optional
username	User name	Optional

mbus client config

Modify client parameters

Syntax:

```
config      [id = <number>]
         [path = <quoted string>]
         [type = <{indexpath|keystrpath}>]
  [wlgetimeout = <number>]
[wlidletimeout = <number>]
     [writelock = <{enabled|disabled}>]
```

Parameters:

id	sessionid to use	Optional
path	Fully qualified mbus path	Optional
type	Path type (default = indexpath)	Optional
wlgetimeout	Writelock get timeout in seconds (forever=-1, *default=nowait=0)	Optional
wlidletimeout	Writelock idle timeout in seconds (forever=-1, *default=30)	Optional
writelock	Get/release mbus writelock	Optional

mbus client exec

Execute mbus command

Syntax:

```
exec          cmd = <{(see Parameters)}>
       [accesslist = <quoted string>]
           [action = <{(see Parameters)}>]
        [attribute = <{(see Parameters)}>]
            [depth = <number>]
           [filter = <quoted string>]
            [flags = <{(see Parameters)}>]
          [gettype = <{parameter|path|object}>]
         [modifier = <{(see Parameters)}>]
        [no_output = <{disabled|enabled}>]
  [onerrorrollback = <{enabled|disabled}>]
            [param = <quoted string>]
             [path = <quoted string>]
       [processcmd = <{enabled|disabled}>]
        [replytype = <{(see Parameters)}>]
           [timing = <{disabled|enabled}>]
      [usecallback = <{enabled|disabled}>]
            [value = <quoted string>]
```

Parameters:

cmd	Mbus command name Options: <{getpath|getcount|getnames|getvalues|setvalue|addobject|deleteobject|subscribe|unsubscribe|getaccessrights|setaccessrights}>	Required
accesslist	Comma separated names of accessrights groups	Optional
action	Type of accessright action Options: <[+/-]flag[+/-flag...]{read write attrchg}>	Optional
attribute	Requested attribute-type Options: <{ar_archg|ar_read|ar_write|param_cached|param_enums|param_eventable|param_key|param_min|param_mandatory|param_max|param_readable|param_type|param_writable|param_xrefs|objtype_cached|objtype_max|objtype_writable|object_clean|object_dynamic|type}>	Optional
depth	Number of levels to recurse, default=-1 (all)	Optional
filter	The filter should be formatted as '(operator operand operand)'. Possible operators are ==, !=, <, <=, >, >=, and, or, not. The left operand is a	Optional

	parameter name. The right operand is a parameter value. For boolean operators the operands are filters. Example: '(== Name eth0)'.	
flags	Client command data flags Options: <[+/-]flag[+/-flag...]{indexpath keystrpath uncommitted dynamicsynchronize sub_addobj sub_delobj sub_update firstnextxref_localidx xref_keypath exact_depth noparamvalue applyonparamsapplyrecursive typetreepath non_persistent}>	Optional
gettype	Get type elements (default=param)	Optional
modifier	Accessrights modifier Options: <{add|delete|allow_only|allow_except}>	Optional
no_output	Discard the output of the command (default=disabled)	Optional
onerrorrollback	on error rollback flag (default=enabled)	Optional
param	Parameter name	Optional
path	Fully qualified mbus path	Optional
processcmd	Process SET_VALUE command flag (default=enabled)	Optional
replytype	Type of accessrights reply Options: <{getallowed|getdisallowed|getasconfigured}>	Optional
timing	Print duration of command invocation (default=disabled)	Optional
usecallback	Use result callback function (default=enabled)	Optional
value	Parameter value to set	Optional

mbus client register

Register cli client to mbus

Syntax:

```
register [dlink = <{local_ipc|remote_inet}>]
        [dmtree = <{igd|atomic|system}>]
    [mbusd_addr = <quoted string>]
     [refresolv = <{disabled|enabled}>]
  [state_events = <{disabled|enabled}>]
          [type = <{indexpath|keystrpath}>]
```

Parameters:

dlink	Daemon link (default = local_ipc)	Optional
dmtree	Select mbusd datamodel tree.	Optional
mbusd_addr	Daemon address (ip addr for inet)	Optional
refresolv	Use reference resolving (default=disabled)	Optional
state_events	Context should be notified when the MBus state changes (default=disabled)	Optional
type	Path type (default = indexpath)	Optional

mbus client termsession

Terminate a session

Syntax:

```
termsession id = <number>
```

Parameters:

id	id of session to terminate	Required

mbus client unregister

Unregister cli client from mbus

Syntax:

```
unregister
```

mbus debug

Following commands are available :

stats	:	Display mbus statistics.
clearstats	:	Reset mbus statistics.
traceconfig	:	Modify mbus trace settings.
loadobjects	:	Load/sync object instances from plugins
unloadobjects	:	Unload object instances
commconfig	:	Modify communication settings.

mbus debug clearstats

Reset mbus statistics.

Syntax:

```
clearstats
```

mbus debug commconfig

Modify communication settings.

Syntax:

```
commconfig [pong-to = <number>]
```

Parameters:

pong-to	MBus message communication pong time-out.	Optional

mbus debug loadobjects

Load/sync object instances from plugins

Syntax:

```
loadobjects [dmtree = <{igd|atomic|system}>]
         [eventing = <{(missing)}>]
            [flush = <{disabled|enabled}>]
      [notifyplugin = <{(missing)}>]
             [path = <quoted string>]
             [type = <{indexpath|keystrpath}>]
```

Parameters:

dmtree	Select mbusd datamodel tree.	Optional
eventing		Hidden
flush	Flush objects before load (default=disabled)	Optional
notifyplugin		Hidden
path	Fully qualified mbus path	Optional
type	Path type (default = indexpath	Optional

mbus debug stats

Display mbus statistics.

Syntax:

```
stats
```

mbus debug traceconfig

Modify mbus trace settings.

Syntax:

```
traceconfig [level = <number{0-4}>]
```

Parameters:

level	Select mbus trace level (0-4).	Optional

mbus debug unloadobjects

Unload object instances

Syntax:

```
unloadobjects [dmtree = <{igd|atomic|system}>]
           [eventing = <{(missing)}>]
              [flush = <{disabled|enabled}>]
       [notifyplugin = <{(missing)}>]
               [path = <quoted string>]
               [type = <{indexpath|keystrpath}>]
```

Parameters:

dmtree	Select mbusd datamodel tree.	Optional
eventing		Hidden
flush	Flush objects before load (default=disabled)	Optional
notifyplugin		Hidden
path	Fully qualified mbus path	Optional
type	Path type	Optional

mbus listcontexts

Display the context instances

Syntax:

```
listcontexts [dmtree = <{igd|atomic|system}>]
             [expand = <{disabled|enabled}>]
```

Parameters:

dmtree	Select mbusd datamodel tree.	Optional
expand	Details enabled/disabled	Optional

mbus listenums

Display the registered enumtypes

Syntax:

```
listenums [dmtree = <{igd|atomic|system}>]
          [expand = <{disabled|enabled}>]
            [name = <quoted string>]
```

Parameters:

dmtree	Select mbusd datamodel tree.	Optional
expand	Details enabled/disabled	Optional
name	Filter enumtypes by (part of) the name	Optional

mbus listobjects

Display the object instances

Syntax:

```
listobjects [dmtree = <{igd|atomic|system}>]
            [output = <{tree|list}>]
              [path = <quoted string>]
        [showflags = <{disabled|enabled}>]
              [type = <{indexpath|keystrpath}>]
```

Parameters:

dmtree	Select mbusd datamodel tree.	Optional
output	List output type	Optional
path	Fully qualified mbus path to list.	Optional
showflags	Display object flags (Clean or Dirty / Persistent or Volatile)	Optional
type	Path type (default = indexpath)	Optional

mbus listsubscriptions

Display the subscription instances

Syntax:

```
listsubscriptions [dmtree = <{igd|atomic|system}>]
```

Parameters:

dmtree	Select mbusd datamodel tree.	Optional

mbus listtypes

Display the registered objecttypes

Syntax:

```
listtypes [dmtree = <{igd|atomic|system}>]
          [expand = <{disabled|enabled}>]
             [path = <quoted string>]
```

Parameters:

dmtree	Select mbusd datamodel tree.	Optional
expand	Details enabled/disabled	Optional
path	Fully qualified mbus path to list.	Optional

mbus pluginevent

Simulate event from plugin

Syntax:

```
pluginevent ctxid = <number>
              path = <quoted string>
              type = <{addobj|delobj|updobj}>
           [flags = <{(see Parameters)}>]
            [name = <quoted string>]
       [orivalue = <quoted string>]
          [value = <quoted string>]
```

Parameters:

ctxid	Plugin context id	Required
path	Plugin event subpath	Required
type	Event type	Required
flags	Plug-in event flags Options: <[+/-]flag[+/-flag...]{dynamic save}>	Optional
name	Plugin event name	Optional
orivalue	Plugin event orivalue	Optional
value	Plugin event value	Optional

mbus unregister

Unregister a client/plugin context

Syntax:

```
unregister id = <number>
```

Parameters:

id	Select message-based client/plugin context id.	Required

mbus xmldump

Dump the registered datamodel to an XML file

Syntax:

```
xmldump filename = <string>
        [format = <{unix|mac|windows}>]
```

Parameters:

filename	Filename.	Required
format	Select output file format.	Optional

memm

Following commands are available :

```
stats              : Display memm statistics.
listobjects        : Display objects.
```

Following command groups are available :

```
debug
```

memm debug

Following commands are available :

stats	:	Display memm time statistics.
clearstats	:	Clear time statistics.
traceconfig	:	Modify memm trace settings.
tag	:	(Un)tag memory manager objects.

Following command groups are available :

lock

memm debug clearstats

Clear time statistics.

Syntax:

```
clearstats
```

memm debug clearstats

memm debug lock

Following commands are available :

```
stats              :   Display lock statistics.
traceconfig        :   Modify lock trace settings.
```

memm debug lock stats

Display lock statistics.

Syntax:

```
stats
```

memm debug lock traceconfig

Modify lock trace settings.

Syntax:

```
traceconfig [level = <number{0-4}>]
            [name = <quoted string>]
          [showtid = <{no|yes}>]
```

Parameters:

level	Select memm trace level (0-4).	Optional
name	application name filter for lock traces (empty displays all lock traces)	Optional
showtid	Display task IDs when hitting lock time-outs (disabled by default)	Optional

memm debug stats

Display memm time statistics.

Syntax:
```
stats [name = <quoted string>]
```

Parameters:

name	Select typename(s) to list (supports partial typename)	Optional

memm debug tag

(Un)tag memory manager objects.

Syntax:

```
tag [name = <quoted string>]
    [tag = <{enabled|disabled}>]
```

Parameters:

name	Select typename(s) to list (supports partial typename)	Optional
tag	Set (or unset) the tag	Optional

memm debug traceconfig

Modify memm trace settings.

Syntax:

```
traceconfig [level = <number{0-4}>]
```

Parameters:

level	Select memm trace level (0-4).	Optional

memm listobjects

Display objects.

Syntax:

```
listobjects [hidedeldynstr = <{no|yes}>]
                     [name = <quoted string>]
                 [tagged = <{no|yes}>]
```

Parameters:

hidedeldynstr	Hide (yes) / show (no) deleted dynstrings (default = show)	Optional
name	Select typename(s) to list (supports partial typename)	Optional
tagged	Show only tagged (yes) or untagged (no) objects	Optional

memm stats

Display memm statistics.

Syntax:

```
stats [name = <quoted string>]
```

Parameters:

name	Select typename(s) to list (supports partial typename)	Optional

mlp

Following commands are available :

import	:	Import all scores.
flush	:	Flush all mlp structures.

Following command groups are available :

debug	privilege	role	*interaction*
zone			

mlp debug

Following commands are available :

export	:	Export all scores.
stats	:	Display mlp statistics.
traceconfig	:	Modify mlp trace settings.

mlp debug export

Export all scores.

Syntax:

```
export
```

mlp debug stats

Display mlp statistics.

Syntax:

```
stats
```

mlp debug traceconfig

Modify mlp trace settings.

Syntax:

```
traceconfig [trace = <{disabled|enabled|full}>]
```

Parameters:

trace	Select mlp trace level.	Optional

mlp flush

Flush all mlp structures.

Syntax:

```
flush
```

mlp import

Import all scores.

Syntax:

```
import [allow_dl = <{no|yes}>]
       [trace = <{disabled|enabled|full}>]
```

Parameters:

allow_dl	Enable/disable support for /dl/ folder	Optional
trace	Select import trace level.	Optional

mlp interaction

Following commands are available :

list	:	Display the interactions.
config	:	Display/Modify the interaction score.
addzone	:	Add the zone to the interaction score.
removezone	:	Remove the zone from interaction score.

Note: mlp interaction is missing from the ':help mlp' group list

mlp interaction addzone

Add the zone to the interaction score.

Syntax:

```
addzone name = <quoted string>
        type = <{cli|cgi|file|mdap|ftp}>
        zone = <>
    [scorenr = <number{1-2}>]
```

Parameters:

name	Select the interaction name.	Required
type	Select the interaction type.	Required
zone	Zone to add.	Required
scorenr	Select score number to change.	Optional

mlp interaction config

Display/Modify the interaction score.

Syntax:

```
config name = <quoted string>
    [recurse = <{disabled|enabled}>]
      [score = <{(see Parameters)}>]
     [score2 = <{(see Parameters)}>]
        [type = <{cli|cgi|file|mdap|ftp|*}>]
    [verbose = <{minimal|medium|all}>]
```

Parameters:

name	Select the interaction name.	Required
recurse	Recursive config (cli only).	Optional
score	Set the score. Options: <{hex-word}[:{hex-word}] ex: 'a12:c30f'>	Optional
score2	Set the score2. Options: <{hex-word}[:{hex-word}] ex: 'a12:c30f'>	Optional
type	Select the interaction type.	Optional
verbose	Limit the output list.	Optional

mlp interaction list

Display the interactions.

Syntax:

```
list [name = <quoted string>]
     [type = <{cli|cgi|file|mdap|ftp}>]
  [verbose = <{minimal|medium|all}>]
```

Parameters:

name	Select a subgroup to list.	Optional
type	Select the interaction type.	Optional
verbose	Limit the output list.	Optional

mlp interaction removezone

Remove the zone from interaction score.

Syntax:

```
removezone name = <quoted string>
           type = <{cli|cgi|file|mdap|ftp}>
           zone = <>
       [scorenr = <number{1-2}>]
```

Parameters:

name	Select the interaction name.	Required
type	Select the interaction type.	Required
zone	Zone to add.	Required
scorenr	Select score number to change.	Optional

mlp privilege

Following commands are available :

add	:	Add a privilege.
delete	:	Delete a privilege.
addzone	:	Add a zone to a privilege.
removezone	:	Remove a zone from a privilege.
list	:	Display the privileges.
config	:	Modify the privilege.

mlp privilege add

Add a privilege.

Syntax:

```
add name = <string>
    type = <{access|service}>
  [descr = <quoted string>]
```

Parameters:

name	Privilege name.	Required
type	Privilege type.	Required
descr	Privilege description.	Optional

mlp privilege addzone

Add a zone to a privilege.

Syntax:

```
addzone name = <>
        zone = <{(see Parameters)}>
```

Parameters:

name	Privilege name.	Required
zone	Zone name. Options: <{Read/LAN/WAN/Local| Write/LAN/WAN/Local|r_lan|r_wan|r_fs_view| r_fs_retrieve|r_rtg|r_fwdg|r_nat|r_frwl| r_ipsec_norm|r_ipsec_adv|r_certificates| r_remote_mgnt|r_local|r_qos|w_lan|w_wan| w_fs_passive|w_rtg|w_fwdg|w_nat| w_frwl_norm|w_frwl_adv|w_frwl_ss|w_ipsec| w_certificates|w_remote_mgnt|w_local|w_qos| SND_lan|SND_wan|SND_local|AND_lan| AND_wan|AND_frwl|AND_local|User_Admin| MLP_Admin|secure_ipsec_term|secure_BR|CLI| CGI|FTP|MDAP|secure_reset|GUI_advanced| mbus|Websev|unsecure_connection|Sensitve_file| channel_ftp|channel_telnet|channel_http| channel_mdap|channel_serial|origin_lan| origin_wan|origin_local|trace}>	Required

mlp privilege config

Modify the privilege.

Syntax:

```
config name = <>
      [descr = <quoted string>]
      [score = <{(see Parameters)}>]
```

Parameters:

name	Select the privilege by name.	Required
descr	Set the description.	Optional
score	Set the score. Options: <{hex-word}[:{hex-word}] ex: 'a12:c30f'>	Optional

mlp privilege delete

Delete a privilege.

Syntax:

```
delete name = <>
```

Parameters:

name	Privilege name.	Required

mlp privilege list

Display the privileges.

Syntax:

```
list [name = <{(see Parameters)}>]
     [type = <{access|service}>]
   [verbose = <{minimal|medium|all}>]
```

Parameters:

name	Privilege name. Options: <{anyaccess|anyservice|AP1|AP2|AP3|AP4|AP5|AP6|AP7|AP8|AP9|SP1|SP10|SP11|SP12|SP13|SP14|SP15|SP16|SP17|SP18|SP19|SP2|SP21|SP22|SP23|SP24|SP25|SP3|SP4|SP5|SP6|SP7|SP8|SP9}>	Optional
type	Privilege type.	Optional
verbose	Limit the output list.	Optional

mlp privilege removezone

Remove a zone from a privilege.

