



CLI REFERENCE GUIDE R10.2
MediaAccess TG784n v3 - SIP



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atm cac config

Configure ATM connection admission control.

SYNTAX:

```
atm cac config          port = <{ds10|ds11|atm2|atm3|aal5|atm5} or
                        number>
                        state = <{disabled|enabled}>
```

where:

port	The port for which CAC is configured.	REQUIRED
state	Enable/disable CAC for an ATM port.	REQUIRED

atm cac list

List all CAC parameters.

atm cac overbooking

Configure ATM overbooking parameters.

SYNTAX:

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

where:

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

atm debug gstats

Display ATM global statistics.

SYNTAX:

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

where:

clear	Clear the statistics after request.	OPTIONAL
-------	-------------------------------------	----------

atm debug stats

Display ATM interface statistics.

SYNTAX:

```
atm debug stats [intf = <{atm_Internet}>]
                [clear = <{disabled|enabled}>]
```

where:

intf	The name of the ATM interface.	OPTIONAL
clear	Clear the statistics after request.	OPTIONAL

atm debug traceconfig

Display/Modify AAL5 debug trace configuration.

SYNTAX:

```
atm debug traceconfig      [len = <number>]
                           [intf = <{atm_Internet}>]
                           [state = <{disabled|enabled}>]
```

where:

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

atm flush

Flush all ATM interfaces.

atm ifattach

Attach an ATM interface.

SYNTAX:

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

where:

intf	The name of the ATM interface.	REQUIRED
------	--------------------------------	----------

atm ifconfig

Modify an ATM interface.

SYNTAX:

```
atm ifconfig          intf = <{atm_Internet}>
                    [dest = <{}>]
                    [qos = <{default}>]
                    [clp = <{0|1|classification}>]
                    [clpthresh = <number{0-15}>]
                    [encaps = <{llc|vcmux}>]
                    [fcs = <{disabled|enabled|auto}>]
                    [ulp = <{mac|ip|ppp}>]
                    [mtu = <number{1536-2016}>]
                    [retry = <number{0-65535}>]
```

where:

intf	The name of the ATM interface to configure.	REQUIRED
dest	The WAN destination for this ATM interface. Typically, a phonebook entry.	OPTIONAL
qos	The name of a qosbook entry defining the QoS parameters for the WAN link.	OPTIONAL
clp	The mode used to determine the CLP bit value.	OPTIONAL
clpthresh	Priority class threshold where CLP becomes 0 (for all classes >= threshold).	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
ulp	The upper layer protocol.	OPTIONAL
mtu	The MTU size for this ATM interface.	OPTIONAL
retry	The number of times the WAN connection setup should retry before giving up.	OPTIONAL

atm ifdelete

Delete an ATM interface.

SYNTAX:

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

where:

intf	The name of the ATM interface.	REQUIRED
------	--------------------------------	----------

atm ifdetach

Detach an ATM interface.

SYNTAX:

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

where:

intf	The name of the ATM interface.	REQUIRED
------	--------------------------------	----------

atm iflist

Display the ATM interfaces.

SYNTAX:

```
atm iflist [intf = <{atm_Internet}>]
```

where:

intf	The name of an ATM interface.	OPTIONAL
------	-------------------------------	----------

atm oam cc list

Display CC configuration.

atm oam cc modify

Modify CC on the connection.

SYNTAX:

```
atm oam cc modify          port = <{dsl10|dsl11|atm2|atm3|aal5|atm5} or
                           number>
                           vpi = <number{0-31}>
                           [vci = <number{0-511}>]
                           [transmit = <{disabled|enabled}>]
                           [receive = <{disabled|enabled}>]
                           [auto = <{disabled|enabled}>]
                           [span = <{segment|end2end}>]
```

where:

port	The ATM port number.	REQUIRED
vpi	The Virtual Path Identifier.	REQUIRED
vci	The Virtual Channel Identifier.	OPTIONAL
transmit	Enable/disable transmission of CC cells.	OPTIONAL
receive	Enable/disable loss of continuity.	OPTIONAL
auto	Enable/disable remote CC activation/deactivation.	OPTIONAL
span	End2end or segment continuity check.	OPTIONAL

atm oam cc send

Send CC activate/deactivate to connection.

SYNTAX:

```
atm oam cc send          port = <{ds10|ds11|atm2|atm3|aal5|atm5} or
                           number>
                           vpi = <number{0-31}>
                           [vci = <number{0-511}>]
                           [span = <{segment|end2end}>]
                           [action = <{activate|deactivate}>]
                           [direction = <{source|sink|both}>]
```

where:

port	The ATM port number.	REQUIRED
vpi	The Virtual Path Identifier.	REQUIRED
vci	The Virtual Channel Identifier.	OPTIONAL
span	Send CC action end2end or segment.	OPTIONAL
action	The CC action.	OPTIONAL
direction	Source, sink or both (default: both).	OPTIONAL

atm oam config

Modify the ATM OAM settings.

SYNTAX:

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

where:

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.

atm oam modify

Modify the ATM OAM data blocking mode.

SYNTAX:

```
atm oam modify          port = <{ds10|ds11|atm2|atm3|aal5|atm5} or  
                        number>  
                        blocking = <{disabled|enabled}>
```

where:

port	The port for which OAM blocking is configured.	REQUIRED
blocking	Enable/disable OAM blocking.	REQUIRED

atm oam ping

Send ATM loopback cells.

SYNTAX:

```
atm oam ping                dest = <{atm_pvc_8_35}>
                             [count = <number{1-1000000}>]
                             [interval = <number{100-1000000}>]
```

where:

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 add

Create a loopback connection for VC

SYNTAX:

```
atm oam vclb add          port = <{ds10|ds11|atm2|atm3|aal5|atm5} or
                           number>
                           vpi = <number{0-31}>
                           [vci = <number{0-511}>]
```

where:

port	The ATM port 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:

```
atm oam vclb del          port = <{ds10|ds11|atm2|atm3|aal5|atm5} or
                           number>
                           vpi = <number{0-31}>
                           [vci = <number{0-511}>]
```

where:

port	The ATM port number.	REQUIRED
vpi	The Virtual Path Identifier.	REQUIRED
vci	The Virtual Channel Identifier.	OPTIONAL

atm oam vclb list

List all VC loopback connections

atm phonebook add

Add a new phonebook entry.

SYNTAX:

```
atm phonebook add          name = <string>
                           addr = <atmchannel : PVC syntax is
                           [port.]vpi.vci port=ds10|ds11|...>
```

where:

name	The phonebook name for this destination.	REQUIRED
addr	The address for this destination.	REQUIRED

atm phonebook delete

Delete a phonebook entry.

SYNTAX:

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

where:

name	The name of the phonebook to delete.	REQUIRED
------	--------------------------------------	----------

atm phonebook flush

Flush all phonebook entries.

atm phonebook list

Display the phonebook.

atm qosbook add

Add a new qosbook entry.

SYNTAX:

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

where:

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

atm qosbook config

Modify the qosbook configuration.

SYNTAX:

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

where:

format	The input, output format of the qosbook.	OPTIONAL
--------	--	----------

atm qosbook ctdadd

Add a new connection traffic descriptor.

SYNTAX:

```
atm qosbook ctdadd          name = <string>
                             conformance = <{UBR|CBR|VBR|UBR.1|UBR.2|
                             UBR.mdc|CBR.1|VBR.1|VBR.2|VBR.3|VBR.c|VBR.nt|
                             VBR.t|GFR.1|GFR.2}>
                             [peakrate = <number{0-27786}>]
                             [sustrate = <number{0-27786}>]
                             [maxburst = <number{48-12240}>]
                             [minrate = <number{0-27786}>]
                             [maxframe = <number{0-255}>]
                             [celldelay = <number>]
                             [realtime = <{enabled|disabled}>]
                             [framediscard = <{enabled|disabled}>]
```

where:

name	The name for the new CTD entry.	REQUIRED
conformance	The ATM service conformance definition.	REQUIRED
peakrate	The peak rate (in kilobits per second). Use '0' to indicate linerate for UBR.	OPTIONAL
sustrate	The sustainable rate (in kilobits per second). (VBR only)	OPTIONAL
maxburst	The maximum burst size (in bytes). (VBR or GFR)	OPTIONAL
minrate	The minimum rate (in kilobits per second). (UBR.m or GFR)	OPTIONAL
maxframe	The maximum frame size (in bytes). (GFR only)	OPTIONAL
celldelay	Cell delay variation in tenths of microseconds.	OPTIONAL
realtime	Enable/disable realtime traffic (VBR only).	OPTIONAL
framediscard	Enable/disable frame discard.	OPTIONAL

atm qosbook ctdelete

Delete a connection traffic descriptor.

SYNTAX:

```
atm qosbook ctdelete      name = <{default}>
                          [force = <{disabled|enabled}>]
```

where:

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.

atm qosbook delete

Delete a qosbook entry.

SYNTAX:

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

where:

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.

atm qosbook list

Display the qosbook.

atm qos list

Display the Qos list.

SYNTAX:

```
atm qos list [intf = <{bridge}>]
```

where:

intf	The name of the ATM interface to configure.	OPTIONAL
------	---	----------

atm qos queue config

Configure TX Queue entry.

SYNTAX:

```
atm qos queue config      qname = <{queue_a0}>
                          weight = <number{0-64}>
                          maxpackets = <number{0-2500}>
                          loprio = <number{0-15}>
                          hiprio = <number{0-15}>
```

where:

qname	The name of the Transmit Queue.	REQUIRED
weight	Weight value of the chosen weight algorithm.	REQUIRED
maxpackets	The maximum number of packets in the queues.	REQUIRED
loprio	The lowest internal priority boundary for entering this queue.	REQUIRED
hiprio	The highest internal priority boundary for entering this queue.	REQUIRED

atm qos queue list

Display the Qos list.

SYNTAX:

```
atm qos queue list [intf = <{strict|cwrr|pwrr|wfg}>]
```

where:

intf	The name of the ATM interface to configure.	OPTIONAL
------	---	----------

config Commands

<i>config delete</i>	<i>Delete a user configuration file.</i>	see page 70
<i>config dump</i>	<i>Show the saved configuration file</i>	see page 71
<i>config flush</i>	<i>Flush the loaded configuration.</i>	see page 72
<i>config list</i>	<i>Show the current configuration set</i>	see page 73
<i>config load</i>	<i>Load saved or default configuration.</i>	see page 74
<i>config save</i>	<i>Store current configuration to backup file</i>	see page 75

config delete

Delete a user configuration file.

SYNTAX:

```
config delete [filename = <user configuration filename>]
```

where:

filename	configuration file to erase	OPTIONAL
----------	-----------------------------	----------

config dump

Show the saved configuration file

config flush

Flush the loaded configuration.

SYNTAX:

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

where:

flush_ip	Flush IP settings or not.	OPTIONAL
----------	---------------------------	----------

config list

Show the current configuration set

SYNTAX:

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

where:

templates	list template files	OPTIONAL
-----------	---------------------	----------

config load

Load saved or default configuration.

SYNTAX:

```
config load [load_ip = <{enabled|disabled}>]
            [defaults = <{disabled|enabled}>]
            [flush = <{enabled|disabled}>]
            [echo = <{disabled|enabled}>]
            [filename = <string>]
```

where:

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

config save

Store current configuration to backup file

SYNTAX:

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

where:

filename	Filename for backupfile of current configuration	REQUIRED
----------	--	----------

connection Commands

<i>connection appconfig</i>	<i>Modify a CONN/NAT application helper configuration</i>	see page 79
<i>connection appinfo</i>	<i>Display CONN/NAT application specific info</i>	see page 80
<i>connection applist</i>	<i>Display the available CONN/NAT application helpers.</i>	see page 81
<i>connection bind</i>	<i>Create a CONN/NAT application helper/port binding.</i>	see page 82
<i>connection bindblacklist add</i>	<i>Add bind blacklist entry.</i>	see page 83
<i>connection bindblacklist delete</i>	<i>Delete bind blacklist entry.</i>	see page 84
<i>connection bindblacklist list</i>	<i>List all bind blacklist entries.</i>	see page 85
<i>connection bindlist</i>	<i>Display the CONN/NAT application helper/port bindings.</i>	see page 86
<i>connection clean</i>	<i>Clean connection database by forcing timeouts.</i>	see page 87
<i>connection clear</i>	<i>Kill all connections.</i>	see page 88
<i>connection config</i>	<i>Modify global connection configuration.</i>	see page 89
<i>connection debug</i>	<i>Connection debug commands.</i>	see page 90
<i>connection describe</i>	<i>Describe the streams of a connection.</i>	see page 91
<i>connection flow add</i>	<i>Add flow</i>	see page 92
<i>connection flow delete</i>	<i>Delete flow</i>	see page 93
<i>connection flow flush</i>	<i>Flush flow configuration</i>	see page 94
<i>connection flow list</i>	<i>List all flows</i>	see page 95
<i>connection flow qoslabeladd</i>	<i>Assign qos label to flow</i>	see page 96
<i>connection flow qoslabeldel</i>	<i>Remove qos label from flow</i>	see page 97
<i>connection flush</i>	<i>Flush the connection configuration.</i>	see page 98
<i>connection info</i>	<i>Display all modules with some info.</i>	see page 99
<i>connection list</i>	<i>Display the currently known connections.</i>	see page 100
<i>connection refresh</i>	<i>Invalidate all cached decisions.</i>	see page 101
<i>connection release</i>	<i>Release connections.</i>	see page 102
<i>connection reserve</i>	<i>Reserve connections.</i>	see page 103
<i>connection stats</i>	<i>Display connection and stream statistics.</i>	see page 104

<i>connection timerclear</i>	<i>Clear connection timeout to default.</i>	see page 105
<i>connection timerconfig</i>	<i>Modify connection timeout handling.</i>	see page 106
<i>connection unbind</i>	<i>Delete a CONN/NAT application helper/port binding.</i>	see page 107

connection appconfig

Modify a CONN/NAT application helper configuration

SYNTAX:

```
connection appconfig          application = <{PPTP|AH|ESP|IKE|SIP|JABBER|CU/
                             SeeMe|RAUDIO(PNA)|RTSP|ILS|FTP}>
                             [trace = <{disabled|enabled}>]
                             [timeout = <number{0-32000}>]
                             [childqos = <{None|Interactive|Local|
                             Management|SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|
                             VoIP-Signal|default}>]
                             [floating = <{disabled|enabled}>]
                             [proxy = <{disabled|enabled}>]
                             [tracelevel = <number{1-4}>]
                             [snooping = <{disabled|enabled}>]
                             [translate-predict = <{disabled|enabled}>]
```

where:

application	The name of a CONN/NAT application helper as listed by 'connection applist'.	REQUIRED
trace	Enable/disable CONN/NAT application helper traces.	OPTIONAL
timeout	The maximum timeout in seconds to keep predicted child connections around.	OPTIONAL
childqos	Used QOS label for the predicted child connections.	OPTIONAL
floating	Enable/disable floating port for IKE helper.	OPTIONAL
proxy	Enable/disable FTP proxy support.	OPTIONAL
tracelevel	1=feature errors; 2=feature traces; 3=all errors; 4=all traces.	OPTIONAL
snooping	SIP only: Enable/disable snooping	OPTIONAL
translate-predict	SIP only: Enable/disable prediction	OPTIONAL

connection appinfo

Display CONN/NAT application specific info

SYNTAX:

```
connection appinfo          application = <{PPTP|AH|ESP|IKE|SIP|JABBER|CU/
                             SeeMe|RAUDIO(PNA)|RTSP|ILS|FTP}>
```

where:

application	The name of a CONN/NAT application helper as listed by 'connection applist'.	REQUIRED
-------------	--	----------

connection applist

Display the available CONN/NAT application helpers.

connection bind

Create a CONN/NAT application helper/port binding.

SYNTAX:

```
connection bind application = <{PPTP|AH|ESP|IKE|SIP|JABBER|CU/
SeeMe|RAUDIO(PNA)|RTSP|ILS|FTP}>
[ipversion = <{any|4|6}>]
[port = <port-range>]
```

where:

application	The name of a CONN/NAT application helper as listed by 'connection applist'.	REQUIRED
ipversion	The IP version this application handler should work on.	OPTIONAL
port	The port number or range this application handler should work on.	OPTIONAL

connection bindblacklist add

Add bind blacklist entry.

SYNTAX:

```
connection bindblacklist add    ip = <ip-address>
                                [proto = <{ah|egp|esp|gpp|gre|hmp|icmp|icmpv6|
                                igmp|pup|rdp|rsvp|tcp|udp|vines|xns-idp|ipv6|
                                ipip|frag} or number>]
                                [port = <port-range>]
```

where:

ip	The source or destination IP address.	REQUIRED
proto	The IP protocol (name or number).	OPTIONAL
port	The port number or range.	OPTIONAL

connection bindblacklist delete

Delete bind blacklist entry.

SYNTAX:

```
connection bindblacklist      ip = <ip-address>
delete                        [proto = <{ah|egp|esp|gpp|gre|hmp|icmp|icmpv6|
                               igmp|pup|rdp|rsvp|tcp|udp|vines|xns-idp|ipv6|
                               ipip|frag} or number>]
                               [port = <port-range>]
```

where:

ip	The source or destination IP address.	REQUIRED
proto	The IP protocol (name or number).	OPTIONAL
port	The port number or range.	OPTIONAL

connection bindblacklist list

List all bind blacklist entries.

connection bindlist

Display the CONN/NAT application helper/port bindings.

connection clean

Clean connection database by forcing timeouts.

SYNTAX:

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

where:

level	Scrubbing level.	OPTIONAL
-------	------------------	----------

connection clear

Kill all connections.

connection config

Modify global connection configuration.

SYNTAX:

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

where:

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

connection debug

Connection debug commands.

SYNTAX:

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

where:

trace	Enable/disable traces.	OPTIONAL
-------	------------------------	----------

connection describe

Describe the streams of a connection.

SYNTAX:

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

where:

id	The connection ID to describe.	REQUIRED
----	--------------------------------	----------

connection flow add

Add flow

SYNTAX:

```
connection flow add [name = <string>]
```

where:

name	Flow name.	OPTIONAL
------	------------	----------

connection flow delete

Delete flow

SYNTAX:

```
connection flow delete [flow = <{Local-Management|VoIP-terminated|}>]
```

where:

flow	Flow name.	OPTIONAL
------	------------	----------

connection flow flush

Flush flow configuration

connection flow list

List all flows

connection flow qoslabeladd

Assign qos label to flow

SYNTAX:

```
connection flow qoslabeladd [flow = <{Local-Management|VoIP-terminated|}>]
                             [qoslabel = <{None|Interactive|Local|
                             Management|SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|
                             VoIP-Signal|default}>]
```

where:

flow	Flow name.	OPTIONAL
qoslabel	Qos label name.	OPTIONAL

connection flow qoslabeldel

Remove qos label from flow

SYNTAX:

```
connection flow qoslabeldel [flow = <{Local-Management|VoIP-terminated}>]
                             [qoslabel = <{None|Interactive|Local|
                             Management|SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|
                             VoIP-Signal|default}>]
```

where:

flow	Flow name.	OPTIONAL
qoslabel	Qos label name.	OPTIONAL

connection flush

Flush the connection configuration.

connection info

Display all modules with some info.

connection list

Display the currently known connections.

SYNTAX:

```

connection list [id = <number{0-4095}>]
                 [nr = <number{1-4096}>]
                 [history = <{disabled|enabled}>]
                 [proto = <{ah|egp|esp|gpp|gre|hmp|icmp|icmpv6|
igmp|pup|rdp|rsvp|tcp|udp|vines|xns-idp|ipv6|
ipip|frag} or number>]
                 [ip = <ip-range>]
                 [port = <port-range>]
                 [intf = <{loop|Internet|LocalNetwork|loop|
Internet|LocalNetwork}>]
                 [routelabel = <{None|Interactive|Local|
Management|SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|
VoIP-Signal|default}>]
                 [qoslabel = <{None|Interactive|Local|
Management|SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|
VoIP-Signal|default}>]
                 [application = <{PPTP|AH|ESP|IKE|SIP|JABBER|
CU/SeeMe|RAUDIO(PNA)|RTSP|ILS|FTP}>]
                 [reserved = <{false|true}>]
                 [accelerated = <{false|true}>]
                 [prioritized = <{false|true}>]

```

where:

id	The connection ID.	OPTIONAL
nr	The maximum number of connections to display (30 by default).	OPTIONAL
history	If enabled, show history.	OPTIONAL
proto	The IP protocol (name or number).	OPTIONAL
ip	The IP address or range.	OPTIONAL
port	The port number or range.	OPTIONAL
intf	The IP interface name.	OPTIONAL
routelabel	The route label name.	OPTIONAL
qoslabel	The QoS label name.	OPTIONAL
application	The name of CONN/NAT application helper.	OPTIONAL
reserved	Filter on "R" connection flag .	OPTIONAL
accelerated	Filter on "A" stream flag.	OPTIONAL
prioritized	Filter on "P" stream flag.	OPTIONAL

connection refresh

Invalidate all cached decisions.

connection release

Release connections.

SYNTAX:

```
connection release [flow = <{Local-Management|VoIP-terminated|}>]
```

where:

flow	Flow name.	OPTIONAL
------	------------	----------

connection reserve

Reserve connections.

SYNTAX:

```
connection reserve          [flow = <{Local-Management|VoIP-terminated|}>]
                           [amount = <number>]
```

where:

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

connection stats

Display connection and stream statistics.

connection timerclear

Clear connection timeout to default.

SYNTAX:

```
connection timerclear [timer = <{tcpidle|tcpneg|tcpkill|udpidle|
udpkill|icmpidle|icmpkill|fragidle|fragkill|
ipidle|ipkill}>]
```

where:

timer	The name of the connection idle timer.	OPTIONAL
-------	--	----------

connection timerconfig

Modify connection timeout handling.

SYNTAX:

```
connection timerconfig      [timer = <{tcpidle|tcpneg|tcpkill|udpidle|
                             udpkill|icmpidle|icmpkill|fragidle|fragkill|
                             ipidle|ipkill}>]
                             [value = <number{0-86400}>]
```

where:

timer	The name of the connection idle timer.	OPTIONAL
value	The timer expire value in seconds.	OPTIONAL

connection unbind

Delete a CONN/NAT application helper/port binding.

SYNTAX:

```
connection unbind          application = <{PPTP|AH|ESP|IKE|SIP|JABBER|CU/
                           SeeMe|RAUDIO(PNA)|RTSP|ILS|FTP}>
                           [ipversion = <{any|4|6}>]
                           [port = <port-range>]
```

where:

application	The name of a CONN/NAT application helper as listed by 'connection applist'.	REQUIRED
ipversion	The IP version this application handler should work on.	OPTIONAL
port	The port number or range this application handler should work on.	OPTIONAL

contentsharing Commands

<i>contentsharing cifs config</i>	<i>To set CIFS service name, to define CIFS service workgroup and to</i>	see page 110
<i>contentsharing cifs list</i>	<i>To display CIFS service context.</i>	see page 111
<i>contentsharing ftp config</i>	<i>To enable/disable FTP service.</i>	see page 112
<i>contentsharing ftp list</i>	<i>To display FTP service context.</i>	see page 113
<i>contentsharing upnpav config</i>	<i>To enable/disable UPnPAV service, to set the friendly name.</i>	see page 114
<i>contentsharing upnpav list</i>	<i>To display UPnPAV service context.</i>	see page 115
<i>contentsharing upnpav radiostation config</i>	<i>To enable/disable radiostations service.</i>	see page 116
<i>contentsharing upnpav radiostation list</i>	<i>To display radiostations service context.</i>	see page 117
<i>contentsharing upnpav radiostation station add</i>	<i>Add an option.</i>	see page 118
<i>contentsharing upnpav radiostation station delete</i>	<i>Delete an option.</i>	see page 119
<i>contentsharing upnpav radiostation station list</i>	<i>List all options.</i>	see page 120

contentsharing cifs config

To set CIFS service name, to define CIFS service workgroup and to

SYNTAX:

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

where:

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

contentsharing cifs list

To display CIFS service context.

contentsharing ftp config

To enable/disable FTP service.

SYNTAX:

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

where:

state	Enabled/disabled FTP service.	OPTIONAL
-------	-------------------------------	----------

contentsharing ftp list

To display FTP service context.

contentsharing upnpav config

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

SYNTAX:

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

where:

state	Enable/disable UPnP AV service.	OPTIONAL
friendlyname	upnpav friendly name.	OPTIONAL

contentsharing upnpav list

To display UPnP AV service context.

contentsharing upnpav radiostation config

To enable/disable radiostations service.

SYNTAX:

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

where:

state	Enabled/disabled radiostations service.	OPTIONAL
-------	---	----------

contentsharing upnpav radiostation list

To display radiostations service context.

contentsharing upnpav radiostation station add

Add an option.

SYNTAX:

```
contentsharing upnpav      name = <string>
radiostation station add  url = <string>
```

where:

name	station name.	REQUIRED
url	station url	REQUIRED

contentsharing upnpav radiostation station delete

Delete an option.

SYNTAX:

```
contentsharing upnpav      name = <string>
radiostation station delete
```

where:

name	station name.	REQUIRED
------	---------------	----------

contentsharing upnpav radiostation station list

List all options.

cwmp Commands

<i>cwmp config</i>	<i>Configure the cwmpd as seen from the ACS.</i>	see page 122
<i>cwmp debug traceconfig</i>	<i>Enable or disable tracing.</i>	see page 124
<i>cwmp server config</i>	<i>Configure the cwmpd towards the ACS.</i>	see page 125

cwmp config

Configure the cwmpd as seen from the ACS.

SYNTAX:

```

cwmp config [state = <{disabled|enabled}>]
            [mode = <{read-only|full}>]
            [periodicInform = <{disabled|enabled}>]
            [periodicInfInt = <number>]
            [periodicInfTime = <string>]
            [sessionTimeout = <number>]
            [noIpTimeout = <number>]
            [maxEnvelopes = <number>]
            [connectionRequest = <{disabled|enabled}>]
            [connectionReqPath = <string>]
            [connectionReqUserName = <quoted string>]
            [connectionReqPsswd = <password>]
            [connectionReqAuth = <{none|basic|digest}>]
            [bootdelayrange = <number>]
            [upgradedelay = <{disabled|enabled}>]
            [delaytimeoutaction = <{force|cancel}>]
            [amlTermination = <{disabled|enabled}>]
            [persistentSubscription = <{disabled|
enabled}>]
            [connectionReqThrotNumber = <number>]
            [connectionReqThrotTime = <number>]
            [showPasswords = <{disabled|enabled}>]
            [urlSource = <{none}>]
    
```

where:

state	The state of the cwmp daemon.	OPTIONAL
mode	Set the operation mode of the cwmp daemon.	OPTIONAL
periodicInform	Set periodicInform flag of the cwmp daemon.	OPTIONAL
periodicInfInt	Set the interval between two periodicInform messages in seconds.	OPTIONAL
periodicInfTime	Set the UTC time the periodic inform will be synchronized upon.	OPTIONAL
sessionTimeout	Set HTTP session-timeout in seconds.	OPTIONAL
noIpTimeout	Set time (in seconds) ip may be 0 after uploading new config file. Modem will step back to old configuration when timeout is reached.	OPTIONAL
maxEnvelopes	Set the maximum number of SOAP envelopes send within one http-message.	OPTIONAL
connectionRequest	Set connection request flag of the cwmp daemon.	OPTIONAL
connectionReqPath	Set the path where the cwmp daemon can be reached.	OPTIONAL

connectionReqUserName	Set the username the ACS must use to log in.	OPTIONAL
connectionReqPsswd	Set the password the ACS must use to log in.	OPTIONAL
connectionReqAuth	Set the authentication type of modem CWMP server for asynchronous connects.	OPTIONAL
bootdelayrange	Set the delay on boot before inform is sent.	OPTIONAL
upgradedelay	Set whether to delay upgrade if statecheck is active.	OPTIONAL
delaytimeoutaction	Set the action to perform when statecheck goes into timeout.	OPTIONAL
am1Termination	Set if am 1 session termination is enabled.	OPTIONAL
persistentSubscription	The cwmp daemon has persistent subscriptions.	OPTIONAL
connectionReqThrotNumber	Set the connection request throttling maximum number of accepted requests within period.	OPTIONAL
connectionReqThrotTime	Set the connection request throttling period in seconds in which max requests is reached.	OPTIONAL
showPasswords	Show all passwords in IGD as plaintext. When 0 then will be empty stringed as the standard requests.	OPTIONAL
urlSource	The name of DHCP client which the URL comes from.	OPTIONAL

cwmp debug traceconfig

Enable or disable tracing.

SYNTAX:

```
cwmp debug traceconfig [level = <number>]
```

where:

level	Set the tracelevel (0-2).	OPTIONAL
-------	---------------------------	----------

cwmp server config

Configure the cwmpd towards the ACS.