Syntax:

```
removezone name = <>
          zone = <{(see Parameters)}>
```

Parameters:

name	Privilege name.	Required
zone	Zone name. Options: <{Read/LAN/WAN/Local| Write/LAN/WAN/Local|r_lan|r_wan|r_fs_view| r_fs_retrieve|r_rtg|r_fwdg|r_nat|r_frwl| r_ipsec_norm|r_ipsec_adv|r_certificates| r_remote_mgnt|r_local|r_qos|w_lan|w_wan| w_fs_passive|w_rtg|w_fwdg|w_nat| w_frwl_norm|w_frwl_adv|w_frwl_ss|w_ipsec| w_certificates|w_remote_mgnt|w_local|w_qos| SND_lan|SND_wan|SND_local|AND_lan| AND_wan|AND_frwl|AND_local|User_Admin| MLP_Admin|secure_ipsec_term|secure_BR|CLI| CGI|FTP|MDAP|secure_reset|GUI_advanced| mbus|Websev|unsecure_connection|Sensitve_file| channel_ftp|channel_telnet|channel_http| channel_mdap|channel_serial|origin_lan| origin_wan|origin_local|trace}>	Required

mlp role

Following commands are available :

add	:	Add a role.
delete	:	Delete a role.
addpriv	:	Add a privilege.
removepriv	:	Remove a privilege.
list	:	Display the roles.
config	:	Modify the role.

mlp role add

Add a role.

Syntax:

```
add name = <string>
  parent = <>
  [descr = <quoted string>]
```

Parameters:

name	Role name.	Required
parent	Parent role name.	Required
descr	Role description.	Optional

mlp role addpriv

Add a privilege.

Syntax:

```
addpriv access = <>
          name = <>
       service = <{(see Parameters)}>
```

Parameters:

access	Access privilege to add.	Required
name	Role name.	Required
service	Privilege name to add. Options: <{anyservice|SP1|SP10|SP11|SP12|SP13|SP14|SP15|SP16|SP17|SP18|SP19|SP2|SP21|SP22|SP23|SP24|SP25|SP3|SP4|SP5|SP6|SP7|SP8|SP9}>	Required

mlp role config

Modify the role.

Syntax:

```
config name = <>
     [descr = <quoted string>]
     [parent = <>]
```

Parameters:

name	Role name.	Required
descr	Role description.	Optional
parent	Parent role name.	Optional

mlp role delete

Delete a role.

Syntax:

```
delete name = <>
```

Parameters:

name	Role name.	Required

mlp role list

Display the roles.

Syntax:

```
list [name = <>]
   [verbose = <{minimal|medium|all}>]
```

Parameters:

name	Role name.	Optional
verbose	Limit the output list.	Optional

mlp role removepriv

Remove a privilege.

Syntax:

```
removepriv access = <>
            name = <>
         [service = <>]
```

Parameters:

access	Access privilege to delete.	Required
name	Role name.	Required
service	Privilege name to delete.	Optional

mlp zone

Following commands are available :

add	:	Add a zone.
delete	:	Delete a zone.
list	:	Display zones.
config	:	Modify a zone.
configintfgroup	:	Modify interfacegroup zone numbers.
configchannels	:	Modify channel zone numbers.
configorigin	:	Modify origin zone numbers.
configsecconn	:	Modify secure connection zone number.
configsecfile	:	Modify secure files zone number.
configtrace	:	Modify trace zone number.

Note: mlp zone is missing from the ':help mlp' group list

mlp zone add

Add a zone.

Syntax:

```
add name = <string>
  zonenr = <number>
  [descr = <quoted string>]
```

Parameters:

name	Zone name	Required
zonenr	Zone number	Required
descr	Zone description	Optional

mlp zone config

Modify a zone.

Syntax:

```
config zonenr = <number>
       [descr = <quoted string>]
        [name = <string>]
```

Parameters:

zonenr	Zone number	Required
descr	Zone description	Optional
name	Zone name	Optional

mlp zone configchannels

Modify channel zone numbers.

Syntax:

```
configchannels [ftp = <number>]
               [http = <number>]
               [mdap = <number>]
            [serial = <number>]
            [telnet = <number>]
```

Parameters:

ftp	Ftp application zone number	Optional
http	Http application zone number	Optional
mdap	Mdap application zone number	Optional
serial	Serial application zone number	Optional
telnet	Telnet application zone number	Optional

mlp zone configintfgroup

Modify interfacegroup zone numbers.

Syntax:

```
configintfgroup [lan = <number>]
               [local = <number>]
                  [rw = <{read|write}>]
             [target = <number>]
                [wan = <number>]
```

Parameters:

lan	Lan zone number	Optional
local	Local zone number	Optional
rw	Read/write config action	Optional
target	Target dynamic zone number	Optional
wan	Wan zone number	Optional

mlp zone configorigin

Modify origin zone numbers.

Syntax:

```
configorigin [lan = <number>]
             [local = <number>]
               [wan = <number>]
```

Parameters:

lan	Lan origin zone number	Optional
local	Local origin zone number	Optional
wan	Wan origin zone number	Optional

mlp zone configsecconn

Modify secure connection zone number.

Syntax:

```
configsecconn [zonenr = <number>]
```

Parameters:

zonenr	Secure connection zone number	Optional

mlp zone configsecfile

Modify secure files zone number.

Syntax:

```
configsecfile [zonenr = <number>]
```

Parameters:

zonenr	Secure files zone number	Optional

mlp zone configtrace

Modify trace zone number.

Syntax:

```
configtrace [zonenr = <number>]
```

Parameters:

zonenr	Trace zone number	Optional

mlp zone delete

Delete a zone.

Syntax:

```
delete name = <{(see Parameters)}>
```

Parameters:

name	Zone name	Required
	Options: <{Read/LAN/WAN/Local|	
	Write/LAN/WAN/Local|r_lan|r_wan|r_fs_view|	
	r_fs_retrieve|r_rtg|r_fwdg|r_nat|r_frwl|	
	r_ipsec_norm|r_ipsec_adv|r_certificates|	
	r_remote_mgnt|r_local|r_qos|w_lan|w_wan|	
	w_fs_passive|w_rtg|w_fwdg|w_nat|	
	w_frwl_norm|w_frwl_adv|w_frwl_ss|w_ipsec|	
	w_certificates|w_remote_mgnt|w_local|w_qos|	
	SND_lan|SND_wan|SND_local|AND_lan|	
	AND_wan|AND_frwl|AND_local|User_Admin|	
	MLP_Admin|secure_ipsec_term|secure_BR|CLI|	
	CGI|FTP|MDAP|secure_reset|GUI_advanced|	
	mbus|Websev|unsecure_connection|Sensitve_file|	
	channel_ftp|channel_telnet|channel_http|	
	channel_mdap|channel_serial|origin_lan|	
	origin_wan|origin_local|trace}>		

mlp zone list

Display zones.

Syntax:

```
list
```

mobile

Following commands are available :

`ifadd`	:	Create a new Mobile interface.
`ifdelete`	:	Delete an Mobile interface.
`ifconfig`	:	Configure an Mobile interface.
`ifattach`	:	Attach an Mobile interface.
`ifdetach`	:	Detach an Mobile interface.
`iflist`	:	Display the Mobile interfaces.
`simcard`	:	Get a state of the SIM card.

Following command groups are available :

`debug`   `device`

mobile debug

Following commands are available :

`operator`	:	Shows the currently selected operator.
`showsq`	:	Shows signal quality (RSSI & BER).
`sendat`	:	Send AT command to the modem card.
`traceconfig`	:	Modify trace configuration

mobile debug operator

Shows the currently selected operator.

Syntax:

```
operator [list = <{current|all}>]
```

Parameters:

list	List only the current or all	Optional

mobile debug sendat

Send AT command to the modem card.

Syntax:

```
sendat command = <quoted string>
```

Parameters:

command	AT command	Required

mobile debug showsq

Shows signal quality (RSSI & BER).

Syntax:

```
showsq
```

mobile debug traceconfig

Modify trace configuration

Syntax:

```
traceconfig [state = <{disabled|enabled}>]
```

Parameters:

state	Enable/disable tracing.	Optional

mobile device

Following commands are available :

list	:	List mobile devices
add	:	Add a mobile device(command is hidden)
delete	:	Delete a mobile device(command is hidden)

mobile device add

Add a mobile device(command is hidden)

Syntax:

```
add  atinterface = <number>
   datainterface = <number>
        modempid = <string>
        modemvid = <string>
            name = <quoted string>
     [forceusb11 = <{yes|no}>]
[modeswitchparam = <quoted string>]
     [storagepid = <string>]
     [storagevid = <string>]
```

Parameters:

atinterface	AT Port USB Interface	Required
datainterface	AT Port USB Interface	Required
modempid	Modem PID (hex)	Required
modemvid	Modem VID (hex)	Required
name	Name	Required
forceusb11	Force USB 1.1	Optional
modeswitch param	Modeswitch parameters	Optional
storagepid	Storage PID (hex)	Optional
storagevid	Storage VID (hex)	Optional

mobile device delete

Delete a mobile device(command is hidden)

Syntax:
```
delete name = <quoted string>
```

Parameters:

name	Name	Required

mobile device list

List mobile devices

Syntax:

```
list
```

mobile ifadd

Create a new Mobile interface.

Syntax:

```
ifadd intf = <string>
```

Parameters:

intf	The name of the new mobile interface	Required

mobile ifattach

Attach an Mobile interface.

Syntax:

```
ifattach intf = <>
```

Parameters:

intf	The name of the Mobile interface.	Required

mobile ifconfig

Configure an Mobile interface.

Syntax:
```
ifconfig intf = <>
         [apn = <string>]
 [initcommand = <string>]
        [mode = <{automatic|manual}>]
    [operator = <number{0-99999}>]
         [pin = <password>]
         [puk = <string>]
  [technology = <{2G|3G}>]
```

Parameters:

intf	The name of the Mobile interface to configure.	Required
apn	Access Point Name.	Optional
initcommand	AT command executed after SIM verification.	Optional
mode	Operator selection (automatic, manual).	Optional
operator	Location area indentifier + network code.	Optional
pin	PIN code.	Optional
puk	PUK code.	Optional
technology	Radio access technology (2G, 3G).	Optional

mobile ifdelete

Delete an Mobile interface.

Syntax:

```
ifdelete intf = <>
```

Parameters:

intf	The name of the Mobile interface.	Required

mobile ifdetach

Detach an Mobile interface.

Syntax:

```
ifdetach intf = <>
```

Parameters:

intf	The name of the Mobile interface.	Required

mobile iflist

Display the Mobile interfaces.

Syntax:

```
iflist [intf = <>]
```

Parameters:

intf	The name of the Mobile interface.	Optional

mobile simcard

Get a state of the SIM card.

Syntax:

```
simcard
```

nat

Following commands are available :

ifconfig	:	Modify address translation on an IP interface.
iflist	:	Display all interfaces.
mapadd	:	Add an address mapping to a nat enabled interface.
mapdelete	:	Delete an address mapping from a nat enabled interface.
maplist	:	Display address mappings.
tmpladd	:	Add an address mapping template.
tmpldelete	:	Delete an address mapping template.
tmpllist	:	Display address mapping templates.
tmplinst	:	Instantiate address mapping templates for a given dynamic address.
config	:	Modify global NAT configuration.
flush	:	Flush current NAT configuration.

nat config

Modify global NAT configuration.

Syntax:

```
config [randomports = <{disabled|enabled}>]
        [trace = <{disabled|enabled}>]
```

Parameters:

randomports	Enable/disable randomization of port translations.	Optional
trace	Enable/disable traces.	Optional

nat flush

Flush current NAT configuration.

Syntax:

```
flush
```

nat ifconfig

Modify address translation on an IP interface.

Syntax:

```
ifconfig intf = <{(see Parameters)}>
   translation = <{disabled|enabled|transparent}>
```

Parameters:

intf	The IP interface name. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Required
translation	Disabled, enabled or tranparent address translation.	Required

nat iflist

Display all interfaces.

Syntax:

```
iflist
```

nat mapadd

Add an address mapping to a nat enabled interface.

Syntax:

```
mapadd   intf = <{(see Parameters)}>
 [access_list = <ip-range>]
[foreign_addr = <ip-range>]
     [inbound = <{(missing)}>]
 [inside_addr = <ip-range>]
 [inside_port = <port-range>]
        [mode = <{auto|inbound|outbound}>]
[outside_addr = <ip-range>]
[outside_port = <port-range>]
    [protocol = <{(see Parameters)}>]
      [status = <{up|down}>]
        [type = <{napt|nat}>]
      [weight = <number{0-255}>]
```

Parameters:

intf	The IP interface name. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Required
access_list	The range of inside addresses the mapping is restricted to.	Optional
foreign_addr	The range of destination addresses the mapping is restricted to.	Optional
inbound		Hidden
inside_addr	The inside (typically private) IP address (range for NAT).	Optional
inside_port	The inside port number or range (only for NAPT).	Optional
mode	The mode to create the portmap.	Optional
outside_addr	The outside (typically public) IP address (range for NAT).	Optional
outside_port	The outside port number or range (only for NAPT).	Optional
protocol	The IP protocol. Options: <{ah|egp|esp|ggp|gre|hmp|icmp|igmp| pup|rdp|rsvp|tcp|udp|vines|xns-idp|6to4|ipip} or number>	Optional
status	The administrative state of mapping.	Optional
type	The type of mapping.	Optional

weight	The weight for the portmap.	Optional

nat mapdelete

Delete an address mapping from a nat enabled interface.

Syntax:

```
mapdelete index = <number>
          intf = <{(see Parameters)}>
```

Parameters:

index	The map index as listed by ':nat maplist'.	Required
intf	The IP interface name. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Required

nat maplist

Display address mappings.

Syntax:

```
maplist [expand = <{disabled|enabled}>]
          [intf = <{(see Parameters)}>]
        [sort_s = <{(missing)}>]
```

Parameters:

expand	Expanded listing.	Optional
intf	The IP interface name. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Optional
sort_s		Hidden

nat tmpladd

Add an address mapping template.

Syntax:

```
tmpladd outside_addr = <ip-range>
        [access_list = <ip-range>]
      [foreign_addr = <ip-range>]
             [group = <{(see Parameters)}>]
           [inbound = <{(missing)}>]
        [inside_addr = <ip-range>]
        [inside_port = <port-range>]
              [intf = <{(see Parameters)}>]
              [mode = <{auto|inbound|outbound}>]
      [outside_port = <port-range>]
          [protocol = <{(see Parameters)}>]
            [status = <{up|down}>]
           [timeout = <number{0-65535}>]
              [type = <{napt|nat}>]
            [weight = <number{0-255}>]
```

Parameters:

outside_addr	The outside (typically public) IP address or index (range for NAT).	Required
access_list	The range of inside addresses the template is restricted to.	Optional
foreign_addr	The range of destination addresses the template is restricted to.	Optional
group	The IP interface group scope for this template. Options: <{wan|local|lan|tunnel|dmz|guest} or number>	Optional
inbound		Hidden
inside_addr	The inside (typically private) IP address or index (range for NAT).	Optional
inside_port	The inside port number or range (only for NAPT).	Optional
intf	The IP interface name scope for this template. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Optional
mode	The mode to create the portmap.	Optional
outside_port	The outside port number or range (only for NAPT).	Optional
protocol	The IP protocol. Options: <{ah|egp|esp|ggp|gre|hmp|icmp|igmp|	Optional

	pup|rdp|rsvp|tcp|udp|vines|xns-idp|6to4|ipip} or number>	
status	The administrative state of template.	Optional
timeout	Lifetime (seconds) for this template.	Optional
type	The type of template.	Optional
weight	The weight to be used for the template instance(s).	Optional

nat tmpldelete

Delete an address mapping template.

Syntax:

```
tmpldelete index = <number>
```

Parameters:

index	The template index as listed by ':nat tmpllist'.	Required

nat tmplinst

Instantiate address mapping templates for a given dynamic address.

Syntax:

```
tmplinst addr_index = <ip-address>
        dynamic_addr = <ip-address>
                intf = <{(see Parameters)}>
```

Parameters:

addr_index	The outside IP address index/key to instantiate for.	Required
dynamic_addr	The dynamic address to substitute the index/key with.	Required
intf	The IP interface name. Options: <{loop|O2_ADSL|LocalNetwork|O2_ADSL2plus|O2_Static|Hotspot}>	Required

nat tmpllist

Display address mapping templates.

Syntax:

```
tmpllist [expand = <{disabled|enabled}>]
```

Parameters:

expand	Expanded listing.	Optional

ppp

Following commands are available :

ifadd	:	Create a new PPP interface.
ifdelete	:	Delete a PPP interface.
ifattach	:	Attach a PPP interface.
ifscan	:	Scan a PPP interface for available interfaces.
ifdetach	:	Detach a PPP interface.
ifconfig	:	Modify a PPP interface.
iflist	:	Display the PPP interfaces.
rtadd	:	Add a route to the routing table when PPP link comes up.
rtdelete	:	Delete the route for a PPP link.
flush	:	Flush all PPP interfaces.
simlock	:	Show allowed list(command is hidden)

Following command groups are available :

relay

ppp flush

Flush all PPP interfaces.

Syntax:

```
flush
```

ppp ifadd

Create a new PPP interface.

Syntax:
```
ifadd intf = <string>
```

Parameters:

intf	The name for the new PPP interface. If not specified, the destination will double as interface name.	Required

ppp ifattach

Attach a PPP interface.

Syntax:

```
ifattach intf = <{}>
```

Parameters:

intf	The name of the PPP interface.	Required

ppp ifconfig

Modify a PPP interface.

Syntax:

```
ifconfig  intf = <{}>
        [accomp = <{enabled|disabled|negotiate}>]
        [acname = <quoted string>]
          [auth = <{pap|chap|auto}>]
         [class = <{(see Parameters)}>]
  [concentrator = <{disabled|enabled}>]
    [demanddial = <{disabled|enabled}>]
          [dest = <{(see Parameters)}>]
     [dnsmetric = <number{0-100}>]
      [doddelay = <number{0-3600}>]
          [echo = <number>]
 [echotolerance = <number{1-100}>]
        [format = <{cidr|dotted|none}>]
      [idletime = <number{0-1000000}>]
   [idletrigger = <{RxTx|Rx|Tx}>]
         [laddr = <ip-address>]
           [mru = <number{256-1500}>]
       [netmask = <ip-mask(dotted or cidr)>]
       [passive = <{disabled|enabled}>]
      [password = <password>]
         [pcomp = <{(missing)}>]
          [pool = <{none}>]
       [poolend = <{(missing)}>]
     [poolstart = <{(missing)}>]
       [primdns = <ip-address>]
         [raddr = <ip-address>]
       [restart = <{disabled|enabled}>]
 [retryinterval = <number{0-65535}>]
       [savepwd = <{disabled|enabled}>]
        [secdns = <ip-address>]
   [servicename = <quoted string>]
        [silent = <{disabled|enabled}>]
        [status = <{(missing)}>]
 [subnetfirstip = <{disabled|enabled}>]
         [trace = <{disabled|enabled}>]
    [unnumbered = <{disabled|enabled}>]
          [user = <string>]
```

Parameters:

intf	The name of the PPP interface to configure.	Required
accomp	Try to negotiate PPP address & control field	Optional

	compression (LCP ACCOMP).	
acname	The access concentrator name for a PPP session.	Optional
auth	Authentication protocol to be used.	Optional
class	The prio class of the PPP packets. Options: <{0|1|2|3|4|5|6|7|8|9|10|11|12|13|14|15}>	Optional
concentrator	The access concentrator is on this side of the PPP connection.	Optional
demanddial	Enable dial-on-demand feature. Nothing happens until packets are sent to this PPP interface.	Optional
dest	The destination interface for this PPP interface. Options: <{bridge|RELAY|eth_dyn|eth_static|eth_WLAN2}>	Optional
dnsmetric	DNS route metric to be used for the negotiated DNS servers.	Optional
doddelay	During this initial interval (seconds) packets do not trigger PPP interface.	Optional
echo	LCP echo request interval.	Optional
echotolerance	Number of failed LCP echo requests needed to trigger a link failure.	Optional
format	The format used to represent the IP subnet.	Optional
idletime	Maximum time the link may be idle (seconds).	Optional
idletrigger	Consider the link being idle if no traffic is sent and/or received during the idle time.	Optional
laddr	Negotiate this IP address at our side of the link.	Optional
mru	Negotiate maximum packet size we can handle.	Optional
netmask	Negotiate IP subnet mask at remote side of the link.	Optional
passive	When LCP times out, put link in a listening state.	Optional
password	The password for remote PAP/CHAP authentication.	Optional
pcomp		Hidden
pool	Acquire IP subnet and assign it to a free DHCP pool.	Optional
poolend		Hidden
poolstart		Hidden
primdns	Negotiate this IP address as primary DNS server.	Optional
raddr	Negotiate this IP address at remote side of the link.	Optional
restart	Automatically restart when LCP link goes down.	Optional
retryinterval	The number of seconds between retries.	Optional
savepwd	Select whether or not password is saved.	Optional

ppp Commands

secdns	Negotiate this IP address as secondary DNS server.	Optional
servicename	The service name for a PPP session.	Optional
silent	Do not send anything at startup, just listen for incoming LCP messages.	Optional
status		Hidden
subnetfirstip	Take the first ip address out of the received IP as local address.	Optional
trace	Enable verbose console logging.	Optional
unnumbered	Take local IP address from 'laddr' field and remote IP address from the pool. SVC only.	Optional
user	The username for remote PAP/CHAP authentication.	Optional

ppp ifdelete

Delete a PPP interface.

Syntax:

```
ifdelete intf = <{O2_ADSL}>
```

Parameters:

intf	The name of the PPP interface.	Required

ppp ifdetach

Detach a PPP interface.

Syntax:

```
ifdetach intf = <{O2_ADSL}>
```

Parameters:

intf	The name of the PPP interface.	Required

ppp iflist

Display the PPP interfaces.

Syntax:

```
iflist [intf = <{O2_ADSL}>]
```

Parameters:

intf	The name of a PPP interface.	Optional

ppp ifscan

Scan a PPP interface for available interfaces.

Syntax:

```
ifscan intf = <{}>
      [time = <number{0-36000}>]
```

Parameters:

intf	The name of the PPP interface to scan.	Required
time	The time to scan for services (in seconds).	Optional

ppp relay

Following commands are available :

`ifadd`	:	Add an ethernet interface to the PPP relay list.
`ifdelete`	:	Delete an ethernet interface from the PPP relay agent list.
`ifconfig`	:	Modify an ethernet interface from the PPP relay agent list.
`iflist`	:	Display all ethernet interfaces added to the PPP relay agent list.
`sesslist`	:	Display all active PPP relay sessions.
`flush`	:	Remove all ethernet interfaces from the PPP relay agent list and terminate all sessions.

ppp relay flush

Remove all ethernet interfaces from the PPP relay agent list and terminate all sessions.

Syntax:

```
flush
```

ppp relay ifadd

Add an ethernet interface to the PPP relay list.

Syntax:
```
ifadd intf = <{bridge|eth_dyn|eth_static|eth_WLAN2}>
```

Parameters:

intf	The ethernet intf to be added to the PPP relay agent list.	Required

ppp relay ifconfig

Modify an ethernet interface from the PPP relay agent list.

Syntax:

```
ifconfig hwaddr = <hardware-address>
          intf = <{}>
```

Parameters:

hwaddr	The hardware address (e.g. Ethernet MAC address) of this interface.	Required
intf	The ethernet intf to be added to the PPP relay agent list.	Required

ppp relay ifdelete

Delete an ethernet interface from the PPP relay agent list.

Syntax:

```
ifdelete intf = <{}>
```

Parameters:

intf	The ethernet intf to be added to the PPP relay agent list.	Required

ppp relay iflist

Display all ethernet interfaces added to the PPP relay agent list.

Syntax:

```
iflist
```

ppp relay sesslist

Display all active PPP relay sessions.

Syntax:

```
sesslist
```

ppp rtadd

Add a route to the routing table when PPP link comes up.

Syntax:

```
rtadd dst = <ip-address>
      intf = <{O2_ADSL}>
   [dstmsk = <ip-mask(dotted or cidr)>]
    [label = <{(see Parameters)}>]
   [metric = <number{0-100}>]
      [src = <ip-address>]
   [srcmsk = <ip-mask(dotted or cidr)>]
```

Parameters:

dst	The IP destination address specification for the route to be added when the link comes up.	Required
intf	The name of a PPP interface.	Required
dstmsk	The IP destination mask. Special values : 1 = remote net; 32 = remote host;	Optional
label	The name of the label. Options: <{None|Blank|DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|default}>	Optional
metric	The route metric.	Optional
src	The IP source address specification. i.e. who can use this link.	Optional
srcmsk	The IP source mask.	Optional

ppp rtdelete

Delete the route for a PPP link.

Syntax:

```
rtdelete intf = <{O2_ADSL}>
```

Parameters:

intf	The PPP interface name for which to delete the route settings.	Required

ppp simlock

Show allowed list(command is hidden)

Syntax:

```
simlock
```

pptp

Following commands are available :

list	:	Shows PPTP configuration.
profadd	:	Defines a new PPTP profile.
profdelete	:	Deletes a PPTP profile.
proflist	:	Lists PPTP profiles.
flush	:	Flushes the PPTP configuration.
ifadd	:	Adds a PPTP profile (backwards compatible with previous release, use profiles instead).

pptp flush

Flushes the PPTP configuration.

Syntax:

```
flush
```

pptp ifadd

Adds a PPTP profile (backwards compatible with previous release, use profiles instead).

Syntax:

```
ifadd dest = <string>
        [ac = <{never|always|keep}>]
    [encaps = <{vcmux|nlpid}>]
      [rate = <number{10-10000}>]
```

Parameters:

dest	The WAN destination for this PPTP tunnel. Typically a phonebook name.	Required
ac	Enable/disable sending address and control field (0xFF03) on the WAN link.	Optional
encaps	The WAN protocol encapsulation.	Optional
rate	Transmit speed in kbits/s for the WAN link.	Optional

pptp list

Shows PPTP configuration.

Syntax:

```
list
```

pptp profadd

Defines a new PPTP profile.

Syntax:

```
profadd name = <string>
        [ac = <{never|always|keep}>]
    [encaps = <{vcmux|nlpid}>]
        [qos = <{default}>]
```

Parameters:

name	The name for the new PPTP profile.	Required
ac	Enable/disable sending address and control field (0xFF03) on the WAN link.	Optional
encaps	The WAN protocol encapsulation to be used with this profile.	Optional
qos	The name of the qosbook entry, containing the settings for this profile.	Optional

pptp profdelete

Deletes a PPTP profile.

Syntax:

```
profdelete name = <>
```

Parameters:

name	The name of the profile to delete.	Required

pptp proflist

Lists PPTP profiles.

Syntax:

```
proflist
```

printersharing

Following command groups are available :

LPD

printersharing LPD

Following commands are available :

config   :   To enable/disable LPD service.
list   :   To display LPD service context.

Following command groups are available :

queue

printersharing LPD config

To enable/disable LPD service.

Syntax:

```
config [state = <{disabled|enabled}>]
```

Parameters:

state	Enabled/disabled LPD printer service.	Optional

printersharing LPD list

To display LPD service context.

Syntax:

```
list
```

printersharing LPD queue

Following commands are available :

add   : Add an option.
delete   : Delete an option.
list   : List all options.

printersharing LPD queue add

Add an option.

Syntax:

```
add name = <string>
[default = <{no|yes}>]
    [type = <{Feed|Raw}>]
```

Parameters:

name	LPD queue name.	Required
default	Set default queue	Optional
type	Queue Type	Optional

printersharing LPD queue delete

Delete an option.

Syntax:
```
delete name = <string>
```

Parameters:

name	LPD queue name.	Required

printersharing LPD queue list

List all options.

Syntax:

```
list
```

ptrace

Following commands are available :

add	:	Add a filter/action pair (=rule)
delete	:	Delete a rule
flush	:	Flush all settings
list	:	List all rules
modify	:	Modify a rule

Following command groups are available :

action   debug   filter

ptrace action

Following commands are available :

add	:	Add an action
delete	:	Delete an action
list	:	List all actions
modify	:	Modify an action

ptrace action add

Add an action

Syntax:
```
add name = <string>
```

Parameters:

name	Action name	Required

ptrace action delete

Delete an action

Syntax:

```
delete name = <>
```

Parameters:

name	Action name	Required

ptrace action list

List all actions

Syntax:

```
list
```

ptrace action modify

Modify an action

Syntax:

```
modify intf = <{}>
        len = <number>
       name = <>
       type = <{dump|mirror|}>
```

Parameters:

intf	Device on which to mirror frames	Required
len	Nbr of bytes to dump	Required
name	Action name	Required
type	Action type	Required

ptrace add

Add a filter/action pair (=rule)

Syntax:

```
add action = <>
    filter = <>
      name = <string>
```

Parameters:

action	Action	Required
filter	Filter	Required
name	Rule name	Required

ptrace debug

Following commands are available :

traceconfig   :   Modify trace configuration

ptrace debug traceconfig

Modify trace configuration

Syntax:

```
traceconfig [state = <{disabled|enabled}>]
```

Parameters:

state	Enable/Disable tracing.	Optional

ptrace delete

Delete a rule

Syntax:

```
delete name = <>
```

Parameters:

name	Rule name	Required

ptrace filter

Following commands are available :

add	:	Add a filter
delete	:	Delete a filter
list	:	List all filters
modify	:	Modify a filter

ptrace filter add

Add a filter

Syntax:

```
add name = <string>
```

Parameters:

name	Filter name	Required

ptrace filter delete

Delete a filter

Syntax:

```
delete name = <>
```

Parameters:

name	Filter name	Required

ptrace filter delete

ptrace filter list

List all filters

> *Syntax:*
> ```
> list
> ```

ptrace filter modify

Modify a filter

Syntax:

```
modify intf = <{(see Parameters)}>
       name = <>
```

Parameters:

intf	Interface on which to trace frames Options: <{bridge|OBC|ethport1|RELAY|ethport2|ethport3|ethport4|WLAN|virt|eth_dyn|eth_static|eth_WLAN2}>	Required
name	Filter name	Required

ptrace flush

Flush all settings

Syntax:

```
flush
```

ptrace list

List all rules

Syntax:

```
list
```

ptrace modify

Modify a rule

Syntax:

```
modify name = <>
      [state = <{disabled|enabled}>]
```

Parameters:

name	Rule name	Required
state	Rule enable/disable	Optional

pwr

Following commands are available :

config   : Modify/Display ECO-manager configuration
wlan-pwr-options   : Modify/Display the WLAN power control options

Following command groups are available :

debug

pwr config

Modify/Display ECO-manager configuration

Syntax:

```
config [cpu-lowspeed = <{disabled|enabled}>]
      [cpu-microsleep = <{disabled|enabled}>]
         [eco-manager = <{disabled|enabled}>]
      [usb-controller = <{disabled|enabled}>]
    [wlan-pwrcontrol = <{disabled|enabled}>]
```

Parameters:

cpu-lowspeed	(Allows the CPU to adjust its internal clock).	Optional
cpu-microsleep	(Allows the CPU to use low power instructions).	Optional
eco-manager	(Enables / Disables the ECO-manager).	Optional
usb-controller	(Enables / Disables the USB-Controller)	Optional
wlan-pwrcontrol	(Enables / Disables Wireless LAN (WLAN) power control).	Optional

pwr debug

Following commands are available :

traceconfig   :   Enable/disable the ECO manager traces

pwr debug traceconfig

Enable/disable the ECO manager traces

Syntax:
```
traceconfig [state = <{disabled|enabled}>]
```

Parameters:

state	enable/disable the ECO manager traces	Optional

pwr wlan-pwr-options

Modify/Display the WLAN power control options

Syntax:

```
wlan-pwr-options [t-ext = <number{2-600}>]
                 [t-off = <number{4-600}>]
                  [t-on = <number{4-600}>]
```

Parameters:

t-ext	Wireless subsystem On-time Extension (s)	Optional
t-off	Wireless subsystem Off-time(s)	Optional
t-on	Wireless subsystem On-time (s)	Optional

script

Following commands are available :

add	:	Add line to script.
delete	:	Delete complete script or line from script.
list	:	List script.
flush	:	Flush scripts.
run	:	Run script.
trace	:	Trace toggle.(command is hidden)

script add

Add line to script.

Syntax:

```
add command = <quoted string>
      name = <string>
     [index = <number>]
```

Parameters:

command	Command.	Required
name	Name of script.	Required
index	Line number (0 = add).	Optional

script delete

Delete complete script or line from script.

Syntax:

```
delete name = <{}>
      [index = <number>]
```

Parameters:

name	Name of script.	Required
index	Line number.	Optional

script flush

Flush scripts.

Syntax:

```
flush
```

script list

List script.

Syntax:

```
list [name = <{}>]
```

Parameters:

name	Name of script.	Optional

script run

Run script.

Syntax:

```
run name = <{}>
    pars = <quoted string>
```

Parameters:

name	Name of script.	Required
pars	Parameters separated with comma e.q. a,b,c .	Required

script trace

Trace toggle.(command is hidden)

Syntax:

```
trace
```

service

Following command groups are available :

```
host              system
```

service host

Following commands are available :

list	:	Display list of services.
add	:	Add a service.
delete	:	Delete a service.
assign	:	Assign a service to a host.
disable	:	Disable a service.
stats	:	Service statistics.
triggerlist	:	List all triggers.
flush	:	Flush all services.
config	:	Modify/Display global service configuration options. (command is hidden)

Following command groups are available :

category   rule

service host add

Add a service.

Syntax:

```
add  name = <quoted string>
[category = <>]
    [mode = <{server|client|custom}>]
```

Parameters:

name	The name of the service.	Required
category	The category to which the service belongs.	Optional
mode	server, client or custom service ?	Optional

service host assign

Assign a service to a host.

Syntax:

```
assign name = <{(see Parameters)}>
      [host = <ip-address>]
       [log = <{disabled|enabled}>]
```

Parameters:

name	The name of the service. Options: <{AIM Talk|BearShare|BitTorrent| Checkpoint FW1 VPN|Counter Strike|DirectX 7| DirectX 8|DirectX 9|DNS|eMule|FTP Server| Gamespy Arcade|HTTP Server (World Wide Web)| HTTPS Server|iMesh|KaZaA|Mail Server(SMTP)| Microsoft Remote Desktop|MSN Game Zone|MSN Game Zone (DX)|NNTP Server|PPTP Server|PS3 Remote Play|Secure Shell Server (SSH)|Steam Games|Telnet Server|VNC|Xbox Live}>	Required
host	The IP address of the host.	Optional
log	Enable/disable logging.	Optional

service host category

Following commands are available :

add	:	Create/define service category.
delete	:	Delete a service category.
rename	:	Rename a service category.
list	:	List the available service categories.

service host category add

Create/define service category.

Syntax:
```
add name = <string>
```

Parameters:

name	The name of the category.	Required

service host category delete

Delete a service category.

Syntax:

```
delete name = <>
```

Parameters:

name	The name of the category.	Required

service host category list

List the available service categories.

Syntax:

```
list
```

service host category rename

Rename a service category.

Syntax:

```
rename name = <>
    new_name = <string>
```

Parameters:

name	The name of the existing category.	Required
new_name	The new name of the category.	Required

service host config

Modify/Display global service configuration options.(command is hidden)

Syntax:
```
config [trace = <{disabled|enabled}>]
```

Parameters:

trace	Enable/disable traces.	Optional

service host delete

Delete a service.