SYNTAX:

```
cwmp server config      [url = <string>]
                        [username = <string>]
                        [password = <password>]
```

where:

url	Set the HTTP URL used to contact the ACS server.	OPTIONAL
username	Set the username for ACS Digest Authentication.	OPTIONAL
password	Set the password for ACS Digest Authentication.	OPTIONAL

debug Command

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

SYNTAX:

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

where:

cmd	Quoted 'Trace & Debug' command string	REQUIRED
-----	---------------------------------------	----------

dhcp Commands

<i>dhcp client debug clear</i>	<i>Clear DHCP client statistics</i>	see page 135
<i>dhcp client debug stats</i>	<i>Print DHCP client statistics</i>	see page 136
<i>dhcp client debug traceconfig</i>	<i>Modify DHCP client trace configuration</i>	see page 137
<i>dhcp client flush</i>	<i>Delete all DHCP clients.</i>	see page 138
<i>dhcp client ifadd</i>	<i>Create a DHCP client.</i>	see page 139
<i>dhcp client ifattach</i>	<i>Activate a DHCP client.</i>	see page 140
<i>dhcp client ifconfig</i>	<i>Configure a DHCP client.</i>	see page 141
<i>dhcp client ifdelete</i>	<i>Delete a DHCP client.</i>	see page 142
<i>dhcp client ifdetach</i>	<i>De-activate a DHCP client and releases its lease.</i>	see page 143
<i>dhcp client iflist</i>	<i>List DHCP clients.</i>	see page 144
<i>dhcp client ifrenew</i>	<i>Renew a DHCP lease.</i>	see page 145
<i>dhcp client roptions add</i>	<i>Add a DHCP Option Code to the Parameter Request List.</i>	see page 146
<i>dhcp client roptions delete</i>	<i>Delete a DHCP Option Code from the Parameter Request List.</i>	see page 147
<i>dhcp client roptions list</i>	<i>List all DHCP Option Codes in the Parameter Request List.</i>	see page 148
<i>dhcp client roptions optionlist</i>	<i>List all DHCP Option Codes that can be used in the Parameter Request List.</i>	see page 149
<i>dhcp client txoptions add</i>	<i>Add an option.</i>	see page 150
<i>dhcp client txoptions delete</i>	<i>Delete an option.</i>	see page 152
<i>dhcp client txoptions list</i>	<i>List all options.</i>	see page 153
<i>dhcp client txoptions optionlist</i>	<i>Lists all DHCP Option Codes that can be used.</i>	see page 154
<i>dhcp clientv6 debug clear</i>	<i>Clear DHCPv6 client statistics</i>	see page 155
<i>dhcp clientv6 debug stats</i>	<i>Print DHCPv6 client statistics</i>	see page 156
<i>dhcp clientv6 debug traceconfig</i>	<i>Modify DHCPv6 client trace configuration</i>	see page 157
<i>dhcp clientv6 flush</i>	<i>Delete all DHCPv6 clients.</i>	see page 158
<i>dhcp clientv6 ifadd</i>	<i>Create a DHCPv6 client.</i>	see page 159
<i>dhcp clientv6 ifattach</i>	<i>Activate a DHCPv6 client.</i>	see page 160

<i>dhcp clientv6 ifconfig</i>	<i>Configure a DHCPv6 client.</i>	see page 161
<i>dhcp clientv6 ifdelete</i>	<i>Delete a DHCPv6 client.</i>	see page 163
<i>dhcp clientv6 ifdetach</i>	<i>Deactivate a DHCPv6 client</i>	see page 164
<i>dhcp clientv6 iflist</i>	<i>List DHCPv6 clients.</i>	see page 165
<i>dhcp clientv6 ifrenew</i>	<i>Renew a DHCPv6 client.</i>	see page 166
<i>dhcp clientv6 oro add</i>	<i>Add a DHCPv6 Option Code to the Option Request Option list.</i>	see page 167
<i>dhcp clientv6 oro delete</i>	<i>Delete a DHCPv6 Option Code from the Option Request Option list.</i>	see page 168
<i>dhcp clientv6 oro list</i>	<i>List all DHCPv6 Option Codes in the Option Request Option list.</i>	see page 169
<i>dhcp clientv6 oro optionlist</i>	<i>List all DHCPv6 Option Codes that can be used in the Option Request Option</i>	see page 170
<i>dhcp clientv6 txoptions add</i>	<i>Add a DHCPv6 option.</i>	see page 171
<i>dhcp clientv6 txoptions delete</i>	<i>Delete a DHCPv6 option.</i>	see page 172
<i>dhcp clientv6 txoptions list</i>	<i>List all DHCPv6 options.</i>	see page 173
<i>dhcp clientv6 txoptions optionlist</i>	<i>Lists all DHCPv6 Option Codes that can be used.</i>	see page 174
<i>dhcp relay add</i>	<i>Add an entry to the DHCP forward list.</i>	see page 175
<i>dhcp relay config</i>	<i>Sets the relay configuration settings.</i>	see page 176
<i>dhcp relay debug stats</i>	<i>Print DHCP relay statistics.</i>	see page 177
<i>dhcp relay debug traceconfig</i>	<i>Modify DHCP relay trace configuration</i>	see page 178
<i>dhcp relay delete</i>	<i>Delete an entry from the DHCP forward list.</i>	see page 179
<i>dhcp relay flush</i>	<i>Flushes the DHCP relay settings.</i>	see page 180
<i>dhcp relay ifconfig</i>	<i>Configure a relay interface.</i>	see page 181
<i>dhcp relay iflist</i>	<i>Show the configuration of the relay interfaces.</i>	see page 182
<i>dhcp relay list</i>	<i>List the DHCP forward list.</i>	see page 183
<i>dhcp relay modify</i>	<i>Modify an entry from the DHCP forward list.</i>	see page 184
<i>dhcp relay ruleadd</i>	<i>Add a selection rule to a DHCP forward entry</i>	see page 185
<i>dhcp relay ruledel</i>	<i>Delete a selection rule from a DHCP forward entry</i>	see page 186
<i>dhcp relayv6 add</i>	<i>Add an entry to the DHCPv6 relay forwarding list.</i>	see page 187
<i>dhcp relayv6 config</i>	<i>Show the DHCPv6 relay status.</i>	see page 188

<i>dhcp relayv6 debug clear</i>	<i>Clear DHCPv6 relay statistics</i>	see page 189
<i>dhcp relayv6 debug stats</i>	<i>Print DHCPv6 relay statistics</i>	see page 190
<i>dhcp relayv6 debug traceconfig</i>	<i>Modify DHCPv6 relay trace configuration</i>	see page 191
<i>dhcp relayv6 debug tracelevel</i>	<i>Show the DHCPv6 relay trace level</i>	see page 192
<i>dhcp relayv6 delete</i>	<i>Delete an entry from the DHCPv6 relay forwarding list.</i>	see page 193
<i>dhcp relayv6 flush</i>	<i>Flushes the DHCPv6 relay settings.</i>	see page 194
<i>dhcp relayv6 ifconfig</i>	<i>Configure a DHCPv6 relay interface.</i>	see page 195
<i>dhcp relayv6 iflist</i>	<i>Show the configuration of the DHCPv6 relay interfaces.</i>	see page 196
<i>dhcp relayv6 list</i>	<i>Show the DHCPv6 forwarding list.</i>	see page 197
<i>dhcp relayv6 modify</i>	<i>Modify an entry in the DHCPv6 relay forwarding list.</i>	see page 198
<i>dhcp relayv6 ruleadd</i>	<i>Add a selection rule to a DHCPv6 forwarding rule</i>	see page 199
<i>dhcp relayv6 ruledel</i>	<i>Delete a selection rule from a DHCPv6 forwarding rule</i>	see page 200
<i>dhcp rule add</i>	<i>Add a rule for DHCP conditional selection</i>	see page 201
<i>dhcp rule debug traceconfig</i>	<i>Modify DHCP rule trace configuration</i>	see page 203
<i>dhcp rule delete</i>	<i>Delete a DHCP rule</i>	see page 204
<i>dhcp rule flush</i>	<i>Flush all DHCP rules</i>	see page 205
<i>dhcp rule list</i>	<i>List all DHCP rules</i>	see page 206
<i>dhcp server config</i>	<i>Print DHCP server configuration settings</i>	see page 207
<i>dhcp server debug clear</i>	<i>Clear DHCP server statistics</i>	see page 208
<i>dhcp server debug stats</i>	<i>Print DHCP server statistics</i>	see page 209
<i>dhcp server debug traceconfig</i>	<i>Modify DHCP server trace configuration</i>	see page 210
<i>dhcp server flush</i>	<i>Flush all DHCP server pool and lease entries</i>	see page 211
<i>dhcp server lease add</i>	<i>Add a DHCP server lease</i>	see page 212
<i>dhcp server lease delete</i>	<i>Delete a DHCP server lease</i>	see page 213
<i>dhcp server lease flush</i>	<i>Flush all DHCP server leases</i>	see page 214
<i>dhcp server lease list</i>	<i>List all DHCP server leases</i>	see page 215
<i>dhcp server option flush</i>	<i>Flush all DHCP server option templates and instances</i>	see page 216

<i>dhcp server option instadd</i>	<i>Add a DHCP server option instance</i>	see page 217
<i>dhcp server option instdelete</i>	<i>Delete a DHCP server option instance</i>	see page 218
<i>dhcp server option instlist</i>	<i>List all DHCP server option instances</i>	see page 219
<i>dhcp server option ruleadd</i>	<i>Add a selection rule to a DHCP server option instance</i>	see page 220
<i>dhcp server option ruledel</i>	<i>Delete a selection rule from a DHCP server option instance</i>	see page 221
<i>dhcp server option tmpladd</i>	<i>Add a DHCP server option template</i>	see page 222
<i>dhcp server option tmpldelete</i>	<i>Delete a DHCP server option template</i>	see page 223
<i>dhcp server option tmpllist</i>	<i>List all DHCP server option templates</i>	see page 224
<i>dhcp server policy</i>	<i>Print DHCP server policy settings</i>	see page 225
<i>dhcp server pool add</i>	<i>Add a DHCP server pool</i>	see page 226
<i>dhcp server pool config</i>	<i>Configure a DHCP server pool</i>	see page 227
<i>dhcp server pool delete</i>	<i>Delete a DHCP server pool</i>	see page 229
<i>dhcp server pool flush</i>	<i>Flush all DHCP server pools</i>	see page 230
<i>dhcp server pool list</i>	<i>List all DHCP server pools</i>	see page 231
<i>dhcp server pool optadd</i>	<i>Add an option instance to the DHCP server pool</i>	see page 232
<i>dhcp server pool optdelete</i>	<i>Delete an option instance from the DHCP server pool</i>	see page 233
<i>dhcp server pool rtadd</i>	<i>Add a route to the DHCP server pool</i>	see page 234
<i>dhcp server pool rtdelete</i>	<i>Delete a route from the DHCP server pool</i>	see page 235
<i>dhcp server pool ruleadd</i>	<i>Add a selection rule to the DHCP server pool</i>	see page 236
<i>dhcp server pool ruledel</i>	<i>Delete a selection rule from the DHCP server pool</i>	see page 237
<i>dhcp serverv6 config</i>	<i>Config DHCPv6 server configuration settings</i>	see page 238
<i>dhcp serverv6 debug clear</i>	<i>Clear DHCPv6 server statistics</i>	see page 239
<i>dhcp serverv6 debug stats</i>	<i>Print DHCPv6 server statistics</i>	see page 240
<i>dhcp serverv6 debug traceconfig</i>	<i>Modify DHCPv6 server trace configuration</i>	see page 241
<i>dhcp serverv6 flush</i>	<i>Flush DHCPv6 server pool configuration.</i>	see page 242
<i>dhcp serverv6 option add</i>	<i>Add a DHCPv6 server option profile</i>	see page 243
<i>dhcp serverv6 option delete</i>	<i>Delete a DHCPv6 server option profile</i>	see page 244

<i>dhcp serverv6 option fieldadd</i>	<i>Add an option field to a DHCPv6 server option profile</i>	see page 245
<i>dhcp serverv6 option fielddelete</i>	<i>Delete an option field from a DHCPv6 server option profile</i>	see page 246
<i>dhcp serverv6 option flush</i>	<i>Flush all DHCPv6 server option profiles</i>	see page 247
<i>dhcp serverv6 option list</i>	<i>List all DHCPv6 server option profiles</i>	see page 248
<i>dhcp serverv6 option modify</i>	<i>Modify the DHCPv6 server option profile parameters</i>	see page 249
<i>dhcp serverv6 option optionlist</i>	<i>Lists all DHCPv6 Option Codes that can be used.</i>	see page 250
<i>dhcp serverv6 option ruleadd</i>	<i>Add a selection rule to a DHCPv6 server option profile</i>	see page 251
<i>dhcp serverv6 option ruledelate</i>	<i>Delete a selection rule from a DHCPv6 server option profile</i>	see page 252
<i>dhcp serverv6 pool add</i>	<i>Add a DHCPv6 server pool</i>	see page 253
<i>dhcp serverv6 pool config</i>	<i>Configure a DHCPv6 server pool</i>	see page 254
<i>dhcp serverv6 pool delete</i>	<i>Delete a DHCPv6 server pool</i>	see page 255
<i>dhcp serverv6 pool flush</i>	<i>Flush all DHCPv6 server pools</i>	see page 256
<i>dhcp serverv6 pool list</i>	<i>List all DHCPv6 server pools</i>	see page 257
<i>dhcp serverv6 pool optionadd</i>	<i>Add an option to the DHCPv6 server pool</i>	see page 258
<i>dhcp serverv6 pool optiondelete</i>	<i>Delete an option from the DHCPv6 server pool</i>	see page 259
<i>dhcp serverv6 pool ruleadd</i>	<i>Add a selection rule to the DHCPv6 server pool</i>	see page 260
<i>dhcp serverv6 pool ruledelate</i>	<i>Delete a selection rule from the DHCPv6 server pool</i>	see page 261
<i>dhcp spoofing add</i>	<i>Add a Spoofing-Association</i>	see page 262
<i>dhcp spoofing attach</i>	<i>Enable a Spoofing-Association</i>	see page 263
<i>dhcp spoofing config</i>	<i>Display/modify dhcp spoofing state</i>	see page 264
<i>dhcp spoofing debug traceconfig</i>	<i>Display/modify DHCP spoofing trace configuratin</i>	see page 265
<i>dhcp spoofing delete</i>	<i>Delete a Spoofing-Association</i>	see page 266
<i>dhcp spoofing detach</i>	<i>Disable a Spoofing-Association</i>	see page 267
<i>dhcp spoofing flush</i>	<i>Flush all the associations and the options.</i>	see page 268
<i>dhcp spoofing list</i>	<i>List the available Spoofing-Associations</i>	see page 269

<i>dhcp spoofing option-add</i>	<i>Add a DHCP Option Code to a Spoofing-Association.</i>	see page 270
<i>dhcp spoofing option-delete</i>	<i>Delete a DHCP Option Code from a Spoofing-Association.</i>	see page 271

dhcp client debug clear

Clear DHCP client statistics

dhcp client debug stats

Print DHCP client statistics

dhcp client debug traceconfig

Modify DHCP client trace configuration

SYNTAX:

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

where:

state	Enable/Disable tracing.	OPTIONAL
-------	-------------------------	----------

dhcp client flush

Delete all DHCP clients.

dhcp client ifadd

Create a DHCP client.

SYNTAX:

```
dhcp client ifadd          intf = <{Internet|LocalNetwork}>
```

where:

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

dhcp client ifattach

Activate a DHCP client.

SYNTAX:

```
dhcp client ifattach          intf = <>
```

where:

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

dhcp client ifconfig

Configure a DHCP client.

SYNTAX:

```
dhcp client ifconfig          intf = <>
                              [metric = <number{0-255}>]
                              [dnsmetric = <number{0-100}>]
                              [broadcast = <{disabled|enabled}>]
                              [serverroute = <{disabled|enabled}>]
                              [routelabel = <{None|Interactive|Local|
Management|SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|
VoIP-Signal|default}>]
                              [qoslabel = <{None|Interactive|Local|
Management|SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|
VoIP-Signal|default}>]
                              [followlabel = <{disabled|enabled}>]
                              [forcerenew = <{disabled|enabled}>]
```

where:

intf	The name of the dynamic interface to be configured.	REQUIRED
metric	Route metric for default gateway and static routes.	OPTIONAL
dnsmetric	Metric for DNS forwarding entries.	OPTIONAL
broadcast	Operate client in unicast/broadcast mode.	OPTIONAL
serverroute	Insert a route for the DHCP server IP	OPTIONAL
routelabel	Route label for default gateway and static routes.	OPTIONAL
qoslabel	Qos label to be used by the DHCP client.	OPTIONAL
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
forcerenew	Accept DHCP force-renew messages.	OPTIONAL

dhcp client ifdelete

Delete a DHCP client.

SYNTAX:

```
dhcp client ifdelete          intf = <>
```

where:

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:

```
dhcp client ifdetach          intf = <>
```

where:

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

dhcp client iflist

List DHCP clients.

SYNTAX:

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

where:

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

dhcp client ifrenew

Renew a DHCP lease.

SYNTAX:

```
dhcp client ifrenew          intf = <>
```

where:

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

dhcp client roptions add

Add a DHCP Option Code to the Parameter Request List.

SYNTAX:

```
dhcp client roptions add      intf = <>
                             option = <{subnet-mask|time-offset|default-
                             routers|time-servers|ien116-name-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|streetwork-
                             server|streetwork-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>
                             [index = <number{0-255}>]
```

where:

intf	The name of the interface on which a DHCP Client is defined.	REQUIRED
option	The name or number of the option.	REQUIRED
index	The index of the option.	OPTIONAL

dhcp client roptions delete

Delete a DHCP Option Code from the Parameter Request List.

SYNTAX:

```
dhcp client roptions delete    intf = <>
                               option = <{subnet-mask|time-offset|default-
                               routers|time-servers|ien116-name-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|streetwork-
                               server|streetwork-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>
```

where:

intf	The name of the interface on which a DHCP Client is defined.	REQUIRED
option	The name or number of the option.	REQUIRED

dhcp client roptions list

List all DHCP Option Codes in the Parameter Request List.

SYNTAX:

```
dhcp client roptions list [intf = <>]
```

where:

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

dhcp client roptions optionlist

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

dhcp client txoptions add

Add an option.

SYNTAX:

```
dhcp client txoptions add      intf = <>
                               option = <{subnet-mask|time-offset|default-
                               routers|time-servers|ien116-name-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|streetwork-server|
                               streetwork-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>
                               [enterprise = <number{1-2147483647}>]
                               [suboption = <number{1-254}>]
                               value = <Value : (type)value; type being 8-
                               bit, 16-bit, 32-bit, addr, ascii, byte_array,
                               clientid, env>
                               [index = <number{0-255}>]
```

where:

intf	The name of the interface on which a DHCP Client is defined.	REQUIRED
option	The name or number of the option.	REQUIRED
enterprise	The enterprise number (see http://www.iana.org/assignments/enterprise-numbers)	OPTIONAL

suboption	The suboption number	OPTIONAL
value	The value of the option.	REQUIRED
index	The index of the (sub)option/enterprise number in the Option List.	OPTIONAL

dhcp client txoptions delete

Delete an option.

SYNTAX:

```
dhcp client txoptions delete    intf = <>
                                option = <{subnet-mask|time-offset|default-
                                routers|time-servers|ien116-name-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|streetwork-server|
                                streetwork-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>
                                [enterprise = <number{1-2147483647}>]
                                [suboption = <number{1-254}>]
```

where:

intf	The name of the interface on which a DHCP Client is defined.	REQUIRED
option	The name or number of the option.	REQUIRED
enterprise	The enterprise number (see http://www.iana.org/assignments/enterprise-numbers)	OPTIONAL
suboption	The suboption number	OPTIONAL

dhcp client toptions list

List all options.

SYNTAX:

```
dhcp client toptions list      [intf = <>]
                               [expand = <{disabled|enabled}>]
```

where:

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

dhcp client txoptions optionlist

Lists all DHCP Option Codes that can be used.

dhcp clientv6 debug clear

Clear DHCPv6 client statistics

dhcp clientv6 debug stats

Print DHCPv6 client statistics

dhcp clientv6 debug traceconfig

Modify DHCPv6 client trace configuration

SYNTAX:

```
dhcp clientv6 debug [state = <{disabled|enabled}>]
traceconfig
```

where:

state	Enable/Disable tracing.	OPTIONAL
-------	-------------------------	----------

dhcp clientv6 flush

Delete all DHCPv6 clients.

dhcp clientv6 ifadd

Create a DHCPv6 client.

SYNTAX:

```
dhcp clientv6 ifadd          intf = <{LocalNetwork}>
```

where:

intf	The name of the interface on which a DHCPv6 Client will be added.	REQUIRED
------	---	----------

dhcp clientv6 ifattach

Activate a DHCPv6 client.

SYNTAX:

```
dhcp clientv6 ifattach          intf = <>
```

where:

intf	The name of the interface on which a DHCPv6 Client is defined.	REQUIRED
------	--	----------

dhcp clientv6 ifconfig

Configure a DHCPv6 client.

SYNTAX:

```
dhcp clientv6 ifconfig      intf = <>
                           [listenra = <{disabled|enabled}>]
                           [stateless = <{disabled|enabled}>]
                           [rapidcommit = <{disabled|enabled}>]
                           [leasetime = <number>]
                           [irt = <number>]
                           [iana = <number{0-5}>]
                           [iapd = <number{0-5}>]
                           [leasehist = <{disabled|enabled}>]
                           [dnsmetric = <number{0-100}>]
                           [routelabel = <{None|Interactive|Local|
Management|SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|
VoIP-Signal|default}>]
                           [qoslabe1 = <{None|Interactive|Local|
Management|SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|
VoIP-Signal|default}>]
                           [followlabel = <{disabled|enabled}>]
```

where:

intf	The name of the DHCPv6 client interface to be configured.	REQUIRED
listenra	If enabled Router Advertisement messages will trigger the DHCPv6 client in stateful or stateless mode via the M and O flags	OPTIONAL
stateless	If enabled the DHCPv6 client is configured stateless mode	OPTIONAL
rapidcommit	If enabled the DHCPv6 client will include the rapid commit option	OPTIONAL
leasetime	The time in seconds the DHCPv6 client proposes to the server (tip: 4294967295 means infinite leasetime)	OPTIONAL
irt	The DHCPv6 client Information Refresh Time used in stateless mode when no value is specified by the server (tip: 4294967295 means infinite information refresh time)	OPTIONAL
iana	The number of IA NA options the DHCPv6 client will propose.	OPTIONAL
iapd	The number of IA PD options the DHCPv6 client will propose.	OPTIONAL
leasehist	If enabled the DHCPv6 client will keep lease history.	OPTIONAL
dnsmetric	Metric for DNS forwarding entries.	OPTIONAL
routelabel	Route label to be used for default gateway and static routes.	OPTIONAL

qoslabel	Qos label to be used by the DHCPv6 client.	OPTIONAL
followlabel	If enabled the DHCPv6 client's unicast traffic will follow the route label specified.	OPTIONAL

dhcp clientv6 ifdelete

Delete a DHCPv6 client.

SYNTAX:

```
dhcp clientv6 ifdelete          intf = <{Internet}>
```

where:

intf	The name of the interface on which a DHCPv6 Client is defined.	REQUIRED
------	--	----------

dhcp clientv6 ifdetach

Deactivate a DHCPv6 client

SYNTAX:

```
dhcp clientv6 ifdetach          intf = <{Internet}>
```

where:

intf	The name of the interface on which a DHCPv6 Client is defined.	REQUIRED
------	--	----------

dhcp clientv6 iflist

List DHCPv6 clients.

SYNTAX:

```
dhcp clientv6 iflist          [intf = <{Internet}>]
                              [expand = <{disabled|enabled}>]
```

where:

intf	The name of the interface on which a DHCPv6 Client is defined.	OPTIONAL
expand	Expand enabled/disabled.	OPTIONAL

dhcp clientv6 ifrenew

Renew a DHCPv6 client.

SYNTAX:

```
dhcp clientv6 ifrenew          intf = <{Internet}>
```

where:

intf	The name of the interface on which a DHCPv6 Client is defined.	REQUIRED
------	--	----------

dhcp clientv6 oro add

Add a DHCPv6 Option Code to the Option Request Option list.

SYNTAX:

```
dhcp clientv6 oro add          intf = <>
                                option = <{ia-non-temporary-address|ia-
                                temporary-address|preference|specific-
                                information|interface-id|sip-servers-dns|sip-
                                servers-addr|domain-name-servers|domain-name-
                                search|ia-prefix-delegation|nis-servers|nisp-
                                servers|nis-domain-name|nisp-domain-name|
                                sntp-servers|information-refresh-time|bcms-
                                server-d|bcms-server-a|subscriber-id|client-
                                fqdn|pana-agent|new-posix-timezone|new-tzdb-
                                timezone|lq-query|client-data|clt-time|lq-
                                relay-data|lq-client-link|aftr-name}>or number>
                                [required = <{disabled|enabled}>]
                                [index = <number{0-255}>]
```

where:

intf	The name of the interface on which a DHCPv6 Client is defined.	REQUIRED
option	The name or number of the option.	REQUIRED
required	If enabled the option must be offered by the DHCPv6 server	OPTIONAL
index	The index of the option.	OPTIONAL

dhcp clientv6 oro delete

Delete a DHCPv6 Option Code from the Option Request Option list.

SYNTAX:

```
dhcp clientv6 oro delete      intf = <>
                              option = <{ia-non-temporary-address|ia-
                              temporary-address|preference|specific-
                              information|interface-id|sip-servers-dns|sip-
                              servers-addr|domain-name-servers|domain-name-
                              search|ia-prefix-delegation|nis-servers|nisp-
                              servers|nis-domain-name|nisp-domain-name|
                              sntp-servers|information-refresh-time|bcms-
                              server-d|bcms-server-a|subscriber-id|client-
                              fqdn|pana-agent|new-posix-timezone|new-tzdb-
                              timezone|lq-query|client-data|clt-time|lq-
                              relay-data|lq-client-link|aftr-name}or number>
```

where:

intf	The name of the interface on which a DHCPv6 Client is defined.	REQUIRED
option	The name or number of the option.	REQUIRED

dhcp clientv6 oro list

List all DHCPv6 Option Codes in the Option Request Option list.

SYNTAX:

```
dhcp clientv6 oro list [intf = <{Internet}>]
```

where:

intf	The name of the interface on which a DHCPv6 Client is defined.	OPTIONAL
------	--	----------

dhcp clientv6 oro optionlist

List all DHCPv6 Option Codes that can be used in the Option Request Option

dhcp clientv6 txoptions add

Add a DHCPv6 option.

SYNTAX:

```
dhcp clientv6 txoptions add      intf = <>
                                option = <{client-identifier|user-class|
                                vendor-class|vendor-specific-information|
                                client-fqdn} or number>
                                [enterprise = <number{1-2147483647}>]
                                [suboption = <number{1-65535}>]
                                value = <Value : (type)value; optional type
                                being 8-bit, 8-sbit, 16-bit, 16-env>
```

where:

intf	The name of the interface on which a DHCPv6 Client is defined.	REQUIRED
option	The name or number of the option.	REQUIRED
enterprise	The enterprise number (see http://www.iana.org/assignments/enterprise-numbers)	OPTIONAL
suboption	The suboption number	OPTIONAL
value	The value of the option.	REQUIRED

dhcp clientv6 tsoptions delete

Delete a DHCPv6 option.

SYNTAX:

```
dhcp clientv6 tsoptions delete  intf = <>
                                option = <{client-identifier|user-class|
                                vendor-class|vendor-specific-information|
                                client-fqdn} or number>
                                [enterprise = <number{1-2147483647}>]
                                [suboption = <number{1-65535}>]
```

where:

intf	The name of the interface on which a DHCPv6 Client is defined.	REQUIRED
option	The number or number of the option.	REQUIRED
enterprise	The enterprise number (see http://www.iana.org/assignments/enterprise-numbers)	OPTIONAL
suboption	The suboption number	OPTIONAL

dhcp clientv6 txoptions list

List all DHCPv6 options.

SYNTAX:

```
dhcp clientv6 txoptions list    [intf = <{Internet}>]  
                                [expand = <{disabled|enabled}>]
```

where:

intf	The name of the interface on which a DHCPv6 Client is defined.	OPTIONAL
expand	Expand enabled/disabled.	OPTIONAL

dhcp clientv6 txoptions optionlist

Lists all DHCPv6 Option Codes that can be used.

dhcp relay add

Add an entry to the DHCP forward list.

SYNTAX:

```
dhcp relay add                name = <string>
```

where:

name	The forward entry name.	REQUIRED
------	-------------------------	----------

dhcp relay config

Sets the relay configuration settings.

SYNTAX:

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

where:

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 stats

Print DHCP relay statistics.

dhcp relay debug traceconfig

Modify DHCP relay trace configuration

SYNTAX:

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

where:

state	Enable/Disable tracing.	OPTIONAL
-------	-------------------------	----------

dhcp relay delete

Delete an entry from the DHCP forward list.

SYNTAX:

```
dhcp relay delete          name = <{LocalNetwork_to_127.0.0.1}>
```

where:

name	The forward entry name.	REQUIRED
------	-------------------------	----------

dhcp relay flush

Flushes the DHCP relay settings.

dhcp relay ifconfig

Configure a relay interface.

SYNTAX:

```
dhcp relay ifconfig      intf = <{LocalNetwork|Internet}>
                        [relay = <{disabled|enabled}>]
                        [maxhops = <number{0-16}>]
                        [remoteid = <password>]
                        [trusted = <{disabled|enabled}>]
```

where:

intf	The name of the relay interface to configure.	REQUIRED
relay	Set the relay status.	OPTIONAL
maxhops	Set the maximum number of hops allowed in the DHCP packet.	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:

```
dhcp relay iflist [intf = <{LocalNetwork|Internet}>]
```

where:

intf	The name of the relay interface.	OPTIONAL
------	----------------------------------	----------

dhcp relay list

List the DHCP forward list.

SYNTAX:

```
dhcp relay list [name = <{LocalNetwork_to_127.0.0.1}>]
```

where:

name	The forward entry name.	OPTIONAL
------	-------------------------	----------

dhcp relay modify

Modify an entry from the DHCP forward list.

SYNTAX:

```
dhcp relay modify          name = <{LocalNetwork_to_127.0.0.1}>
                          [addr = <ipv4-address>]
                          [intf = <{None|LocalNetwork|Internet}>]
                          [giaddr = <ipv4-address>]
                          [script = <>]
```

where:

name	The forward entry name.	REQUIRED
addr	The DHCP server IP address.	OPTIONAL
intf	The name of the relay interface, 'None' to indicate no interface is specified.	OPTIONAL
giaddr	The giaddr field to be used in relayed DHCP packets.	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:

```
dhcp relay ruleadd          name = <{LocalNetwork_to_127.0.0.1}>
                             [key = <{or|and}>]
                             rulename = <>
```

where:

name	The name of the forward entry.	REQUIRED
key	The logical key of the selection rule.	OPTIONAL
rulename	The name of the DHCP selection rule.	REQUIRED

dhcp relay ruledelete

Delete a selection rule from a DHCP forward entry

SYNTAX:

```
dhcp relay ruledelete          name = <{LocalNetwork_to_127.0.0.1}>  
                               rulename = <>
```

where:

name	The name of the forward entry.	REQUIRED
rulename	The name of the DHCP selection rule.	REQUIRED

dhcp relayv6 add

Add an entry to the DHCPv6 relay forwarding list.

SYNTAX:

```
dhcp relayv6 add name = <string>
```

where:

name	The forwarding rule name.	REQUIRED
------	---------------------------	----------

dhcp relayv6 config

Show the DHCPv6 relay status.

dhcp relayv6 debug clear

Clear DHCPv6 relay statistics

dhcp relayv6 debug stats

Print DHCPv6 relay statistics

dhcp relayv6 debug traceconfig

Modify DHCPv6 relay trace configuration

SYNTAX:

```
dhcp relayv6 debug traceconfig [state = <{disabled|enabled}>]
```

where:

state	Enable/disable tracing.	OPTIONAL
-------	-------------------------	----------

dhcp relayv6 debug tracelevel

Show the DHCPv6 relay trace level

dhcp relayv6 delete

Delete an entry from the DHCPv6 relay forwarding list.

SYNTAX:

```
dhcp relayv6 delete          name = <{LocalNetwork_to_loop}>
```

where:

name	The forwarding rule name.	REQUIRED
------	---------------------------	----------

dhcp relayv6 flush

Flushes the DHCPv6 relay settings.

dhcp relayv6 ifconfig

Configure a DHCPv6 relay interface.

SYNTAX:

```
dhcp relayv6 ifconfig      intf = <{Internet|LocalNetwork}>
                           [status = <{disabled|enabled}>]
                           [maxhops = <number{0-254}>]
                           [interfaceid = <{disabled|enabled}>]
                           [remoteid = <password>]
```

where:

intf	The name of the interface to be configured.	REQUIRED
status	The DHCPv6 relay status.	OPTIONAL
maxhops	The maximum number of hops allowed for a DHCPv6 relay packet.	OPTIONAL
interfaceid	Enable/disable the adding of interface-id options.	OPTIONAL
remoteid	Set the remote-id option as specified in RFC4649.	OPTIONAL

dhcp relayv6 iflist

Show the configuration of the DHCPv6 relay interfaces.

SYNTAX:

```
dhcp relayv6 iflist [intf = <{Internet|LocalNetwork}>]
```

where:

intf	The name of the interface to be listed.	OPTIONAL
------	---	----------

dhcp relayv6 list

Show the DHCPv6 forwarding list.

SYNTAX:

```
dhcp relayv6 list [name = <{LocalNetwork_to_loop}>]
```

where:

name	The forwarding rule name.	OPTIONAL
------	---------------------------	----------

dhcp relayv6 modify

Modify an entry in the DHCPv6 relay forwarding list.