Syntax:

```
delete name = <{(see Parameters)}>
```

Parameters:

name	The name of the service.	Required
	Options: <{AIM Talk|BearShare|BitTorrent| Checkpoint FW1 VPN|Counter Strike|DirectX 7| DirectX 8|DirectX 9|DNS|eMule|FTP Server| Gamespy Arcade|HTTP Server (World Wide Web)| HTTPS Server|iMesh|KaZaA|Mail Server(SMTP)| Microsoft Remote Desktop|MSN Game Zone|MSN Game Zone (DX)|NNTP Server|PPTP Server|PS3 Remote Play|Secure Shell Server (SSH)|Steam Games|Telnet Server|VNC|Xbox Live}>	

service host disable

Disable a service.

Syntax:

```
disable [name = <{(see Parameters)}>]
```

Parameters:

name	The name of the service. Options: <{AIM Talk|BearShare|BitTorrent| Checkpoint FW1 VPN|Counter Strike|DirectX 7| DirectX 8|DirectX 9|DNS|eMule|FTP Server| Gamespy Arcade|HTTP Server (World Wide Web)| HTTPS Server|iMesh|KaZaA|Mail Server(SMTP)| Microsoft Remote Desktop|MSN Game Zone|MSN Game Zone (DX)|NNTP Server|PPTP Server|PS3 Remote Play|Secure Shell Server (SSH)|Steam Games|Telnet Server|VNC|Xbox Live}>	Optional

service host flush

Flush all services.

Syntax:

```
flush
```

service host list

Display list of services.

Syntax:

```
list [name = <{(see Parameters)}>]
```

Parameters:

name	The name of the service. Options: <{AIM Talk|BearShare|BitTorrent| Checkpoint FW1 VPN|Counter Strike|DirectX 7| DirectX 8|DirectX 9|DNS|eMule|FTP Server| Gamespy Arcade|HTTP Server (World Wide Web)| HTTPS Server|iMesh|KaZaA|Mail Server(SMTP)| Microsoft Remote Desktop|MSN Game Zone|MSN Game Zone (DX)|NNTP Server|PPTP Server|PS3 Remote Play|Secure Shell Server (SSH)|Steam Games|Telnet Server|VNC|Xbox Live}>	Optional

service host rule

Following commands are available :

add	:	Create/define service portmap.
delete	:	Delete a service portmap.

service host rule add

Create/define service portmap.

Syntax:

```
add          name = <{(see Parameters)}>
        portrange = <port-range>
        [baseport = <{(see Parameters)}>]
            [mode = <{inbound|outbound|auto}>]
        [protocol = <{any|tcp|udp}>]
     [triggerport = <{(see Parameters)}>]
[triggerprotocol = <{any|tcp|udp}>]
```

Parameters:

name	The name of the service. Options: <{AIM Talk|BearShare|BitTorrent| Checkpoint FW1 VPN|Counter Strike|DirectX 7| DirectX 8|DirectX 9|DNS|eMule|FTP Server| Gamespy Arcade|HTTP Server (World Wide Web)| HTTPS Server|iMesh|KaZaA|Mail Server(SMTP)| Microsoft Remote Desktop|MSN Game Zone|MSN Game Zone (DX)|NNTP Server|PPTP Server|PS3 Remote Play|Secure Shell Server (SSH)|Steam Games|Telnet Server|VNC|Xbox Live}>	Required
portrange	The outbound portrange.	Required
baseport	Inbound base port. Options: <{undefined|at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen| clearcase|daytime|discard|dns|domain|doom| echo|exec|finger|ftp|ftp-data|gopher|h323| httpproxy|ike|ils|imap2|imap3|ingres-net| ipcserver|ipx|irc-0|irc-u|kerberos|ldap|login| netbios-dgm|netbios-ns|netbios-ssn|netwall| netware-ip|new-rwho|nfds|nicname|nntp|ntalk| ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio| rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp| sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat| talk|telnet|time|timed|tftp|ulistserv|utime|uucp| uucp-rlogin|who|www-http|whoami|xwindows} or number>	Optional
mode	Port map mode.	Optional
protocol	Protocol type.	Optional
triggerport	Defines outbound trigger port. Options: <{undefined|at-echo|at-nbp|at-rtmp|at-	Optional

	zis|auth|bgp|biff|bootpc|bootps|chargen| clearcase|daytime|discard|dns|domain|doom| echo|exec|finger|ftp|ftp-data|gopher|h323| httpproxy|ike|ils|imap2|imap3|ingres-net| ipcserver|ipx|irc-0|irc-u|kerberos|ldap|login| netbios-dgm|netbios-ns|netbios-ssn|netwall| netware-ip|new-rwho|nfds|nicname|nntp|ntalk| ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio| rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp| sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat| talk|telnet|time|timed|tftp|ulistserv|utime|uucp| uucp-rlogin|who|www-http|whoami|xwindows} ornumber>	
triggerprotocol	Protocol of the trigger port.	Optional

service host rule delete

Delete a service portmap.

Syntax:

```
delete        name = <{(see Parameters)}>
         portrange = <port-range>
         [baseport = <{(see Parameters)}>]
              [mode = <{inbound|outbound|auto}>]
         [protocol = <{any|tcp|udp}>]
      [triggerport = <{(see Parameters)}>]
 [triggerprotocol = <{any|tcp|udp}>]
```

Parameters:

name	The name of the service. Options: <{AIM Talk|BearShare|BitTorrent|Checkpoint FW1 VPN|Counter Strike|DirectX 7|DirectX 8|DirectX 9|DNS|eMule|FTP Server|Gamespy Arcade|HTTP Server (World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail Server(SMTP)|Microsoft Remote Desktop|MSN Game Zone|MSN Game Zone (DX)|NNTP Server|PPTP Server|PS3 Remote Play|Secure Shell Server (SSH)|Steam Games|Telnet Server|VNC|Xbox Live}>	Required
portrange	The outbound portrange.	Required
baseport	Inbound base port. Options: <{undefined|at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|xwindows} or number>	Optional
mode	Port map mode.	Optional
protocol	Protocol type.	Optional
triggerport	Defines outbound trigger port. Options: <{undefined|at-echo|at-nbp|at-rtmp|at-	Optional

zis|auth|bgp|biff|bootpc|bootps|chargen|
clearcase|daytime|discard|dns|domain|doom|
echo|exec|finger|ftp|ftp-data|gopher|h323|
httpproxy|ike|ils|imap2|imap3|ingres-net|
ipcserver|ipx|irc-0|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|
netware-ip|new-rwho|nfds|nicname|nntp|ntalk|
ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|
rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|
sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|
talk|telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows}
ornumber>

triggerprotocol	Protocol of the trigger port.	Optional

service host stats

Service statistics.

Syntax:

```
stats
```

service host triggerlist

List all triggers.

> *Syntax:*
> ```
> triggerlist
> ```

service system

Following commands are available :

`list`	:	Display services.
`modify`	:	Modify a service.
`mapadd`	:	Add a port map for a service.
`mapdelete`	:	Delete a port map for a service.
`ifadd`	:	Add an interface to the access list.
`ifdelete`	:	Delete an interface from the access list.
`ipadd`	:	Add an IP address (range) to the access list.
`ipdelete`	:	Delete an IP address (range) from the access list.

Following command groups are available :

debug

service system debug

Following commands are available :

<code>stats</code>   :   Display system service statistics.

Note: service system debug is missing from the ':help service system' group list

service system debug stats

Display system service statistics.

Syntax:

```
stats
```

service system ifadd

Add an interface to the access list.

Syntax:

```
ifadd name = <{(see Parameters)}>
    [group = <{(see Parameters)}>]
     [intf = <{(see Parameters)}>]
```

Parameters:

name	The name of the service for this access list. Options: <{PPTP|HTTP|HTTPs|webservice|FTP| TELNET|RIP-Query|DNS-S|MDAP|SSDP| PING_RESPONDER}>	Required
group	The interface group for this access list. Options: <{wan|local|lan|tunnel|dmz|guest} or number>	Optional
intf	The interface for this access list. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Optional

service system ifdelete

Delete an interface from the access list.

Syntax:

```
ifdelete name = <{(see Parameters)}>
        [group = <{(see Parameters)}>]
          [intf = <{(see Parameters)}>]
```

Parameters:

name	The name of the service for this access list. Options: <{PPTP|HTTP|HTTPs|webservice|FTP|TELNET|RIP-Query|DNS-S|MDAP|SSDP|PING_RESPONDER}>	Required
group	The interface group for this access list. Options: <{wan|local|lan|tunnel|dmz|guest} or number>	Optional
intf	The interface for this access list. Options: <{loop|O2_ADSL|LocalNetwork|O2_ADSL2plus|O2_Static|Hotspot}>	Optional

service system ipadd

Add an IP address (range) to the access list.

Syntax:

```
ipadd ip = <ip-range>
     name = <{(see Parameters)}>
```

Parameters:

ip	The IP address (range) for this access list.	Required
name	The name of the service for this access list. Options: <{PPTP|HTTP|HTTPs|webservice|FTP|TELNET|RIP-Query|DNS-S|MDAP|SSDP|PING_RESPONDER}>	Required

service system ipdelete

Delete an IP address (range) from the access list.

Syntax:

```
ipdelete ip = <ip-range>
        name = <{(see Parameters)}>
```

Parameters:

ip	The IP address (range) for this access list.	Required
name	The name of the service for this access list. Options: <{PPTP|HTTP|HTTPs|webservice|FTP| TELNET|RIP-Query|DNS-S|MDAP|SSDP| PING_RESPONDER}>	Required

service system list

Display services.

Syntax:

```
list [dynamics = <{disabled|enabled}>]
        [expand = <{disabled|enabled}>]
      [members = <{disabled|enabled}>]
          [name = <{(see Parameters)}>]
```

Parameters:

dynamics	Display dynamic sevices.	Optional
expand	Expanded listing.	Optional
members	Display sevice group members.	Optional
name	The name of the service. Options: <{Remote-MBus|PPTP|PPTPD|PPTPGRE|SNTP|SLA_ICMP_PING|SLA_UDP_PING|SYSLOG|HTTP|HTTPs|webservice|UPnP-HTTP|HTTPI|WEBF|FTP|TELNET|RIP|RIP-Query|IGMP-Proxy|DNS-S|DNS-C|DYNAMIC_DNS|dyndns|statdns|custom|No-IP|DtDNS|gnudip|DHCP-S|DHCP-R|MDAP|CWMP-C|CWMP-S|SSDP|IP_COMMANDS|ICMP_PING|SENDTO|PING_RESPONDER|ICMP_TRACEROUTE|UDP_TRACEROUTE|HTTPPROBE}>	Optional

service system mapadd

Add a port map for a service.

Syntax:

```
mapadd intf = <{(see Parameters)}>
       name = <{(see Parameters)}>
       port = <{(see Parameters)}>
```

Parameters:

intf	The interface for this map. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Required
name	The name of the service for this map. Options: <{PPTP|HTTP|HTTPs|webservice| HTTPI|FTP|TELNET|DNS-S|MDAP|SSDP}>	Required
port	The port for this map. Options: <{undefined|at-echo|at-nbp|at-rtmp|at- zis|auth|bgp|biff|bootpc|bootps|chargen| clearcase|daytime|discard|dns|domain|doom| echo|exec|finger|ftp|ftp-data|gopher|h323| httpproxy|ike|ils|imap2|imap3|ingres-net| ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login| netbios-dgm|netbios-ns|netbios-ssn|netwall| netware-ip|new-rwho|nfds|nicname|nntp|ntalk| ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio| rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp| sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat| talk|telnet|time|timed|tftp|ulistserv|utime|uucp| uucp-rlogin|who|www-http|whoami|xwindows} or number>	Required

service system mapdelete

Delete a port map for a service.

Syntax:

```
mapdelete intf = <{(see Parameters)}>
         name = <{(see Parameters)}>
         port = <{(see Parameters)}>
```

Parameters:

intf	The interface for this map. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Required
name	The name of the service for this map. Options: <{PPTP|HTTP|HTTPs|webservice| HTTPI|FTP|TELNET|DNS-S|MDAP|SSDP}>	Required
port	The port for this map. Options: <{undefined|at-echo|at-nbp|at-rtmp|at- zis|auth|bgp|biff|bootpc|bootps|chargen| clearcase|daytime|discard|dns|domain|doom| echo|exec|finger|ftp|ftp-data|gopher|h323| httpproxy|ike|ils|imap2|imap3|ingres-net| ipcserver|ipx|irc-0|irc-u|kerberos|ldap|login| netbios-dgm|netbios-ns|netbios-ssn|netwall| netware-ip|new-rwho|nfds|nicname|nntp|ntalk| ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio| rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp| sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat| talk|telnet|time|timed|tftp|ulistserv|utime|uucp| uucp-rlogin|who|www-http|whoami|xwindows} or number>	Required

service system modify

Modify a service.

Syntax:

```
modify   name = <{(see Parameters)}>
[dynportrange = <port-range>]
     [forward = <{disabled|enabled}>]
          [log = <{disabled|enabled}>]
 [natpmweight = <number{0-255}>]
        [port = <{(see Parameters)}>]
   [qoslabel = <{(see Parameters)}>]
  [routelabel = <{(see Parameters)}>]
     [srcintf <{(see Parameters)}>]
        [state = <{disabled|enabled}>]
```

Parameters:

name	The name of the service. Options: <{Remote-MBus|PPTP|PPTPD|PPTPGRE|SNTP|SLA_ICMP_PING|SLA_UDP_PING|SYSLOG|HTTP|HTTPs|webservice|UPnP-HTTP|HTTPI|WEBF|FTP|TELNET|RIP|RIP-Query|IGMP-Proxy|DNS-S|DNS-C|DHCP-S|DHCP-R|MDAP|CWMP-C|CWMP-S|SSDP|IP_COMMANDS|PING_RESPONDER}>	Required
dynportrange	The dynamic port range for this service.	Optional
forward	Disable/Enable service forwarding.	Optional
log	Disable/Enable service logging.	Optional
natpmweight	The nat portmap weight for this service.	Optional
port	The port of the service. Options: <{undefined|at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|xwindows} or	Optional

	number>	
qoslabel	QOS label for service data. Options: <{None|Blank|DSCP|Interactive| Management|Video|VoIP-RTP|VoIP-Signal| default}>	Optional
routelabel	Route label for service data. Options: <{None|Blank|DSCP|Interactive| Management|Video|VoIP-RTP|VoIP-Signal| default}>	Optional
srcintf	The primary IP interface for this service. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Optional
state	Disable/Enable this service.	Optional

sntp

Following commands are available :

add	:	Add NTP server
list	:	List the NTP servers
delete	:	Delete NTP server from list
flush	:	Flush NTP server list and SNTP client configuration
config	:	Modify/Display configuration

Following command groups are available :

debug

sntp add

Add NTP server

Syntax:

```
add [addr = <ip-address>]
    [name = <string>]
  [version = <number{1-4}>]
```

Parameters:

addr	IP address of NTP server to be added to list	Optional
name	DNS name of NTP server to be added to list. If both the IP address and the DNS name are provided, the IP address is ignored.	Optional
version	SNTP version of server (1,2,3 or 4)	Optional

sntp config

Modify/Display configuration

Syntax:

```
config  [poll = <number{1-10080}>]
 [pollpresync = <number{1-60}>]
       [state = <{enabled|disabled}>]
[wanSubscribe = <{enabled|disabled}>]
```

Parameters:

poll	polling interval (1 min, ... ,10080min(=7days))	Optional
pollpresync	polling interval before first sync (1 min, ... ,60min)	Optional
state	Enable/Disable SNTP client	Optional
wanSubscribe	Enable/Disable subscribe wan connection	Optional

sntp debug

Following commands are available :

traceconfig   :   Modify SNTP client trace configuration

sntp debug traceconfig

Modify SNTP client trace configuration

Syntax:

```
traceconfig [state = <{disabled|enabled}>]
```

Parameters:

state	Enable/Disable tracing.	Optional

sntp delete

Delete NTP server from list

Syntax:

```
delete [addr = <ip-address>]
       [name = <string>]
```

Parameters:

addr	IP address of NTP server to be removed from list	Optional
name	DNS name of NTP server to be removed from list	Optional

sntp flush

Flush NTP server list and SNTP client configuration

Syntax:

```
flush
```

sntp list

List the NTP servers

Syntax:

```
list
```

software

Following commands are available :

`version`	:	Displays the software version.
`upgrade`	:	Reboots the modem to initiate the SW upgrade. New software available on a remote LAN host will be uploaded to the modem.

software upgrade

Reboots the modem to initiate the SW upgrade. New software available on a remote LAN host will be uploaded to the modem.

Syntax:

```
upgrade
```

software version

Displays the software version.

Syntax:

```
version
```

statecheck

Following commands are available :

config	:	Configure checkd parameters.
statecheckadd	:	Add a statecheck object.
statecheckdelete	:	Delete a statecheck object.
groupadd	:	Add a group object.
groupdelete	:	Delete a group object.
checkadd	:	Add a check object.
checkdelete	:	Delete a check object.
list	:	List checks.

statecheck checkadd

Add a check object.

Syntax:

```
checkadd group = <{}>
         match = <quoted string>
     matchtype = <{equal|differ|statdelta}>
          name = <string>
        object = <string>
     paramname = <string>
     paramtype = <{string|uint|bool}>
   [conschecks = <number>]
      [paramop = <{and|or|single}>]
   [statecheck = <{}>]
```

Parameters:

group	The name of the group.	Required
match	The match value.	Required
matchtype	The match type.	Required
name	The name of the check.	Required
object	The object to check.	Required
paramname	The parameter to check.	Required
paramtype	The parameter type.	Required
conschecks	The number of consecutuve checks the result has to be inactive before the inactive parameter changes	Optional
paramop	The parameter operator type.	Optional
statecheck	The name of the statecheck.	Optional

statecheck checkdelete

Delete a check object.