SYNTAX:

```
dhcp relayv6 modify          name = <{LocalNetwork_to_loop}>
                             [addr = <ipv6-address>]
                             [intf = <{None|LocalNetwork|Internet}>]
                             [dstintf = <{None|LocalNetwork|Internet}>]
                             [linkaddr = <ipv6-address>]
                             [script = <>]
```

where:

name	The DHCPv6 relay forwarding rule name.	REQUIRED
addr	The DHCPv6 server IPv6 address. Enter "::0" to reset the server address.	OPTIONAL
intf	The name of the interface associated with this DHCPv6 relay forwarding rule, 'Any' to indicate the forwarding rule applies to all interfaces.	OPTIONAL
dstintf	Destination interface of the forwarding rule, needed when specifying a link-local or multicast server address.	OPTIONAL
linkaddr	The link-address to be used when relaying packets through this interface. Enter "::0" to reset the link-address	OPTIONAL
script	Script to run when the forwarding rule is used.	OPTIONAL

dhcp relayv6 ruleadd

Add a selection rule to a DHCPv6 forwarding rule

SYNTAX:

```
dhcp relayv6 ruleadd          name = <{LocalNetwork_to_loop}>
                              [key = <{or|and}>]
                              rulename = <>
```

where:

name	The name of the DHCPv6 relay forwarding rule.	REQUIRED
key	The logical key of the selection rule.	OPTIONAL
rulename	The name of the DHCPv6 selection rule.	REQUIRED

dhcp relayv6 ruledelete

Delete a selection rule from a DHCPv6 forwarding rule

SYNTAX:

```
dhcp relayv6 ruledelete      name = <{LocalNetwork_to_loop}>
                             rulename = <>
```

where:

name	The name of the DHCPv6 relay forwarding rule.	REQUIRED
rulename	The name of the DHCPv6 selection rule.	REQUIRED

dhcp rule add

Add a rule for DHCP conditional selection

SYNTAX:

```
dhcp rule add
name = <string>
type = <{option|mac|root}>
[version = <{dhcpv4|dhcpv6}>]
option [!] = <{subnet-mask|time-offset|
default-routers|time-servers|ien116-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-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|streetwork-server|
streetwork-directory-assistance-server|user-
class-identifier|slp-directory-agent|slp-
service-scope|...} or number>
[enterprise = <number{1-2147483647}>]
[suboption = <number{1-254}>]
[value = <Value : (type)value; optional type
being 8-bit, 8-sbit, 16-bit, flag, ascii,
byte_array, clientid, env>]
[match = <{exactly|as_substring}>]
mac [!] = <hardware-address with wildcard ex:
'00:9f:aa:*:*:*'>
[key = <{or|and}>]
subrule = <>
```

where:

name	The name of the DHCP rule.	REQUIRED
type	Specify the DHCP rule type.	REQUIRED
version	The DHCP version (v4/v6) of the option.	OPTIONAL
option [!]	The name or number of the option. If a value is preceded by a “!”, it means NOT.	REQUIRED
enterprise	The enterprise number (see http://www.iana.org/assignments/enterprise-numbers)	OPTIONAL
suboption	The suboption number	OPTIONAL
value	The value of the option.	OPTIONAL
match	The option value matching.	OPTIONAL
mac [!]	The mac address. If a value is preceded by a “!”, it means NOT.	REQUIRED
key	The logical key of the subrule.	OPTIONAL
subrule	The name of the DHCP subrule.	REQUIRED

dhcp rule debug traceconfig

Modify DHCP rule trace configuration

SYNTAX:

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

where:

state	Enable/Disable tracing.	OPTIONAL
-------	-------------------------	----------

dhcp rule delete

Delete a DHCP rule

SYNTAX:

```
dhcp rule delete          name = <>  
                          subrule = <>
```

where:

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

dhcp rule flush

Flush all DHCP rules

dhcp rule list

List all DHCP rules

dhcp server config

Print DHCP server configuration settings

SYNTAX:

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

where:

state	Enable/Disable the DHCP server.	OPTIONAL
-------	---------------------------------	----------

dhcp server debug clear

Clear DHCP server statistics

dhcp server debug stats

Print DHCP server statistics

dhcp server debug traceconfig

Modify DHCP server trace configuration

SYNTAX:

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

where:

state	Enable/Disable tracing.	OPTIONAL
-------	-------------------------	----------

dhcp server flush

Flush all DHCP server pool and lease entries

dhcp server lease add

Add a DHCP server lease

SYNTAX:

```
dhcp server lease add      clientid = <clientid>
                          pool = <{LAN_private}>
                          [addr = <ipv4-address>]
                          [offset = <number>]
                          [lifetime = <number>]
                          [leasetime = <number>]
                          [gateway = <ip-address|0|none>]
                          [macaddr = <hardware-address>]
                          [allocation = <{automatic|manual}>]
```

where:

clientid	The DHCP client identification string.	REQUIRED
pool	The name of the DHCP server pool.	REQUIRED
addr	The IP address for this client.	OPTIONAL
offset	The IP address offset in the pool preserved for this client.	OPTIONAL
lifetime	The time in seconds the DHCP server keeps the lease reserved (tip: 0 means infinite lifetime).	OPTIONAL
leasetime	The time in seconds the client is allowed to use an address (tip: 0 means infinite leasetime).	OPTIONAL
gateway	The IP address of the default router for this client.	OPTIONAL
macaddr	The host MAC address.	OPTIONAL
allocation	Define the client IP address allocation method (tip : automatic means the lease can be recycled).	OPTIONAL

dhcp server lease delete

Delete a DHCP server lease

SYNTAX:

```
dhcp server lease delete      [clientid = <clientid>]  
                              [index = <number>]
```

where:

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:

```
dhcp server lease flush [pool = <{LAN_private}>]
```

where:

pool	The name of the DHCP server pool. Only the leases belonging to this pool will be deleted.	OPTIONAL
------	---	----------

dhcp server lease list

List all DHCP server leases

SYNTAX:

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

where:

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

dhcp server option flush

Flush all DHCP server option templates and instances

dhcp server option instadd

Add a DHCP server option instance

SYNTAX:

```
dhcp server option instadd      name = <string>
                                tplname = <>
                                [policy = <{requested|always|rules}>]
                                [dynamic = <{disabled|enabled}>]
                                [maxuse = <number{1-255}>]
                                [enterprise = <number{1-2147483647}>]
                                [suboption = <number{1-254}>]
                                value = <Value : (type)value; type being 8-
                                bit, 16-bit, 32-bit, addr, ascii, byte_array,
                                env>
```

where:

name	The name of the DHCP server option instance.	REQUIRED
tplname	The name of the DHCP server option template.	REQUIRED
policy	The transmit policy type for the DHCP server option instance.	OPTIONAL
dynamic	Enable/Disable option instance as dynamic.	OPTIONAL
maxuse	Maximum number of times an option instance can be used in DHCP pools	OPTIONAL
enterprise	The enterprise number (see http://www.iana.org/assignments/enterprise-numbers)	OPTIONAL
suboption	The suboption number	OPTIONAL
value	The value of the DHCP server option instance.	REQUIRED

dhcp server option instdelete

Delete a DHCP server option instance

SYNTAX:

```
dhcp server option instdelete  name = <>
                               [enterprise = <number{1--1}>]
                               [suboption = <number{1-254}>]
```

where:

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:

```
dhcp server option instlist [name = <>]
```

where:

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:

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

where:

name	The name of the DHCP server option instance.	REQUIRED
key	The logical key of the selection rule.	OPTIONAL
rulename	The name of the DHCP selection rule.	REQUIRED

dhcp server option ruledelete

Delete a selection rule from a DHCP server option instance

SYNTAX:

```
dhcp server option ruledelete  name = <>
                               rulename = <>
```

where:

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

dhcp server option tmladd

Add a DHCP server option template

SYNTAX:

```
dhcp server option tmladd      name = <string>
                               optionid = <number{1-254}>
                               [dynamic = <{disabled|enabled}>]
```

where:

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

dhcp server option tmpldelete

Delete a DHCP server option template

SYNTAX:

```
dhcp server option tmpldelete name = <>
```

where:

name	The name of the DHCP server option template.	REQUIRED
------	--	----------

dhcp server option tmlist

List all DHCP server option templates

dhcp server policy

Print DHCP server policy settings

SYNTAX:

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

where:

verifyfirst	Enable/Disable IP address conflict network probing before handing out an address to a client.	OPTIONAL
trustclient	Whether or not the IP address suggested by a DHCP client should be taken into account.	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
ackinform	Enable/Disable DHCP inform acknowledgement for an unknown lease	OPTIONAL

dhcp server pool add

Add a DHCP server pool

SYNTAX:

```
dhcp server pool add          name = <string>  
                             [index = <number>]
```

where:

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:

```
dhcp server pool config      name = <{LAN_private}>
                             [state = <{disabled|enabled}>]
                             [allocation = <{dynamic|automatic}>]
                             [intf = <{Internet|LocalNetwork}>]
                             [index = <number>]
                             [poolstart = <ipv4-address>]
                             [poolend = <ipv4-address>]
                             [netmask = <ip-mask(dotted or cidr)>]
                             [gateway = <ip-address|0|none>]
                             [server = <ip-address|none>]
                             [primdns = <ip-address|none>]
                             [secdns = <ip-address|none>]
                             [primwins = <ip-address|none>]
                             [secwins = <ip-address|none>]
                             [leasetime = <number{0-1814400}>]
                             [renewtime = <number{0-1814400}>]
                             [rebindtime = <number{0-1814400}>]
                             [lockouttime = <number{0-1814400}>]
                             [unnumbered = <{disabled|enabled}>]
                             [localgw = <{disabled|enabled}>]
                             [localdns = <{disabled|enabled}>]
```

where:

name	The name of the DHCP server pool.	REQUIRED
state	Enable/Disable the DHCP server pool admin state.	OPTIONAL
allocation	Define the DHCP Server's pool allocation method (tip : automatic means the IP address becomes reserved for the lease).	OPTIONAL
intf	The interface for which the pool is allowed to lease IP addresses.	OPTIONAL
index	The number of the pool before which you want the new pool to be added.	OPTIONAL
poolstart	The DHCP server pool start IP address.	OPTIONAL
poolend	The DHCP server pool end IP address.	OPTIONAL
netmask	The DHCP server pool netmask.	OPTIONAL
gateway	The IP address of the default router for DHCP clients.	OPTIONAL
server	The IP address of the DHCP server for DHCP clients.	OPTIONAL

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

dhcp server pool delete

Delete a DHCP server pool

SYNTAX:

```
dhcp server pool delete          name = <{LAN_private}>
```

where:

name	The name of the DHCP server pool.	REQUIRED
------	-----------------------------------	----------

dhcp server pool flush

Flush all DHCP server pools

dhcp server pool list

List all DHCP server pools

SYNTAX:

```
dhcp server pool list [name = <{LAN_private}>]
```

where:

name	The name of the DHCP server pool.	OPTIONAL
------	-----------------------------------	----------

dhcp server pool optadd

Add an option instance to the DHCP server pool

SYNTAX:

```
dhcp server pool optadd      name = <{LAN_private}>
                              instname = <>
```

where:

name	The name of the DHCP server pool.	REQUIRED
instname	The name of the DHCP server option instance.	REQUIRED

dhcp server pool optdelete

Delete an option instance from the DHCP server pool

SYNTAX:

```
dhcp server pool optdelete      name = <{LAN_private}>
                                instname = <>
```

where:

name	The name of the DHCP server pool.	REQUIRED
instname	The name of the DHCP server option instance.	REQUIRED

dhcp server pool rtadd

Add a route to the DHCP server pool

SYNTAX:

```
dhcp server pool rtadd      name = <{LAN_private}>
                             dst = <ipv4-address>
                             [dstmsk = <ip-mask(dotted or cidr)>]
                             [gateway = <ip-address|0>]
```

where:

name	The name of the DHCP server pool.	REQUIRED
dst	The IP destination address of the route for DHCP clients.	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:

```
dhcp server pool rtdelete      name = <{LAN_private}>
                               dst = <ipv4-address>
                               [dstmsk = <ip-mask(dotted or cidr)>]
                               [gateway = <ip-address|0>]
```

where:

name	The name of the DHCP server pool.	REQUIRED
dst	The IP destination address of the route for DHCP clients.	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:

```
dhcp server pool ruleadd      name = <{LAN_private}>
                               [key = <{or|and}>]
                               rulename = <>
```

where:

name	The name of the DHCP server pool.	REQUIRED
key	The logical key of the selection rule.	OPTIONAL
rulename	The name of the DHCP selection rule.	REQUIRED

dhcp server pool ruledelete

Delete a selection rule from the DHCP server pool

SYNTAX:

```
dhcp server pool ruledelete      name = <{LAN_private}>
                                rulename = <>
```

where:

name	The name of the DHCP server pool.	REQUIRED
rulename	The name of the DHCP selection rule.	REQUIRED

dhcp serverv6 config

Config DHCPv6 server configuration settings

SYNTAX:

```
dhcp serverv6 config [state = <{disabled|enabled}>]
```

where:

state	Enable/Disable the DHCPv6 server.	OPTIONAL
-------	-----------------------------------	----------

dhcp serverv6 debug clear

Clear DHCPv6 server statistics

dhcp server6 debug stats

Print DHCPv6 server statistics

dhcp serverv6 debug traceconfig

Modify DHCPv6 server trace configuration

SYNTAX:

```
dhcp serverv6 debug [state = <{disabled|enabled}>]
traceconfig
```

where:

state	Enable/Disable tracing.	OPTIONAL
-------	-------------------------	----------

dhcp server v6 flush

Flush DHCPv6 server pool configuration.

dhcp serverv6 option add

Add a DHCPv6 server option profile

SYNTAX:

```
dhcp serverv6 option add          name = <string>
```

where:

name	The name of the DHCPv6 server option.	REQUIRED
------	---------------------------------------	----------

dhcp serverv6 option delete

Delete a DHCPv6 server option profile

SYNTAX:

```
dhcp serverv6 option delete      name = <>
```

where:

name	The name of the DHCPv6 server option.	REQUIRED
------	---------------------------------------	----------

dhcp serverv6 option fieldadd

Add an option field to a DHCPv6 server option profile

SYNTAX:

```
dhcp serverv6 option fieldadd name = <>
                                option = <{preference|unicast|user-class|
                                vendor-class|vendor-specific-addr|domain-name-
                                servers|domain-name-search|nis-servers|nisp-
                                servers|nis-domain-name|nisp-domain-name|sntp-
                                servers|information-refresh-time|bcms-server-
                                d|bcms-server-a|pana-agent|new-posix-timezone|
                                new-tzdb-timezone|aftr-name} or number>
                                [enterprise = <number{1-2147483647}>]
                                [suboption = <number{1-65535}>]
                                [value = <Value : (type)value; optional type
                                being 8-bit, 8-sbit, 16-bit, byte_array, env>]
```

where:

name	The name of the DHCPv6 server option.	REQUIRED
option	The name or number of the option	REQUIRED
enterprise	The enterprise number (see http://www.iana.org/assignments/enterprise-numbers)	OPTIONAL
suboption	The suboption number	OPTIONAL
value	The value of the DHCPv6 server option.	OPTIONAL

dhcp serverv6 option fielddelete

Delete an option field from a DHCPv6 server option profile

SYNTAX:

```
dhcp serverv6 option          name = <>
fielddelete                   option = <{preference|unicast|user-class|
                                vendor-class|vendor-specific-addr|domain-name-
                                servers|domain-name-search|nis-servers|nisp-
                                servers|nis-domain-name|nisp-domain-name|sntp-
                                servers|information-refresh-time|bcms-server-
                                d|bcms-server-a|pana-agent|new-posix-timezone|
                                new-tzdb-timezone|aftr-name} or number>
                                [enterprise = <number{1-2147483647}>]
                                [suboption = <number{1-65535}>]
```

where:

name	The name of the DHCPv6 server option.	REQUIRED
option	The name or number of the option	REQUIRED
enterprise	The enterprise number (see http://www.iana.org/assignments/enterprise-numbers)	OPTIONAL
suboption	The suboption number	OPTIONAL

dhcp serverv6 option flush

Flush all DHCPv6 server option profiles

dhcp serverv6 option list

List all DHCPv6 server option profiles

SYNTAX:

```
dhcp serverv6 option list [name = <>]
```

where:

name	The name of the DHCPv6 server option.	OPTIONAL
------	---------------------------------------	----------

dhcp serverv6 option modify

Modify the DHCPv6 server option profile parameters

SYNTAX:

```
dhcp serverv6 option modify    name = <>
                               [policy = <{requested|always|rules}>]
                               [maxuse = <number{1-255}>]
```

where:

name	The name of the DHCPv6 server option.	REQUIRED
policy	The transmit policy for the DHCPv6 server option.	OPTIONAL
maxuse	Maximum number of times a DHCPv6 option can be used in DHCPv6 pools	OPTIONAL

dhcp server6 option optionlist

Lists all DHCPv6 Option Codes that can be used.

dhcp serverv6 option ruleadd

Add a selection rule to a DHCPv6 server option profile

SYNTAX:

```
dhcp serverv6 option ruleadd    name = <>
                                [key = <{or|and}>]
                                rulename = <>
```

where:

name	The name of the DHCPv6 server option.	REQUIRED
key	The logical key of the selection rule.	OPTIONAL
rulename	The name of the DHCP selection rule.	REQUIRED

dhcp server6 option ruledelete

Delete a selection rule from a DHCPv6 server option profile

SYNTAX:

```
dhcp server6 option          name = <>
ruledelete                   rulename = <>
```

where:

name	The name of the DHCPv6 server option.	REQUIRED
rulename	The name of the DHCP selection rule.	REQUIRED

dhcp server6 pool add

Add a DHCPv6 server pool

SYNTAX:

```
dhcp server6 pool add      name = <string>  
                          [index = <number>]
```

where:

name	The name of the DHCPv6 server pool.	REQUIRED
index	The number of the pool before which you want the new pool to be added.	OPTIONAL

dhcp serverv6 pool config

Configure a DHCPv6 server pool

SYNTAX:

```
dhcp serverv6 pool config      name = <{LAN6_pool}>
                               [state = <{disabled|enabled}>]
                               [intf = <{Internet|LocalNetwork}>]
                               [index = <number>]
                               [localdns = <{disabled|enabled}>]
```

where:

name	The name of the DHCPv6 server pool.	REQUIRED
state	Enable/Disable the DHCPv6 server pool admin state.	OPTIONAL
intf	The interface for which the pool is allowed to lease.	OPTIONAL
index	The number of the pool before which you want the new pool to be added.	OPTIONAL
localdns	Enable/Disable the transmission of the local DNS server in the DNS server option.	OPTIONAL

dhcp serverv6 pool delete

Delete a DHCPv6 server pool

SYNTAX:

```
dhcp serverv6 pool delete      name = <{LAN6_pool}>
```

where:

name	The name of the DHCPv6 server pool.	REQUIRED
------	-------------------------------------	----------

dhcp serverv6 pool flush

Flush all DHCPv6 server pools

dhcp serverv6 pool list

List all DHCPv6 server pools

SYNTAX:

```
dhcp serverv6 pool list      [name = <{LAN6_pool}>]  
                             [expand = <{disabled|enabled}>]
```

where:

name	The name of the DHCPv6 server pool.	OPTIONAL
expand	Expand enabled/disabled.	OPTIONAL

dhcp serverv6 pool optionadd

Add an option to the DHCPv6 server pool

SYNTAX:

```
dhcp serverv6 pool optionadd    name = <{LAN6_pool}>  
                                optionname = <>
```

where:

name	The name of the DHCPv6 server pool.	REQUIRED
optionname	The name of the DHCPv6 server option.	REQUIRED

dhcp serverv6 pool optiondelete

Delete an option from the DHCPv6 server pool

SYNTAX:

```
dhcp serverv6 pool          name = <{LAN6_pool}>
optiondelete                optionname = <>
```

where:

name	The name of the DHCPv6 server pool.	REQUIRED
optionname	The name of the DHCPv6 server option.	REQUIRED

dhcp serverv6 pool ruleadd

Add a selection rule to the DHCPv6 server pool

SYNTAX:

```
dhcp serverv6 pool ruleadd      name = <{LAN6_pool}>
                                [key = <{or|and}>]
                                rulename = <>
```

where:

name	The name of the DHCPv6 server pool.	REQUIRED
key	The logical key of the selection rule.	OPTIONAL
rulename	The name of the DHCPv6 selection rule.	REQUIRED

dhcp serverv6 pool ruledelete

Delete a selection rule from the DHCPv6 server pool

SYNTAX:

```
dhcp serverv6 pool ruledelete  name = <{LAN6_pool}>
                                rulename = <>
```

where:

name	The name of the DHCPv6 server pool.	REQUIRED
rulename	The name of the DHCPv6 selection rule.	REQUIRED

dhcp spoofing add

Add a Spoofing-Association

SYNTAX:

```
dhcp spoofing add          name = <string>
                           pool_name = <{LAN_private}>
                           ifname = <>
```

where:

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

dhcp spoofing attach

Enable a Spoofing-Association

SYNTAX:

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

where:

name	The name of the Association.	REQUIRED
------	------------------------------	----------

dhcp spoofing config

Display/modify dhcp spoofing state

SYNTAX:

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

where:

state	Enable/Disable spoofing.	OPTIONAL
-------	--------------------------	----------

dhcp spoofing debug traceconfig

Display/modify DHCP spoofing trace configuratin

SYNTAX:

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

where:

state	Enable/Disable tracing.	OPTIONAL
-------	-------------------------	----------

dhcp spoofing delete

Delete a Spoofing-Association

SYNTAX:

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

where:

name	The name of the Association.	REQUIRED
------	------------------------------	----------

dhcp spoofing detach

Disable a Spoofing-Association

SYNTAX:

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

where:

name	The name of the Association.	REQUIRED
------	------------------------------	----------

dhcp spoofing flush

Flush all the associations and the options.

dhcp spoofing list

List the available Spoofing-Associations

SYNTAX:

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

where:

name	The name of the Association.	OPTIONAL
------	------------------------------	----------

dhcp spoofing option-add

Add a DHCP Option Code to a Spoofing-Association.

SYNTAX:

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

where:

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:

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

where:

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

dns Commands

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<i>dns server host add</i>	<i>Add a local DNS host</i>	see page 300
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dns server host list

List all local DNS hosts

see page 303

dns client config

Modify the DNS resolver configuration.

SYNTAX:

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

where:

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

dns client dnsadd

Add a DNS server.

SYNTAX:

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

where:

addr	The DNS server IP address.	REQUIRED
port	The DNS server port number.	OPTIONAL

dns client dnsdelete

Delete a DNS server.

SYNTAX:

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

where:

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

dns client dnslist

List all DNS servers.

dns client flush

Remove all DNS servers.

dns client nslookup

DNS lookup for a domain name or an address.

SYNTAX:

```
dns client nslookup          host = <string>
```

where:

host	The DNS domain name string to query.	REQUIRED
------	--------------------------------------	----------

dns server config

DNS server configuration settings

SYNTAX:

```
dns server config      [domain = <string>]
                      [timeout = <number{0-120}>]
                      [suppress = <number{0-400}>]
                      [state = <{disabled|enabled}>]
                      [trace = <{disabled|enabled}>]
                      [syslog = <{disabled|enabled}>]
                      [WANDownSpoofing = <{disabled|enabled}>]
                      [WDSpoofedIP = <ipv4-address>]
                      [filter = <{disabled|enabled}>]
```

where:

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

dns server debug clear

Clear the DNS server/forwarder statistics.

dns server debug spoof clear

Clear the intercept cache table

dns server debug spoof getaddress

Get the real ip for the given spoofed ip

SYNTAX:

```
dns server debug spoof      addr = <ipv4-address>  
getaddress
```

where:

addr	The spoofed ip to look up.	REQUIRED
------	----------------------------	----------

dns server debug spoof getflags

Get the error flags for the given spoofed ip

SYNTAX:

```
dns server debug spoof      addr = <ipv4-address>  
getflags
```

where:

addr	The spoofed ip to look up.	REQUIRED
------	----------------------------	----------

dns server debug spoof list

List the intercept cache table.

dns server debug spoof update

update the intercept cache table

dns server debug stats

Print the DNS server/forwarder statistics.

dns server flush

Flush all local DNS hosts and forwards.

dns server forward dnsset add

Creates a DNS Set entry or template

SYNTAX:

```
dns server forward dnsset add  set = <number{0-200}>
                               dns = <ip-address>
                               [label = <{None|Interactive|Local|Management|
                               SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|VoIP-Signal|
                               default}>]
                               [metric = <number{0-100}>]
                               [intf = <{loop|Internet|LocalNetwork}>]
                               [udpsize = <number{512-4096}>]
                               [owner = <{PPP|DHCP|IPSEC}>]
```

where:

set	DNS Set id. If no rule matches, set ID=0 will be selected as default.	REQUIRED
dns	DNS Server to forward request to. Use 0.0.0.0 (IPv4) or :: (IPv6) to add a DNS Template.	REQUIRED
label	The label associated with the DNS entry or DNS Template.	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. Please note that metric-value of a template DNS is not replacing the metric-value, instead, it gets added to the already existing value received from the daemon.	OPTIONAL
intf	The interface associated with the DNS entry or DNS Template.	OPTIONAL
udpsize	Add an EDNS option indicating support for packets this large.	OPTIONAL
owner	Match on originating application (Templates only).	OPTIONAL

dns server forward dnsset delete

Deletes a DNS Set

SYNTAX:

```
dns server forward dnsset      set = <number{0-200}>
delete                          dns = <ip-address>
                                [label = <{None|Interactive|Local|Management|
                                SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|VoIP-Signal|
                                default}>]
                                [metric = <number{0-100}>]
                                [intf = <{loop|Internet|LocalNetwork}>]
                                [owner = <{PPP|DHCP|IPSEC}>]
```

where:

set	DNS Set id.	REQUIRED
dns	DNS Server to forward request to.	REQUIRED
label	The label associated with the DNS entry or DNS Template.	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
intf	The interface associated with the DNS set.	OPTIONAL
owner	Match on originating application (Templates only).	OPTIONAL

dns server forward dnsset flush

Removes all DNS Set entries and templates

dns server forward dnsset list

Lists all DNS Set entries and templates

dns server forward flush

Removes all DNS forward sets and rules.

dns server forward list

List rules and dnssets.

SYNTAX:

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

where:

expand	Expanded listing.	OPTIONAL
--------	-------------------	----------

dns server forward rule add

Creates a DNS rule

SYNTAX:

```
dns server forward rule add      idx = <number{20-200}>
                                set = <number{0-200}>
                                [addr = <ip-prefix>]
                                [intf = <{loop|Internet|LocalNetwork}>]
                                [domain = <string>]
                                [qtype = <{A|AAAA}>]
```

where:

idx	The sequence ordering number of the rule. Range 0-19 are reserved for system use.	REQUIRED
set	Forward request using the specified dns set.	REQUIRED
addr	Match on source address or prefix.	OPTIONAL
intf	Match on source interface.	OPTIONAL
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
qtype	Match on this DNS Query type.	OPTIONAL

dns server forward rule delete

Deletes a DNS rule

SYNTAX:

```
dns server forward rule delete [idx = <number{20-200}>]
```

where:

idx	The sequence of the rule to delete.	OPTIONAL
-----	-------------------------------------	----------

dns server forward rule flush

Removes all DNS rules

dns server forward rule list

Lists all DNS rules

SYNTAX:

```
dns server forward rule list [expand = <{disabled|enabled}>]
```

where:

expand	Expanded listing.	OPTIONAL
--------	-------------------	----------

dns server host add

Add a local DNS host

SYNTAX:

```
dns server host add      name = <string>
                        [addr = <ipv4-address>]
                        [addr6 = <ipv6-address>]
                        [ttl = <number>]
```

where:

name	The name of an IP host to add.	REQUIRED
addr	The IPv4 address of the host.	OPTIONAL
addr6	The IPv6 address of the host.	OPTIONAL
ttl	The lifetime of the host.	OPTIONAL

dns server host delete

Delete a local DNS host

SYNTAX:

```
dns server host delete      name = <string>
```

where:

name	The name of an IP host to delete.	REQUIRED
------	-----------------------------------	----------

dns server host flush

Flush all local DNS hosts

dns server host list

List all local DNS hosts

download Commands

<i>download config</i>	<i>Change the upgrade daemon configuration</i>	see page 306
<i>download debug sesslist</i>	<i>Display the list of sessions</i>	see page 307
<i>download debug traceconfig</i>	<i>Enable/disable upgrade daemon tracing</i>	see page 308
<i>download ifadd</i>	<i>Add a download interface</i>	see page 309
<i>download ifattach</i>	<i>Attach a download interface</i>	see page 310
<i>download ifconfig</i>	<i>Configure a download interface</i>	see page 311
<i>download ifdelete</i>	<i>Delete a download interface</i>	see page 312
<i>download ifdetach</i>	<i>Detach a download interface</i>	see page 313
<i>download iflist</i>	<i>List download interfaces</i>	see page 314
<i>download profile add</i>	<i>Add a new file profile description</i>	see page 315
<i>download profile delete</i>	<i>Delete a file profile description</i>	see page 316
<i>download profile list</i>	<i>Display a list of the file profile descriptions</i>	see page 317
<i>download profile modify</i>	<i>Modify a file profile description</i>	see page 318
<i>download start</i>	<i>Start a new upgrade</i>	see page 319

download config

Change the upgrade daemon configuration

SYNTAX:

```
download config [state = <{disabled|enabled}>]
                [protocol = <{tftp|ftp|http|https}>]
                [half-dhcp = <{disabled|enabled}>]
```

where:

state	The upgrade daemon state	OPTIONAL
protocol	The transfer protocol to be used for file download	OPTIONAL
half-dhcp	half-dhcp mode (use only DHCP Option 66)	OPTIONAL

download debug sesslist

Display the list of sessions

download debug traceconfig

Enable/disable upgrade daemon tracing

SYNTAX:

```
download debug traceconfig state = <{disabled|enabled}>
```

where:

state	The upgrade daemon trace state	REQUIRED
-------	--------------------------------	----------

download ifadd

Add a download interface

SYNTAX:

```
download ifadd          intf = <string>
```

where:

intf	A download interface	REQUIRED
------	----------------------	----------

download ifattach

Attach a download interface

SYNTAX:

```
download ifattach          intf = <>
```

where:

intf	A download interface.	REQUIRED
------	-----------------------	----------

download ifconfig

Configure a download interface

SYNTAX:

```
download ifconfig          intf = <>
                           [protocol = <{tftp|ftp|http|https}>]
                           [dest = <{loop|Internet|LocalNetwork}>]
                           [server = <string>]
                           [file = <string>]
                           [time = <number>]
```

where:

intf	A download interface.	REQUIRED
protocol	The transfer protocol	OPTIONAL
dest	An network interface name.	OPTIONAL
server	The servername	OPTIONAL
file	The servername	OPTIONAL
time	download cycle time (in secs)	OPTIONAL

download ifdelete

Delete a download interface

SYNTAX:

```
download ifdelete          intf = <>
```

where:

intf	A download interface.	REQUIRED
------	-----------------------	----------

download ifdetach

Detach a download interface

SYNTAX:

```
download ifdetach          intf = <>
```

where:

intf	A download interface.	REQUIRED
------	-----------------------	----------

download iflist

List download interfaces

download profile add

Add a new file profile description

SYNTAX:

```
download profile add          extension = <{sts|ini|bin}>
                               [maxsize(KBytes) = <number>]
                               action = <{none|config_load|script_load|
                               reboot|upgrade}>
```

where:

extension	The extension of the new file profile	REQUIRED
maxsize(KBytes)	The maximum filesize (in KBytes) allowed for files with the extension of this profile	OPTIONAL
action	The action to be done when the file with the extension of this profile is downloaded	REQUIRED

download profile delete

Delete a file profile description

SYNTAX:

```
download profile delete          extension = <{sts|ini|bin}>
```

where:

extension	The extension of the file profile to be deleted	REQUIRED
-----------	---	----------

download profile list

Display a list of the file profile descriptions

download profile modify

Modify a file profile description

SYNTAX:

```
download profile modify      extension = <{sts|ini|bin}>
                             [maxsize(KBytes) = <number>]
                             action = <{none|config_load|script_load|
                             reboot|upgrade}>
```

where:

extension	The extension of the new file profile	REQUIRED
maxsize(KBytes)	The maximum filesize (in KBytes) allowed for files with the extension of this profile	OPTIONAL
action	The action to be done when the file with the extension of this profile is downloaded	REQUIRED

download start

Start a new upgrade

SYNTAX:

```
download start          protocol = <{tftp|ftp|http|https}>
                        [server = <string>]
                        [filename = <string>]
```

where:

protocol	The protocol to be used for the download	REQUIRED
server	The server name or IP address	OPTIONAL
filename	The file to be downloaded	OPTIONAL

dsd Commands

<i>dsd config</i>	<i>Display/modify DSD framework configuration</i>	see page 323
<i>dsd debug config</i>	<i>Display/modify DSD debug settings</i>	see page 324
<i>dsd debug connection list</i>	<i>Display internal connection pool usage</i>	see page 325
<i>dsd debug proxy</i>	<i>Display/modify HTTPPI fixed proxy settings</i>	see page 326
<i>dsd debug recycling</i>	<i>Display/modify HTTPPI recycling settings</i>	see page 327
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<i>dsd urlfilter config</i>	<i>Display/modify url filtering configuration</i>	see page 332
<i>dsd urlfilter rule add</i>	<i>Add a rule</i>	see page 333
<i>dsd urlfilter rule delete</i>	<i>Remove a rule</i>	see page 334
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<i>dsd urlfilter rule list</i>	<i>Display a list of current rules</i>	see page 336
<i>dsd urlfilter rule modify</i>	<i>Modify an existing rule</i>	see page 337
<i>dsd webfilter cache flush</i>	<i>Empty internal cache</i>	see page 338
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<i>dsd webfilter config</i>	<i>Configure web filter</i>	see page 340
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<i>dsd webfilter professional category add</i>	<i>Add a category to a group</i>	see page 342
<i>dsd webfilter professional category create</i>	<i>Create a category or group</i>	see page 343
<i>dsd webfilter professional category delete</i>	<i>Delete a category or group</i>	see page 344
<i>dsd webfilter professional category flush</i>	<i>Delete all categories and groups</i>	see page 345
<i>dsd webfilter professional category list</i>	<i>List all categories and groups</i>	see page 346
<i>dsd webfilter professional category remove</i>	<i>Remove a category from a group</i>	see page 347
<i>dsd webfilter professional config</i>		see page 348
<i>dsd webfilter professional level add</i>	<i>Add a new web filtering level</i>	see page 349
<i>dsd webfilter professional level delete</i>	<i>Delete a web filtering level</i>	see page 350