Syntax:

```
checkdelete group = <{}>
              name = <{}>
        statecheck = <{}>
```

Parameters:

group	The name of the group.	Required
name	The name of the check.	Required
statecheck	The name of the statecheck.	Required

statecheck config

Configure checkd parameters.

Syntax:

```
config interval = <number>
        timeout = <number>
        [dmtree = <{igd|atomic}>]
        [groupop = <{and|or}>]
     [statecheck = <{}>]
```

Parameters:

interval	The interval seconds between checks.	Required
timeout	The Timeout seconds after which checking stops.	Required
dmtree	Client type.	Optional
groupop	Group operator type.	Optional
statecheck	The name of the statecheck.	Optional

statecheck groupadd

Add a group object.

Syntax:

```
groupadd name = <string>
      [checkop = <{and|or}>]
   [statecheck = <{}>]
```

Parameters:

name	The name of the group.	Required
checkop	Check operator type.	Optional
statecheck	The name of the statecheck.	Optional

statecheck groupdelete

Delete a group object.

Syntax:

```
groupdelete name = <{}>
        statecheck = <{}>
```

Parameters:

name	The name of the group.	Required
statecheck	The name of the statecheck.	Required

statecheck list

List checks.

Syntax:

```
list
```

statecheck statecheckadd

Add a statecheck object.

Syntax:

```
statecheckadd name = <string>
```

Parameters:

name	The name of the statecheck.	Required

statecheck statecheckadd

statecheck statecheckdelete

Delete a statecheck object.

Syntax:

```
statecheckdelete statecheck = <{}>
```

Parameters:

statecheck	The name of the statecheck.	Required

statecheck statecheckdelete

syslog

Following commands are available :

config	:	Set/Display configuration
ruleadd	:	Add a new rule to the syslog configuration.
ruledelete	:	Delete a rule in the syslog configuration
flush	:	Flushes syslog rules.
list	:	List the current syslog configuration
bootup	:	Disable bootmode flag(command is hidden)

Following command groups are available :

msgbuf

syslog bootup

Disable bootmode flag(command is hidden)

Syntax:

```
bootup
```

syslog config

Set/Display configuration

Syntax:

```
config [activate = <{disabled|enabled}>]
        [format = <{standard|welf}>]
        [timeout = <number{0-60}>]
```

Parameters:

activate	Syslog send to collectors enabled.	Optional
format	Syslog contents format	Optional
timeout	Syslog flooding timeout (in secs) to collectors.	Optional

syslog flush

Flushes syslog rules.

Syntax:

```
flush
```

syslog list

List the current syslog configuration

Syntax:

```
list
```

syslog msgbuf

Following commands are available :

show	:	Show messages in the syslog message buffer.
send	:	Send messages to remote syslog server.
flush	:	Flush all messages in syslog message buffer.

syslog msgbuf flush

Flush all messages in syslog message buffer.

Syntax:

```
flush
```

syslog msgbuf send

Send messages to remote syslog server.

Syntax:

```
send dest = <ip-address>
     [fac = <{(see Parameters)}>]
    [hist = <{disabled|enabled}>]
     [sev = <{(see Parameters)}>]
```

Parameters:

dest	Remote syslog server destination: an ip-address.	Required
fac	Syslog facility level. Options: <{kern|user|mail|daemon|auth|syslog|lpr|news|uucp|cron|security|ftp|ntp|audit|logalert|clock|local0|local1|local2|local3|local4|local5|local6|local7}>	Optional
hist	Syslog display message history (over several bootups)	Optional
sev	Syslog severity level. Options: <{emerg|alert|crit|err|warning|notice|info|debug}>	Optional

syslog msgbuf show

Show messages in the syslog message buffer.

Syntax:

```
show [fac = <{(see Parameters)}>]
     [hist = <{disabled|enabled}>]
      [sev = <{(see Parameters)}>]
```

Parameters:

fac	Syslog facility level. Options: <{kern|user|mail|daemon|auth|syslog| lpr|news|uucp|cron|security|ftp|ntp|audit| logalert|clock|local0|local1|local2|local3|local4| local5|local6|local7}>	Optional
hist	Syslog display message history (over several bootups)	Optional
sev	Syslog severity level. Options: <{emerg|alert|crit|err|warning|notice| info|debug}>	Optional

syslog ruleadd

Add a new rule to the syslog configuration.

Syntax:

```
ruleadd dest = <ip-address>
        fac = <{(see Parameters)}>
        sev = <{(see Parameters)}>
```

Parameters:

dest	Syslog rule destination: an ip-address.	Required
fac	Syslog rule facility. Options: <{kern|user|mail|daemon|auth|syslog|lpr|news|uucp|cron|security|ftp|ntp|audit|logalert|clock|local0|local1|local2|local3|local4|local5|local6|local7|all or comma-seperated }>	Required
sev	Syslog rule severity. Options: <{emerg|alert|crit|err|warning|notice|info|debug}>	Required

syslog ruledelete

Delete a rule in the syslog configuration

Syntax:

```
ruledelete rule_index = <number{1-16}>
```

Parameters:

rule_index	Syslog rule index.	Required

system

Following commands are available :

settime	:	Set/Get date, time, timezone, daylight savings time, uptime.
dst	:	Set daylight saving values
reboot	:	Reboot the modem.
flush	:	Flush system configuration.
reset	:	Reset to (factory or ISP) defaults: user specific settings will be cleared !
config	:	Set or change system config parameters.
timedreboot	:	Set or change editing mode timed reboot
locale	:	Set/Get regional settings.(command is hidden)

Following command groups are available :

debug	ipc	ra	*qual*

system config

Set or change system config parameters.

Syntax:

```
config   [autosave = <{enabled|disabled}>]
     [autosavedelay = <number{0-600}>]
[defaultconnection = <{(see Parameters)}>]
       [digestauth = <{(missing)}>]
             [drst = <{(missing)}>]
    [dualinterface = <{(missing)}>]
              [led = <{(see Parameters)}>]
             [mdap = <{disabled|enabled}>]
      [resetbutton = <{disabled|enabled}>]
             [tr64 = <{disabled|enabled}>]
         [tr64auth = <{disabled|enabled}>]
             [upnp = <{disabled|enabled}>]
      [WANEthPort = <{(see Parameters)}>]
         [WANMode = <{ADSL|VDSL|SHDSL|ETH|UMTS}>]
              [wps = <{(missing)}>]
```

Parameters:

autosave	Enable/Disable autosaves	Optional
autosavedelay	Autosave delay in seconds (0 for immediate save)	Optional
default connection	The name of the default internet connection. Options: <{loop|O2_ADSL|LocalNetwork| O2_ADSL2plus|O2_Static|Hotspot}>	Optional
digestauth		Hidden
drst		Hidden
dualinterface		Hidden
led	Set system LED color Options: <{green|red|orange|flash|off}>	Optional
mdap	Enable/Disable mdap discovery	Optional
resetbutton	Enable/Disable reset-to-factory-defaults pushbutton	Optional
tr64	Enable/Disable TR-64 discovery	Optional
tr64auth	Enable/Disable TR-64 digest authentication	Optional
upnp	Enable/Disable upnp discovery	Optional
WANEthPort	Set autosensing eth wan port Options: <{ethif1|ethif2|ethif3|ethif4}>	Optional
WANMode	Set autosensing wan mode	Optional

wps	Hidden

system debug

Following commands are available :

cpu   :   CPU usage statistics
mem   :   Memory usage statistics
autosave   :   Autosave debugging commands

system debug autosave

Autosave debugging commands

Syntax:

```
autosave [trace = <{disabled|enabled}>]
```

Parameters:

trace	Enable/Disable autosave traces	Optional

system debug cpu

CPU usage statistics

Syntax:

```
cpu  [delay = <number{1-60}>]
[iterations = <number{1-4000000}>]
     [tasks = <{disabled|enabled}>]
```

Parameters:

delay	Delay between stats updates	Optional
iterations	Number of iteration before ending	Optional
tasks	Show active tasks	Optional

system debug mem

Memory usage statistics

Syntax:

```
mem [expand = <{disabled|enabled}>]
```

Parameters:

expand	Dump of /proc/meminfo	Optional

system dst

Set daylight saving values

Syntax:

```
dst  [enddate = <dd/mm/yyyy>]
     [endhour = <number{0-23}>]
    [endmonth = <number{1-12}>]
     [endtime = <hh:mm:ss>]
     [endweek = <number{1-5}>]
  [endweekday = <{(see Parameters)}>]
        [mode = <{Absolute|Relative}>]
   [startdate = <dd/mm/yyyy>]
   [starthour = <number{0-23}>]
  [startmonth = <number{1-12}>]
   [starttime = <hh:mm:ss>]
   [startweek = <number{1-5}>]
[startweekday = <{(see Parameters)}>]
      [status = <{(missing)}>]
```

Parameters:

enddate	Set the end date of the daylight saving in the absolute mode	Optional
endhour	Set the end hour of the daylight saving in the relative mode	Optional
endmonth	Set the end month of the daylight saving in the relative mode	Optional
endtime	Set the end time of the daylight saving in the absolute mode	Optional
endweek	Set the end week of the daylight saving in the relative mode	Optional
endweekday	Set the end weekday of the daylight saving in the relative mode Options: <{Sunday|Monday|Tuesday|Wednesday|Thursday|Friday|Saturday}>	Optional
mode	Set daylight saving mode	Optional
startdate	Set the start date of the daylight saving in the absolute mode	Optional
starthour	Set the start hour of the daylight saving in the relative mode	Optional
startmonth	Set the start month of the daylight saving in the ralative mode	Optional

starttime	Set the start time of the daylight saving in the absolute mode	Optional
startweek	Set the start week of the daylight saving in the relative mode	Optional
startweekday	Set the start weekday of the daylight saving in the relative mode Options: <{Sunday|Monday|Tuesday|Wednesday|Thursday|Friday|Saturday}>	Optional
status		Hidden

system flush

Flush system configuration.

Syntax:

```
flush
```

system ipc

Following commands are available :

config   :   IPC configuration

system ipc config

IPC configuration

Syntax:

```
config [prio-level = <number{0-255}>]
```

Parameters:

prio-level	IPC priority traffic level	Optional

system locale

Set/Get regional settings.(command is hidden)

Syntax:

```
locale [date_format = <{(see Parameters)}>]
    [date_separator = <{/|-|.}>]
   [datetime_format = <{iso|date+time|time+date}>]
        [dec_symbol = <{,|.}>]
   [duration_format = <{dhmmss|hmmss}>]
      [group_symbol = <{.|,}>]
       [time_format = <{iso|hmmss}>]
```

Parameters:

date_format	Set date format Options: <{iso|ddmmyyyy|ddmmyy|mmddyyyy|mmddyy}>	Optional
date_separator	Set date separator	Optional
datetime_format	Set date-time format	Optional
dec_symbol	Set decimal symbol	Optional
duration_format	Set duration format	Optional
group_symbol	Set digit grouping symbol	Optional
time_format	Set time format	Optional

system qual

Following commands are available :

`led`   :   Led configuration

Note: system qual is missing from the ':help system' group list

system qual led

Led configuration

Syntax:

```
led [value = <{(see Parameters)}>]
```

Parameters:

value	Set system LED color Options: <{green|red|orange|flash|off|allon|alloff| allgreen|allred|unlock}>	Optional

system ra

Following commands are available :

list	:	List remote access instances.
instadd	:	Add a remote access instances.
instdelete	:	Delete remote access instances.
config	:	Configure remote access parameters.
start	:	Starts temporary mode.
stop	:	Stops temporary mode.

system ra config

Configure remote access parameters.

Syntax:

```
config      name = <{}>
           [group = <string>]
          [ipintf = <string>]
            [mode = <{Permanent|Temporary|Schedule}>]
            [port = <number>]
 [randompassword = <{enabled|disabled}>]
     [randomport = <{enabled|disabled}>]
          [secure = <{enabled|disabled}>]
           [state = <{disabled|enabled}>]
  [systemservice = <{GUI|webservice}>]
        [timeout = <number>]
    [todschedule = <string>]
            [user = <string>]
```

Parameters:

name	Instance name	Required
group	The name of the xref to the group keypath.	Optional
ipintf	The name of the xref to the IP interface.	Optional
mode	Mode Permanent or Temporary.	Optional
port	The port number.	Optional
random password	Create a random password.	Optional
randomport	Use a random port.	Optional
secure	Use secure mode (https).	Optional
state	Enable/disable RAD.	Optional
systemservice	The system service type.	Optional
timeout	The timeout value.	Optional
todschedule	The name of the xref to the ToD schedule.	Optional
user	The name of the xref to the user keypath.	Optional

system ra instadd

Add a remote access instances.

Syntax:

```
instadd name = <string>
```

Parameters:

name	Instance name	Required

system ra instdelete

Delete remote access instances.

Syntax:

```
instdelete name = <{}>
```

Parameters:

name	Instance name	Required

system ra list

List remote access instances.

Syntax:

```
list [name = <{}>]
```

Parameters:

name	The name of the instance.	Optional

system ra start

Starts temporary mode.

Syntax:

```
start name = <{}>
```

Parameters:

name	Instance name	Required

system ra stop

Stops temporary mode.

Syntax:

```
stop name = <{}>
```

Parameters:

name	Instance name	Required

system reboot

Reboot the modem.

Syntax:

```
reboot
```

system reset

Reset to (factory or ISP) defaults: user specific settings will be cleared !

Syntax:

```
reset factory = <{yes|no}>
      proceed = <{no|yes}>
```

Parameters:

factory	Option to reset to factory	Required
proceed	Confirmation for resetting the modem.	Required

system settime

Set/Get date, time, timezone, daylight savings time, uptime.

Syntax:

```
settime    [date = <dd/mm/yyyy>]
  [daylightsaving = <{disabled|enabled}>]
     [geotimezone = <{(missing)}>]
[geotimezonename = <{(see Parameters)}>]
            [gtzn = <{(missing)}>]
             [rtc = <{disabled|enabled}>]
            [time = <hh:mm:ss>]
        [timezone = <(+ or -)hh:mm>]
```

Parameters:

date	Set the system date	Optional
daylightsaving	Enable/Disable daylight saving	Optional
geotimezone		Hidden
geotimezone name	Set the geographical timezone by name Options: <{(UTC-12:00)|(UTC-11:00)|(UTC-10:00)|(UTC-09:00)|(UTC-08:00)|(UTC-07:00)|(UTC-06:00)|(UTC-05:00)|(UTC-04:00)|(UTC-03:30)|(UTC-03:00)|(UTC-02:00)|(UTC-01:00)|(UTC)|(UTC+01:00)|(UTC+02:00)|(UTC+03:00)|(UTC+03:30)|(UTC+04:00)|(UTC+04:30)|(UTC+05:00)|(UTC+05:30)|(UTC+05:45)|(UTC+06:00)|(UTC+06:30)|(UTC+07:00)|(UTC+08:00)|(UTC+09:00)|(UTC+09:30)|(UTC+10:00)|(UTC+11:00)|(UTC+12:00)|(UTC+13:00)}>	Optional
gtzn		Hidden
rtc	Enable/Disable the real time clock	Optional
time	Set the system time	Optional
timezone	Set the system timezone(-12:00...+14:00 / 15 minute resolution)	Optional

system timedreboot

Set or change editing mode timed reboot

Syntax:

```
timedreboot [date = <string>]
            [state = <{disabled|enabled}>]
             [time = <number{0-983040}>]
```

Parameters:

date	Set date/time to reboot (DD/MM/YYYY/HH:MM).	Optional
state	Enable/Disable timed reboot	Optional
time	Change default countdown time (Min).	Optional

threshold

Following commands are available :

enable	:	Enables a threshold definition.
disable	:	Disables a threshold definition.
config	:	Configures a threshold definition.
reset	:	Reset threshold period.
clear	:	Clears threshold statistics.
list	:	Lists all threshold definitions.
stats	:	Lists threshold resources.

Note: threshold is missing from the ':help' group list

threshold clear

Clears threshold statistics.

Syntax:

```
clear [id = <threshold id>]
```

Parameters:

id	Threshold identifier.	Optional

threshold config

Configures a threshold definition.

Syntax:

```
config [count = <number{1-10000}>]
          [id = <threshold id>]
      [period = <number{1-100000}>]
       [state = <{disabled|enabled}>]
        [type = <{limit|threshold|trigger}>]
```

Parameters:

count	Threshold event count.	Optional
id	Threshold identifier.	Optional
period	Threshold period.	Optional
state	Threshold state.	Optional
type	Type of threshold.	Optional

threshold disable

Disables a threshold definition.

Syntax:

```
disable [id = <threshold id>]
```

Parameters:

id	Threshold identifier.	Optional

threshold enable

Enables a threshold definition.

Syntax:

```
enable [id = <threshold id>]
```

Parameters:

id	Threshold identifier.	Optional

threshold list

Lists all threshold definitions.

> *Syntax:*
>
> ```
> list
> ```

threshold reset

Reset threshold period.

Syntax:

```
reset [id = <threshold id>]
```

Parameters:

id	Threshold identifier.	Optional

threshold stats

Lists threshold resources.