<i>dsd webfilter professional level flush</i>	<i>Delete all levels</i>	see page 351
<i>dsd webfilter professional level list</i>	<i>Display levels</i>	see page 352
<i>dsd webfilter professional level modify</i>	<i>Modify a web filtering level</i>	see page 353
<i>dsd webfilter professional level set</i>	<i>Set current web filtering level</i>	see page 354
<i>dsd webfilter professional rule clear</i>	<i>Reset level to default rule</i>	see page 355
<i>dsd webfilter professional rule list</i>	<i>List all rules</i>	see page 356
<i>dsd webfilter professional rule modify</i>	<i>Modify a rule</i>	see page 357
<i>dsd webfilter server add</i>	<i>Add a web filter server</i>	see page 358
<i>dsd webfilter server config</i>	<i>Configure web filter server</i>	see page 359
<i>dsd webfilter server delete</i>	<i>Delete a web filter server</i>	see page 360
<i>dsd webfilter server flush</i>	<i>Flush server list</i>	see page 361
<i>dsd webfilter server list</i>	<i>List all web filter servers</i>	see page 362
<i>dsd webfilter server modify</i>	<i>Modify a web filter server</i>	see page 363
<i>dsd webfilter standard category add</i>	<i>Add a category to a group</i>	see page 364
<i>dsd webfilter standard category create</i>	<i>Create a category or group</i>	see page 365
<i>dsd webfilter standard category delete</i>	<i>Delete a category or group</i>	see page 366
<i>dsd webfilter standard category flush</i>	<i>Delete all categories and groups</i>	see page 367
<i>dsd webfilter standard category list</i>	<i>List all categories and groups</i>	see page 368
<i>dsd webfilter standard category remove</i>	<i>Remove a category from a group</i>	see page 369
<i>dsd webfilter standard config</i>		see page 370
<i>dsd webfilter standard level add</i>	<i>Add a new web filtering level</i>	see page 371
<i>dsd webfilter standard level delete</i>	<i>Delete a web filtering level</i>	see page 372
<i>dsd webfilter standard level flush</i>	<i>Delete all levels</i>	see page 373
<i>dsd webfilter standard level list</i>	<i>Display levels</i>	see page 374
<i>dsd webfilter standard level modify</i>	<i>Modify a web filtering level</i>	see page 375
<i>dsd webfilter standard level set</i>	<i>Set current web filtering level</i>	see page 376
<i>dsd webfilter standard rule clear</i>	<i>Reset level to default rule</i>	see page 377
<i>dsd webfilter standard rule list</i>	<i>List all rules</i>	see page 378
<i>dsd webfilter standard rule modify</i>	<i>Modify a rule</i>	see page 379

dsd config

Display/modify DSD framework configuration

SYNTAX:

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

where:

state	DSD framework operation mode	OPTIONAL
-------	------------------------------	----------

dsd debug config

Display/modify DSD debug settings

SYNTAX:

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

where:

turbomode	Enable/disable turbomode	OPTIONAL
-----------	--------------------------	----------

dsd debug connection list

Display internal connection pool usage

SYNTAX:

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

where:

expand	Expanded listing.	OPTIONAL
--------	-------------------	----------

dsd debug proxy

Display/modify HTTPPI fixed proxy settings

SYNTAX:

```
dsd debug proxy [state = <{disabled|enabled}>]
                [dest = <ipv4-address>]
                [port = <{undefined|at-echo|at-nbp|at-rtmp|at-
                zis|auth|bgp|biff|bootpc|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|nfs|nicname|
                nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
                gotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
                snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
                sunrpc|syslog|sysstat|talk|telnet|time|timed|
                tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-
                http|whoami|xwindows} or number>]
```

where:

state	Enable/disable fixed proxy redirecting	OPTIONAL
dest	Destination IP where requests will be forwarded to	OPTIONAL
port	Port used for connecting to the proxy IP	OPTIONAL

dsd debug recycling

Display/modify HTTP/1.1 recycling settings

SYNTAX:

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

where:

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

dsd debug stats

Display/clear DSD framework and module statistics

SYNTAX:

```
dsd debug stats [name = <{intercept|urlfilter|recycling|
                syslog|all}>]
                [clear = <{no|yes}>]
```

where:

name	Specify the name of a module	OPTIONAL
clear	Clear the specified statistics	OPTIONAL

dsd intercept config

Display/modify HTTP Intercept configuration

SYNTAX:

```
dsd intercept config      [WDSpoofedIP = <ipv4-address>]
                          [servertimeout = <number>]
                          [connecterrorurl = <string>]
                          [categoryerrorurl = <string>]
                          [monitorintercepturl = <string>]
                          [unauthorizedrequrl = <string>]
                          [imageredirect = <{disabled|enabled}>]
                          [imageredirecturl = <string>]
                          [alwaysuseip = <{disabled|enabled}>]
```

where:

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

dsd syslog config

Display/modify HTTPPI logging configuration

SYNTAX:

```
dsd syslog config [syslog = <{none|unauthorized|errors|intercepted|all}>]
```

where:

syslog	Define which type of events to log	OPTIONAL
--------	------------------------------------	----------

dsd syslog list

Display HTTPPI log file

dsd urlfilter config

Display/modify url filtering configuration

SYNTAX:

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

where:

state	Enable/disable url filtering	OPTIONAL
blockproxy	Block HTTP requests via a proxy server	OPTIONAL
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
defaultaction	Action to perform when no filter applicable.	OPTIONAL

dsd urlfilter rule add

Add a rule

SYNTAX:

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

where:

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

dsd urlfilter rule delete

Remove a rule

SYNTAX:

```
dsd urlfilter rule delete      index = <number>
                               [url = <string>]
```

where:

index	Insertion position in the list	REQUIRED
url	Definition of the url filter	OPTIONAL

dsd urlfilter rule flush

Remove all current rules

dsd urlfilter rule list

Display a list of current rules

dsd urlfilter rule modify

Modify an existing rule

SYNTAX:

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

where:

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

dsd webfilter cache flush

Empty internal cache

dsd webfilter cache stats

Display cache statistics

SYNTAX:

```
dsd webfilter cache stats [expand = <{disabled|enabled}>]
```

where:

expand	More detailed statistics.	OPTIONAL
--------	---------------------------	----------

dsd webfilter config

Configure web filter

SYNTAX:

```
dsd webfilter config      [state = <{enabled|disabled}>]
                          [serverunreachable = <{block-all|accept-all}>]
                          [uncategorized = <{block|accept}>]
                          [license = <{none|trial|standard|
                          professional}>]
                          [ticket = <string>]
                          [sessionkey = <string>]
```

where:

state	Enable or disable the web filter	OPTIONAL
serverunreachable	Block or allow requests when the categorization server is unreachable	OPTIONAL
uncategorized	Block or allow requests for which no category is available	OPTIONAL
license		OPTIONAL
ticket		OPTIONAL
sessionkey		OPTIONAL

dsd webfilter list

Display web filter license state

dsd webfilter professional category add

Add a category to a group

SYNTAX:

```
dsd webfilter professional      destid = <number>
category add                    srcid = <number>
```

where:

destid	Destination category or group	REQUIRED
srcid	Category ID to add	REQUIRED

dsd webfilter professional category create

Create a category or group

SYNTAX:

```
dsd webfilter professional      id = <number>
category create                 name = <quoted string>
                                type = <{category|group}>
```

where:

id	Unique local ID for the category/group	REQUIRED
name	Friendly name	REQUIRED
type		REQUIRED

dsd webfilter professional category delete

Delete a category or group

SYNTAX:

```
dsd webfilter professional      id = <number>  
category delete
```

where:

id	Unique local ID for the category/group	REQUIRED
----	--	----------

dsd webfilter professional category flush

Delete all categories and groups

dsd webfilter professional category list

List all categories and groups

SYNTAX:

```
dsd webfilter professional [type = <{category|group}>]  
category list
```

where:

type

OPTIONAL

dsd webfilter professional category remove

Remove a category from a group

SYNTAX:

```
dsd webfilter professional      destid = <number>
category remove                 srcid = <number>
```

where:

destid	Destination category or group	REQUIRED
srcid	Category ID to add	REQUIRED

dsd webfilter professional config

SYNTAX:

```
dsd webfilter professional [listversion = <string>]
config [validcatmask = <string>]
```

where:

listversion	OPTIONAL
validcatmask	OPTIONAL

dsd webfilter professional level add

Add a new web filtering level

SYNTAX:

```
dsd webfilter professional      index = <number>
level add                       name = <string>
                                [text = <quoted string>]
                                [otherurls = <{block|accept}>]
```

where:

index	Level index (-1 for next available)	REQUIRED
name	Content category level name	REQUIRED
text	Friendly description	OPTIONAL
otherurls	Block or allow requests that do not belong to a specific category	OPTIONAL

dsd webfilter professional level delete

Delete a web filtering level

SYNTAX:

```
dsd webfilter professional      index = <number>
level delete                    name = <string>
                                [text = <quoted string>]
                                [otherurls = <{block|accept}>]
```

where:

index	Level index (-1 for next available)	REQUIRED
name	Content category level name	REQUIRED
text	Friendly description	OPTIONAL
otherurls	Block or allow requests that do not belong to a specific category	OPTIONAL

dsd webfilter professional level flush

Delete all levels

dsd webfilter professional level list

Display levels

dsd webfilter professional level modify

Modify a web filtering level

SYNTAX:

```
dsd webfilter professional      index = <number>
level modify                    name = <string>
                                [text = <quoted string>]
                                [otherurls = <{block|accept}>]
```

where:

index	Level index (-1 for next available)	REQUIRED
name	Content category level name	REQUIRED
text	Friendly description	OPTIONAL
otherurls	Block or allow requests that do not belong to a specific category	OPTIONAL

dsd webfilter professional level set

Set current web filtering level

SYNTAX:

```
dsd webfilter professional      name = <string>
level set
```

where:

name	Name of the current category level	REQUIRED
------	------------------------------------	----------

dsd webfilter professional rule clear

Reset level to default rule

SYNTAX:

```
dsd webfilter professional      level = <string>
rule clear
```

where:

level	Level name	REQUIRED
-------	------------	----------

dsd webfilter professional rule list

List all rules

SYNTAX:

```
dsd webfilter professional [level = <string>]
rule list
```

where:

level	Level name	OPTIONAL
-------	------------	----------

dsd webfilter professional rule modify

Modify a rule

SYNTAX:

```
dsd webfilter professional    level = <string>
rule modify                  [id = <number>]
                             action = <{block|accept}>
```

where:

level	Level name	REQUIRED
id	Server category ID	OPTIONAL
action		REQUIRED

dsd webfilter server add

Add a web filter server

SYNTAX:

```
dsd webfilter server add      [index = <number>]
                             address = <ipv4-address>
                             port = <{undefined|at-echo|at-nbp|at-rtmp|at-
                             zis|auth|bgp|biff|bootpc|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|nfs|nicname|
                             nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
                             gotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
                             snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
                             sunrpc|syslog|sysstat|talk|telnet|time|timed|
                             tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-
                             http|whoami|xwindows} or number>
```

where:

index	Server index	OPTIONAL
address	Server IP address	REQUIRED
port	Server port	REQUIRED

dsd webfilter server config

Configure web filter server

SYNTAX:

```
dsd webfilter server config [listversion = <string>]
                             [retries = <number>]
                             [servertimeout = <number>]
                             [timeoutmultiplier = <number>]
                             [renewfrequency = <number>]
                             [useproxy = <{disabled|enabled}>]
                             [proxyserver = <ipv4-address>]
                             [proxyport = <{undefined|at-echo|at-nbp|at-
rtmp|at-zis|auth|bgp|biff|bootpc|exec|finger|
ftp|ftp-data|gopher|h323|httpproxy|ike|ils|
imap2|imap3|ingres-net|ipcserv|ipx|irc-o|
irc-u|kerberos|ldap|login|netbios-dgm|netbios-
ns|netbios-ssn|netwall|netware-ip|new-rwho|
nfs|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|sysstat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or
number>]
```

where:

listversion		OPTIONAL
retries	Number of server contact retries	OPTIONAL
servertimeout	Cobion server timeout in seconds	OPTIONAL
timeoutmultiplier	Timeout for reporting server error to client (timeout * multiplier)	OPTIONAL
renewfrequency	Frequency (in hours) to check license and list versions	OPTIONAL
useproxy	Enable or disable the use of a proxy server	OPTIONAL
proxyserver	Proxy server to be used	OPTIONAL
proxyport	Proxy server port to be used	OPTIONAL

dsd webfilter server delete

Delete a web filter server

SYNTAX:

```
dsd webfilter server delete      index = <number>
                                address = <ipv4-address>
                                port = <{undefined|at-echo|at-nbp|at-rtmp|at-
                                zis|auth|bgp|biff|bootpc|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|nfs|nicname|
                                nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
                                gotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
                                snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
                                sunrpc|syslog|sysstat|talk|telnet|time|timed|
                                tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-
                                http|whoami|xwindows} or number>
```

where:

index	Server index	REQUIRED
address	Server IP address	REQUIRED
port	Server port	REQUIRED

dsd webfilter server flush

Flush server list

dsd webfilter server list

List all web filter servers

dsd webfilter server modify

Modify a web filter server

SYNTAX:

```
dsd webfilter server modify      index = <number>
                                address = <ipv4-address>
                                port = <{undefined|at-echo|at-nbp|at-rtmp|at-
                                zis|auth|bgp|biff|bootpc|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|nfs|nicname|
                                nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
                                gotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
                                snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
                                sunrpc|syslog|sysstat|talk|telnet|time|timed|
                                tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-
                                http|whoami|xwindows} or number>
```

where:

index	Server index	REQUIRED
address	Server IP address	REQUIRED
port	Server port	REQUIRED

dsd webfilter standard category add

Add a category to a group

SYNTAX:

```
dsd webfilter standard      destid = <number>
category add                srcid = <number>
```

where:

destid	Destination category or group	REQUIRED
srcid	Category ID to add	REQUIRED

dsd webfilter standard category create

Create a category or group

SYNTAX:

```
dsd webfilter standard      id = <number>
category create             name = <quoted string>
                             type = <{category|group}>
```

where:

id	Unique local ID for the category/group	REQUIRED
name	Friendly name	REQUIRED
type		REQUIRED

dsd webfilter standard category delete

Delete a category or group

SYNTAX:

```
dsd webfilter standard      id = <number>  
category delete
```

where:

id	Unique local ID for the category/group	REQUIRED
----	--	----------

dsd webfilter standard category flush

Delete all categories and groups

dsd webfilter standard category list

List all categories and groups

SYNTAX:

```
dsd webfilter standard      [type = <{category|group}>]  
category list
```

where:

type

OPTIONAL

dsd webfilter standard category remove

Remove a category from a group

SYNTAX:

```
dsd webfilter standard      destid = <number>
category remove            srcid = <number>
```

where:

destid	Destination category or group	REQUIRED
srcid	Category ID to add	REQUIRED

dsd webfilter standard config

SYNTAX:

```
dsd webfilter standard config [stdmax = <number>]  
                             [validcatmask = <string>]
```

where:

stdmax	OPTIONAL
validcatmask	OPTIONAL

dsd webfilter standard level add

Add a new web filtering level

SYNTAX:

```
dsd webfilter standard level    index = <number>
add                             name = <string>
                                [text = <quoted string>]
                                [otherurls = <{block|accept}>]
```

where:

index	Level index (-1 for next available)	REQUIRED
name	Content category level name	REQUIRED
text	Friendly description	OPTIONAL
otherurls	Block or allow requests that do not belong to a specific category	OPTIONAL

dsd webfilter standard level delete

Delete a web filtering level

SYNTAX:

```
dsd webfilter standard level    index = <number>
delete                          name = <string>
                                [text = <quoted string>]
                                [otherurls = <{block|accept}>]
```

where:

index	Level index (-1 for next available)	REQUIRED
name	Content category level name	REQUIRED
text	Friendly description	OPTIONAL
otherurls	Block or allow requests that do not belong to a specific category	OPTIONAL

dsd webfilter standard level flush

Delete all levels

dsd webfilter standard level list

Display levels

dsd webfilter standard level modify

Modify a web filtering level

SYNTAX:

```
dsd webfilter standard level    index = <number>
modify                          name = <string>
                                [text = <quoted string>]
                                [otherurls = <{block|accept}>]
```

where:

index	Level index (-1 for next available)	REQUIRED
name	Content category level name	REQUIRED
text	Friendly description	OPTIONAL
otherurls	Block or allow requests that do not belong to a specific category	OPTIONAL

dsd webfilter standard level set

Set current web filtering level

SYNTAX:

```
dsd webfilter standard level    name = <string>  
set
```

where:

name	Name of the current category level	REQUIRED
------	------------------------------------	----------

dsd webfilter standard rule clear

Reset level to default rule

SYNTAX:

```
dsd webfilter standard rule    level = <string>
clear
```

where:

level	Level name	REQUIRED
-------	------------	----------

dsd webfilter standard rule list

List all rules

SYNTAX:

```
dsd webfilter standard rule    [level = <string>]  
list
```

where:

level	Level name	OPTIONAL
-------	------------	----------

dsd webfilter standard rule modify

Modify a rule

SYNTAX:

```
dsd webfilter standard rule    level = <string>
modify                          [id = <number>]
                                action = <{block|accept}>
```

where:

level	Level name	REQUIRED
id	Server category ID	OPTIONAL
action		REQUIRED

dyndns Commands

<i>dyndns add</i>	<i>Add a dynamic DNS client.</i>	see page 382
<i>dyndns delete</i>	<i>Delete a dynamic DNS client.</i>	see page 383
<i>dyndns flush</i>	<i>Delete all dynamic DNS clients.</i>	see page 384
<i>dyndns host add</i>	<i>Add a fully qualified host name</i>	see page 385
<i>dyndns host delete</i>	<i>Delete a host name</i>	see page 386
<i>dyndns host flush</i>	<i>Delete all host names</i>	see page 387
<i>dyndns host list</i>	<i>List all host names</i>	see page 388
<i>dyndns list</i>	<i>List all dynamic DNS clients.</i>	see page 389
<i>dyndns modify</i>	<i>Modify a dynamic DNS client.</i>	see page 390
<i>dyndns service list</i>	<i>List all dynamic DNS services</i>	see page 391
<i>dyndns service modify</i>	<i>Modify specific dynamic DNS service settings</i>	see page 392

dyndns add

Add a dynamic DNS client.

SYNTAX:

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

where:

name	The dynamic DNS client name.	REQUIRED
------	------------------------------	----------

dyndns delete

Delete a dynamic DNS client.

SYNTAX:

```
dyndns delete name = <>
```

where:

name	The dynamic DNS client name.	REQUIRED
------	------------------------------	----------

dyndns flush

Delete all dynamic DNS clients.

dyndns host add

Add a fully qualified host name

SYNTAX:

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

where:

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:

```
dyndns host delete          name = <>
```

where:

name	The name of an IP host to delete.	REQUIRED
------	-----------------------------------	----------

dyndns host flush

Delete all host names

dyndns host list

List all host names

dyndns list

List all dynamic DNS clients.

dyndns modify

Modify a dynamic DNS client.

SYNTAX:

```
dyndns modify          name = <>
                        [intf = <{Internet}>]
                        [user = <string>]
                        [password = <password>]
                        [group = <>]
                        [mx = <string>]
                        [backmx = <{disabled|enabled}>]
                        [wildcard = <{disabled|enabled}>]
                        [offline = <{disabled|enabled}>]
                        [service = <{dyndns|statdns|custom|No-IP|
DtDNS|gnudip}>]
                        [status = <{disabled|enabled}>]
                        [trace = <{disabled|enabled}>]
```

where:

name	The dynamic DNS client name.	REQUIRED
intf	The dynamic DNS client interface.	OPTIONAL
user	The username for dynamic DNS authentication.	OPTIONAL
password	The password for dynamic DNS authentication.	OPTIONAL
group	The dynamic DNS host group.	OPTIONAL
mx	The mail exchanger.	OPTIONAL
backmx	Set up the mail exchanger as a backup MX.	OPTIONAL
wildcard	Allow use of hostname wildcards.	OPTIONAL
offline	Set the host to offline mode.	OPTIONAL
service	The dynamic DNS service.	OPTIONAL
status	Enable/Disable the dynamic DNS client.	OPTIONAL
trace	Enable/Disable the verbose console logging for the dynamic DNS client.	OPTIONAL

dyndns service list

List all dynamic DNS services

dyndns service modify

Modify specific dynamic DNS service settings

SYNTAX:

```
dyndns service modify      name = <{dyndns|statdns|custom|No-IP|DtDNS|
                           gnudip}>
                           [server = <string>]
                           [port = <{undefined|at-echo|at-nbp|at-rtmp|at-
                           zis|auth|bgp|biff|bootpc|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|nfsd|nicname|
                           nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
                           gotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
                           snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
                           sunrpc|syslog|sysstat|talk|telnet|time|timed|
                           tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-
                           http|whoami|xwindows} or number>]
                           [request = <string>]
                           [updateinterval = <number{0-2097120}>]
                           [retryinterval = <number{0-600}>]
                           [max_retry = <number{1-5}>]
```

where:

name	The dynamic DNS service.	REQUIRED
server	The dynamic DNS server hostname.	OPTIONAL
port	The dynamic DNS server port.	OPTIONAL
request	The dynamic DNS request string.	OPTIONAL
updateinterval	Number of seconds before a dynamic update is sent to the dynamic DNS server (The value 0 means disabled).	OPTIONAL
retryinterval	Number of seconds between retries if communication with the dynamic DNS server fails (The value 0 means disabled).	OPTIONAL
max_retry	The maximum number of retries if communication with the dynamic DNS server fails.	OPTIONAL

env Commands

<i>env flush</i>	<i>Remove all non-system environment variables.</i>	see page 394
<i>env get</i>	<i>Gets an environment variable.</i>	see page 395
<i>env list</i>	<i>List all environment variables.</i>	see page 396
<i>env set</i>	<i>Sets an environment variable.</i>	see page 397
<i>env unset</i>	<i>Deletes an environment variable.</i>	see page 398

env flush

Remove all non-system environment variables.

env get

Gets an environment variable.

SYNTAX:

```
env get var = <{_SW_FLAG|_ETHERNET|_COMPANY_NAME|
_COMPANY_URL|_PROD_NAME|_SSID_SERIAL_PREFIX|
_BOARD_SERIAL_NBR|_PROD_SERIAL_NBR|_FII|
_BUILD|_BOOTLOADER_VERSION|_BUILDVARIANT|
_OUI|_BUILD_PASSIVEBANK|_CUSTOVARIANT|
_PHYSLAYERTYPE|_BUILDNAME|_BUILD_FILENAME|
_BUILD_PASSIVEFILENAME|_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|
_BOARD_FAKE_SERIAL_NBR|_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|
_WL_MACADDR|_LWL_MACADDR|_VOICE_CAPABLE|
_VOIP_TYPE|_MODEMLABEL|_WIZ_AUTOPOPUP|
_SNTPPOLL_POST_SYNC|_SNTPPOLL_PRE_SYNC|
_ADSL_EOC_VERSION|EOC_MSG|CONF_REGION|
CONF_PROVIDER|CONF_DESCRIPTION|CONF_SERVICE|
CONF_DATE|HOST_SETUP|CONF_DATETIME|
CONF_TPVERSION|GENERIC_OUI|@CWMPUSER|
_WL0_SSID_PREFIX_CUSTOM}>
```

where:

var	The name of the variable.	REQUIRED
-----	---------------------------	----------

env list

List all environment variables.

env set

Sets an environment variable.

SYNTAX:

```
env set          var = <string>
                 value = <translated string>
```

where:

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

env unset

Deletes an environment variable.

SYNTAX:

```
env unset var = <{_SW_FLAG | _ETHERNET | _COMPANY_NAME |
  _COMPANY_URL | _PROD_NAME | _SSID_SERIAL_PREFIX |
  _BOARD_SERIAL_NBR | _PROD_SERIAL_NBR | _FII |
  _BUILD | _BOOTLOADER_VERSION | _BUILDVARIANT |
  _OUI | _BUILD_PASSIVEBANK | _CUSTOVARIANT |
  _PHYSLAYERTYPE | _BUILDNAME | _BUILD_FILENAME |
  _BUILD_PASSIVEFILENAME | _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 |
  _BOARD_FAKE_SERIAL_NBR | _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 |
  _WL_MACADDR | _LWL_MACADDR | _VOICE_CAPABLE |
  _VOIP_TYPE | _MODEMLABEL | _WIZ_AUTOPOPUP |
  _SNTPPOLL_POST_SYNC | _SNTPPOLL_PRE_SYNC |
  _ADSL_EOC_VERSION | EOC_MSG | CONF_REGION |
  CONF_PROVIDER | CONF_DESCRIPTION | CONF_SERVICE |
  CONF_DATE | HOST_SETUP | CONF_DATETIME |
  CONF_TPVERSION | GENERIC_OUI | @CWMPUSER |
  WL0_SSID_PREFIX_CUSTOM}>
```

where:

var	The name of the variable.	REQUIRED
-----	---------------------------	----------

eth Commands

<i>eth bridge add</i>	<i>Add a new bridge instance.</i>	see page 404
<i>eth bridge clear</i>	<i>Clear bridge statistics.</i>	see page 405
<i>eth bridge config</i>	<i>Modify/Display the bridge configuration settings.</i>	see page 406
<i>eth bridge delete</i>	<i>Delete a bridge instance.</i>	see page 407
<i>eth bridge dynvlan actlist</i>	<i>Display the active MAC entries for the dynamic VLAN membership.</i>	see page 408
<i>eth bridge dynvlan add</i>	<i>Add a dynamic VLAN membership entry.</i>	see page 409
<i>eth bridge dynvlan config</i>	<i>Modify the dynamic VLAN membership configuration.</i>	see page 410
<i>eth bridge dynvlan delete</i>	<i>Delete a dynamic VLAN membership entry.</i>	see page 411
<i>eth bridge dynvlan flush</i>	<i>Flush all dynamic VLAN membership entries.</i>	see page 412
<i>eth bridge dynvlan list</i>	<i>Display a dynamic VLAN membership entry.</i>	see page 413
<i>eth bridge filter add</i>	<i>Add a filter.</i>	see page 414
<i>eth bridge filter attach</i>	<i>Enable a filter.</i>	see page 415
<i>eth bridge filter config</i>	<i>Change filter configuration</i>	see page 416
<i>eth bridge filter delete</i>	<i>Delete a filter.</i>	see page 417
<i>eth bridge filter detach</i>	<i>Disable a filter.</i>	see page 418
<i>eth bridge filter forwarding</i>	<i>Action: set forwarding configuration.</i>	see page 419
<i>eth bridge filter fwdintfadd</i>	<i>Add Forwarding interface: filter action.</i>	see page 420
<i>eth bridge filter fwdintfdel</i>	<i>Remove Forwarding interface: filter action.</i>	see page 421
<i>eth bridge filter ifadd</i>	<i>Connect an interface with a filter.</i>	see page 422
<i>eth bridge filter ifdel</i>	<i>Remove an interface from a filter.</i>	see page 423
<i>eth bridge filter list</i>	<i>Display the bridge filters.</i>	see page 424
<i>eth bridge flush</i>	<i>Flush all bridge instances with their interfaces and properties.</i>	see page 425
<i>eth bridge ifadd</i>	<i>Add a new bridge interface.</i>	see page 426
<i>eth bridge ifattach</i>	<i>Attach a bridge interface.</i>	see page 427
<i>eth bridge ifconfig</i>	<i>Modify a bridge interface configuration.</i>	see page 428
<i>eth bridge ifdelete</i>	<i>Delete a bridge interface.</i>	see page 430

<i>eth bridge ifdetach</i>	<i>Detach a bridge interface.</i>	see page 431
<i>eth bridge ifflush</i>	<i>flush the bridge interfaces: detach/delete all interfaces.</i>	see page 432
<i>eth bridge iflist</i>	<i>Display the current bridge interfaces.</i>	see page 433
<i>eth bridge igmpsnooping clear</i>	<i>Clear snooping statistics.</i>	see page 434
<i>eth bridge igmpsnooping config</i>	<i>Configure bridge instance IGMP Snooping flags.</i>	see page 435
<i>eth bridge igmpsnooping ifconfig</i>	<i>Configure bridge interface IGMP snooping flags and mode.</i>	see page 436
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<i>eth bridge ippriomap</i>	<i>Modify the IP priority mappings for a bridge.</i>	see page 439
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<i>eth bridge macadd</i>	<i>Add a static MAC address to a bridge interface.</i>	see page 442
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<i>eth bridge mldsnooping config</i>	<i>Configure bridge instance MLD Snooping flags.</i>	see page 446
<i>eth bridge mldsnooping ifconfig</i>	<i>Configure bridge interface MLD snooping flags and mode.</i>	see page 447
<i>eth bridge mldsnooping iflist</i>	<i>Display bridge interface MLD status.</i>	see page 448
<i>eth bridge mldsnooping list</i>	<i>Display bridge instance snooped groups.</i>	see page 449
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<i>eth bridge unknownvlan ifadd</i>	<i>Add bridge interface to unknown 'VLAN'.</i>	see page 455
<i>eth bridge unknownvlan ifconfig</i>	<i>Modify bridge interface from unknown 'VLAN'.</i>	see page 456

<i>eth bridge unknownvlan ifdelete</i>	<i>Delete bridge interface from unknown 'VLAN'.</i>	see page 457
<i>eth bridge unknownvlan iflist</i>	<i>Display all interfaces of the unknown 'VLAN'.</i>	see page 458
<i>eth bridge vlan ifadd</i>	<i>Add bridge interface to virtual LAN.</i>	see page 459
<i>eth bridge vlan ifconfig</i>	<i>Modify bridge interface from virtual LAN.</i>	see page 460
<i>eth bridge vlan ifdelete</i>	<i>Delete bridge interface from virtual LAN.</i>	see page 461
<i>eth bridge vlan iflist</i>	<i>Display all virtual LAN's.</i>	see page 462
<i>eth bridge vlan ifstats</i>	<i>Display all virtual LAN's port statistics.</i>	see page 463
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<i>eth device iflist</i>	<i>Show all Ethernet ports' operational status.</i>	see page 472
<i>eth device ifrestart</i>	<i>Reset an Ethernet port and restart autonegotiation.</i>	see page 473
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<i>eth filter operand flush</i>	<i>Remove all filter operands (this will only delete the ones not in use: flush).</i>	see page 478
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<i>eth filter operand ipprotoadd</i>	<i>Add another ip protocol in the set.</i>	see page 481
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<i>eth filter operand priorityadd</i>	<i>Add another priority in the set.</i>	see page 484

<i>eth filter operand prioritydelete</i>	<i>Delete a ip priority from the set.</i>	see page 485
<i>eth filter operand reset</i>	<i>Reset an operand to its default initial state (removes all content, set to</i>	see page 486
<i>eth filter operand vidadd</i>	<i>Add another VID in the set.</i>	see page 487
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<i>eth filter template config</i>	<i>Config a filter.</i>	see page 490
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<i>eth filter template flush</i>	<i>Remove all filters.</i>	see page 492
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<i>eth filter template setpriority</i>	<i>Action: enable/disable priority derivation</i>	see page 497
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<i>eth flush</i>	<i>Flush all ETH interfaces.</i>	see page 499
<i>eth ifadd</i>	<i>Create a new ETH interface.</i>	see page 500
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<i>eth switch group delete</i>	<i>Delete a specified port from a specified group.</i>	see page 506
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<i>eth switch qos config</i>	<i>Configure common qos parameters.</i>	see page 514
<i>eth switch qos ifconfig</i>	<i>Configure per port qos parameters.</i>	see page 515
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<i>eth switch shaper ifconfig</i>	<i>Configure per port shaper parameters.</i>	see page 519
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<i>eth switch share add</i>	<i>Add a port to be shared.</i>	see page 521
<i>eth switch share delete</i>	<i>Delete a shared port.</i>	see page 522
<i>eth switch share list</i>	<i>Display shared ports.</i>	see page 523
<i>eth switch storm ifconfig</i>	<i>Configure per port storm control parameters.</i>	see page 524
<i>eth switch storm iflist</i>	<i>Display storm control configuration per port.</i>	see page 525
<i>eth vlan add</i>	<i>Add a new virtual LAN.</i>	see page 526
<i>eth vlan delete</i>	<i>Delete a virtual LAN.</i>	see page 527
<i>eth vlan flush</i>	<i>Flush all virtual LAN's.</i>	see page 528
<i>eth vlan list</i>	<i>Display all virtual LAN's.</i>	see page 529
<i>eth vlan priomap config</i>	<i>Change a VLAN/DE to/from internal priority mapping.</i>	see page 530
<i>eth vlan priomap list</i>	<i>Display the VLAN/DE to/from internal priority mappings.</i>	see page 531

eth bridge add

Add a new bridge instance.

SYNTAX:

```
eth bridge add          brname = <string>
```

where:

brname	The name of the new bridge instance.	REQUIRED
--------	--------------------------------------	----------

eth bridge clear

Clear bridge statistics.

SYNTAX:

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

where:

brname	The name of a bridge instance.	OPTIONAL
--------	--------------------------------	----------

eth bridge config

Modify/Display the bridge configuration settings.

SYNTAX:

```
eth bridge config          [brname = <{bridge}>]
                           [age = <number{10-1000000}>]
                           [mtu = <number{1500-1982}>]
                           [filter = <{none|no_WAN_broadcast}>]
                           [vlan = <{disabled|enabled}>]
```

where:

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

eth bridge delete

Delete a bridge instance.

SYNTAX:

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

where:

brname	The name of a bridge instance.	REQUIRED
--------	--------------------------------	----------

eth bridge dynvlan actlist

Display the active MAC entries for the dynamic VLAN membership.

eth bridge dynvlan add

Add a dynamic VLAN membership entry.

SYNTAX:

```
eth bridge dynvlan add      [id = <number{0-100000}>]
                             hwaddr = <masked-hardware-address>
                             vlan = <{default}>
                             [prio = <number{0-7}>]
                             [mode = <{none|vid|prio|both}>]
```

where:

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

eth bridge dynvlan config

Modify the dynamic VLAN membership configuration.

SYNTAX:

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

where:

timeout	Timeout in seconds for the dynamic entries.	OPTIONAL
---------	---	----------

eth bridge dynvlan delete

Delete a dynamic VLAN membership entry.

SYNTAX:

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

where:

id	REQUIRED
----	----------

eth bridge dynvlan flush

Flush all dynamic VLAN membership entries.

eth bridge dynvlan list

Display a dynamic VLAN membership entry.

eth bridge filter add

Add a filter.

SYNTAX:

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

where:

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:

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

where:

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

eth bridge filter config

Change filter configuration

SYNTAX:

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

where:

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:

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

where:

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

eth bridge filter detach

Disable a filter.

SYNTAX:

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

where:

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:

```
eth bridge filter forwarding    brname = <{bridge}>
                                name = <{ }>
                                mode = <{ToFwdIntfsOnly|AlsoToFwdIntfs|
                                NotToFwdIntfs|Drop}>
```

where:

brname	The name of an bridge.	REQUIRED
name	The name of the filter to configure.	REQUIRED
mode	The forwarding type to set.	REQUIRED

eth bridge filter fwdintfadd

Add Forwarding interface: filter action.

SYNTAX:

```
eth bridge filter fwdintfadd    brname = <{bridge}>
                                name = <{ }>
                                intf = <{OBC|ethport1|ethport2|ethport3|
                                        ethport4|WLAN|virt}>
```

where:

brname	The name of an bridge.	REQUIRED
name	The name of the filter to configure.	REQUIRED
intf	The name of the bridge interface to add.	REQUIRED

eth bridge filter fwdintfdel

Remove Forwarding interface: filter action.

SYNTAX:

```
eth bridge filter fwdintfdel    brname = <{bridge}>
                                name = <{ }>
                                intf = <{OBC|ethport1|ethport2|ethport3|
                                        ethport4|WLAN|virt}>
```

where:

brname	The name of an bridge.	REQUIRED
name	The name of the filter to configure.	REQUIRED
intf	The name of the bridge interface to remove.	REQUIRED

eth bridge filter ifadd

Connect an interface with a filter.

SYNTAX:

```
eth bridge filter ifadd      brname = <{bridge}>
                             name = <{ }>
                             intf = <{OBC|ethport1|ethport2|ethport3|
                                     ethport4|WLAN|virt}>
```

where:

brname	The name of an bridge.	REQUIRED
name	The name of the filter to configure.	REQUIRED
intf	The name of the bridge interface to add.	REQUIRED

eth bridge filter ifdel

Remove an interface from a filter.

SYNTAX:

```
eth bridge filter ifdel      brname = <{bridge}>
                             name = <{ }>
                             intf = <{OBC|ethport1|ethport2|ethport3|
                                     ethport4|WLAN|virt}>
```

where:

brname	The name of an bridge.	REQUIRED
name	The name of the filter to configure.	REQUIRED
intf	The name of the bridge interface to remove.	REQUIRED

eth bridge filter list

Display the bridge filters.

SYNTAX:

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

where:

brname	The name of an bridge.	REQUIRED
name	The name of an filter.	OPTIONAL
expand	Expanded listing.	OPTIONAL

eth bridge flush

Flush all bridge instances with their interfaces and properties.

SYNTAX:

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

where:

brname	The name of a bridge instance.	OPTIONAL
--------	--------------------------------	----------

eth bridge ifadd

Add a new bridge interface.

SYNTAX:

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

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The new bridge interface name.	REQUIRED

eth bridge ifattach

Attach a bridge interface.

SYNTAX:

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

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The name of the bridge interface.	REQUIRED

eth bridge ifconfig

Modify a bridge interface configuration.

SYNTAX:

```
eth bridge ifconfig [brname = <{bridge}>]
                    [intf = <{OBC|ethport1|ethport2|ethport3|
                    ethport4|WLAN|virt}>]
                    [dest = <{}>]
                    [portstate = <{disabled|learning|forwarding}>]
                    [retry = <number{0-65535}>]
                    [priotag = <{disabled|enabled}>]
                    [vlan = <{default}>]
                    [prioconfig = <{disabled|overwrite|increase}>]
                    [ipprec = <{disabled|precedence|dscp}>]
                    [priority = <number{0-7}>]
                    [regenprio = <string>]
                    [ingressfiltering = <{disabled|enabled}>]
                    [acceptvlanonly = <{disabled|enabled}>]
                    [mcastfilter = <{disabled|enabled}>]
                    [dynvlan = <{disabled|enabled|switched}>]
                    [wan = <{disabled|enabled}>]
                    [igmpsnooping = <{disabled|enabled}>]
                    [mldsnooping = <{disabled|enabled}>]
                    [priotransparent = <{disabled|enabled}>]
                    [bpdufiltering = <{disabled|enabled}>]
                    [xtratagging = <{none|c-vlan|s-vlan}>]
```

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The name of the bridge interface to configure.	REQUIRED
dest	The destination for this interface. Typically an ATM or a physical interface name.	OPTIONAL
portstate	The bridge portstate for this interface.	OPTIONAL
retry	The number of WAN connection setup retries before giving up.	OPTIONAL
priotag	Enable/Disable priority tagging.	OPTIONAL
vlan	The default VLAN.	OPTIONAL
prioconfig	The priority configuration for this interface.	OPTIONAL
ipprec	The IP precedence for this interface.	OPTIONAL
priority	The default priority for untagged ingress packets.	OPTIONAL
regenprio	The priority regeneration table for tagged ingress packets.	OPTIONAL

ingressfiltering	Enable/disable discard of tagged ingress packets if the interface is not part of the VLAN.	OPTIONAL
acceptvlanonly	Enable/disable receipt of tagged ingress packets.	OPTIONAL
mcastfilter	Enable/disable discard of multicast packets for this interface.	OPTIONAL
dynvlan	Change dynamic VLAN membership checking mechanism for this interface.	OPTIONAL
wan	Enable/disable WAN for this interface.	OPTIONAL
igmpsnooping	Enable/disable IGMP snooping for this interface.	OPTIONAL
mldsnooping	Enable/disable MLD snooping for this interface.	OPTIONAL
priotransparent	Enable/disable priority preservation for this interface.	OPTIONAL
bpdufiltering	Enable/disable BPDU filtering 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:

```
eth bridge ifdelete          [brname = <{bridge}>]
                             intf = <{ethport1|ethport2|ethport3|ethport4|
                             WLAN|virt}>
```

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The name of the bridge interface.	REQUIRED

eth bridge ifdetach

Detach a bridge interface.

SYNTAX:

```
eth bridge ifdetach          [brname = <{bridge}>]  
                             intf = <{ethport1|ethport2|ethport3|ethport4|  
                             WLAN|virt}>
```

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The name of the bridge interface.	REQUIRED

eth bridge ifflush

flush the bridge interfaces: detach/delete all interfaces.

SYNTAX:

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

where:

brname	The name of a bridge instance.	OPTIONAL
--------	--------------------------------	----------

eth bridge iflist

Display the current bridge interfaces.

SYNTAX:

```
eth bridge iflist [brname = <{bridge}>]
                  [intf = <{OBC|ethport1|ethport2|ethport3|
ethport4|WLAN|virt}>]
```

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The name of a bridge interface.	OPTIONAL

eth bridge igmpsnooping clear

Clear snooping statistics.

SYNTAX:

```
eth bridge igmpsnooping clear [brname = <{bridge}>]
                               [intf = <{OBC|ethport1|ethport2|ethport3|
                               ethport4|WLAN|virt}>]
```

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The bridge interface currently to be cleared.	OPTIONAL

eth bridge igmpsnooping config

Configure bridge instance IGMP Snooping flags.

SYNTAX:

```
eth bridge igmpsnooping config [brname = <{bridge}>]
                                [state = <{disabled|enabled}>]
                                [floodrp = <{disabled|enabled}>]
                                [floodmcast = <{disabled|enabled}>]
                                [queryto = <number{0-86400}>]
```

where:

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

eth bridge igmpsnooping ifconfig

Configure bridge interface IGMP snooping flags and mode.

SYNTAX:

```
eth bridge igmpsnooping [brname = <{bridge}>]
ifconfig                intf = <{OBC|ethport1|ethport2|ethport3|
                        ethport4|WLAN|virt}>
                        [portmode = <{Host|Router|Auto|None}>]
                        [fastleave = <{disabled|enabled}>]
                        [exptrack = <{disabled|enabled}>]
                        [mrdp = <{disabled|enabled}>]
                        [rgmp = <{disabled|enabled}>]
```

where:

brname	The bridge instance currently to be configured.	OPTIONAL
intf	The bridge interface currently to be configured.	REQUIRED
portmode	Mode of the bridge port.	OPTIONAL
fastleave	Enable/Disable Fast Immediate Leave.	OPTIONAL
exptrack	Enable/Disable Explicit Host Tracking.	OPTIONAL
mrdp	Enable/Disable MRDP support.	OPTIONAL
rgmp	Enable/Disable RGMP support.	OPTIONAL

eth bridge igmpsnooping iflist

Display bridge interface IGMP status.

SYNTAX:

```
eth bridge igmpsnooping iflist [brname = <{bridge}>]
                                [intf = <{OBC|ethport1|ethport2|ethport3|
                                ethport4|WLAN|virt}>]
```

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The name of the bridge interface.	OPTIONAL

eth bridge igmpsnooping list

Display bridge instance snooped groups.

SYNTAX:

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

where:

brname	The name of a bridge instance.	OPTIONAL
--------	--------------------------------	----------

eth bridge ipriomap

Modify the IP priority mappings for a bridge.

SYNTAX:

```
eth bridge ipriomap          [brname = <{bridge}>]
                             type = <{tos|dscp}>
                             tostable = <{Default|MinimizeDelay|
                             MaximizeThroughput|MaximizeReliability|
                             MinimizeCost}>
                             dscpidx = <{dscp_0_7|dscp_8_15|dscp_16_23|
                             dscp_24_31|dscp_32_39|dscp_40_47|dscp_48_55|
                             dscp_56_63}>
                             precedencemap = <string>
```

where:

brname	The name of a bridge instance.	OPTIONAL
type	For which IP priority type to adapt the precedencemap.	REQUIRED
tostable	TOS table type to edit.	REQUIRED
dscpidx	Index in the DSCP table to edit.	REQUIRED
precedencemap	The IP priority precedence mapping values.	REQUIRED

eth bridge ipriomapreset

Reset the IP priority mappings to its defaults.

SYNTAX:

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

where:

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

eth bridge list

Display the current bridge instances.

SYNTAX:

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

where:

brname	The name of a bridge instance.	OPTIONAL
--------	--------------------------------	----------

eth bridge macadd

Add a static MAC address to a bridge interface.

SYNTAX:

```
eth bridge macadd [brname = <{bridge}>]
                  intf = <{OBC|ethport1|ethport2|ethport3|
ethport4|WLAN|virt}>
                  hwaddr = <hardware-address>
                  [vlan = <{default}>]
```

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The name of the bridge interface.	REQUIRED
hwaddr	The ethernet MAC address of the new entry.	REQUIRED
vlan	The VLAN.	OPTIONAL

eth bridge macdelete

Remove a MAC address from the database.

SYNTAX:

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

where:

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

eth bridge maclist

Display the MAC address database.

SYNTAX:

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

where:

brname	The name of a bridge instance.	OPTIONAL
--------	--------------------------------	----------

eth bridge mldsnooping clear

Clear snooping statistics.

SYNTAX:

```
eth bridge mldsnooping clear [brname = <{bridge}>]
                              [intf = <{OBC|ethport1|ethport2|ethport3|
                              ethport4|WLAN|virt}>]
```

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The bridge interface currently to be cleared.	OPTIONAL

eth bridge mldsnooping config

Configure bridge instance MLD Snooping flags.

SYNTAX:

```
eth bridge mldsnooping config [brname = <{bridge}>]
                               [state = <{disabled|enabled}>]
                               [floodrp = <{disabled|enabled}>]
                               [floodmcast = <{disabled|enabled}>]
                               [qi = <number{0-86400}>]
```

where:

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

eth bridge mld snooping ifconfig

Configure bridge interface MLD snooping flags and mode.

SYNTAX:

```
eth bridge mld snooping      brname = <{bridge}>
ifconfig                    intf = <{OBC|ethport1|ethport2|ethport3|
                             ethport4|WLAN|virt}>
                             [portmode = <{Host|Router|Auto|None}>]
                             [fastdone = <{disabled|enabled}>]
                             [exptrack = <{disabled|enabled}>]
```

where:

brname	The bridge instance currently to be configured.	REQUIRED
intf	The bridge interface currently to be configured.	REQUIRED
portmode	Mode of the bridge port.	OPTIONAL
fastdone	Enable/Disable Fast Immediate Leave.	OPTIONAL
exptrack	Enable/Disable Explicit Host Tracking.	OPTIONAL

eth bridge mldsnooping iflist

Display bridge interface MLD status.

SYNTAX:

```
eth bridge mldsnooping iflist [brname = <{bridge}>]
                               [intf = <{OBC|ethport1|ethport2|ethport3|
                               ethport4|WLAN|virt}>]
```

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The name of the bridge interface.	OPTIONAL

eth bridge mldsnooping list

Display bridge instance snooped groups.

SYNTAX:

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

where:

brname	The name of a bridge instance.	OPTIONAL
--------	--------------------------------	----------

eth bridge rule add

Add a new constraint to the VLAN learning system.

SYNTAX:

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

where:

brname	The name of a bridge instance.	OPTIONAL
type	Type of constraint.	REQUIRED
vlan	The VLAN where the constraint belongs to.	REQUIRED
vlan2	The second VLAN for a shared constraint.	OPTIONAL
isi	The independent set id for an independent constraint.	OPTIONAL

eth bridge rule delete

Delete a constraint from the VLAN learning system.

SYNTAX:

```
eth bridge rule delete      [brname = <{bridge}>]  
                             index = <number{0-32}>
```

where:

brname	The name of a bridge instance.	OPTIONAL
index	Index of the constraint.	REQUIRED

eth bridge rule flush

Flush all constraints from the VLAN learning system.

eth bridge rule list

Display all constraints from the VLAN learning system.

SYNTAX:

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

where:

brname	The name of a bridge instance.	OPTIONAL
--------	--------------------------------	----------

eth bridge select

Select the default bridge for configuring interfaces from (if not setting

SYNTAX:

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

where:

brname	The name of a bridge instance.	REQUIRED
--------	--------------------------------	----------

eth bridge unknownvlan ifadd

Add bridge interface to unknown 'VLAN'.

SYNTAX:

```
eth bridge unknownvlan ifadd [brname = <{bridge}>]
                              intf = <{OBC|ethport1|ethport2|ethport3|
                              ethport4|WLAN|virt}>
                              [untagged = <{disabled|enabled}>]
```

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The name of the bridge interface to add to the unknown 'VLAN'.	REQUIRED
untagged	Enable/disable interface as untagged for this unknown 'VLAN'.	OPTIONAL

eth bridge unknownvlan ifconfig

Modify bridge interface from unknown 'VLAN'.

SYNTAX:

```
eth bridge unknownvlan      [brname = <{bridge}>]
ifconfig                    intf = <{OBC|ethport1|ethport2|ethport3|
                             ethport4|WLAN|virt}>
                             [untagged = <{disabled|enabled}>]
```

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The bridge interface from the unknown 'VLAN' to configure.	REQUIRED
untagged	Enable/disable interface as untagged for this unknown 'VLAN'.	OPTIONAL

eth bridge unknownvlan ifdelete

Delete bridge interface from unknown 'VLAN'.

SYNTAX:

```
eth bridge unknownvlan      [brname = <{bridge}>]
ifdelete                    intf = <{OBC|ethport1|ethport2|ethport3|
                              ethport4|WLAN|virt}>
```

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The name of the bridge interface to remove from the unknown 'VLAN'.	REQUIRED

eth bridge unknownvlan iflist

Display all interfaces of the unknown 'VLAN'.

eth bridge vlan ifadd

Add bridge interface to virtual LAN.

SYNTAX:

```
eth bridge vlan ifadd      [brname = <{bridge}>]
                           name = <{default}>
                           intf = <{OBC|ethport1|ethport2|ethport3|
                           ethport4|WLAN|virt}>
                           [untagged = <{disabled|enabled}>]
```

where:

brname	The name of a bridge instance.	OPTIONAL
name	The VLAN name.	REQUIRED
intf	The name of the bridge interface to add to the VLAN.	REQUIRED
untagged	Enable/disable interface as untagged for this VLAN.	OPTIONAL

eth bridge vlan ifconfig

Modify bridge interface from virtual LAN.

SYNTAX:

```
eth bridge vlan ifconfig      [brname = <{bridge}>]
                              name = <{default}>
                              intf = <{OBC|ethport1|ethport2|ethport3|
                              ethport4|WLAN|virt}>
                              untagged = <{disabled|enabled}>
```

where:

brname	The name of a bridge instance.	OPTIONAL
name	The VLAN name.	REQUIRED
intf	The bridge interface from the VLAN to configure.	REQUIRED
untagged	Enable/disable interface as untagged for this VLAN.	REQUIRED

eth bridge vlan ifdelete

Delete bridge interface from virtual LAN.

SYNTAX:

```
eth bridge vlan ifdelete      [brname = <{bridge}>]
                              name = <{default}>
                              intf = <{OBC|ethport1|ethport2|ethport3|
                              ethport4|WLAN|virt}>
```

where:

brname	The name of a bridge instance.	OPTIONAL
name	The VLAN name.	REQUIRED
intf	The name of the bridge interface to remove from the VLAN.	REQUIRED

eth bridge vlan iflist

Display all virtual LAN's.

SYNTAX:

```
eth bridge vlan iflist [brname = <{bridge}>]
```

where:

brname	The name of a bridge instance.	OPTIONAL
--------	--------------------------------	----------

eth bridge vlan ifstats

Display all virtual LAN's port statistics.

SYNTAX:

```
eth bridge vlan ifstats [brname = <{bridge}>]
```

where:

brname	The name of a bridge instance.	OPTIONAL
--------	--------------------------------	----------

eth bridge xtrntag add

Add an extra tag mapping entry.

SYNTAX:

```
eth bridge xtrntag add      [brname = <{bridge}>]
                           intf = <{OBC|ethport1|ethport2|ethport3|
                           ethport4|WLAN|virt}>
                           innervid = <{[1-4094]|all|}>
                           outervid = <{[1-4094]|notag|transparent|}>
```

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The name of the bridge interface.	REQUIRED
innervid	The inner VLAN id [all,1-4094] (all = all inner vid will be translated to the outer vid).	REQUIRED
outervid	The outer VLAN id [notag,1-4094,transparent] (notag: outer not tagged, transparent: tagged as inner).	REQUIRED

eth bridge xtratag config

Configure an extra tag mapping entry.

SYNTAX:

```
eth bridge xtratag config      [brname = <{bridge}>]
                               intf = <{OBC|ethport1|ethport2|ethport3|
                               ethport4|WLAN|virt}>
                               innervid = <{[1-4094]|all|}>
                               outervid = <{[1-4094]|notag|transparent|}>
```

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The name of the bridge interface.	REQUIRED
innervid	The inner VLAN id [all,1-4094] (all = all inner vid will be translated to the outer vid).	REQUIRED
outervid	The outer VLAN id [notag,1-4094,transparent] (notag: outer not tagged, transparent: tagged as inner).	REQUIRED

eth bridge xtratag delete

Delete an extra tag mapping entry.

SYNTAX:

```
eth bridge xtratag delete      [brname = <{bridge}>]
                               intf = <{OBC|ethport1|ethport2|ethport3|
                               ethport4|WLAN|virt}>
                               innervid = <{[1-4094]|all|}>
```

where:

brname	The name of a bridge instance.	OPTIONAL
intf	The name of the bridge interface.	REQUIRED
innervid	The inner VLAN id [all,1-4094] (all = all inner vid will be translated to the outer vid).	REQUIRED

eth bridge xtratag flush

Flush all extra tag mapping entries.

eth bridge xtratag list

Display all extra tag mapping entries.

eth device debug stats

Display ETH interface statistics.

SYNTAX:

```
eth device debug stats      [intf = <{ethif1|ethif2|ethif3|ethif4|ethif5|  
                           wlif1|ethif6|}>]  
                           [clear = <{disabled|enabled}>]
```

where:

intf	The Ethernet port's name.	OPTIONAL
clear	Clear the statistics after read	OPTIONAL

eth device ifautoneg

Adapt/list an Ethernet port's autonegotiation parameters (if autonegotiation

SYNTAX:

```
eth device ifautoneg          intf = <{ethif1|ethif2|ethif3|ethif4|ethif5|
                               wlif1|ethif6}>
                               [speed = <{auto|10Mb|100Mb|1Gb}>]
                               [duplex = <{auto|half|full}>]
                               [pause = <{none|asym|sym|both}>]
```

where:

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

eth device ifconfig

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

SYNTAX:

```
eth device ifconfig          intf = <{ethif1|ethif2|ethif3|ethif4|ethif5|
                             wlif1|ethif6}>
                             [state = <{enabled|disabled}>]
                             [type = <{auto|10BaseTHD|10BaseTFD|100BaseTHD|
                             100BaseTFD}>]
                             [mtu = <number{1518-2000}>]
```

where:

intf	The Ethernet port's name.	REQUIRED
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!	OPTIONAL
mtu	The MTU for this Ethernet port.	OPTIONAL

eth device iflist

Show all Ethernet ports' operational status.

eth device ifrestart

Reset an Ethernet port and restart autonegotiation.

SYNTAX:

```
eth device ifrestart          intf = <{ethif1|ethif2|ethif3|ethif4|ethif5|  
                             wlif1|ethif6|}>
```

where:

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

eth filter operand add

Add a filter operand.

SYNTAX:

```
eth filter operand add      operand = <string>
```

where:

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:

```
eth filter operand config      operand = <{ }>
                               type = <{CheckDAClass|CheckFrameClass|
                               CheckVLANPriority|CheckVID|
                               CheckBridgeSourcePort}>
                               operator = <{Equal|Less|LessEqual|InSet}>
                               protocollevel = <{EthernetFrame|Protocol|
                               EthernetPayload|ULPHeader|ULPPayload}>
                               length = <number>
                               mask = <string>
                               value = <string>
                               daclass = <{Unicast|Multicast|Broadcast}>
                               [frameclass = <{Eth2|SNAPEType|SNAP8021H|
                               SNAPOther|LLCNLPID|LLCOther}>]
                               [ipprotocol = <number{0-254}>]
                               action = <{Delete|Insert|Modify}>
                               offset = <number>
                               [priority = <number{0-7}>]
                               size = <number>
                               [vid = <number{1-4095}>]
                               protocol = <{IP|UpperLayer}>
                               srcintf = <{OBC|ethport1|ethport2|ethport3|
                               ethport4|WLAN|virt}>
```

where:

operand	The name of an operand.	REQUIRED
type	The type to set.	REQUIRED
operator	The compare operator.	REQUIRED
protocollevel	The protocol level from where to start offset/size calculations.	REQUIRED
length	The length of the compare value/mask combination in bytes..	REQUIRED
mask	The mask to be used on the value.	REQUIRED
value	The value.	REQUIRED
daclass	The destination address class.	REQUIRED
frameclass	The Ethernet frame class to filter on.	OPTIONAL
ipprotocol	The IP protocol to filter on.	OPTIONAL
action	The action to undertake with matching filter..	REQUIRED

offset	At which offset from protocol level in bytes the Match/Modify action should start (in bytes).	REQUIRED
priority	The VLAN priority to filter on.	OPTIONAL
size	The size of the frame at this protocol level.	REQUIRED
vid	The VID to filter on.	OPTIONAL
protocol	The protocol level of the checksum.	REQUIRED
srcintf	The source bridge interface from where the packet ingressed the bridge.	REQUIRED

eth filter operand delete

Delete a filter operand.

SYNTAX:

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

where:

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

eth filter operand frameclassadd

Add another frameclass in the set.

SYNTAX:

```
eth filter operand          operand = <{ }>
frameclassadd              frameclass = <{Eth2 | SNAPEType | SNAP8021H |
                             SNAPOther | LLCNLPID | LLCOther}>
```

where:

operand	The name of an operand.	REQUIRED
frameclass	The frame class to add.	REQUIRED

eth filter operand frameclassdelete

Delete a frameclass from the set.

SYNTAX:

```
eth filter operand          operand = <{ }>
frameclassdelete          frameclass = <{Eth2 | SNAPEType | SNAP8021H |
                           SNAPOther | LLCNLPID | LLCOther}>
```

where:

operand	The name of an operand.	REQUIRED
frameclass	The frameclass to remove.	REQUIRED

eth filter operand ipprotoadd

Add another ip protocol in the set.

SYNTAX:

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

where:

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

eth filter operand ipprotodelete

Delete a ip protocol from the set.

SYNTAX:

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

where:

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

eth filter operand list

Display the filter operands.

SYNTAX:

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

where:

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

eth filter operand priorityadd

Add another priority in the set.

SYNTAX:

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

where:

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:

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

where:

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

SYNTAX:

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

where:

operand	The name of an operand.	REQUIRED
---------	-------------------------	----------

eth filter operand vidadd

Add another VID in the set.

SYNTAX:

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

where:

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

eth filter operand viddelete

Delete a VID from the set.

SYNTAX:

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

where:

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

eth filter template add

Add a filter.

SYNTAX:

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

where:

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

eth filter template config

Config a filter.

SYNTAX:

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

where:

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

eth filter template delete

Delete a filter.

SYNTAX:

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

where:

filter	The name of an filter.	REQUIRED
--------	------------------------	----------

eth filter template flush

Remove all filters.

eth filter template list

Display the filters.

SYNTAX:

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

where:

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

eth filter template ruleadd

Connect an operand rule with a filter.