Syntax:

```
stats
```

tls

Following command groups are available :

`acs-client`   `https-server`

tls acs-client

Following commands are available :

config   :   Display/modify tls settings

Following command groups are available :

cert

tls acs-client cert

Following commands are available :

add   :   Add a new certificate
delete   :   Delete a certificate
list   :   List certificates

tls acs-client cert add

Add a new certificate

Syntax:

```
add filename = <string>
```

Parameters:

filename	name of the certificate file	Required

tls acs-client cert add

tls acs-client cert delete

Delete a certificate

Syntax:

```
delete index = <number>
```

Parameters:

index	Certificate index	Required

tls acs-client cert list

List certificates

Syntax:

```
list [expand = <{disabled|enabled}>]
     [index = <number>]
```

Parameters:

expand	Display more information	Optional
index	Certificate index	Optional

tls acs-client config

Display/modify tls settings

Syntax:

```
config [auth-serv = <{disabled|enabled}>]
          [state = <{disabled|enabled}>]
      [valid-date = <{disabled|enabled}>]
    [valid-domain = <{disabled|enabled}>]
```

Parameters:

auth-serv	Request server authentication	Optional
state	SSL/TLS client for ACS state	Optional
valid-date	Check certificate validity date	Optional
valid-domain	Check certificate domain	Optional

tls https-server

Following commands are available :

config   :   Display/modify tls settings

Following command groups are available :

cert

tls https-server cert

Following commands are available :

add   :   Add a new certificate
delete   :   Delete a certificate
list   :   List certificates

tls https-server cert add

Add a new certificate

Syntax:

```
add filename = <string>
```

Parameters:

filename	name of the certificate file	Required

tls https-server cert add

tls https-server cert delete

Delete a certificate

Syntax:
```
delete index = <number>
```

Parameters:

index	Certificate index	Required

tls https-server cert list

List certificates

Syntax:
```
list [expand = <{disabled|enabled}>]
     [index = <number>]
```

Parameters:

expand	Display more information	Optional
index	Certificate index	Optional

tls https-server config

Display/modify tls settings

Syntax:

```
config [auth-client = <{disabled|enabled}>]
             [state = <{disabled|enabled}>]
        [valid-date = <{disabled|enabled}>]
      [valid-domain = <{(missing)}>]
```

Parameters:

auth-client	Request client authentication	Optional
state	SSL/TLS server for HTTPS state	Optional
valid-date	Check certificate validity date	Optional
valid-domain		Hidden

tod

Following commands are available :

```
config                 :  Configure tod parameters.
list                   :  List config.
```

Following command groups are available :

```
action            schedule
```

Note: tod is missing from the ':help' group list

tod action

Following commands are available :

add	:	Add an action object.
delete	:	Delete an action object.
setvaladd	:	Add a setvalue object.
setvaldelete	:	Delete a setvalue object.
paramadd	:	Add a setvalue parameter.
paramdelete	:	Delete a setvalue parameter.
list	:	List actions.

tod action add

Add an action object.

Syntax:

```
add [id = <number>]
```

Parameters:

id	The id of the actiom.	Optional

tod action delete

Delete an action object.

Syntax:

```
delete actionid = <number>
```

Parameters:

actionid	The id of the action.	Required

tod action list

List actions.

Syntax:

```
list
```

tod action paramadd

Add a setvalue parameter.

Syntax:

```
paramadd actionid = <number>
       setvalueid = <number>
             [id = <number>]
          [object = <string>]
              [on = <{active|inactive}>]
           [param = <string>]
           [value = <string>]
```

Parameters:

actionid	The id of the action.	Required
setvalueid	The id of the setvalue action.	Required
id	The id of the setvalue param.	Optional
object	Mbus object path.	Optional
on	Active/inactive.	Optional
param	Mbus parameter name.	Optional
value	Parameter value.	Optional

tod action paramdelete

Delete a setvalue parameter.

Syntax:

```
paramdelete actionid = <number>
               paramid = <number>
            setvalueid = <number>
```

Parameters:

actionid	The id of the action.	Required
paramid	The id of the setvalue param.	Required
setvalueid	The id of the setvalue action.	Required

tod action setvaladd

Add a setvalue object.

Syntax:

```
setvaladd actionid = <number>
              [id = <number>]
              [on = <{(missing)}>]
```

Parameters:

actionid	The id of the action.	Required
id	The id of the setvalue actiom.	Optional
on		Hidden

tod action setvaldelete

Delete a setvalue object.

Syntax:

```
setvaldelete actionid = <number>
             setvalueid = <number>
```

Parameters:

actionid	The id of the action.	Required
setvalueid	The id of the setvalue action.	Required

tod action setvaldelete

tod config

Configure tod parameters.

Syntax:

```
config [acchain = <string>]
       [state = <{enabled|disabled}>]
```

Parameters:

acchain	firewall chain name	Optional
state	enable/disable ToD	Optional

tod list

List config.

Syntax:

```
list
```

tod schedule

Following commands are available :

add	:	Add a schedule object.
modify	:	Modify schedule parameters.
start	:	Start a schedule.
delete	:	Delete a schedule object.
dayadd	:	Add a day object.
daydelete	:	Delete a day object.
timeadd	:	Add a timerange object.
timedelete	:	Delete a timerange object.
timeabsadd	:	Add a timerange_abs object.
timeabsdelete	:	Delete a timerange_abs object.
list	:	List schedules.

tod schedule add

Add a schedule object.

Syntax:

```
add type = <{none|accesscontrol|action}>
     [id = <number>]
```

Parameters:

type	The schedule type.	Required
id	The id of the schedule.	Optional

tod schedule dayadd

Add a day object.

Syntax:

```
dayadd scheduleid = <number>
        weekday = <{(see Parameters)}>
            [id = <number>]
```

Parameters:

scheduleid	The id of the schedule.	Required
weekday	The day of the week.. Options: <{mo|tu|we|th|fr|sa|su|all|weekend|workweek}>	Required
id	The id of the day.	Optional

tod schedule daydelete

Delete a day object.

Syntax:

```
daydelete dayid = <number>
        scheduleid = <number>
```

Parameters:

dayid	The id of the day.	Required
scheduleid	The id of the schedule.	Required

tod schedule delete

Delete a schedule object.

Syntax:

```
delete scheduleid = <number>
```

Parameters:

scheduleid	The id of the schedule.	Required

tod schedule list

List schedules.

Syntax:

```
list
```

tod schedule modify

Modify schedule parameters.

Syntax:

```
modify scheduleid = <number>
        [action = <string>]
         [count = <number>]
     [expiretime = <string>]
           [mode = <{(see Parameters)}>]
           [name = <quoted string>]
    [nrofminutes = <number>]
      [reference = <string>]
          [state = <{enabled|disabled}>]
```

Parameters:

scheduleid	The id of the schedule.	Required
action	Action.	Optional
count	The timer count (0=periodical)	Optional
expiretime	The absolute expire time.	Optional
mode	The mode. Options: <{timerange|timeout|timerangeabs|timerangeedge}>	Optional
name	Friendly name.	Optional
nrofminutes	The number of minutes.	Optional
reference	Access control reference.	Optional
state	Enable/disable	Optional

tod schedule start

Start a schedule.

Syntax:
```
start scheduleid = <number>
        start = <{enabled|disabled}>
```

Parameters:

scheduleid	The id of the schedule.	Required
start	Start the schedule	Required

tod schedule timeabsadd

Add a timerange_abs object.

Syntax:

```
timeabsadd scheduleid = <number>
             [endtime = <string>]
             [rangeid = <number>]
           [starttime = <string>]
```

Parameters:

scheduleid	The id of the schedule.	Required
endtime	The absolute end time of the range.	Optional
rangeid	The id of the timerange_abs.	Optional
starttime	The absolute start time of the range.	Optional

tod schedule timeabsdelete

Delete a timerange_abs object.

Syntax:

```
timeabsdelete rangeid = <number>
              scheduleid = <number>
```

Parameters:

rangeid	The id of the timerange_abs.	Required
scheduleid	The id of the schedule.	Required

tod schedule timeadd

Add a timerange object.

Syntax:

```
timeadd dayid = <number>
      endhour = <number>
    endminute = <number>
   scheduleid = <number>
    starthour = <number>
  startminute = <number>
     [action = <string>]
         [id = <number>]
```

Parameters:

dayid	The id of the day.	Required
endhour	The end hour of the range.	Required
endminute	The end minute of the range.	Required
scheduleid	The id of the schedule.	Required
starthour	The start hour of the range.	Required
startminute	The start minute of the range.	Required
action	Action.	Optional
id	The id of the timerange.	Optional

tod schedule timedelete

Delete a timerange object.

Syntax:

```
timedelete dayid = <number>
      scheduleid = <number>
          timeid = <number>
```

Parameters:

dayid	The id of the day.	Required
scheduleid	The id of the schedule.	Required
timeid	The id of the timerange.	Required

trigger

Following commands are available :

`list`   :   Display the triggers.

Following command groups are available :

`rule`   *chain*

Note: trigger is missing from the ':help ' group list

trigger chain

Following commands are available :

add	:	Add a chain.
delete	:	Delete a chain.
list	:	Display a list of chains.
flush	:	Flush all chains.
modify	:	Modify a chain.(command is hidden)

Note: trigger chain is missing from the ':help trigger' group list

trigger chain add

Add a chain.

Syntax:

```
add chain = <string>
   [policy = <{(missing)}>]
```

Parameters:

chain	The name of the chain to add.	Required
policy		Hidden

trigger chain add

trigger chain delete

Delete a chain.

Syntax:

```
delete chain = <chain name>
```

Parameters:

| chain | The name of the chain to delete. | Required |

trigger chain flush

Flush all chains.

Syntax:

```
flush
```

trigger chain list

Display a list of chains.

Syntax:

```
list [format = <{pretty|cli}>]
```

Parameters:

format	The format of the chain list.	Optional

trigger chain modify

Modify a chain.(command is hidden)

Syntax:

```
modify chain = <chain name>
      [policy = <{(missing)}>]
```

Parameters:

chain	The name of the chain to modify.	Required
policy		Hidden

trigger list

Display the triggers.

Syntax:

```
list [name = <{}>]
```

Parameters:

name	The name of a trigger.	Optional

trigger rule

Following commands are available :

list	:	Display a list of rules.
add	:	Add a rule.(command is hidden)
delete	:	Delete a rule.(command is hidden)
flush	:	Flush all rules.(command is hidden)
modify	:	Modify a rule.(command is hidden)

Following command groups are available :

debug

trigger rule add

Add a rule.(command is hidden)

Syntax:

```
add  chain    = <chain name>
    trigger   = <{None|link}>
     [clink   = <chain name>]
[connstate    = <{(missing)}>]
  [dstintf [!]= <{wan|local|lan|tunnel|dmz|guest}>]
     [dstip [!]= <{(see Parameters)}>]
     [index   = <number>]
   [length [!]= <{}>]
       [log   = <{disabled|enabled}>]
      [name   = <string>]
 [newindex    = <{(missing)}>]
     [serv [!]= <{(see Parameters)}>]
  [srcintf [!]= <{wan|local|lan|tunnel|dmz|guest}>]
    [srcip [!]= <{(see Parameters)}>]
    [srcmac  = <{(missing)}>]
     [state  = <{disabled|enabled}>]
```

Parameters:

chain	The name of the chain which contains the rule.	Required
trigger	None, link (when clink is used) or trigger name.	Required
clink	The name of the chain to be parsed when this rule applies.	Optional
connstate		Hidden
dstintf	The name of the destination interface expression. (Can optionally use "!=")	Optional
dstip	The name of the destination ip expression. (Can optionally use "!=") Options: <{private|ssdp_ip|mdap_ip| 192.68.1.253}>	Optional
index	The index of the rule in the chain.	Optional
length	The name of the length expression. (Can optionally use "!=")	Optional
log	Disable/Enable logging when this rule applies.	Optional
name	The name of the new rule.	Optional
newindex		Hidden
serv	The name of the service expression. (Can optionally use "!=")	Optional

	Options: <{icmp|igmp|ftp|telnet|http|httpproxy| https|RPC|NBT|SMB|imap|imap3|imap4-ssl| imaps|pop2|pop3|pop3s|smtp|ssh|dns|nntp| ipsec|esp|ah|ike|DiffServ|sip|h323|dhcp|rtsp| ssdp_serv|mdap_serv|syslog}>	
srcintf	The name of the source interface expression. (Can optionally use "!=")	Optional
srcip	The name of the source ip expression. (Can optionally use "!=") Options: <{private|ssdp_ip|mdap_ip| 192.68.1.253}>	Optional
srcmac		Hidden
state	Disable/Enable this rule.	Optional

trigger rule debug

Following commands are available :

traceconfig   : Display/Modify rule trace configuration.
stats   : Display rule statistics.
clear   : Clear rule statistics.

trigger rule debug clear

Clear rule statistics.

Syntax:

```
clear [chain = <chain name>]
      [index = <number>]
```

Parameters:

chain	The name of the chain.	Optional
index	The index of the rule in the chain.	Optional

trigger rule debug stats

Display rule statistics.

Syntax:

```
stats [chain = <chain name>]
      [index = <number>]
```

Parameters:

chain	The name of the chain.	Optional
index	The index of the rule in the chain.	Optional

trigger rule debug traceconfig

Display/Modify rule trace configuration.

Syntax:

```
traceconfig [state = <{disabled|enabled}>]
```

Parameters:

state	Disable/Enable rule traces.	Optional

trigger rule debug traceconfig

trigger rule delete

Delete a rule.(command is hidden)

Syntax:

```
delete chain = <chain name>
       index = <number>
```

Parameters:

chain	The name of the chain in which to delete the rule.	Required
index	The number of the rule in the chain.	Required

trigger rule flush

Flush all rules.(command is hidden)

Syntax:

```
flush [chain = <chain name>]
```

Parameters:

chain	The name of the chain to flush.	Optional

trigger rule flush

trigger rule list

Display a list of rules.

Syntax:

```
list [chain = <chain name>]
     [format = <{pretty|cli}>]
```

Parameters:

chain	The name of the chain to list the rules of.	Optional
format	The format of the rule list.	Optional

trigger rule modify

Modify a rule.(command is hidden)

Syntax:

```
modify chain = <chain name>
      [clink = <chain name>]
  [connstate = <{(missing)}>]
 [[!]dstintf]
   [[!]dstip]
      [index = <number>]
  [[!]length]
        [log = <{disabled|enabled}>]
       [name = <string>]
   [newindex = <number>]
    [[!]serv]
 [[!]srcintf]
   [[!]srcip]
     [srcmac = <{(missing)}>]
      [state = <{disabled|enabled}>]
    [trigger = <{None|link}>]
```

Parameters:

chain	The name of the chain which contains the rule.	Required
clink	The name of the chain to be parsed when this rule applies.	Optional
connstate		Hidden
dstintf	The name of the destination interface expression. (Optionally prepend a "!" to mean NOT)	Optional
dstip	The name of the destination ip expression. (Optionally prepend a "!" to mean NOT)	Optional
index	The index of the rule in the chain.	Optional
length	The name of the length expression. (Optionally prepend a "!" to mean NOT)	Optional
log	Disable/Enable logging when this rule applies.	Optional
name	The name of the new rule.	Optional
newindex	The new index of the rule in the chain.	Optional
serv	The name of the service expression. (Optionally prepend a "!" to mean NOT)	Optional
srcintf	The name of the source interface expression. (Optionally prepend a "!" to mean NOT)	Optional

trigger Commands

srcip	The name of the source ip expression. (Optionally prepend a "!" to mean NOT)	Optional
srcmac		Hidden
state	Disable/Enable this rule.	Optional
trigger	None, link (when clink is used) or trigger name.	Optional

---

upnp

Following commands are available :

config	: Config upnp parameter(s)
flush	: Flushes upnp config (i.e. to defaults)
list	: List all registered devices
listmask	: List all mask and security devices

Following command groups are available :

debug

upnp config

Config upnp parameter(s)

Syntax:

```
config [autosavedelay = <number{30-45}>]
          [dslfautosave = <{disabled|enabled}>]
               [httpport = <{(missing)}>]
                  [maxage = <number{60-999999}>]
            [onlydefault = <{disabled|enabled}>]
     [preferredaddresses = <string>]
                [safenat = <{disabled|enabled}>]
           [upnpautosave = <{disabled|enabled}>]
              [writemode = <{full|natonly|readonly}>]
```

Parameters:

autosavedelay	Auto save delay time (sec)	Optional
dslfautosave	Enable / disable TR-064 auto save	Optional
httpport		Hidden
maxage	ssdp advertisements MAX-AGE (default = 1800)	Optional
onlydefault	Only advertise the default WAN connection	Optional
preferred addresses	CSV list of preferred ip addresses for UPnP (1 per lan ip-interface)	Optional
safenat	Enable / disable check on safe nat entries (limited to own host)	Optional
upnpautosave	Enable / disable upnp auto save	Optional
writemode	Configuration access level for UPnP	Optional

upnp debug

Following commands are available :

traceconfig   :   Enable or disable tracing.
nonce   :   To re-generate the nonce string.

upnp debug nonce

To re-generate the nonce string.

Syntax:

```
nonce [type = <{upnp|tr64|wfa}>]
```

Parameters:

type	Specify device type for nonce string	Optional

upnp debug traceconfig

Enable or disable tracing.

Syntax:

```
traceconfig [level = <number>]
```

Parameters:

level	Set the tracelevel (0-2)	Optional

upnp flush

Flushes upnp config (i.e. to defaults)

Syntax:

```
flush
```

upnp list

List all registered devices

Syntax:
```
list [verbose = <number{0-2}>]
```

Parameters:

verbose	Verbose level (default = 1)	Optional

upnp listmask

List all mask and security devices

Syntax:

```
listmask
```

user

Following commands are available :

add	:	Add a user.
delete	:	Delete a user.
list	:	Display the users.
config	:	Modify the user.
flush	:	Flush the users.
rights	:	Display session rights.

user

user add

Add a user.