SYNTAX:

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

where:

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
order	The operand order in thes filter (lower order is processed first = priority)	OPTIONAL
operator	Operand operator.	OPTIONAL

eth filter template ruledel

Remove an operand rule from a filter.

SYNTAX:

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

where:

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:

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

where:

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

eth filter template setpriority

Action: enable/disable priority derivation

SYNTAX:

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

where:

filter	The name of an filter.	REQUIRED
state	Enable/disable priority derivation for this filters	OPTIONAL
priority	The priority to set in the derivation.	REQUIRED

eth filter template setvid

Action: enable/disable VID derivation

SYNTAX:

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

where:

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

eth flush

Flush all ETH interfaces.

eth ifadd

Create a new ETH interface.

SYNTAX:

```
eth ifadd                               intf = <string>
```

where:

intf	The name for the new ETH interface.	REQUIRED
------	-------------------------------------	----------

eth ifattach

Attach an ETH interface.

SYNTAX:

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

where:

intf	The name of the ETH interface.	REQUIRED
------	--------------------------------	----------

eth ifconfig

Modify an ETH interface.

SYNTAX:

```
eth ifconfig          intf = <{ethoa_8_35|eth_ge}>
                    [dest = <{bridge|ethoa_8_35|eth_ge}>]
                    [retry = <number{0-65535}>]
                    [wan = <{disabled|enabled}>]
                    [priotag = <{disabled|enabled}>]
                    [mtu = <number{1500-1982}>]
                    [vlan = <{default}>]
```

where:

intf	The name of the ETH interface to configure.	REQUIRED
dest	The destination interface for this ETH interface.	OPTIONAL
retry	The number of times the ETH connection setup should retry before giving up.	OPTIONAL
wan	Enable/Disable WAN for this ETH interface.	OPTIONAL
priotag	Enable/Disable VLAN priority tagging.	OPTIONAL
mtu	The MTU for this ETH interface.	OPTIONAL
vlan	The VLAN for this ETH interface.	OPTIONAL

eth ifdelete

Delete an ETH interface.

SYNTAX:

```
eth ifdelete          intf = <{ethoa_8_35|eth_ge}>
```

where:

intf	The name of the ETH interface.	REQUIRED
------	--------------------------------	----------

eth ifdetach

Detach an ETH interface.

SYNTAX:

```
eth ifdetach          intf = <{ethoa_8_35|eth_ge}>
```

where:

intf	The name of the ETH interface.	REQUIRED
------	--------------------------------	----------

eth iflist

Display the ETH interfaces.

SYNTAX:

```
eth iflist [intf = <{ethoa_8_35|eth_ge}>]
```

where:

intf	The name of an ETH interface.	OPTIONAL
------	-------------------------------	----------

eth switch group delete

Delete a specified port from a specified group.

SYNTAX:

```
eth switch group delete      group = <number{0-5}>
                             port = <number{1-5}>
```

where:

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).

eth switch group list

List all configured groups.

eth switch group move

Move a specified port to a specified group.

SYNTAX:

```
eth switch group move          group = <number{0-5}>
                               port = <number{1-5}>
```

where:

group	The group id.	REQUIRED
port	The port.	REQUIRED

eth switch info

Display switch capabilities

eth switch mirror capture

Define the specified port to be the Mirror Capture Port.

SYNTAX:

```
eth switch mirror capture      port = <number{1-5}>
```

where:

port	The port.	REQUIRED
------	-----------	----------

eth switch mirror egress

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

SYNTAX:

```
eth switch mirror egress      port = <number{1-5}>
                               [state = <{enabled|disabled}>]
```

where:

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:

```
eth switch mirror ingress      port = <number{1-5}>
                               [state = <{enabled|disabled}>]
```

where:

port	The port.	REQUIRED
state	Enable/disable state.	OPTIONAL

eth switch qos config

Configure common qos parameters.

SYNTAX:

```
eth switch qos config          state = <{enabled|disabled}>
                               [nbrOfQueues = <number{0-4}>]
                               [realtime = <{enabled|disabled}>]
                               [threshold = <number{0-15}>]
                               [rxbackpressure = <{disabled|enabled}>]
                               [txbackpressure = <{disabled|enabled}>]
```

where:

state	Enable/disable QoS.	REQUIRED
nbrOfQueues	Number of queues.	OPTIONAL
realtime	Enable/disable realtime.	OPTIONAL
threshold	Tx Qos threshold.	OPTIONAL
rxbackpressure	Enable/disable controlled receive from switch (OBC pauses Rx).	OPTIONAL
txbackpressure	Enable/disable controlled transmit to switch (switch pauses Tx).	OPTIONAL

eth switch qos ifconfig

Configure per port qos parameters.

SYNTAX:

```
eth switch qos ifconfig      port = <number{1-5}>
                             mode = <[+/-]flag[+/-flag...]{802.1p high
                             diffserv tos}>
                             [flowcontrol = <{disabled|enabled}>]
```

where:

port	The port.	REQUIRED
mode	Classifier.	REQUIRED
flowcontrol	Enable/disable flow-control.	OPTIONAL

eth switch qos list

Display qos configuration.

eth switch qos weights

Configure the queue weights.

SYNTAX:

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

where:

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 config

Configure common ingress shaper parameters.

SYNTAX:

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

where:

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

eth switch shaper ifconfig

Configure per port shaper parameters.

SYNTAX:

```
eth switch shaper ifconfig      port = <number{1-5}>
                                ingress = <{enabled|disabled}>
                                shaper = <number{0-1}>
                                [state = <{enabled|disabled}>]
                                [speed = <number{64000-1000000000}>]
                                [burstsize = <{16|20|28|40|76|140|268|500}>]
```

where:

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

eth switch shaper iflist

Display shaper configuration per port.

eth switch share add

Add a port to be shared.

SYNTAX:

```
eth switch share add          port = <number{1-5}>
                              shared = <number{1-5}>
```

where:

port	The port.	REQUIRED
shared	The shared port.	REQUIRED

eth switch share delete

Delete a shared port.

SYNTAX:

```
eth switch share delete      port = <number{1-5}>
                             shared = <number{1-5}>
```

where:

port	The port.	REQUIRED
shared	The shared port.	REQUIRED

eth switch share list

Display shared ports.

eth switch storm ifconfig

Configure per port storm control parameters.

SYNTAX:

```
eth switch storm ifconfig      port = <number{1-5}>
                               [state = <{enabled|disabled}>]
                               [rate = <number{0-1000}>]
                               [burstsize = <{16|20|28|40|76|140|268|500}>]
                               [broadcast = <{enabled|disabled}>]
                               [multicast = <{enabled|disabled}>]
                               [unknown = <{enabled|disabled}>]
```

where:

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

eth switch storm iflist

Display storm control configuration per port.

eth vlan add

Add a new virtual LAN.

SYNTAX:

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

where:

name	The new VLAN name.	REQUIRED
vid	The new VLAN id.	REQUIRED
brname	The name of a bridge instance.	OPTIONAL
addrule	Add the default bridge constraint.	OPTIONAL

eth vlan delete

Delete a virtual LAN.

SYNTAX:

```
eth vlan delete [brname = <{bridge}>]
                name = <{default}>
```

where:

brname	The name of a bridge instance.	OPTIONAL
name	The VLAN name.	REQUIRED

eth vlan flush

Flush all virtual LAN's.

eth vlan list

Display all virtual LAN's.

SYNTAX:

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

where:

brname	The name of a bridge instance.	OPTIONAL
--------	--------------------------------	----------

eth vlan priomap config

Change a VLAN/DE to/from internalpriority mapping.

SYNTAX:

```
eth vlan priomap config      entry = <{prio_0_7_2vlan|prio_8_15_2vlan|
                             prio_0_7_2de|prio_8_15_2de|vlan2prio_de_0|
                             vlan2prio_de_1}>
                             priomap = <string>
```

where:

entry	Which prioritymap entry to edit.	REQUIRED
priomap	The 8 priority mapping values.	REQUIRED

eth vlan priomap list

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

expr Commands

<i>expr add</i>	<i>Add an expression.</i>	see page 534
<i>expr delete</i>	<i>Delete an expression.</i>	see page 538
<i>expr flush</i>	<i>Flush all expressions.</i>	see page 539
<i>expr list</i>	<i>List expressions.</i>	see page 540
<i>expr modify</i>	<i>Modify an expression.</i>	see page 541

expr add

Add an expression.

SYNTAX:

```

expr add      name = <{wan|local|lan|tunnel|dmz|guest|
              contentsharing_ip|private|ssdp_ip|imap3|imap4-
              ssl|imaps|pop2|pop3|pop3s|smtp|ssh|dns|nntp|
              ipsec|esp|ah|ike|sip|h323|dhcp|rtsp|ssdp_serv|
              mdap_serv|syslog|VoIP-Inc-SIP-UDP|VoIP-Inc-
              SIP-TCP|VoIP-Inc-RTP|gre|icmpv6}>
              [type = <{intf|ip|serv|mac|length}>]
              mac [!] = <hardware-address>
              addr [!] = <ip-range>
              [mask [ = <ip-mask(dotted or cidr)>]
              [intf [!] = <{loop|Internet|LocalNetwork|loop|
              Internet|LocalNetwork}>]
              [intfgroup [!] = <{wan|local|lan|tunnel|dmz|
              guest}>]
              [tos [!] = <number{0-255}>]
              [precedence [!] = <{routine|priority|
              immediate|flash|flash-override|CRITIC-ECP|
              internetwork-control|network-control} or
              number>]
              [dscp [!] = <{ef|af11|af12|af13|af21|af22|
              af23|af31|af32|af33|af41|af42|af43|cs0|cs1|
              cs2|cs3|cs4|cs5|cs6|cs7} or number>]
              [proto [!] = <{icmp|icmpv6|igmp|ipinip|tcp|
              udp|ah|esp|ipcomp} or number>]
              [srcport [!] = <{undefined|at-echo|at-nbp|
              at-rtmp|at-zis|auth|bgp|biff|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|nfd|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|sysstat|talk|
              telnet|time|timed|tftp|ulistserv|utime|uucp|
              uucp-rlogin|who|www-http|whoami|xwindows} or
              number>]
              [srcportend = <{undefined|at-echo|at-nbp|
              at-rtmp|at-zis|auth|bgp|biff|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|nfd|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|sysstat|talk|
              telnet|time|timed|tftp|ulistserv|utime|uucp|

```

```

uucp-rlogin|who|www-http|whoami|xwindows} or
number>]
[dstport [!] = <{undefined|at-echo|at-nbp|
at-rtmp|at-zis|auth|bgp|biff|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|nfdns|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|sysstat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or
number>]
[dstportend = <{undefined|at-echo|at-nbp|
at-rtmp|at-zis|auth|bgp|biff|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|nfdns|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|sysstat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or
number>]
[icmptype [!] = <{destination-unreachable|
time-exceeded|parameter-problems|echo-request|
echo-reply|router-advertisement|router-
solicitation|timestamp-request|timestamp-
reply|information-request|information-reply|
address-mask-request|address-mask-reply|
multicast-listener-query|multicast-listener-
report|multicast-listener-done|neighbor-
advertisement|neighbor-solicitation|node-
information-query|node-information-response|
inverse-neighbor-solicitation|inverse-
neighbor-advertisement|v2-multicast-listener-
report|home-agent-address-request|home-agent-
address-reply|mobile-prefix-solicitation|
mobile-prefix-advertisement|certification-
path-solicitation|certification-path-
advertisement|multicast-router-advertisement|
multicast-router-solicitation|multicast-
router-termination} or number>]
[icmpcode [!] = <number{0-15}>]
[icmpcodeend = <number{0-15}>]
[iplengthmin [!] = <number>
[iplengthmax = <number>]

```

where:

name	The name of an expression to add.	REQUIRED
type	The type of an expression.	OPTIONAL
mac [!]	The MAC address. If a value is preceded by a “!”, it means NOT.	REQUIRED
addr [!]	The IP address or range. If a value is preceded by a “!”, it means NOT.	REQUIRED
mask [The IP mask (ignored if an IP range is provided).	OPTIONAL
intf [!]	The IP interface name. If a value is preceded by a “!”, it means NOT.	OPTIONAL
intfgroup [!]	The IP interface group. If a value is preceded by a “!”, it means NOT.	OPTIONAL
tos [!]	The Type Of Service specification in the IP packet. If a value is preceded by a “!”, it means NOT.	OPTIONAL
precedence [!]	The precedence in the IP packet (part of tos). If a value is preceded by a “!”, it means NOT.	OPTIONAL
dscp [!]	The diffserv code point in the IP packet (part of tos). If a value is preceded by a “!”, it means NOT.	OPTIONAL
proto [!]	The IP protocol (name or number) in the IP packet. If a value is preceded by a “!”, it means NOT.	OPTIONAL
srcport [!]	The TCP/UDP source port number or range begin. If a value is preceded by a “!”, it means NOT.	OPTIONAL
srcportend	The TCP/UDP source port range end. (inclusive)	OPTIONAL
dstport [!]	The TCP/UDP destination port number or range begin. If a value is preceded by a “!”, it means NOT.	OPTIONAL
dstportend	The TCP/UDP destination port range end.	OPTIONAL
icmpstype [!]	The ICMP type (name or number) of the packet. If a value is preceded by a “!”, it means NOT.	OPTIONAL
icmpcode [!]	The ICMP code or range begin. If a value is preceded by a “!”, it means NOT.	OPTIONAL
icmpcodeend	The ICMP code range end. (inclusive)	OPTIONAL
iplengthmin [!]	The minimum IP length in bytes (header inclusive). If a value is preceded by a “!”, it means NOT.	REQUIRED

iplengthmax	The maximum IP length including header in bytes (header inclusive).	OPTIONAL
-------------	---	----------

expr delete

Delete an expression.

SYNTAX:

```
expr delete name = <{wan|local|lan|tunnel|dmz|guest|
contentsharing_ip|private|ssdp_ip|imap3|imap4-
ssl|imaps|pop2|pop3|pop3s|smtp|ssh|dns|nntp|
ipsec|esp|ah|ike|sip|h323|dhcp|rtsp|ssdp_serv|
mdap_serv|syslog|VoIP-Inc-SIP-UDP|VoIP-Inc-
SIP-TCP|VoIP-Inc-RTP|gre|icmpv6}>
[index = <number>]
```

where:

name	The name of an expression to delete.	REQUIRED
index	The index of a subexpression.	OPTIONAL

expr flush

Flush all expressions.

expr list

List expressions.

SYNTAX:

```
expr list [name = <{_intf_loop|UPnP-HTTP_if_in|_intf_Internet|_intf_LocalNetwork|DHCP-lan|tunnel|dmz|guest|SSDP_if_in|DHCP-S_if_in|HTTP_if_in|HTTPs_if_in|HTTPI_if_in|FTP_if_in|TELNET_if_in|DNS-S-UDP_if_in|DNS-S-TCP_if_in|DNS-S_if_in|PING_RESPONDER_if_in|MDAP_if_in|PPTPD_if_in|PPTPGRE_if_in|PINGv6_RESP_if_in|DHCPv6-S_if_in|RTSOL_if_in|_addr_local|_addr_127_0_0_1|_addr____1|_ipv4_addr|_ipv6_addr|_addr_fe80__1|_addr_fe80__290_d0ff_fe4e_f7ad|_addr_10_0_0_138|_addr_192_168_1_254|contentsharing_ip|private|ssdp_ip|mdap_ip|RTADV_ip_in|UPnP-HTTP_sv_in|DHCP-R_sv_in|DHCPv6-R-C_sv_in|DHCPv6-R-SR_sv_in|DHCPv6-C_sv_in|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|sip|h323|dhcp|rtsp|ssdp_serv|mdap_serv|syslog|VoIP-Inc-SIP-UDP|VoIP-Inc-SIP-TCP|VoIP-Inc-RTP|gre|icmpv6|SSDP_sv_in|DNS-C_sv_in|DNS-C_sv_out|DHCP-S_sv_in|DHCP-S_sv_out|HTTP_sv_in|HTTPs_sv_in|HTTPI_sv_in|FTP_sv_in|TELNET_sv_in|IGMP-Proxy_sv|DNS-S-UDP_sv_in|DNS-S-UDP_sv_out|DNS-S-TCP_sv_in|DNS-S-TCP_sv_out|DNS-S_sv|PING_RESPONDER_sv|MDAP_sv_in|PPTPD_sv_in|PPTPGRE_sv|VOIP_SIP_UDP_sv_in|VOIP_SIP_UDP_sv_out|PINGv6_RESP_sv|DHCPv6-S_sv_in|DHCPv6-S_sv_out|MLD_sv|NDSOL_sv|NDADV_sv|RTSOL_sv|RTADV_sv}>]
[type = <{intf|ip|serv|mac|length}>]
[format = <{pretty|cli}>]
```

where:

name	The name of an expression to list.	OPTIONAL
type	The type of an expression.	OPTIONAL
format	The format of the expression list.	OPTIONAL

expr modify

Modify an expression.

SYNTAX:

```
expr modify name = <{wan|local|lan|tunnel|dmz|guest|
contentsharing_ip|private|ssdp_ip|imap3|imap4-
ssl|imaps|pop2|pop3|pop3s|smtp|ssh|dns|nntp|
ipsec|esp|ah|ike|sip|h323|dhcp|rtsp|ssdp_serv|
mdap_serv|syslog|VoIP-Inc-SIP-UDP|VoIP-Inc-
SIP-TCP|VoIP-Inc-RTP|gre|icmpv6}>
[type = <{intf|ip|serv|mac|length}>]
index = <number>
mac [!] = <hardware-address>
addr [!] = <ip-range>
[mask [ = <ip-mask(dotted or cidr)>]
[intf [!] = <{loop|Internet|LocalNetwork|loop|
Internet|LocalNetwork}>]
[intfgroup [!] = <{wan|local|lan|tunnel|dmz|
guest}>]
[tos [!] = <number{0-255}>]
[precedence [!] = <{routine|priority|
immediate|flash|flash-override|CRITIC-ECP|
internetwork-control|network-control} or
number>]
[dscp [!] = <{ef|af11|af12|af13|af21|af22|
af23|af31|af32|af33|af41|af42|af43|cs0|cs1|
cs2|cs3|cs4|cs5|cs6|cs7} or number>]
[proto [!] = <{icmp|icmpv6|igmp|ipinip|tcp|
udp|ah|esp|ipcomp} or number>]
[srcport [!] = <{undefined|at-echo|at-nbp|
at-rtmp|at-zis|auth|bgp|biff|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|nfd|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|sysstat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or
number>]
[srcportend = <{undefined|at-echo|at-nbp|
at-rtmp|at-zis|auth|bgp|biff|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|nfd|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|sysstat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or
number>]
[dstport [!] = <{undefined|at-echo|at-nbp|
at-rtmp|at-zis|auth|bgp|biff|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|nfs|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|sysstat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or
number>]
[dstportend = <{undefined|at-echo|at-nbp|
at-rtmp|at-zis|auth|bgp|biff|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|nfs|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|sysstat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or
number>]
[icmptype [!] = <{destination-unreachable|
time-exceeded|parameter-problems|echo-request|
echo-reply|router-advertisement|router-
solicitation|timestamp-request|timestamp-
reply|information-request|information-reply|
address-mask-request|address-mask-reply|
multicast-listener-query|multicast-listener-
report|multicast-listener-done|neighbor-
advertisement|neighbor-solicitation|node-
information-query|node-information-response|
inverse-neighbor-solicitation|inverse-
neighbor-advertisement|v2-multicast-listener-
report|home-agent-address-request|home-agent-
address-reply|mobile-prefix-solicitation|
mobile-prefix-advertisement|certification-
path-solicitation|certification-path-
advertisement|multicast-router-advertisement|
multicast-router-solicitation|multicast-
router-termination} or number>]
[icmpcode [!] = <number{0-15}>]
[icmpcodeend = <number{0-15}>]
[iplengthmin [!] = <number>]
[iplengthmax = <number>]

```

where:

name	The name of an expression to modify.	REQUIRED
type	The type of an expression.	OPTIONAL
index	The index of a subexpression.	REQUIRED
mac [!]	The MAC address. If a value is preceded by a “!”, it means NOT.	REQUIRED
addr [!]	The IP address or range. If a value is preceded by a “!”, it means NOT.	REQUIRED
mask [The IP mask (ignored if an IP range is provided).	OPTIONAL
intf [!]	The IP interface name. If a value is preceded by a “!”, it means NOT.	OPTIONAL
intfgroup [!]	The IP interface group. If a value is preceded by a “!”, it means NOT.	OPTIONAL
tos [!]	The Type Of Service specification in the IP packet. If a value is preceded by a “!”, it means NOT.	OPTIONAL
precedence [!]	The precedence in the IP packet (part of tos). If a value is preceded by a “!”, it means NOT.	OPTIONAL
dscp [!]	The diffserv code point in the IP packet (part of tos). If a value is preceded by a “!”, it means NOT.	OPTIONAL
proto [!]	The IP protocol (name or number) in the IP packet. If a value is preceded by a “!”, it means NOT.	OPTIONAL
srcport [!]	The TCP/UDP source port number or range begin. If a value is preceded by a “!”, it means NOT.	OPTIONAL
srcportend	The TCP/UDP source port range end. (inclusive)	OPTIONAL
dstport [!]	The TCP/UDP destination port number or range begin. If a value is preceded by a “!”, it means NOT.	OPTIONAL
dstportend	The TCP/UDP destination port range end.	OPTIONAL
icmpstype [!]	The ICMP type (name or number) of the packet. If a value is preceded by a “!”, it means NOT.	OPTIONAL
icmpcode [!]	The ICMP code or range begin. If a value is preceded by a “!”, it means NOT.	OPTIONAL
icmpcodeend	The ICMP code range end. (inclusive)	OPTIONAL
iplengthmin [!]	The minimum IP length in bytes (header inclusive).	REQUIRED

If a value is preceded by a “!”, it means NOT.

iplengthmax

The maximum IP length including header in bytes (header inclusive).

OPTIONAL

firewall Commands

<i>firewall chain add</i>	<i>Add a chain.</i>	see page 546
<i>firewall chain delete</i>	<i>Delete a chain.</i>	see page 547
<i>firewall chain flush</i>	<i>Flush all chains.</i>	see page 548
<i>firewall chain list</i>	<i>Display a list of chains.</i>	see page 549
<i>firewall clear</i>	<i>Clear firewall configuration.</i>	see page 550
<i>firewall config</i>	<i>Display/Modify firewall configuration.</i>	see page 551
<i>firewall debug clear</i>	<i>Clear firewall statistics.</i>	see page 552
<i>firewall debug stats</i>	<i>Display firewall statistics.</i>	see page 553
<i>firewall debug traceconfig</i>	<i>Display/Modify firewall trace configuration.</i>	see page 554
<i>firewall level add</i>	<i>Add a new security level.</i>	see page 555
<i>firewall level delete</i>	<i>Delete a security level.</i>	see page 556
<i>firewall level flush</i>	<i>Flush security level configuration.</i>	see page 557
<i>firewall level list</i>	<i>List all security levels.</i>	see page 558
<i>firewall level modify</i>	<i>Modify a security level.</i>	see page 559
<i>firewall level set</i>	<i>Set/Display active security level.</i>	see page 560
<i>firewall list</i>	<i>Display firewall configuration.</i>	see page 561
<i>firewall rule add</i>	<i>Add a rule.</i>	see page 562
<i>firewall rule debug clear</i>	<i>Clear rule statistics.</i>	see page 564
<i>firewall rule debug stats</i>	<i>Display rule statistics.</i>	see page 565
<i>firewall rule debug traceconfig</i>	<i>Display/Modify rule trace configuration.</i>	see page 566
<i>firewall rule delete</i>	<i>Delete a rule.</i>	see page 567
<i>firewall rule flush</i>	<i>Flush all rules.</i>	see page 568
<i>firewall rule list</i>	<i>Display a list of rules.</i>	see page 569
<i>firewall rule modify</i>	<i>Modify a rule.</i>	see page 570

firewall chain add

Add a chain.

SYNTAX:

```
firewall chain add          chain = <string>
```

where:

chain	The name of the chain to add.	REQUIRED
-------	-------------------------------	----------

firewall chain delete

Delete a chain.

SYNTAX:

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

where:

chain	The name of the chain to delete.	REQUIRED
-------	----------------------------------	----------

firewall chain flush

Flush all chains.

firewall chain list

Display a list of chains.

SYNTAX:

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

where:

format	The format of the chain list.	OPTIONAL
--------	-------------------------------	----------

firewall clear

Clear firewall configuration.

firewall config

Display/Modify firewall configuration.

SYNTAX:

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

where:

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

firewall debug clear

Clear firewall statistics.

firewall debug stats

Display firewall statistics.

firewall debug traceconfig

Display/Modify firewall trace configuration.

SYNTAX:

```
firewall debug traceconfig      [tcpchecks = <{disabled|enabled}>]
                                [udpchecks = <{disabled|enabled}>]
                                [icmpchecks = <{disabled|enabled}>]
                                [sink = <{none|all|accept|deny|drop|reset} or
                                number>]
                                [forward = <{none|all|accept|deny|drop|reset}
                                or number>]
                                [source = <{none|all|accept|deny|drop|reset}
                                or number>]
```

where:

tcpchecks	Disable/Enable tcpchecks traces.	OPTIONAL
udpchecks	Disable/Enable udpchecks traces.	OPTIONAL
icmpchecks	Disable/Enable icmpchecks traces.	OPTIONAL
sink	The action the firewall traces for sink traffic.	OPTIONAL
forward	The action the firewall traces for forward traffic.	OPTIONAL
source	The action the firewall traces for source traffic.	OPTIONAL

firewall level add

Add a new security level.

SYNTAX:

```
firewall level add          name = <string>
                           [index = <number>]
                           [readonly = <{disabled|enabled}>]
                           [udptrackmode = <{strict|loose}>]
                           [service = <{disabled|enabled}>]
                           [proxy = <{disabled|enabled}>]
                           [text = <quoted string>]
                           [policy = <{default|drop|accept}>]
```

where:

name	The name of the security level to add.	REQUIRED
index	The index of the security level.	OPTIONAL
readonly	Select whether the security level is readonly.	OPTIONAL
udptrackmode	Select UDP connection tracking mode.	OPTIONAL
service	Enable/Disable host service definitions for this security level.	OPTIONAL
proxy	Enable/Disable proxy system services for this security level.	OPTIONAL
text	The description of this security level.	OPTIONAL
policy	Select default policy of this security level.	OPTIONAL

firewall level delete

Delete a security level.

SYNTAX:

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

where:

name	The name of the security level to delete.	REQUIRED
------	---	----------

firewall level flush

Flush security level configuration.

firewall level list

List all security levels.

SYNTAX:

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

where:

format	The format of the security level list.	OPTIONAL
--------	--	----------

firewall level modify

Modify a security level.

SYNTAX:

```
firewall level modify      name = <security level nam>
                           [index = <number>]
                           [readonly = <{disabled|enabled}>]
                           [udptrackmode = <{strict|loose}>]
                           [service = <{disabled|enabled}>]
                           [proxy = <{disabled|enabled}>]
                           [text = <quoted string>]
                           [policy = <{default|drop|accept}>]
```

where:

name	The name of the security level to modify.	REQUIRED
index	The index of this security level.	OPTIONAL
readonly	Select whether the security level is readonly.	OPTIONAL
udptrackmode	Select UDP connection tracking mode.	OPTIONAL
service	Enable/Disable service definitions for this security level.	OPTIONAL
proxy	Enable/Disable proxy system services for this security level.	OPTIONAL
text	The description of this security level.	OPTIONAL
policy	Select default policy of this security level.	OPTIONAL

firewall level set

Set/Display active security level.

SYNTAX:

```
firewall level set [name = <security level nam>]
```

where:

name	The name of the security level to set active.	OPTIONAL
------	---	----------

firewall list

Display firewall configuration.

SYNTAX:

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

where:

format	The format of the firewall list.	OPTIONAL
--------	----------------------------------	----------

firewall rule add

Add a rule.

SYNTAX:

```
firewall rule add          chain = <chain name>
                           [index = <number>]
                           [name = <string>]
                           [clink = <chain name>]
                           [srcintf [!] = <{wan|local|lan|tunnel|dmz|
                           guest}>]
                           [srcip [!] = <{contentsharing_ip|private|
                           ssdp_ip|mdap_ip}>]
                           [dstintf [!] = <{wan|local|lan|tunnel|dmz|
                           guest}>]
                           [dstip [!] = <{contentsharing_ip|private|
                           ssdp_ip|mdap_ip}>]
                           [serv [!] = <{icmp|igmp|ftp|telnet|http|
                           httpproxy|https|RPC|NBT|SMB|imap|esp|ah|ike|
                           sip|h323|dhcp|rtsp|ssdp_serv|mdap_serv|syslog|
                           VoIP-Inc-SIP-UDP|VoIP-Inc-SIP-TCP|VoIP-Inc-
                           RTP|gre|icmpv6}>]
                           [length [!] = <{}>]
                           [log = <{disabled|enabled}>]
                           [state = <{disabled|enabled}>]
                           action = <{accept|deny|drop|reset|count|link}>
```

where:

chain	The name of the chain which contains the rule.	REQUIRED
index	The index of the rule in the chain.	OPTIONAL
name	The name of the new rule.	OPTIONAL
clink	The name of the chain to be parsed when this rule applies.	OPTIONAL
srcintf [!]	The name of the source interface expression. If a value is preceded by a "!", it means NOT.	OPTIONAL
srcip [!]	The name of the source ip expression. If a value is preceded by a "!", it means NOT.	OPTIONAL
dstintf [!]	The name of the destination interface expression. If a value is preceded by a "!", it means NOT.	OPTIONAL
dstip [!]	The name of the destination ip expression. If a value is preceded by a "!", it means NOT.	OPTIONAL
serv [!]	The name of the service expression. If a value is preceded by a "!", it means NOT.	OPTIONAL

length [!]	The name of the length expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL
log	Disable/Enable logging when this rule applies.	OPTIONAL
state	Disable/Enable this rule.	OPTIONAL
action	The action to be taken when this rule applies (‘link’ when clink is used).	REQUIRED

firewall rule debug clear

Clear rule statistics.

SYNTAX:

```
firewall rule debug clear      [chain = <chain name>]
                               [index = <number>]
```

where:

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:

```
firewall rule debug stats      [chain = <chain name>]
                               [index = <number>]
```

where:

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:

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

where:

state	Disable/Enable rule traces.	OPTIONAL
-------	-----------------------------	----------

firewall rule delete

Delete a rule.

SYNTAX:

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

where:

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:

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

where:

chain	The name of the chain to flush.	OPTIONAL
-------	---------------------------------	----------

firewall rule list

Display a list of rules.

SYNTAX:

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

where:

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:

```
firewall rule modify          chain = <chain name>
                              [index = <number>]
                              [newindex = <number>]
                              [name = <string>]
                              [clink = <chain name>]
                              [[!]srcintf] = <chain name>]
                              [[!]srcip] = <chain name>]
                              [[!]dstintf] = <chain name>]
                              [[!]dstip] = <chain name>]
                              [[!]serv] = <chain name>]
                              [[!]length] = <chain name>]
                              [log = <{disabled|enabled}>]
                              [state = <{disabled|enabled}>]
                              [action = <{accept|deny|drop|reset|count|
link}>]
```

where:

chain	The name of the chain which contains the rule.	REQUIRED
index	The index of the rule in the chain.	OPTIONAL
newindex	The new index of the rule in the chain.	OPTIONAL
name	The name of the new rule.	OPTIONAL
clink	The name of the chain to be parsed when this rule applies.	OPTIONAL
[[!]srcintf]	The name of the source interface expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL
[[!]srcip]	The name of the source ip expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL
[[!]dstintf]	The name of the destination interface expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL
[[!]dstip]	The name of the destination ip expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL
[[!]serv]	The name of the service expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL
[[!]length]	The name of the length expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL
log	Disable/Enable logging when this rule applies.	OPTIONAL

state	Disable/Enable this rule.	OPTIONAL
action	The action to be taken when this rule applies ('link' when link is used).	OPTIONAL

grp Commands

<i>grp config</i>	<i>Set the grp configuration settings.</i>	see page 574
<i>grp flush</i>	<i>Flush grp interface settings and parameters.</i>	see page 575
<i>grp rip config</i>	<i>Set the RIP configuration settings.</i>	see page 576
<i>grp rip flush</i>	<i>Flush RIP interface settings and global parameters.</i>	see page 577
<i>grp rip ifconfig</i>	<i>Configure a RIP interface.</i>	see page 578
<i>grp rip show</i>	<i>Show the RIP settings and the routes in the RIP database.</i>	see page 579
<i>grp rtlist</i>	<i>Show the current routes in the grp routing table.</i>	see page 580

grp config

Set the grp configuration settings.

SYNTAX:

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

where:

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.

grp rip config

Set the RIP configuration settings.

SYNTAX:

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

where:

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

grp rip flush

Flush RIP interface settings and global parameters.

grp rip ifconfig

Configure a RIP interface.

SYNTAX:

```
grp rip ifconfig          intf = <{LocalNetwork|Internet}>
                          [rip = <{disabled|enabled}>]
                          [rxversion = <{rip_unspec|rip_v1|rip_v2|
rip_v1-2}>]
                          [authmode = <{none|cleartext}>]
                          [authstr = <password>]
                          [splithorizon = <{disabled|enabled}>]
```

where:

intf	The name of the RIP interface to configure.	REQUIRED
rip	Enable/Disable the RIP status.	OPTIONAL
rxversion	Set the RIP receive version.	OPTIONAL
authmode	Set the RIP authentication mode.	OPTIONAL
authstr	Set the RIP authentication password.	OPTIONAL
splithorizon	Enable/Disable the split horizon status.	OPTIONAL

grp rip show

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

grp rtlist

Show the current routes in the grp routing table.

SYNTAX:

```
grp rtlist [dst = <ipv4-address>]
           [dstmsk = <ip-mask(dotted or cidr)>]
```

where:

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

help Command

Create a new ATM interface.

SYNTAX:

```
atm ifadd                               intf = <string>
                                         [queues = <number{0-8}>]
                                         [priority = <{strict|cwrr|pwrr|wfq}>]
```

where:

intf	The name for the new ATM interface. If not specified, the destination will double as interface name.	REQUIRED
queues	Number of Transmit Queue of the EFM Interface (default=1)	OPTIONAL
priority	The weight of this queue used for Strict Priority, WFQ, CWRR or PWRR. (default=strict priority)	OPTIONAL

hostmgr Commands

<i>hostmgr add</i>	<i>Add host device</i>	see page 584
<i>hostmgr clear</i>	<i>Remove all host devices</i>	see page 585
<i>hostmgr config</i>	<i>Configure Device Discovery daemon</i>	see page 586
<i>hostmgr delete</i>	<i>Delete host device</i>	see page 587
<i>hostmgr flush</i>	<i>Flush Device Discovery configuration (i.e. clear & to defaults)</i>	see page 588
<i>hostmgr list</i>	<i>List all host devices</i>	see page 589
<i>hostmgr update</i>	<i>Update host device parameters</i>	see page 590

hostmgr add

Add host device

SYNTAX:

```
hostmgr add mac_addr = <hardware-address>
            [host_type = <{Generic|Desktop|Laptop|STB|PDA|
            GS|Phone|GSM|Printer|MassStorage|None}>]
            [host_name = <string>]
            [user_friendly_name = <quoted string>]
            [dns_name = <string>]
            [type = <{Unknown|L2-FXS|L2-USB|L2-BT|L3-IP|
            L7-UPNP|L2-PPPOERELAY|L2-WLAN}>]
            [interface = <string>]
            [ip_intf = <string>]
```

where:

mac_addr	Host MAC address	REQUIRED
host_type	Host type	OPTIONAL
host_name	Host name	OPTIONAL
user_friendly_name	Host user friendly name	OPTIONAL
dns_name	Host DNS name	OPTIONAL
type	Host connection type	OPTIONAL
interface	Host Ethernet interface XREF	OPTIONAL
ip_intf	Host IP interface XREF	OPTIONAL

hostmgr clear

Remove all host devices

hostmgr config

Configure Device Discovery daemon

SYNTAX:

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

where:

state	Enable/disable Device Discovery daemon	OPTIONAL
trace	Enable/disable Device Discovery traces	OPTIONAL

hostmgr delete

Delete host device

SYNTAX:

```
hostmgr delete mac_addr = <hardware-address>
                [type = <{Unknown|L2-FXS|L2-USB|L2-BT|L3-IP|
                L7-UPNP|L2-PPPOERELAY|L2-WLAN}>]
                [index = <number>]
```

where:

mac_addr	Host MAC address	REQUIRED
type	Host connection type	OPTIONAL
index	Host index	OPTIONAL

hostmgr flush

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

hostmgr list

List all host devices

SYNTAX:

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

where:

expand	Expanded listing.	OPTIONAL
--------	-------------------	----------

hostmgr update

Update host device parameters

SYNTAX:

```
hostmgr update mac_addr = <hardware-address>
               [host_type = <{Generic|Desktop|Laptop|STB|PDA|
               GS|Phone|GSM|Printer|MassStorage|None}>]
               [host_name = <string>]
               [user_friendly_name = <quoted string>]
               [dns_name = <string>]
               [type = <{Unknown|L2-FXS|L2-USB|L2-BT|L3-IP|
               L7-UPNP|L2-PPPOERELAY|L2-WLAN}>]
               [interface = <string>]
               [ip_intf = <string>]
```

where:

mac_addr	Host MAC address	REQUIRED
host_type	Host type	OPTIONAL
host_name	Host name	OPTIONAL
user_friendly_name	Host user friendly name	OPTIONAL
dns_name	Host DNS name	OPTIONAL
type	Host connection type	OPTIONAL
interface	Host Ethernet interface XREF	OPTIONAL
ip_intf	Host IP interface XREF	OPTIONAL

ids Commands

<i>ids clear</i>	<i>Clear IDS statistics.</i>	see page 592
<i>ids config</i>	<i>Display/Modify IDS configuration.</i>	see page 593
<i>ids parser list</i>	<i>Display ids parser configuration.</i>	see page 594
<i>ids parser modify</i>	<i>Modify ids parser configuration.</i>	see page 595
<i>ids pattern clear</i>	<i>Reset pattern tracker.</i>	see page 596
<i>ids pattern list</i>	<i>Display patterns in pattern tracker.</i>	see page 597
<i>ids pattern stats</i>	<i>Display pattern tracker statistics.</i>	see page 598
<i>ids signature list</i>	<i>Display ids signature configuration.</i>	see page 599
<i>ids signature modify</i>	<i>Modify ids signature configuration.</i>	see page 600
<i>ids threshold clear</i>	<i>Reset IDS thresholds.</i>	see page 601
<i>ids threshold list</i>	<i>Display IDS thresholds.</i>	see page 602
<i>ids threshold modify</i>	<i>Modify IDS threshold.</i>	see page 603

ids clear

Clear IDS statistics.

ids config

Display/Modify IDS configuration.

SYNTAX:

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

where:

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

ids parser list

Display ids parser configuration.

SYNTAX:

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

where:

parser	The name of the parser.	OPTIONAL
--------	-------------------------	----------

ids parser modify

Modify ids parser configuration.

SYNTAX:

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

where:

parser	The name of the parser.	OPTIONAL
state	The state of the parser.	REQUIRED

ids pattern clear

Reset pattern tracker.

ids pattern list

Display patterns in pattern tracker.

SYNTAX:

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

where:

size	Modify the size of pattern tracker list.	OPTIONAL
------	--	----------

ids pattern stats

Display pattern tracker statistics.

ids signature list

Display ids signature configuration.

SYNTAX:

```
ids signature list [signature = <{fragment_sweep|zero-
length_fragment_size|small_fragment_size|
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_data_offset|
tcp_invalid_urgent_offset|udp_null_port|
icmp_type_unknown|icmp_code_unknown|
ip_zero_payload|incomplete_transport_header|
tcp_rate_limiting|udp_rate_limiting|
icmp_rate_limiting|ip_rate_limiting}>]
```

where:

signature	The name of the signature.	OPTIONAL
-----------	----------------------------	----------

ids signature modify

Modify ids signature configuration.

SYNTAX:

```
ids signature modify [signature = <{fragment_sweep|zero-
length_fragment_size|small_fragment_size|
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_data_offset|
tcp_invalid_urgent_offset|udp_null_port|
icmp_type_unknown|icmp_code_unknown|
ip_zero_payload|incomplete_transport_header|
tcp_rate_limiting|udp_rate_limiting|
icmp_rate_limiting|ip_rate_limiting}>]
state = <{disabled|enabled}>
```

where:

signature	The name of the signature.	OPTIONAL
state	The state of the sign.	REQUIRED

ids threshold clear

Reset IDS thresholds.

ids threshold list

Display IDS thresholds.

ids threshold modify

Modify IDS threshold.

SYNTAX:

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

where:

index	The index of the threshold.	REQUIRED
window	The time window of the threshold.	OPTIONAL
limit	The limit of the threshold.	OPTIONAL
scaling	Scaling of the threshold window.	OPTIONAL

igmp Commands

<i>igmp host config</i>	<i>Display/Modify global IGMP configuration.</i>	see page 606
<i>igmp host debug clear</i>	<i>Clear IGMP statistics.</i>	see page 607
<i>igmp host debug stats</i>	<i>Print IGMP statistics.</i>	see page 608
<i>igmp host flush</i>	<i>Flush the IGMP settings.</i>	see page 609
<i>igmp host ifconfig</i>	<i>Configure an IGMP interface.</i>	see page 610
<i>igmp host iflist</i>	<i>Show the configuration of the IGMP interfaces.</i>	see page 611
<i>igmp host list</i>	<i>Show the IGMP groups.</i>	see page 612
<i>igmp proxy config</i>	<i>Configure the IGMP proxy.</i>	see page 613
<i>igmp proxy debug clear</i>	<i>Clear IGMP proxy statistics</i>	see page 614
<i>igmp proxy debug stats</i>	<i>Print IGMP proxy statistics</i>	see page 615
<i>igmp proxy debug traceconfig</i>	<i>Modify IGMP proxy trace configuration</i>	see page 616
<i>igmp proxy flush</i>	<i>Flush all IGMP proxy settings and learned groups</i>	see page 617
<i>igmp proxy grouplist</i>	<i>Show the learned groups on an IGMP proxy interface.</i>	see page 618
<i>igmp proxy ifconfig</i>	<i>Configure an IGMP proxy interface.</i>	see page 619
<i>igmp proxy iflist</i>	<i>Show the configuration of an IGMP proxy interface.</i>	see page 620
<i>igmp proxy mbslist</i>	<i>Show the IGMP proxy membership database (merge of all learned groups).</i>	see page 621

igmp host config

Display/Modify global IGMP configuration.

SYNTAX:

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

where:

requirera	Enable/Disable the router alert IP option check.	OPTIONAL
-----------	--	----------

igmp host debug clear

Clear IGMP statistics.

igmp host debug stats

Print IGMP statistics.

igmp host flush

Flush the IGMP settings.

igmp host ifconfig

Configure an IGMP interface.

SYNTAX:

```
igmp host ifconfig          intf = <{loop|Internet|LocalNetwork}>  
                           version = <{none|IGMPv1|IGMPv2|IGMPv3}>
```

where:

intf	The IP interface name.	REQUIRED
version	The IGMP version of the IP interface.	REQUIRED

igmp host iflist

Show the configuration of the IGMP interfaces.

SYNTAX:

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

where:

expand	Expanded listing.	OPTIONAL
--------	-------------------	----------

igmp host list

Show the IGMP groups.

SYNTAX:

```
igmp host list [intf = <{loop|Internet|LocalNetwork}>]
               [expand = <{disabled|enabled}>]
```

where:

intf	The IP interface name.	OPTIONAL
expand	Expanded listing.	OPTIONAL

igmp proxy config

Configure the IGMP proxy.

SYNTAX:

```
igmp proxy config [state = <{disabled|enabled}>]
                  [qi = <number{1-31744}>]
                  [qri = <number{1-3175}>]
                  [lmqi = <number{1-3175}>]
                  [rv = <number{2-8}>]
                  [advinter = <number{4-180}>]
                  [initadvinter = <number{1-4}>]
                  [initadvcount = <number{1-10}>]
                  [requirera = <{disabled|enabled}>]
                  [localgroup = <{disabled|enabled}>]
```

where:

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

igmp proxy debug clear

Clear IGMP proxy statistics

igmp proxy debug stats

Print IGMP proxy statistics

igmp proxy debug traceconfig

Modify IGMP proxy trace configuration

SYNTAX:

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

where:

state	Enable/Disable tracing.	OPTIONAL
-------	-------------------------	----------

igmp proxy flush

Flush all IGMP proxy settings and learned groups

igmp proxy grouplist

Show the learned groups on an IGMP proxy interface.

SYNTAX:

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

where:

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

igmp proxy ifconfig

Configure an IGMP proxy interface.

SYNTAX:

```
igmp proxy ifconfig          intf = <{LocalNetwork|Internet}>
                             [state = <{inactive|downstream|upstream}>]
                             [version = <{IGMPv1|IGMPv2|IGMPv3}>]
                             [fastleave = <{disabled|enabled}>]
                             [exptrack = <{disabled|enabled}>]
                             [mrd = <{disabled|enabled}>]
```

where:

intf	The name of the IGMP proxy interface to be configured.	REQUIRED
state	The state of the IGMP proxy interface.	OPTIONAL
version	The IGMP version of the IGMP proxy interface.	OPTIONAL
fastleave	Enable/Disable the immediate deletion of a group when a leave is received.	OPTIONAL
exptrack	Enable/Disable explicit host tracking.	OPTIONAL
mrd	Enable/Disable sending multicast router advertisements (rfc 4286).	OPTIONAL

igmp proxy iflist

Show the configuration of an IGMP proxy interface.

SYNTAX:

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

where:

expand	Expanded listing.	OPTIONAL
--------	-------------------	----------

igmp proxy mbslist

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

interface Commands

interface ifstack

Display ifstack.

see page 624

interface list

Display interfaces.

see page 625

interface ifstack

Display ifstack.

interface list

Display interfaces.

SYNTAX:

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

where:

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

ip Commands

<i>ip aip config</i>	<i>Display/Modify AIP configuration.</i>	see page 630
<i>ip aip hw config</i>	<i>Display/Modify AIP HW configuration.</i>	see page 631
<i>ip aip hw fap</i>	<i>Display/Modify FAP configuration.</i>	see page 632
<i>ip aip hw flush</i>	<i>Reset AIP HW configuration.</i>	see page 633
<i>ip aip hw stats</i>	<i>Display statistics about AIP HW usage.</i>	see page 634
<i>ip aip list</i>	<i>Display AIP session list.</i>	see page 635
<i>ip aip stats</i>	<i>Display AIP session/intf statistics</i>	see page 636
<i>ip arpadd</i>	<i>Add an entry to the ARP cache of a broadcast IP interface.</i>	see page 637
<i>ip arpdelete</i>	<i>Delete an ARP entry.</i>	see page 638
<i>ip arplist</i>	<i>Display the ARP cache.</i>	see page 639
<i>ip auto debug traceconfig</i>	<i>Modify autoIP trace configuration</i>	see page 640
<i>ip auto flush</i>	<i>Flushes autoIP interfaces.</i>	see page 641
<i>ip auto ifadd</i>	<i>Creates a new autoIP interface.</i>	see page 642
<i>ip auto ifattach</i>	<i>Select and assign a link-local address to an autoIP interface.</i>	see page 643
<i>ip auto ifconfig</i>	<i>Configures an autoIP interface.</i>	see page 644
<i>ip auto ifdelete</i>	<i>Deletes an existing autoIP interface.</i>	see page 645
<i>ip auto ifdetach</i>	<i>Release the link-local address for the given autoIP interface.</i>	see page 646
<i>ip auto iflist</i>	<i>Shows the autoIP interfaces.</i>	see page 647
<i>ip clearifstats</i>	<i>Flush IP interface statistics.</i>	see page 648
<i>ip config</i>	<i>Display/Modify global IP stack configuration.</i>	see page 649
<i>ip debug clearstats</i>	<i>Flush statistics.</i>	see page 650
<i>ip debug httpprobe</i>	<i>Send HTTP probe to measure the round trip time taken to connect and access</i>	see page 651
<i>ip debug nbflush</i>	<i>Deletes all neighbours</i>	see page 652
<i>ip debug sendto</i>	<i>Send UDP packets.</i>	see page 653
<i>ip debug stats</i>	<i>Display statistics.</i>	see page 654
<i>ip debug traceconfig</i>	<i>Display/Modify IP stack trace configuration.</i>	see page 655

<i>ip flush</i>	<i>Flush all static IP parameters. Dynamic info (e.g. from PPP links) remains.</i>	see page 656
<i>ip ifadd</i>	<i>Create an IP interface.</i>	see page 657
<i>ip ifattach</i>	<i>Attach an IP interface.</i>	see page 658
<i>ip ifconfig</i>	<i>Modify an IP interface configuration.</i>	see page 659
<i>ip ifdelete</i>	<i>Delete an IP interface.</i>	see page 661
<i>ip ifdetach</i>	<i>Detach an IP interface.</i>	see page 662
<i>ip iflist</i>	<i>Display all IP interfaces.</i>	see page 663
<i>ip ifwait</i>	<i>Wait for a status change of an IP interface.</i>	see page 664
<i>ip ipadd</i>	<i>Assign an IP address to an IP interface.</i>	see page 665
<i>ip ipconfig</i>	<i>Modify an IP address configuration.</i>	see page 666
<i>ip ipdelete</i>	<i>Remove an IP address from an IP interface.</i>	see page 667
<i>ip iplist</i>	<i>Display all configured IP addresses.</i>	see page 668
<i>ip mcast flush</i>	<i>Flush the multicast routing table.</i>	see page 669
<i>ip mcast rtadd</i>	<i>Add a multicast route to the multicast routing table.</i>	see page 670
<i>ip mcast rtdelete</i>	<i>Delete a multicast route from the multicast routing table.</i>	see page 671
<i>ip mcast rtlist</i>	<i>Display the multicast routing table.</i>	see page 672
<i>ip nbdelete</i>	<i>Delete a neighbour</i>	see page 673
<i>ip nblist</i>	<i>List the neighbours</i>	see page 674
<i>ip nbset</i>	<i>Add/modify a neighbour</i>	see page 675
<i>ip rt6advd config</i>	<i>RTADVD configuration.</i>	see page 676
<i>ip rt6advd cpdlist</i>	<i>List cache learned prefix delegations.</i>	see page 677
<i>ip rt6advd debug clear</i>	<i>Clear RTADVD statistics</i>	see page 678
<i>ip rt6advd debug stats</i>	<i>Print RTADVD statistics</i>	see page 679
<i>ip rt6advd debug traceconfig</i>	<i>Modify RTADVD trace configuration</i>	see page 680
<i>ip rt6advd ifadd</i>	<i>Add an advertising interface.</i>	see page 681
<i>ip rt6advd ifattach</i>	<i>Attach an advertising interface.</i>	see page 682
<i>ip rt6advd ifconfig</i>	<i>Configure an advertising interface.</i>	see page 683
<i>ip rt6advd ifdelete</i>	<i>Delete an advertising interface.</i>	see page 684
<i>ip rt6advd ifdetach</i>	<i>Detach an advertising interface.</i>	see page 685

<i>ip rt6advd iflist</i>	<i>List advertising interfaces.</i>	see page 686
<i>ip rt6advd option dns add</i>	<i>Add a recursive DNS server.</i>	see page 687
<i>ip rt6advd option dns delete</i>	<i>Delete a recursive DNS server.</i>	see page 688
<i>ip rt6advd option dns list</i>	<i>List recursive DNS server information.</i>	see page 689
<i>ip rt6advd option dns sladd</i>	<i>Add a DNS search list domain.</i>	see page 690
<i>ip rt6advd option dns sldelete</i>	<i>Delete a DNS search list domain.</i>	see page 691
<i>ip rt6advd option dns sllist</i>	<i>List DNS search list information.</i>	see page 692
<i>ip rt6advd option route add</i>	<i>Add a route information option prefix.</i>	see page 693
<i>ip rt6advd option route delete</i>	<i>Delete a route information option prefix.</i>	see page 694
<i>ip rt6advd option route list</i>	<i>List route information option prefixes.</i>	see page 695
<i>ip rt6advd pdadd</i>	<i>Add a prefix delegation instantiation.</i>	see page 696
<i>ip rt6advd pddelete</i>	<i>Delete a prefix delegation instantiation.</i>	see page 697
<i>ip rt6advd pdlist</i>	<i>List prefix delegations.</i>	see page 698
<i>ip rt6advd pfxadd</i>	<i>Add a prefix to advertise.</i>	see page 699
<i>ip rt6advd pfxdelete</i>	<i>Delete an advertised prefix.</i>	see page 700
<i>ip rt6advd pfxlist</i>	<i>List advertised prefixes.</i>	see page 701
<i>ip rtadd</i>	<i>Add a route to the routing table.</i>	see page 702
<i>ip rtconfig</i>	<i>Modify a route of the routing table.</i>	see page 703
<i>ip rtdelete</i>	<i>Delete a route from the routing table.</i>	see page 704
<i>ip rtlist</i>	<i>Display the routing table.</i>	see page 705

ip aip config

Display/Modify AIP configuration.

SYNTAX:

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

where:

state	Enable/disable IP acceleration.	OPTIONAL
-------	---------------------------------	----------

ip aip hw config

Display/Modify AIP HW configuration.

SYNTAX:

```
ip aip hw config [state = <{disabled|enabled}>]
                  [policy = <{manual|automatic}>]
                  [min-priority = <number{0-255}>]
                  [threshold = <number{10-100000}>]
                  [ignore-priority = <{no|yes}>]
                  [replace-inhw = <{no|yes}>]
                  [replace-equal-prio = <{no|yes}>]
```

where:

state	Enable/disable hardware IP acceleration.	OPTIONAL
policy	Stream selection algorithm.	OPTIONAL
min-priority	Minimal priority for a stream to be eligible for HW acceleration.	OPTIONAL
threshold	Minimal packetrate for a stream to be eligible for HW acceleration.	OPTIONAL
ignore-priority	Ignore stream priority when sorting for HW eligibility.	OPTIONAL
replace-inhw	Replace streams already in HW.	OPTIONAL
replace-equal-prio	Replace if equal priority (higher packetrate).	OPTIONAL

ip aip hw fap

Display/Modify FAP configuration.

SYNTAX:

```
ip aip hw fap [prio = <number{0-255}>]
```

where:

prio	Stream priority threshold wrt. Ingress Qos	OPTIONAL
------	--	----------

ip aip hw flush

Reset AIP HW configuration.

ip aip hw stats

Display statistics about AIP HW usage.

ip aip list

Display AIP session list.

ip aip stats

Display AIP session/intf statistics

ip arpadd

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

SYNTAX:

```
ip arpadd                intf = <{LocalNetwork}>
                        ip = <ip-range>
                        [hwaddr = <hardware-address>]
```

where:

intf	The IP interface name.	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:

```
ip arpdelete          intf = <{LocalNetwork}>
                    ip = <ip-range>
                    [hwaddr = <hardware-address>]
```

where:

intf	The IP interface name.	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.

ip auto debug traceconfig

Modify autoIP trace configuration

SYNTAX:

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

where:

state	Enable/Disable verbose logging.	OPTIONAL
-------	---------------------------------	----------

ip auto flush

Flushes autoIP interfaces.

ip auto ifadd

Creates a new autoIP interface.

SYNTAX:

```
ip auto ifadd                intf = <{LocalNetwork}>  
                             [addr = <ipv4-address>]
```

where:

intf	The name of the IP interface for which a link-local address has to be allocated.	REQUIRED
addr	The preferred link-local IP address.	OPTIONAL

ip auto ifattach

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

SYNTAX:

```
ip auto ifattach          intf = <>
```

where:

intf	The name of the autoIP interface.	REQUIRED
------	-----------------------------------	----------

ip auto ifconfig

Configures an autoIP interface.

SYNTAX:

```
ip auto ifconfig          intf = <>
                          [addr = <ipv4-address>]
                          [poolstart = <ipv4-address>]
                          [poolend = <ipv4-address>]
                          [netmask = <ip-mask(dotted or cidr)>]
                          [claim = <number{0-65535}>]
                          [defence = <number{0-65535}>]
                          [probe = <number{0-65535}>]
                          [interval = <number{1-65535}>]
```

where:

intf	The name of the autoIP interface to configure.	REQUIRED
addr	The preferred link-local IP address.	OPTIONAL
poolstart	The start IP address of the link-local address pool.	OPTIONAL
poolend	The end IP address of the link-local address pool.	OPTIONAL
netmask	The netmask of the link-local IP address pool.	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
probe	The number of ARP probes to be sent before accepting a link-local address.	OPTIONAL
interval	The time interval between two ARP probe transmissions.	OPTIONAL

ip auto ifdelete

Deletes an existing autoIP interface.

SYNTAX:

```
ip auto ifdelete          intf = <>
```

where:

intf	The name of the autoIP interface.	REQUIRED
------	-----------------------------------	----------

ip auto ifdetach

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

SYNTAX:

```
ip auto ifdetach          intf = <>
```

where:

intf	The name of the autoIP interface.	REQUIRED
------	-----------------------------------	----------

ip auto iflist

Shows the autoIP interfaces.

SYNTAX:

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

where:

intf	The name of a autoIP interface.	OPTIONAL
------	---------------------------------	----------

ip clearifstats

Flush IP interface statistics.

SYNTAX:

```
ip clearifstats [intf = <{loop|Internet|LocalNetwork}>]
```

where:

intf	Interface for which IP statistics must be cleared (when missing, will clear statistics for ALL IP interfaces).	OPTIONAL
------	--	----------

ip config

Display/Modify global IP stack configuration.

SYNTAX:

```
ip config [forwarding = <{disabled|enabled}>]
          [redirects = <{disabled|enabled}>]
          [checkoptions = <{disabled|enabled|
          transparent}>]
          [netbroadcasts = <{disabled|enabled}>]
          [randomdatagramids = <{disabled|enabled}>]
          [ttl = <number{0-255}>]
          [fraglimit = <number{1-1024}>]
          [defragmode = <{disabled|enabled}>]
          [addrcheck = <{off|own|static|dynamic}>]
          [mssclamping = <{disabled|enabled}>]
          [natloopback = <{disabled|enabled}>]
          [arpcachetimeout = <number{10-7200}>]
          [arpclass = <{0|1|2|3|4|5|6|7|8|9|10|11|12|13|
          14|15}>]
```

where:

forwarding	Disable/Enable IP routing functionality.	OPTIONAL
redirects	Disable/Enable sending of ICMP redirect messages.	OPTIONAL
checkoptions	Disallow/Allow packets with IP options.	OPTIONAL
netbroadcasts	Disallow/Allow net directed broadcasts.	OPTIONAL
randomdatagramids	Disable/Enable random datagram IDs for packets generated locally.	OPTIONAL
ttl	Set the default time-to-live for locally generated IP packets.	OPTIONAL
fraglimit	Set the maximum number of IP fragments waiting for completion. (Avoids buffer depletion).	OPTIONAL
defragmode	Disallow/Allow defragmenting IP fragments.	OPTIONAL
addrcheck	Sets the level of ip address checks.	OPTIONAL
mssclamping	Disable/Enable mss clamping for low mtu interfaces.	OPTIONAL
natloopback	Disable/Enable NAT loopback.	OPTIONAL
arpcachetimeout	Set the global ARP cache timeout.	OPTIONAL
arpclass	The prio class of the ARP packets.	OPTIONAL

ip debug clearstats

Flush statistics.

SYNTAX:

```
ip debug clearstats [proto = <{ip|ipv6|udp|tcp|icmp|icmpv6}>]
```

where:

proto	The protocol of which statistics should be cleared (when missing, ALL protocol statistics will cleared) .	OPTIONAL
-------	---	----------

ip debug httpprobe

Send HTTP probe to measure the round trip time taken to connect and access

SYNTAX:

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

where:

url	The Uniform Resource Locator identifying the HTTP server.	REQUIRED
version	The version of the HTTP server.	OPTIONAL

ip debug nbflush

Deletes all neighbours

ip debug sendto

Send UDP packets.

SYNTAX:

```
ip debug sendto                addr = <ip-address>
                                [count = <number{1-1000000}>]
                                [size = <number{0-20000}>]
                                [interval = <number{1-1000000}>]
                                [listen = <{disabled|enabled}>]
                                [dffield = <{disabled|enabled}>]
                                [srcaddr = <ip-address>]
                                [srcport = <number{1-65535}>]
                                dstport = <number{1-65535}>
                                [dstintf = <{loop|Internet|LocalNetwork}>]
```

where:

addr	The destination IP address.	REQUIRED
count	The number of datagrams to send.	OPTIONAL
size	The size of the datagram.	OPTIONAL
interval	The interval in milliseconds between datagrams.	OPTIONAL
listen	Don't send, just listen for incoming datagrams.	OPTIONAL
dffield	Enables setting of the don't fragment flag in the IP headers of the ping packet(s).	OPTIONAL
srcaddr	The IP source address to use.	OPTIONAL
srcport	The UDP source port number to use.	OPTIONAL
dstport	The UDP destination port number to send to.	REQUIRED
dstintf	The IP interface name.	OPTIONAL

ip debug stats

Display statistics.

SYNTAX:

```
ip debug stats proto = <{ip|ipv6|udp|tcp|icmp|icmpv6}>
```

where:

proto	The protocol for which to display the statistics.	REQUIRED
-------	---	----------

ip debug traceconfig

Display/Modify IP stack trace configuration.

SYNTAX:

```
ip debug traceconfig [state = <{disabled|enabled}>]
                    [input = <{none|label|-telnet|-host|-
                    broadcast|all}>]
                    [forward = <{none|label|-telnet|-host|-
                    broadcast|all}>]
                    [output = <{none|label|-telnet|-host|-
                    broadcast|all}>]
                    [drop = <{none|label|-telnet|-host|-broadcast|
                    all}>]
                    [mode = <{line|dump}>]
                    [proto = <{ipv4|ipv6}>]
                    [arp = <{none|all}>]
```

where:

state	Enable/Disable all packet traces.	OPTIONAL
input	Define the packets that will be traced.	OPTIONAL
forward	Define the packets that will be traced.	OPTIONAL
output	Define the packets that will be traced.	OPTIONAL
drop	Define the packet drops that will be traced.	OPTIONAL
mode	Packet dump method.	OPTIONAL
proto	The protocol family.	OPTIONAL
arp	Define the arp packets that will be traced.	OPTIONAL

ip flush

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

ip ifadd

Create an IP interface.

SYNTAX:

```
ip ifadd                intf = <string>  
                        dest = <{ethoa_8_35|eth_ge}>
```

where:

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

ip ifattach

Attach an IP interface.