Syntax:

```
add       name = <string>
      password = <password>
          role = <>
       [crypt = <string>]
[deflocadmin = <{disabled|enabled}>]
[defremadmin = <{disabled|enabled}>]
    [defuser = <{disabled|enabled}>]
      [descr = <quoted string>]
      [hash2 = <string>]
      [hash3 = <{(missing)}>]
         [lm = <{(missing)}>]
       [ntlm = <{(missing)}>]
```

Parameters:

name	User name.	Required
password	User password.	Required
role	Role name.	Required
crypt	The crypt password.	Optional
deflocadmin	Set this user as the default local administrator.	Optional
defremadmin	Set this user as the default remote administrator.	Optional
defuser	Set this user as the default user.	Optional
descr	User description.	Optional
hash2	The MD5 hash.	Optional
hash3		Hidden
lm		Hidden
ntlm		Hidden

user config

Modify the user.

Syntax:

```
config  name = <{npr}>
[deflocadmin = <{disabled|enabled}>]
[defremadmin = <{disabled|enabled}>]
    [defuser = <{disabled|enabled}>]
       [descr = <quoted string>]
   [password = <password>]
        [role = <>]
```

Parameters:

name	User name.	Required
deflocadmin	Set this user as the default local administrator.	Optional
defremadmin	Set this user as the default remote administrator.	Optional
defuser	Set this user as the default user.	Optional
descr	User description.	Optional
password	User password.	Optional
role	Role name.	Optional

user delete

Delete a user.

Syntax:

```
delete name = <{npr}>
```

Parameters:

name	User name.	Required

user flush

Flush the users.

Syntax:

```
flush
```

user list

Display the users.

Syntax:

```
list [channel = <{ftp|telnet|http|mdap|serial}>]
        [name = <{npr}>]
      [origin = <{lan|wan|local}>]
      [secure = <{disabled|enabled}>]
```

Parameters:

channel	The selected channel.	Optional
name	User name.	Optional
origin	The selected origin.	Optional
secure	The selected security level.	Optional

user rights

Display session rights.

> **Syntax:**
>
> ```
> rights
> ```

vfs

Following command groups are available :

`upnpavcontrolpoint`

vfs upnpavcontrolpoint

Following commands are available :

config   :   To enable/disable UPnPAV Control Point FS service.
list   :   To display UPnPAV Control Point FS context.

vfs upnpavcontrolpoint config

To enable/disable UPnPAV Control Point FS service.

Syntax:

```
config [state = <{enabled|disabled}>]
```

Parameters:

state	Enable/disable UPnPAV Control Point FS service.	Optional

vfs upnpavcontrolpoint list

To display UPnPAV Control Point FS context.

Syntax:

```
list
```

wansensing

Following commands are available :

config	:	Configure parameters
flush	:	Clean configuration
list	:	Display parameters
requestmode	:	Request to enter certain mode

Following command groups are available :

debug	mode

wansensing config

Configure parameters

Syntax:

```
config [errorinterval = <number>]
       [errorscript = <string>]
             [state = <{disabled|enabled}>]
```

Parameters:

errorinterval	Error interval value	Optional
errorscript	Error script name	Optional
state	Enable/disable	Optional

wansensing debug

Following commands are available :

traceconfig   :   Tracing settings

wansensing debug traceconfig

Tracing settings

Syntax:

```
traceconfig [state = <{disabled|enabled}>]
```

Parameters:

state	Enable/disable	Optional

wansensing flush

Clean configuration

Syntax:

```
flush
```

wansensing list

Display parameters

Syntax:

```
list
```

wansensing mode

Following commands are available :

list	:	List all modes
add	:	Add mode
delete	:	Delete mode

wansensing mode add

Add mode

Syntax:

```
add maininterval = <number>
            name = <string>
      scriptname = <string>
     [redirectgui = <{disabled|enabled}>]
```

Parameters:

maininterval	Main interval value	Required
name	Mode name	Required
scriptname	Script name	Required
redirectgui	Redirect GUI	Optional

wansensing mode delete

Delete mode

Syntax:

```
delete name = <string>
```

Parameters:

name	Mode name	Required

wansensing mode list

List all modes

Syntax:

```
list
```

wansensing requestmode

Request to enter certain mode

Syntax:

```
requestmode mode = <string>
```

Parameters:

mode	Mode to enter (its name)	Required

webserver

Following command groups are available :

```
ssl
```

webserver ssl

Following command groups are available :

```
commonname
```

webserver ssl commonname

Following commands are available :

add   :   Add an CommonName
delete   :   Delete an option.
list   :   List all options.

webserver ssl commonname add

Add an CommonName

Syntax:
```
add commonname = <string>
```

Parameters:

commonname	CommonName	Required

webserver ssl commonname add

webserver ssl commonname delete

Delete an option.

Syntax:

```
delete id = <string>
```

Parameters:

id	id	Required

webserver ssl commonname list

List all options.

Syntax:

```
list
```

webserver ssl commonname list

wireless

Following commands are available :

radio	:	Configures radio settings.
reset	:	Reset Wireless interface settings to defaults
flush	:	Flush all wireless dynamic contextes(command is hidden)
ifconfig	:	Configures wireless settings.(command is hidden)

Following command groups are available :

acs	debug	macacl	mssid
qos	stations	wds	wps
eco	*multiuni*	*qual*	*secmode*

wireless acs

Following commands are available :

config   :   ACS configuration
scanhistory   :   ACS scanhistory

Following command groups are available :

debug

wireless acs config

ACS configuration

Syntax:

```
config [autoscanreport = <{no|yes}>]
          [ccathreshold = <number>]
       [channelscantime = <number>]
         [failiteration = <number>]
       [glitchthreshold = <number>]
         [lockoutperiod = <number>]
          [maxiteration = <number>]
      [periodicscantime = <number>]
              [radio_id = <number{0-9999}>]
              [scanmode = <{(see Parameters)}>]
```

Parameters:

autoscanreport	ACS auto scan report generation	Optional
ccathreshold	ACS cca threshold	Optional
channelscantime	ACS channelscantime	Optional
failiteration	ACS failiteration	Optional
glitchthreshold	ACS glitsch threshold	Optional
lockoutperiod	ACS lockout period	Optional
maxiteration	ACS maxiteration	Optional
periodicscan time	ACS periodic scan	Optional
radio_id	radio	Optional
scanmode	ACS scan mode Options: <{disabled|detect|detect+act}>	Optional

wireless acs debug

Following commands are available :

rescan   :   ACS perform automatic channel selection
scan   :   ACS netowrk scan
scanreport   :   ACS scanresults
triggerdump   :   driver detailed counter stats

wireless acs debug rescan

ACS perform automatic channel selection

Syntax:

```
rescan [radio_id = <number{0-9999}>]
```

Parameters:

radio_id	radio	Optional

wireless acs debug scan

ACS netowrk scan

Syntax:

```
scan [radio_id = <number{0-9999}>]
```

Parameters:

radio_id	radio	Optional

wireless acs debug scanreport

ACS scanresults

Syntax:

```
scanreport [radio_id = <number{0-9999}>]
```

Parameters:

radio_id	radio	Optional

wireless acs debug triggerdump

driver detailed counter stats

Syntax:

```
triggerdump [radio_id = <number{0-9999}>]
```

Parameters:

radio_id	radio	Optional

wireless acs debug triggerdump

wireless acs scanhistory

ACS scanhistory

Syntax:

```
scanhistory [radio_id = <number{0-9999}>]
```

Parameters:

radio_id	radio	Optional

wireless debug

Following commands are available :

stats   :   Transfer statistics

hwdump   :   Shows the settings in hw(command is hidden)

wireless debug hwdump

Shows the settings in hw(command is hidden)

Syntax:

```
hwdump
```

wireless debug stats

Transfer statistics

Syntax:

```
stats
```

wireless eco

Following commands are available :

config	:	ECO configuration
dump	:	ECO dump config
suspend	:	ECO suspend
resume	:	ECO resume
traceconfig	:	ECO trace
stats	:	ECO stats

Note: wireless eco is missing from the ':help wireless' group list

wireless eco config

ECO configuration

Syntax:

```
config [radio_id = <number{0-9999}>]
          [state = <{enabled|disabled}>]
           [text = <number{2-600}>]
           [toff = <number{4-600}>]
            [ton = <number{4-600}>]
```

Parameters:

radio_id	radio	Optional
state	ECO SM configuration	Optional
text	text	Optional
toff	ton	Optional
ton	ton	Optional

wireless eco dump

ECO dump config

Syntax:

```
dump [radio_id = <number{0-9999}>]
```

Parameters:

radio_id	radio	Optional

wireless eco resume

ECO resume

Syntax:

```
resume [radio_id = <number{0-9999}>]
```

Parameters:

radio_id	radio	Optional

wireless eco resume

wireless eco stats

ECO stats

Syntax:

```
stats [radio_id = <number{0-9999}>]
```

Parameters:

radio_id	radio	Optional

wireless eco suspend

ECO suspend

Syntax:

```
suspend [radio_id = <number{0-9999}>]
```

Parameters:

radio_id	radio	Optional

wireless eco traceconfig

ECO trace

Syntax:

```
traceconfig smtrace = <{disabled|enabled}>
            [radio_id = <number{0-9999}>]
```

Parameters:

smtrace	tracing	Required
radio_id	radio	Optional

wireless flush

Flush all wireless dynamic contextes(command is hidden)

Syntax:

```
flush
```

wireless ifconfig

Configures wireless settings.(command is hidden)

Syntax:

```
ifconfig      [any = <{enabled|disabled}>]
          [channel = <{(see Parameters)}>]
          [country = <{(missing)}>]
             [dtim = <{(missing)}>]
            [flags = <{(missing)}>]
[frameaggregation = <{(missing)}>]
       [frameburst = <{disabled|enabled}>]
          [interop = <{802.11b/g|802.11b/g/n}>]
           [locale = <{(missing)}>]
              [lrl = <{(missing)}>]
       [protection = <{(missing)}>]
         [protmode = <{(missing)}>]
       [prottrigger = <{(missing)}>]
           [rateset = <{(missing)}>]
               [rts = <{(missing)}>]
        [shortslot = <{(missing)}>]
               [srl = <{(missing)}>]
              [ssid = <quoted string>]
             [state = <{enabled|disabled}>]
```

Parameters:

any	Make SSID public	Optional
channel	Communication channel number Options: <{auto|1|2|3|4|5|6|7|8|9|10|11|12|13}>	Optional
country		Hidden
dtim		Hidden
flags		Hidden
frame aggregation		Hidden
frameburst	Framebursting	Optional
interop	Interoperability mode	Optional
locale		Hidden
lrl		Hidden
protection		Hidden
protmode		Hidden
prottrigger		Hidden

wireless Commands

rateset		Hidden
rts		Hidden
shortslot		Hidden
srl		Hidden
ssid	SSID	Optional
state	Interface operational status of wireless access point	Optional

wireless macacl

Following commands are available :

config	:	Access Control List configuration
register	:	Start a registration process (only for register mode)
add	:	Add an ACL MAC entry
modify	:	Modify an ACL entry
delete	:	Delete an ACL MAC entry
list	:	Shows a list of all configured ACL entries
flush	:	Flushes ACL entries

wireless macacl add

Add an ACL MAC entry

Syntax:

```
add hwaddr = <hardware-address>
permission = <{allow|deny}>
      [name = <quoted string>]
  [radio_id = <number{0-9999}>]
    [ssid_id = <number{0-9999}>]
```

Parameters:

hwaddr	The Ethernet MAC address of the ACL entry	Required
permission	The action to be performed on ACL entry	Required
name	The name of the station	Optional
radio_id	radio	Optional
ssid_id	ssid id	Optional

wireless macacl config

Access Control List configuration

Syntax:

```
config [control = <{lock|unlock|register}>]
       [radio_id = <number{0-9999}>]
        [regtime = <number{15-3600}>]
        [ssid_id = <number{0-9999}>]
```

Parameters:

control	Access Control List mode	Optional
radio_id	radio	Optional
regtime	Registration time	Optional
ssid_id	ssid id	Optional

wireless macacl delete

Delete an ACL MAC entry

Syntax:

```
delete hwaddr = <hardware-address>
    [radio_id = <number{0-9999}>]
     [ssid_id = <number{0-9999}>]
```

Parameters:

hwaddr	hardware address of the ACL entry	Required
radio_id	radio	Optional
ssid_id	ssid id	Optional

wireless macacl flush

Flushes ACL entries

Syntax:

```
flush proceed = <{disabled|enabled}>
    [radio_id = <number{0-9999}>]
     [ssid_id = <number{0-9999}>]
```

Parameters:

proceed	Confirmation required	Required
radio_id	radio	Optional
ssid_id	ssid id	Optional

wireless macacl list

Shows a list of all configured ACL entries

Syntax:

```
list [radio_id = <number{0-9999}>]
     [ssid_id = <number{0-9999}>]
```

Parameters:

radio_id	radio	Optional
ssid_id	ssid id	Optional

wireless macacl modify

Modify an ACL entry

Syntax:

```
modify hwaddr = <hardware-address>
        [name = <quoted string>]
  [permission = <{allow|deny}>]
    [radio_id = <number{0-9999}>]
      [ssid_id = <number{0-9999}>]
```

Parameters:

hwaddr	The Ethernet MAC address of the ACL entry	Required
name	The name of the station	Optional
permission	The action to be performed on ACL entry	Optional
radio_id	radio	Optional
ssid_id	ssid id	Optional

wireless macacl register

Start a registration process (only for register mode)

Syntax:

```
register proceed = <{disabled|enabled}>
        [radio_id = <number{0-9999}>]
         [ssid_id = <number{0-9999}>]
```

Parameters:

proceed	Confirmation required	Required
radio_id	radio	Optional
ssid_id	ssid id	Optional

wireless mssid

Following commands are available :

`iflist`	:	Multiple ssid configuration
`ifadd`	:	Add an extra ssid context
`ifdelete`	:	Delete a ssid context
`ifconfig`	:	Configure a ssid context
`ifattach`	:	Attach a ssid context
`ifdetach`	:	Detach a ssid context

wireless mssid ifadd

Add an extra ssid context

Syntax:
```
ifadd [radio_id = <number{0-9999}>]
      [ssid = <quoted string>]
```

Parameters:

radio_id	radio	Optional
ssid	ssid	Optional

wireless mssid ifattach

Attach a ssid context

Syntax:

```
ifattach ssid_id = <number{0-9999}>
        [radio_id = <number{0-9999}>]
```

Parameters:

ssid_id	ssid	Required
radio_id	radio	Optional

wireless mssid ifconfig

Configure a ssid context

Syntax:

```
ifconfig ssid_id = <number{0-9999}>
       [addscript = <{(missing)}>]
             [any = <{disabled|enabled}>]
     [apisolation = <{disabled|enabled}>]
       [delscript = <{(missing)}>]
        [radio_id = <number{0-9999}>]
         [secmode = <{disable|wep|wpa-psk}>]
            [ssid = <quoted string>]
           [trace = <{(missing)}>]
          [WEPkey = <quoted string>]
       [WPAPSKkey = <quoted string>]
  [WPAPSKversion = <{WPA|WPA2|WPA+WPA2}>]
```

Parameters:

ssid_id	ssid id	Required
addscript		Hidden
any	public network	Optional
apisolation	ap isolation	Optional
delscript		Hidden
radio_id	radio	Optional
secmode	security mode	Optional
ssid	ssid	Optional
trace		Hidden
WEPkey	WEP key: expected format 5 or 13 ASCII characters, or 10 or 26 HEX digits.	Optional
WPAPSKkey	WPA-PSK key: expected format 8 to 63 ASCII characters or 64 HEX digits.	Optional
WPAPSKversion	wpa version	Optional

wireless mssid ifdelete

Delete a ssid context

Syntax:

```
ifdelete ssid_id = <number{0-9999}>
        [radio_id = <number{0-9999}>]
```

Parameters:

ssid_id	ssid	Required
radio_id	radio	Optional

wireless mssid ifdetach

Detach a ssid context

Syntax:

```
ifdetach ssid_id = <number{0-9999}>
        [radio_id = <number{0-9999}>]
```

Parameters:

ssid_id	ssid	Required
radio_id	radio	Optional

wireless mssid iflist

Multiple ssid configuration

Syntax:

```
iflist [radio_id = <number{0-9999}>]
       [ssid_id = <number{0-9999}>]
```

Parameters:

radio_id	radio	Optional
ssid_id	ssid	Optional

wireless multiuni

Following commands are available :

scanresults	:	display detected multicast mac addresses
add	:	add a multicast to unicast mapping
delete	:	delete all multicast mappings
list	:	show configured multicast to unicast mappings
flush	:	flush all multicast to unicast mappings

Note: wireless multiuni is missing from the ':help wireless' group list

wireless multiuni add

add a multicast to unicast mapping

Syntax:
```
add multicast = <hardware-address>
      unicast = <hardware-address>
```

Parameters:

multicast	Multicast MAC	Required
unicast	Unicast MAC	Required

wireless multiuni delete

delete all multicast mappings

Syntax:
```
delete multicast = <hardware-address>
```

Parameters:

multicast	Multicast MAC	Required

wireless multiuni delete

wireless multiuni flush

flush all multicast to unicast mappings

Syntax:

```
flush
```

wireless multiuni list

show configured multicast to unicast mappings

Syntax:

```
list
```

wireless multiuni scanresults

display detected multicast mac addresses

Syntax:

```
scanresults [rescan = <{no|yes}>]
```

Parameters:

rescan	rescan for new multicast addresses	Optional

wireless qos

Following commands are available :

config	:	configure QoS settings
apacconfig	:	configure AP EDCA parameters
staacconfig	:	configure STA EDCA parameters

wireless qos apacconfig

configure AP EDCA parameters

Syntax:

```
apacconfig [acm = <{(missing)}>]
           [aifsn = <number{1-15}>]
           [class = <{AC_BE|AC_BK|AC_VI|AC_VO}>]
           [cwmax = <{(see Parameters)}>]
           [cwmin = <{0|1|3|7|15|31|63|127|255}>]
          [ecwmax = <{(missing)}>]
          [ecwmin = <{(missing)}>]
       [radio_id = <number{0-9999}>]
            [txop = <number>]
```

Parameters:

acm		Hidden
aifsn	Aifsn configuration	Optional
class	AC class	Optional
cwmax	CWmax configuration Options: <{0|1|3|7|15|31|63|127|255|511|1023|2047|4095|8191|16383|32767}>	Optional
cwmin	CWmin configuration	Optional
ecwmax		Hidden
ecwmin		Hidden
radio_id	radio	Optional
txop	txoplimit [us] configuration	Optional

wireless qos config

configure QoS settings

Syntax:

```
config [ackpolicy = <{(missing)}>]
          [apsd = <{(missing)}>]
          [mode = <{disabled|wmm}>]
       [radio_id = <number{0-9999}>]
```

Parameters:

ackpolicy		Hidden
apsd		Hidden
mode	WMM active	Optional
radio_id	radio	Optional

wireless qos staaconfig

configure STA EDCA parameters

Syntax:

```
staaconfig [acm = <{(missing)}>]
           [aifsn = <number{1-15}>]
           [class = <{AC_BE|AC_BK|AC_VI|AC_VO}>]
           [cwmax = <{(see Parameters)}>]
           [cwmin = <{0|1|3|7|15|31|63|127|255}>]
          [ecwmax = <{(missing)}>]
          [ecwmin = <{(missing)}>]
       [radio_id = <number{0-9999}>]
           [txop = <number>]
```

Parameters:

acm		Hidden
aifsn	Aifsn configuration	Optional
class	AC class	Optional
cwmax	CWmax configuration Options: <{0|1|3|7|15|31|63|127|255|511|1023|2047|4095|8191|16383|32767}>	Optional
cwmin	CWmin configuration	Optional
ecwmax		Hidden
ecwmin		Hidden
radio_id	radio	Optional
txop	txoplimit [us] configuration	Optional

wireless qual

Following commands are available :

up	:	wl up
down	:	wl down
out	:	wl out
renewssid	:	renew ssid
txant	:	wl txant
antdiv	:	wl antdiv
fqacursy	:	wl fqacursy

Note: wireless qual is missing from the ':help wireless' group list

wireless qual antdiv

wl antdiv

Syntax:

```
antdiv [radio_id = <number{0-9999}>]
       [value = <{0|1|auto}>]
```

Parameters:

radio_id	radio	Optional
value	Value	Optional

wireless qual down

wl down

Syntax:

```
down [radio_id = <number{0-9999}>]
```

Parameters:

radio_id	radio	Optional

wireless qual fqacursy

wl fqacursy

Syntax:

```
fqacursy channum = <number{0-13}>
        [radio_id = <number{0-9999}>]
```

Parameters:

channum	channum	Required
radio_id	radio	Optional

wireless qual out

wl out

Syntax:

```
out [radio_id = <number{0-9999}>]
```

Parameters:

radio_id	radio	Optional

wireless qual renewssid

renew ssid

Syntax:

```
renewssid [radio_id = <number{0-9999}>]
```

Parameters:

radio_id	radio	Optional

wireless qual renewssid

wireless qual txant

wl txant

Syntax:

```
txant [radio_id = <number{0-9999}>]
      [value = <{0|1|auto}>]
```

Parameters:

radio_id	radio	Optional
value	Value	Optional

wireless qual up

wl up

Syntax:

```
up [radio_id = <number{0-9999}>]
```

Parameters:

radio_id	radio	Optional

wireless qual up

wireless radio

Configures radio settings.

Syntax:

```
radio        [channel = <{(see Parameters)}>]
              [country = <{(missing)}>]
                 [dtim = <{(missing)}>]
                [flags = <{(missing)}>]
     [frameaggregation = <{off|ampdu|amsdu}>]
           [frameburst = <{disabled|enabled}>]
  [interferencechannel = <{(missing)}>]
     [interferencemode = <{(missing)}>]
               [interop = <{802.11b/g|802.11b/g/n}>]
                [locale = <{(missing)}>]
                   [lrl = <{(missing)}>]
            [protection = <{(missing)}>]
              [protmode = <{(missing)}>]
           [prottrigger = <{(missing)}>]
              [radio_id = <number{0-9999}>]
               [rateset = <{(missing)}>]
                   [rts = <{(missing)}>]
             [shortslot = <{(missing)}>]
                   [srl = <{(missing)}>]
                 [state = <{enabled|disabled}>]
```

Parameters:

channel	Communication channel number Options: <{auto|1|2|3|4|5|6|7|8|9|10|11|12|13}>	Optional
country		Hidden
dtim		Hidden
flags		Hidden
frame aggregation	Frame aggregation method	Optional
frameburst	Framebursting	Optional
interference channel		Hidden
interference mode		Hidden
interop	Interoperability mode	Optional
locale		Hidden
lrl		Hidden

protection		Hidden
protmode		Hidden
prottrigger		Hidden
radio_id	radio	Optional
rateset		Hidden
rts		Hidden
shortslot		Hidden
srl		Hidden
state	Interface operational status of wireless access point	Optional

wireless reset

Reset Wireless interface settings to defaults

Syntax:

```
reset proceed = <{disabled|enabled}>
```

Parameters:

proceed	Confirmation required	Required

wireless secmode

Following commands are available :

`config`	:	Configure/Show the security mode.
`wep`	:	Configure WEP settings.
`wpa-psk`	:	Configure WPA-PSK settings.

Note: wireless secmode is missing from the ':help wireless' group list

wireless secmode config

Configure/Show the security mode.

Syntax:

```
config [mode = <{disable|wep|wpa-psk}>]
```

Parameters:

mode	security mode	Optional

wireless secmode wep

Configure WEP settings.

Syntax:

```
wep [encryptionkey = <quoted string>]
```

Parameters:

encryptionkey	WEP key: expected format 5 or 13 ASCII characters, or 10 or 26 HEX digits.	Optional

wireless secmode wpa-psk

Configure WPA-PSK settings.

Syntax:

```
wpa-psk [encryption = <{(missing)}>]
       [presharedkey = <quoted string>]
            [rekeysec = <{(missing)}>]
              [version = <{WPA|WPA2|WPA+WPA2}>]
```

Parameters:

encryption		Hidden
presharedkey	WPA-PSK key: expected format 8 to 63 ASCII characters or 64 HEX digits.	Optional
rekeysec		Hidden
version	wpa version	Optional

wireless stations

Following commands are available :

```
list                  :   List of the currently associated stations
```

wireless stations list

List of the currently associated stations

Syntax:

```
list [radio_id = <number{0-9999}>]
     [ssid_id = <number{0-9999}>]
```

Parameters:

radio_id	radio	Optional
ssid_id	Selected BSS	Optional

wireless wds

Following commands are available :

config	:	WDS configuration parameters
scanresults	:	scan all networks
add	:	add WDS station
delete	:	delete WDS station
list	:	list WDS stations
flush	:	Flush all wds stations

wireless wds add

add WDS station

Syntax:

```
add bssid = <hardware-address>
    [name = <quoted string>]
```

Parameters:

bssid	The WDS bssid	Required
name	A user specified reference name	Optional

wireless wds config

WDS configuration parameters

Syntax:

```
config [state = <{disabled|enabled}>]
```

Parameters:

state	WDS functionality	Optional

wireless wds delete

delete WDS station

Syntax:

```
delete bssid = <hardware-address>
```

Parameters:

bssid	The WDS bssid	Required

wireless wds flush

Flush all wds stations

Syntax:

```
flush
```

wireless wds list

list WDS stations

Syntax:

```
list
```

wireless wds scanresults

scan all networks

Syntax:

```
scanresults [rescan = <{disabled|enabled}>]
```

Parameters:

rescan	perform a new scan	Optional

wireless wps

Following commands are available :

config   :   Configure/Show the WPS settings
pin   :   Set the ENROLLEE pin value
ap_pin   :   Set/Show the AP pin value
mode   :   Set/Show the configuration mode value

wireless wps ap_pin

Set/Show the AP pin value

Syntax:

```
ap_pin [radio_id = <number{0-9999}>]
       [ssid_id = <number{0-9999}>]
          [value = <number>]
```

Parameters:

radio_id	radio	Optional
ssid_id	ssid id	Optional
value	pin number	Optional

wireless wps config

Configure/Show the WPS settings

Syntax:

```
config [radio_id = <number{0-9999}>]
       [ssid_id = <number{0-9999}>]
          [state = <{disabled|enabled}>]
```

Parameters:

radio_id	radio	Optional
ssid_id	ssid id	Optional
state	WPS state	Optional

wireless wps mode

Set/Show the configuration mode value

Syntax:

```
mode [radio_id = <number{0-9999}>]
      [ssid_id = <number{0-9999}>]
         [state = <{unconfigured|configured}>]
         [value = <{(missing)}>]
```

Parameters:

radio_id	radio	Optional
ssid_id	ssid id	Optional
state	configuration mode	Optional
value		Hidden

wireless wps pin

Set the ENROLLEE pin value

Syntax:

```
pin [radio_id = <number{0-9999}>]
    [ssid_id = <number{0-9999}>]
      [value = <number>]
```

Parameters:

radio_id	radio	Optional
ssid_id	ssid id	Optional
value	pin number	Optional

wizard

Following commands are available :

config	:	configuration of embedded wizard
def	:	Profile definition.
flush	:	Clear active profile
view	:	View active profile
load	:	Load a profile(command is hidden)

Note: wizard is missing from the ':help' group list

wizard config

configuration of embedded wizard

Syntax:

```
config [allow_factory_tpl = <{no|yes}>]
               [autopopup = <{no|yes}>]
              [configtime = <number{15-300}>]
                   [trace = <{no|yes}>]
```

Parameters:

allow_factory_ tpl	Option to indicate if factory templates may be loaded	Optional
autopopup	Generate wizard popup if factory defaults are active	Optional
configtime	Time in between 'please wait' page and 'complete' page(in seconds)	Optional
trace	Trace during loading	Optional

wizard def

Profile definition.

Syntax:

```
def type = <{(see Parameters)}>
      var = <string>
  [alias = <translated string>]
    [calc = <quoted string>]
 [dalias = <translated string>]
    [data = <quoted string>]
[default = <quoted string>]
    [desc = <translated string>]
     [grp = <string>]
    [help = <translated string>]
[linkvar = <string>]
     [max = <number>]
     [min = <number>]
     [req <{no|yes}>]
```

Parameters:

type	type of the variable Options: <{string|passw|integer|combo|list| radioset|bool|ipaddr|ipmask|passwcheck|label| hex|grp}>	Required
var	Variable name : name of variable or group	Required
alias	user friendly name for field or group	Optional
calc	host wizard related stuff, ignored here	Optional
dalias	user friendly names for data values	Optional
data	list of values, used in configuration file	Optional
default	a default value field for variable	Optional
desc	Description text, help text	Optional
grp	Group name in case variable is defined	Optional
help	Addtional help text (only for group description	Optional
linkvar	to which variable this variable is linked to (only for passwcheck)	Optional
max	maximum value in case type is integer	Optional
min	minumum value in case type is integer	Optional
req	parameter without value: to indicate a required field	Optional

wizard flush

Clear active profile

Syntax:

```
flush
```

wizard load

Load a profile(command is hidden)

Syntax:

```
load [profile = <profile filename>]
```

Parameters:

profile	Profile name to load	Optional

wizard view

View active profile

Syntax:

```
view
```

xdsl

Following commands are available :

`info`	:	Displays status information about modem
`config`	:	Modify/Display dsl configuration
`version`	:	Display xdsl version information.
`maxspeed`	:	Set ATM Default Maximum Speed.(command is hidden)

Following command groups are available :

`debug`   *qual*

xdsl config

Modify/Display dsl configuration

Syntax:

```
config [adslmultimode = <{(see Parameters)}>]
          [detect-lop = <{disabled|enabled}>]
              [status = <{down|up}>]
              [syslog = <{disabled|enabled}>]
```

Parameters:

adslmultimode	Set/Show selected multimode type of the modem Options: <{disable|adsl|adsl2|adsl2plus}>	Optional
detect-lop	Detect Loss Of Power	Optional
status	configure adsl line up or down (setting can't be saved!)	Optional
syslog	Log in syslog during showtime	Optional

xdsl debug

Following commands are available :

bitloadinginfo   :   Displays # bits per tone
deltconfig   :   Dual Ended Line Testing interface
deltinfo   :   Dual Ended Line Test result display
modemoptioninfo   :   The modem options bitmap display
multimode   :   Config custom multimode
traceconfig   :   Config the adsl tracelevel

xdsl debug bitloadinginfo

Displays # bits per tone

Syntax:

```
bitloadinginfo
```

xdsl debug deltconfig

Dual Ended Line Testing interface

Syntax:

```
deltconfig [state = <{disabled|enabled}>]
```

Parameters:

state	Enable/Disable dual ended line testing	Optional

xdsl debug deltinfo

Dual Ended Line Test result display

Syntax:

```
deltinfo
```

xdsl debug modemoptioninfo

The modem options bitmap display

Syntax:

```
modemoptioninfo
```

xdsl debug multimode

Config custom multimode

Syntax:

```
multimode [config = <{(see Parameters)}>]
```

Parameters:

config	The custom multimode bitmap Options: <[+/-]flag[+/-flag...]{default t1.413issue2 g992.1_annex_a g992.2g992.3_annex_a g992.3_annex_l g992.3_annex_m g992.5_annex_ag992.5_annex_m}>	Optional

xdsl debug traceconfig

Config the adsl tracelevel

Syntax:

```
traceconfig level = <{0|1|2|3|4}>
```

Parameters:

level	Trace Level (0=disable tracing; 1=enable dsl manager tracing; 2=enable dsl driver tracing)	Required

xdsl info

Displays status information about modem

Syntax:

```
info [counter_period_filter = <{(see Param)}>]
            [counters_reset = <{no|yes}>]
                     [expand = <{disabled|enabled}>]
                    [g.997.1 = <{disabled|enabled}>]
```

Parameters:

counter_period_ filter	Specify the statistics period Options: <{current|15_minutes|24_hours}>	Optional
counters_reset	Reset all counters	Optional
expand	Condensed / Expanded listing link information	Optional
g.997.1	Condensed / Expanded listing link information	Optional

xdsl maxspeed

Set ATM Default Maximum Speed.(command is hidden)

Syntax:

```
maxspeed [rx = <number>]
         [tx = <number>]
```

Parameters:

rx	A predefined Maximum ADSL Speed in Downstream direction	Optional
tx	A predefined Maximum ADSL Speed in Upstream direction	Optional

xdsl qual

Following commands are available :

`alb`	:	Analog front end LoopBack Test Mode
`bitloadinginfo`	:	Displays # bits per tone
`lov`	:	Longitudinal Balance (LOV) Test Mode -continuously sending-
`lcl`	:	Longitudinal Balance (LCL) Test Mode -online quiet-
`qln`	:	Quiet Line Noise Test Mode
`aisf`	:	Set modem's ATU Impedance State Force
`freeze-showtime`	:	freeze showtime (no auto retrain)
`mib`	:	Retreive extra adsl info Test Mode(command is hidden)

Note: xdsl qual is missing from the ':help xdsl' group list

xdsl qual aisf

Set modem's ATU Impedance State Force

Syntax:

```
aisf state = <{disable|inactive|active}>
```

Parameters:

state	aisf state	Required

xdsl qual alb

Analog front end LoopBack Test Mode

Syntax:

```
alb address = <string>
       port = <{(see Parameters)}>
       type = <{adsl}>
```

Parameters:

address	remote IP Address or string "modem" to store on the board	Required
port	Remote IP Port Options: <{undefined|at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|xwindows} or number>	Required
type	Type of Test Mode	Required

xdsl qual bitloadinginfo

Displays # bits per tone

Syntax:

```
bitloadinginfo
```

xdsl qual freeze-showtime

freeze showtime (no auto retrain)

Syntax:

```
freeze-showtime [state = <{disabled|enabled}>]
```

Parameters:

state	Enable/Disable freeze showtime testing	Optional

xdsl qual lcl

Longitudinal Balance (LCL) Test Mode -online quiet-

Syntax:

```
lcl
```

xdsl qual lov

Longitudinal Balance (LOV) Test Mode -continuously sending-

Syntax:

```
lov      type = <{(see Parameters)}>
[signal_type = <{(missing)}>]
```

Parameters:

type	Type of (LOV) Test Mode Options: <{adsl_annex_a|adsl_annex_l_wide|adsl_annex_l_narrow}>	Required
signal_type		Hidden

xdsl qual mib

Retreive extra adsl info Test Mode(command is hidden)

Syntax:

```
mib address = <string>
        port = <{(see Parameters)}>
        type = <{adsl}>
```

Parameters:

address	remote IP Address or string "modem" to store on the board	Required
port	Remote IP Port Options: <{undefined|at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|xwindows} or number>	Required
type	Type of Test Mode	Required

xdsl qual qln

Quiet Line Noise Test Mode

Syntax:

```
qln address = <string>
        port = <{(see Parameters)}>
        type = <{adsl}>
```

Parameters:

address	remote IP Address or string "modem" to store on the board	Required
port	Remote IP Port Options: <{undefined|at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|xwindows} or number>	Required
type	Type of Test Mode	Required

xdsl version

Display xdsl version information.

Syntax:

```
version
```