SYNTAX:

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

where:

intf	An IP interface name.	REQUIRED
------	-----------------------	----------

ip ifconfig

Modify an IP interface configuration.

SYNTAX:

```
ip ifconfig          intf = <{loop|Internet|LocalNetwork}>
                    [mtu = <number{68-65535}>]
                    [hwaddr = <hardware-address>]
                    [linksensing = <{disabled|enabled}>]
                    [group = <{wan|local|lan|tunnel|dmz|guest} or
                    number>]
                    [mcastpromisc = <{disabled|enabled}>]
                    [symmetric = <{disabled|enabled}>]
                    [forwarding = <{disabled|enabled}>]
                    [acceptredir = <{disabled|enabled}>]
                    [rpfilter = <{disabled|enabled}>]
                    [ipv4 = <{disabled|enabled}>]
                    [arpcachetimeout = <number{0-7200}>]
                    [arpprobemode = <{unicast|broadcast}>]
                    [primary = <{disabled|enabled}>]
                    [ipv6 = <{disabled|enabled}>]
                    [curhoplimit = <number{0-255}>]
                    [dadtransmits = <number{0-100}>]
                    [retranstimer = <number{1000-5000}>]
                    [basereachabletime = <number{5000-3600000}>]
                    [gctimer = <number{300000-86400000}>]
                    [acceptra = <{disabled|enabled}>]
                    [autoconf = <{disabled|enabled}>]
```

where:

intf	An IP interface name.	REQUIRED
mtu	The maximum packet size (including IP header) to use on this interface.	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
group	The group this interface belongs to. Can be used by e.g. firewalling.	OPTIONAL
mcastpromisc	Make the IP interface multicast promiscuous.	OPTIONAL
symmetric	The routing mode of the IP interface.	OPTIONAL
forwarding	The forwarding state of the interface.	OPTIONAL
acceptredir	Accepts redirect messages.	OPTIONAL
rpfilter	Enables reverse path filtering on received packets.	OPTIONAL

ipv4	IPv4 state on this interface.	OPTIONAL
arpcachetimeout	Set the ARP cache timeout to be used for this interface (0 = use global ARP cache timeout).	OPTIONAL
arpprobemode	The ARP probe mode of the interface.	OPTIONAL
primary	Make the IP interface the primary interface.	OPTIONAL
ipv6	IPv6 state on this interface.	OPTIONAL
curhoplimit	The default hop limit used for packets sent by local host.	OPTIONAL
dadtransmits	The number of duplicate address detection transmits.	OPTIONAL
retranstimer	The delay (in milliseconds) between duplicate address detection transmits.	OPTIONAL
basereachabletime	The base value (in milliseconds) used for computing the random reachabletime value.	OPTIONAL
gctimer	The time interval (in milliseconds) after which staled neighbors are removed.	OPTIONAL
acceptra	Accepts router advertisement messages.	OPTIONAL
autoconf	Enable stateless address autoconfiguration.	OPTIONAL

ip ifdelete

Delete an IP interface.

SYNTAX:

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

where:

intf	An IP interface name.	REQUIRED
------	-----------------------	----------

ip ifdetach

Detach an IP interface.

SYNTAX:

```
ip ifdetach          intf = <{loop|LocalNetwork}>
```

where:

intf	An IP interface name.	REQUIRED
------	-----------------------	----------

ip iflist

Display all IP interfaces.

SYNTAX:

```
ip iflist [intf = <{loop|Internet|LocalNetwork}>]
          [expand = <{disabled|enabled}>]
```

where:

intf	The IP interface name.	OPTIONAL
expand	Expanded listing.	OPTIONAL

ip ifwait

Wait for a status change of an IP interface.

SYNTAX:

```
ip ifwait          intf = <{loop|Internet|LocalNetwork}>
                  proto = <{ipv4|ipv6}>
                  [timeout = <number{1-600000}>]
                  [adminstatus = <{down|up}>]
                  [operstatus = <{down|up}>]
                  [linkstatus = <{down|up}>]
```

where:

intf	An IP interface name.	REQUIRED
proto	The protocol family.	REQUIRED
timeout	The timeout in seconds.	OPTIONAL
adminstatus	The administrative state of the interface.	OPTIONAL
operstatus	The operational state of the interface.	OPTIONAL
linkstatus	The link state of the interface.	OPTIONAL

ip ipadd

Assign an IP address to an IP interface.

SYNTAX:

```
ip ipadd          intf = <{loop|Internet|LocalNetwork}>
                  addr = <ip-prefix>
                  [pointopoint = <ipv4-address>]
                  [addroute = <{disabled|enabled}>]
                  [anycast = <{disabled|enabled}>]
                  [pltime = <number>]
                  [vltime = <number>]
```

where:

intf	The IP interface name.	REQUIRED
addr	The new IP address to add.	REQUIRED
pointopoint	The remote address in case of a point-to-point link.	OPTIONAL
addroute	Add typical net/subnet routes automatically.	OPTIONAL
anycast	The IPv6 anycast address	OPTIONAL
pltime	The IPv6 address preferred lifetime	OPTIONAL
vltime	The IPv6 address valid lifetime	OPTIONAL

ip ipconfig

Modify an IP address configuration.

SYNTAX:

```
ip ipconfig                addr = <ipv4-address>  
                           [preferred = <{disabled|enabled}>]  
                           [primary = <{disabled|enabled}>]
```

where:

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:

```
ip ipdelete          addr = <ip-prefix>  
                    intf = <{loop|Internet|LocalNetwork}>
```

where:

addr	The new IP address to delete.	REQUIRED
intf	The IP interface name.	REQUIRED

ip iplist

Display all configured IP addresses.

SYNTAX:

```
ip iplist [expand = <{disabled|enabled}>]  
         [proto = <{ipv4|ipv6}>]
```

where:

expand	Expanded listing.	OPTIONAL
proto	The protocol family.	OPTIONAL

ip mcast flush

Flush the multicast routing table.

ip mcast rtadd

Add a multicast route to the multicast routing table.

SYNTAX:

```
ip mcast rtadd          srcintf = <{loop|Internet|LocalNetwork}>
                        [src = <ip-address>]
                        grp = <ip-address>
                        dstintf = <{loop|Internet|LocalNetwork}>
                        [ttl = <number{1-255}>]
                        [ttlincr = <{disabled|enabled}>]
```

where:

srcintf	The source IP interface.	REQUIRED
src	The source IP address.	OPTIONAL
grp	The multicast group IP address.	REQUIRED
dstintf	The destination IP interface.	REQUIRED
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:

```
ip mcast rtdelete          srcintf = <{loop|Internet|LocalNetwork}>
                           [src = <ip-address>]
                           grp = <ip-address>
                           dstintf = <{loop|Internet|LocalNetwork}>
```

where:

srcintf	The source IP interface.	REQUIRED
src	The source IP address.	OPTIONAL
grp	The multicast group IP address.	REQUIRED
dstintf	The destination IP interface.	REQUIRED

ip mcast rtlist

Display the multicast routing table.

SYNTAX:

```
ip mcast rtlist [expand = <{disabled|enabled}>]
                [proto = <{ipv4|ipv6}>]
```

where:

expand	Expanded listing.	OPTIONAL
proto	The protocol family.	OPTIONAL

ip nbdelete

Delete a neighbour

SYNTAX:

```
ip nbdelete          intf = <{loop|Internet|LocalNetwork}>  
                    ip = <ipv6-address>
```

where:

intf	The IP interface name.	REQUIRED
ip	The IP address of the neighbour.	REQUIRED

ip nblast

List the neighbours

SYNTAX:

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

where:

expand	Expanded listing.	OPTIONAL
--------	-------------------	----------

ip nbset

Add/modify a neighbour

SYNTAX:

```
ip nbset          intf = <{loop|Internet|LocalNetwork}>
                  ip = <ipv6-address>
                  [flags = <[+/-]flag[+/-flag...]{proxy router
                  static autoprobe}>]
                  [hwaddr = <hardware-address>]
```

where:

intf	The IP interface name.	REQUIRED
ip	The IP address of the neighbour.	REQUIRED
flags	Enabled flags of the neighbour.	OPTIONAL
hwaddr	The link layer address (e.g. Ethernet MAC address) of the neighbour.	OPTIONAL

ip rt6advd config

RTADV configuration.

SYNTAX:

```
ip rt6advd config [prevent-forwarding-loop = <{blackhole|
reject}>]
[global-id = <{auto|disable|hexnumber}>]
[ulavltime = <number>]
[ulapltime = <number>]
```

where:

prevent-forwarding-loop	Select method to prevent forwarding loops for the aggregated route. Just discard packets (blackhole) or sent ICMPv6 destination unreachable message (reject).	OPTIONAL
global-id	Unique Local Address GlobalID	OPTIONAL
ulavltime	Valid lifetime to advertise for ULA.	OPTIONAL
ulapltime	Preferred lifetime to advertise for ULA.	OPTIONAL

ip rt6advd cpdlist

List cache learned prefix delegations.

ip rt6advd debug clear

Clear RTADV statistics

ip rt6advd debug stats

Print RTADVd statistics

ip rt6advd debug traceconfig

Modify RTADVD trace configuration

SYNTAX:

```
ip rt6advd debug traceconfig [state = <{disabled|enabled}>]
```

where:

state	Enable/Disable tracing.	OPTIONAL
-------	-------------------------	----------

ip rt6advd ifadd

Add an advertising interface.

SYNTAX:

```
ip rt6advd ifadd          intf = <{loop|Internet}>
```

where:

intf	An IPv6 interface name.	REQUIRED
------	-------------------------	----------

ip rt6advd ifattach

Attach an advertising interface.

SYNTAX:

```
ip rt6advd ifattach          intf = <{}>
```

where:

intf	An IPv6 interface name.	REQUIRED
------	-------------------------	----------

ip rt6advd ifconfig

Configure an advertising interface.

SYNTAX:

```
ip rt6advd ifconfig          intf = <{}>
                             [maxinterval = <number{4-1800}>]
                             [mininterval = <number{3-1350}>]
                             [mflag = <{disabled|enabled}>]
                             [oflag = <{disabled|enabled}>]
                             [preference = <{low|medium|high}>]
                             [linkmtu = <number{1280-65535}>]
                             [reachabletime = <number>]
                             [retranstimer = <number>]
                             [curhoplimit = <number{0-255}>]
                             [deflifetime = <number{0-65535}>]
```

where:

intf	Instance name.	REQUIRED
maxinterval	Maximum time between sending advertisements (seconds)	OPTIONAL
mininterval	Minimum time between sending advertisements (seconds)	OPTIONAL
mflag	Managed address configuration. It indicates to hosts that addresses are available via DHCPv6.	OPTIONAL
oflag	Other configuration available. It indicates to hosts that other configuration information is available via DHCPv6	OPTIONAL
preference	Default router preference.	OPTIONAL
linkmtu	The Maximum Transmission Unit size for this link.	OPTIONAL
reachabletime	Reachable Time (0 = unspecified, milliseconds)	OPTIONAL
retranstimer	Time between NS retransmissions (milliseconds)	OPTIONAL
curhoplimit	Current diameter of the Internet (hops)	OPTIONAL
deflifetime	Router Lifetime (seconds)	OPTIONAL

ip rt6advd ifdelete

Delete an advertising interface.

SYNTAX:

```
ip rt6advd ifdelete          intf = <{LocalNetwork}>
```

where:

intf	An IPv6 interface name.	REQUIRED
------	-------------------------	----------

ip rt6advd ifdetach

Detach an advertising interface.

SYNTAX:

```
ip rt6advd ifdetach          intf = <{LocalNetwork}>
```

where:

intf	An IPv6 interface name.	REQUIRED
------	-------------------------	----------

ip rt6advd iflist

List advertising interfaces.

ip rt6advd option dns add

Add a recursive DNS server.

SYNTAX:

```
ip rt6advd option dns add      intf = <{LocalNetwork}>
                               idx = <number{0-15}>
                               dns = <ipv6-address>
                               [lifetime = <number>]
```

where:

intf	Advertising interface.	REQUIRED
idx	The sequence ordering number of this entry.	REQUIRED
dns	Recursive DNS server address.	REQUIRED
lifetime	The maximum lifetime the dns server maybe be used for name resolution.	OPTIONAL

ip rt6advd option dns delete

Delete a recursive DNS server.

SYNTAX:

```
ip rt6advd option dns delete    intf = <{LocalNetwork}>
                                idx = <number{0-15}>
```

where:

intf	Advertising interface.	REQUIRED
idx	The sequence ordering number of this entry.	REQUIRED

ip rt6advd option dns list

List recursive DNS server information.

SYNTAX:

```
ip rt6advd option dns list [intf = <{LocalNetwork}>]
```

where:

intf	Advertising interface.	OPTIONAL
------	------------------------	----------

ip rt6advd option dns sladd

Add a DNS search list domain.

SYNTAX:

```
ip rt6advd option dns sladd      intf = <{LocalNetwork}>
                                  idx = <number{0-15}>
                                  domain = <string>
                                  [lifetime = <number>]
```

where:

intf	Advertising interface.	REQUIRED
idx	The sequence ordering number of this entry.	REQUIRED
domain	Domain name.	REQUIRED
lifetime	The maximum lifetime the entry maybe be used for name resolution.	OPTIONAL

ip rt6advd option dns sdelete

Delete a DNS search list domain.

SYNTAX:

```
ip rt6advd option dns sdelete intf = <{LocalNetwork}>
                                idx = <number{0-15}>
```

where:

intf	Advertising interface.	REQUIRED
idx	The sequence ordering number of this entry.	REQUIRED

ip rt6advd option dns sllist

List DNS search list information.

SYNTAX:

```
ip rt6advd option dns sllist [intf = <{LocalNetwork}>]
```

where:

intf	Advertising interface.	OPTIONAL
------	------------------------	----------

ip rt6advd option route add

Add a route information option prefix.

SYNTAX:

```
ip rt6advd option route add    intf = <{LocalNetwork}>
                                prefix = <ipv6-mask>
                                [preference = <{low|medium|high}>]
                                [lifetime = <number>]
```

where:

intf	Advertising interface.	REQUIRED
prefix	Route prefix to advertise.	REQUIRED
preference	Route preference.	OPTIONAL
lifetime	Route lifetime to advertise.	OPTIONAL

ip rt6advd option route delete

Delete a route information option prefix.

SYNTAX:

```
ip rt6advd option route delete intf = <{LocalNetwork}>
                                prefix = <ipv6-mask>
```

where:

intf	Advertising interface.	REQUIRED
prefix	Route prefix to advertise.	REQUIRED

ip rt6advd option route list

List route information option prefixes.

SYNTAX:

```
ip rt6advd option route list [intf = <{LocalNetwork}>]
```

where:

intf	Advertising interface.	OPTIONAL
------	------------------------	----------

ip rt6advd pdadd

Add a prefix delegation instantiation.

SYNTAX:

```
ip rt6advd pdadd          intf = <{LocalNetwork}>
                           subnet-id = <ipv6-mask>
                           [interface-id = <ipv6 interface-id or
                             'slaac'>]
                           [origin = <{loop|Internet|LocalNetwork}>]
                           [types = <[+/-]flag[+/-flag...]{dhcp 6rd 6to4
                             ula}>]
                           [aflag = <{enabled|disabled}>]
                           [lflag = <{enabled|disabled}>]
```

where:

intf	Advertising interface.	REQUIRED
subnet-id	Subnet bits and subnet mask to be appended to delegated prefix.	REQUIRED
interface-id	Interface bits to be appended to delegated prefix.	OPTIONAL
origin	Origin interface on which the delegation will be received.	OPTIONAL
types	Allowed origin types for template matching (all types are selected by default).	OPTIONAL
aflag	Autonomous flag (enabled by default).	OPTIONAL
lflag	On-link flag (enabled by default).	OPTIONAL

ip rt6advd pddelete

Delete a prefix delegation instantiation.

SYNTAX:

```
ip rt6advd pddelete          subnet-id = <ipv6-mask>
                             [origin = <{loop|Internet|LocalNetwork}>]
                             [types = <[+/-]flag[+/-flag...]{dhcp 6rd 6to4
                             ula}>]
```

where:

subnet-id	Subnet bits and subnet mask to be appended to delegated prefix.	REQUIRED
origin	Origin interface on which the delegation was received.	OPTIONAL
types	Allowed origin types for template matching.	OPTIONAL

ip rt6advd pdlist

List prefix delegations.

SYNTAX:

```
ip rt6advd pdlist [intf = <{LocalNetwork}>]
```

where:

intf	Advertising interface.	OPTIONAL
------	------------------------	----------

ip rt6advd pfxadd

Add a prefix to advertise.

SYNTAX:

```
ip rt6advd pfxadd          intf = <{LocalNetwork}>
                           [subnet-id = <ipv6-mask>]
                           [interface-id = <ipv6 interface-id or
                           'slaac'>]
                           [vltime = <number>]
                           [pltime = <number>]
                           [aflag = <{enabled|disabled}>]
                           [lflag = <{enabled|disabled}>]
```

where:

intf	Advertising interface.	REQUIRED
subnet-id	Subnet bits and subnet mask of prefix.	OPTIONAL
interface-id	Interface bits of prefix.	OPTIONAL
vltime	Valid lifetime to advertise.	OPTIONAL
pltime	Preferred lifetime to advertise.	OPTIONAL
aflag	Autonomous flag (enabled by default).	OPTIONAL
lflag	On-link flag (enabled by default).	OPTIONAL

ip rt6advd pfxdelete

Delete an advertised prefix.

SYNTAX:

```
ip rt6advd pfxdelete [subnet-id = <ipv6-mask>]
```

where:

subnet-id	Subnet bits and subnet mask of prefix.	OPTIONAL
-----------	--	----------

ip rt6advd pfxlist

List advertised prefixes.

SYNTAX:

```
ip rt6advd pfxlist [intf = <{LocalNetwork}>]
```

where:

intf	Advertising interface.	OPTIONAL
------	------------------------	----------

ip rtadd

Add a route to the routing table.

SYNTAX:

```
ip rtadd                dst = <ip-prefix>
                        [label = <{None|Interactive|Local|Management|
                        SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|VoIP-Signal|
                        default}>]
                        [gateway = <ip-address>]
                        [intf = <{loop|Internet|LocalNetwork}>]
                        [srcintf = <{loop|Internet|LocalNetwork}>]
                        [static = <{enabled|disabled}>]
                        [status = <{up|down}>]
                        [type = <{|blackhole|reject}>]
                        [metric = <number{0-255}>]
```

where:

dst	The destination IP address(es) using this route.	REQUIRED
label	The name of a label.	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.	OPTIONAL
srcintf	Use this interface for source address selection.	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	The type for this route	OPTIONAL
metric	The metric for this route (weight factor).	OPTIONAL

ip rtconfig

Modify a route of the routing table.

SYNTAX:

```
ip rtconfig          dst = <ip-prefix>
                    [label = <{None|Interactive|Local|Management|
                    SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|VoIP-Signal|
                    default}>]
                    [gateway = <ip-address>]
                    [intf = <{loop|Internet|LocalNetwork}>]
                    [srcintf = <{loop|Internet|LocalNetwork}>]
                    [static = <{enabled|disabled}>]
                    [status = <{up|down}>]
                    [type = <{|blackhole|reject}>]
                    [metric = <number{0-255}>]
```

where:

dst	The destination IP address(es) using this route.	REQUIRED
label	The name of a label.	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.	OPTIONAL
srcintf	Use this interface for source address selection.	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	The type for this route	OPTIONAL
metric	The metric for this route (weight factor).	OPTIONAL

ip rtdelete

Delete a route from the routing table.

SYNTAX:

```
ip rtdelete          dst = <ip-prefix>
                    [label = <{None|Interactive|Local|Management|
                    SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|VoIP-Signal|
                    default}>]
                    [gateway = <ip-address>]
                    [intf = <{loop|Internet|LocalNetwork}>]
```

where:

dst	The destination IP address specification of the route to delete.	REQUIRED
label	The name of a label.	OPTIONAL
gateway	The IP address of the next hop.	OPTIONAL
intf	The outgoing IP interface name. (For special interface routes only).	OPTIONAL

ip rtlist

Display the routing table.

SYNTAX:

```
ip rtlist [expand = <{disabled|enabled}>]  
          [proto = <{ipv4|ipv6}>]
```

where:

expand	Expanded listing.	OPTIONAL
proto	The protocol family.	OPTIONAL

ipqos Commands

<i>ipqos config</i>	<i>Modify the IP QoS configuration for a given destination of an interface.</i>	see page 708
<i>ipqos ef config</i>	<i>Modify an IP QoS EF timer configuration for an interface.</i>	see page 710
<i>ipqos ef list</i>	<i>Display the IP QoS EF timers.</i>	see page 711
<i>ipqos ef stats</i>	<i>Display the IP QoS EF timer statistics.</i>	see page 712
<i>ipqos list</i>	<i>Display the IP QoS configuration.</i>	see page 713
<i>ipqos meter add</i>	<i>Add an IP QoS meter.</i>	see page 714
<i>ipqos meter clear</i>	<i>Clear the IP QoS meter statistics.</i>	see page 715
<i>ipqos meter config</i>	<i>Modify an IP QoS meter configuration.</i>	see page 716
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<i>ipqos queue clear</i>	<i>Clear the IP QoS statistics.</i>	see page 724
<i>ipqos queue config</i>	<i>Modify the IP QoS subqueue configuration.</i>	see page 725
<i>ipqos queue list</i>	<i>Display the IP QoS subqueue configuration.</i>	see page 727
<i>ipqos queue stats</i>	<i>Display the IP QoS subqueue statistics.</i>	see page 728

ipqos config

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

SYNTAX:

```
ipqos config dest = <{atm_pvc_8_35}>
              [state = <{disabled|enabled}>]
              [discard = <{tail|early}>]
              [priority = <{wfq|strict|wrr}>]
              [realtimerate = <number{1-100}>]
              [burstsize = <number{1-64}>]
              [qtyrealtimequeues = <number{1-3}>]
              [backgroundqueue = <{disabled|enabled}>]
              [ecnthreshold = <number{1-99}>]
              [weight1 = <number{1-99}>]
              [weight2 = <number{1-99}>]
              [weight3 = <number{0-98}>]
              [weight4 = <number{0-97}>]
              [weight5 = <number{0-96}>]
              [maxpackets = <number{0-500}>]
              [maxbytes = <number{0-256}>]
```

where:

dest	The destination of the interface. Typically, a phonebook entry.	REQUIRED
state	Enable/Disable IP QoS for the interface.	OPTIONAL
discard	The packet discard strategy in case of congestion.	OPTIONAL
priority	The subqueue priority algorithm.	OPTIONAL
realtimerate	The percentage of the bandwidth.	OPTIONAL
burstsize	Burstsize in kilo bytes (KB).	OPTIONAL
qtyrealtimequeues	Number of real-time priority queues.	OPTIONAL
backgroundqueue	Enable/Disable the best effort background queue.	OPTIONAL
ecnthreshold	The ECN marking threshold.	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 weighted round robin (WRR).	OPTIONAL

weight5	The weight of queue 5 used for weighted fair queueing (WFQ) or weighed round robin (WRR).	OPTIONAL
maxpackets	The maximum number of packets in all queues.	OPTIONAL
maxbytes	The maximum size in kilo bytes (KB) in all queues.	OPTIONAL

ipqos ef config

Modify an IP QoS EF timer configuration for an interface.

SYNTAX:

```
ipqos ef config          intf = <{loop|Internet|LocalNetwork}>
                        [state = <{disabled|enabled}>]
                        [timeout = <number{100-10000}>]
                        [mtu = <number{68-65535}>]
```

where:

intf	The IP interface name.	REQUIRED
state	Enable/Disable IP QoS EF timer for the interface.	OPTIONAL
timeout	The timeout in milli seconds.	OPTIONAL
mtu	The MTU of the IP interface in case of EF data.	OPTIONAL

ipqos ef list

Display the IP QoS EF timers.

ipqos ef stats

Display the IP QoS EF timer statistics.

ipqos list

Display the IP QoS configuration.

ipqos meter add

Add an IP QoS meter.

SYNTAX:

```
ipqos meter add name = <string>
```

where:

name	The name of the IP QoS meter.	REQUIRED
------	-------------------------------	----------

ipqos meter clear

Clear the IP QoS meter statistics.

ipqos meter config

Modify an IP QoS meter configuration.

SYNTAX:

```
ipqos meter config          name = <{ }>
                             [label = <{Interactive|Local|Management|
                             SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|VoIP-Signal|
                             default}>]
                             [intf = <{loop|Internet|LocalNetwork}>]
                             [droprate = <number{0-102400}>]
                             [markrate = <number{0-102400}>]
                             [burst = <number{0-64}>]
                             [dropaction = <{count|drop}>]
                             [markaction = <{count|mark}>]
                             [tosmarking = <{disabled|enabled}>]
                             [tos = <number{0-255}>]
                             [dscp = <{ef|af11|af12|af13|af21|af22|af23|
                             af31|af32|af33|af41|af42|af43|cs0|cs1|cs2|cs3|
                             cs4|cs5|cs6|cs7} or number>]
                             [precedence = <{routine|priority|immediate|
                             flash|flash-override|CRITIC-ECP|internetwork-
                             control|network-control} or number>]
                             [classification = <{decrease|overwrite|ignore|
                             offset}>]
                             [class = <number{0-15}>]
                             [direction = <{outbound|inbound}>]
```

where:

name	The name of the IP QoS meter.	REQUIRED
label	The name of the label.	OPTIONAL
intf	The name of the interface.	OPTIONAL
droprate	The drop rate in kilo bits per second (Kbps).	OPTIONAL
markrate	The mark rate in kilo bits per second (Kbps).	OPTIONAL
burst	The burst size in kilo bytes (KB).	OPTIONAL
dropaction	The drop action.	OPTIONAL
markaction	The mark action.	OPTIONAL
tosmarking	Enable tos marking for marked packets.	OPTIONAL
tos	The type of service used for tos marking.	OPTIONAL
dscp	The diffserv code point (part of tos, used for tos-marking).	OPTIONAL
precedence	The precedence (part of tos, used for tos-marking).	OPTIONAL
classification	The type of classification for marked packets.	OPTIONAL

<code>class</code>	The class or offset used for classification.	OPTIONAL
<code>direction</code>	The direction of policing: outbound or inbound.	OPTIONAL

ipqos meter delete

Delete an IP QoS meter.

SYNTAX:

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

where:

name	The name of the IP QoS meter.	REQUIRED
------	-------------------------------	----------

ipqos meter flush

Flush all IP QoS meters.

ipqos meter list

Display the IP QoS meters.

ipqos meter start

Start an IP QoS meter.

SYNTAX:

```
ipqos meter start name = <{}>
```

where:

name	The name of the stopped IP QoS meter.	REQUIRED
------	---------------------------------------	----------

ipqos meter stats

Display the IP QoS meter statistics.

ipqos meter stop

Stop an IP QoS meter.

SYNTAX:

```
ipqos meter stop          name = <{ }>
```

where:

name	The name of the started IP QoS meter.	REQUIRED
------	---------------------------------------	----------

ipqos queue clear

Clear the IP QoS statistics.

ipqos queue config

Modify the IP QoS subqueue configuration.

SYNTAX:

```
ipqos queue config dest = <{atm_pvc_8_35}>
                    queue = <number{0-5}>
                    [discard = <{tail|early}>]
                    [propagate = <{disabled|enabled}>]
                    [ecnmarking = <{disabled|enabled}>]
                    [maxrate = <number{1-100}>]
                    [maxburst = <number{1-64}>]
                    [ackfiltering = <{disabled|enabled}>]
                    [maxpackets = <number{0-500}>]
                    [maxbytes = <number{0-256}>]
                    [respackets = <number{0-500}>]
                    [resbytes = <number{0-256}>]
                    [hold = <number>]
                    [markprob = <number{1-1000}>]
                    [loprio = <number{0-15}>]
                    [hiprio = <number{0-15}>]
```

where:

dest	The destination of the interface. Typically, a phonebook entry.	REQUIRED
queue	The number of the subqueue.	REQUIRED
discard	The packet discard strategy in case of congestion.	OPTIONAL
propagate	Propagate the packets in lower priority queue iso. dropping.	OPTIONAL
ecnmarking	Enable Explicit Congestion Notification for IP packets in this subqueue.	OPTIONAL
maxrate	The percentage of the bandwidth.	OPTIONAL
maxburst	Burstsize in kilo bytes (KB).	OPTIONAL
ackfiltering	Enable filtering of TCP ACK packets.	OPTIONAL
maxpackets	The maximum number of packets in the subqueue.	OPTIONAL
maxbytes	The maximum subqueue size in kilo bytes (KB).	OPTIONAL
respackets	The reserved number of packets in the subqueue.	OPTIONAL
resbytes	The reserved subqueue size in kilo bytes (KB).	OPTIONAL
hold	The hold time in microseconds for early discard strategy.	OPTIONAL
markprob	The maximum packet marking probability in parts per mille for early discard strategy.	OPTIONAL

loprio	The lowest internal priority boundary for entering this queue.	OPTIONAL
hiprio	The highest internal priority boundary for entering this queue.	OPTIONAL

ipqos queue list

Display the IP QoS subqueue configuration.

SYNTAX:

```
ipqos queue list [dest = <{atm_pvc_8_35}>]
```

where:

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

ipqos queue stats

Display the IP QoS subqueue statistics.

SYNTAX:

```
ipqos queue stats [dest = <{atm_pvc_8_35}>]
```

where:

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

label Commands

<i>label add</i>	<i>Add a label.</i>	see page 730
<i>label chain add</i>	<i>Add a chain.</i>	see page 731
<i>label chain delete</i>	<i>Delete a chain.</i>	see page 732
<i>label chain flush</i>	<i>Flush all chains.</i>	see page 733
<i>label chain list</i>	<i>Display a list of chains.</i>	see page 734
<i>label delete</i>	<i>Delete a label.</i>	see page 735
<i>label flush</i>	<i>Flush all label.</i>	see page 736
<i>label list</i>	<i>Display the labels.</i>	see page 737
<i>label modify</i>	<i>Modify a label configuration.</i>	see page 738
<i>label rule add</i>	<i>Add a rule.</i>	see page 739
<i>label rule debug clear</i>	<i>Clear rule statistics.</i>	see page 741
<i>label rule debug stats</i>	<i>Display rule statistics.</i>	see page 742
<i>label rule debug traceconfig</i>	<i>Display/Modify rule trace configuration.</i>	see page 743
<i>label rule delete</i>	<i>Delete a rule.</i>	see page 744
<i>label rule flush</i>	<i>Flush all rules.</i>	see page 745
<i>label rule list</i>	<i>Display a list of rules.</i>	see page 746
<i>label rule modify</i>	<i>Modify a rule.</i>	see page 747

label add

Add a label.

SYNTAX:

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

where:

name	The name of a label to add.	REQUIRED
------	-----------------------------	----------

label chain add

Add a chain.

SYNTAX:

```
label chain add          chain = <string>
```

where:

chain	The name of the chain to add.	REQUIRED
-------	-------------------------------	----------

label chain delete

Delete a chain.

SYNTAX:

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

where:

chain	The name of the chain to delete.	REQUIRED
-------	----------------------------------	----------

label chain flush

Flush all chains.

label chain list

Display a list of chains.

SYNTAX:

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

where:

format	The format of the chain list.	OPTIONAL
--------	-------------------------------	----------

label delete

Delete a label.

SYNTAX:

```
label delete name = <{Interactive|Local|Management|
SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|VoIP-Signal|
default}>
```

where:

name	The name of a label.	REQUIRED
------	----------------------	----------

label flush

Flush all label.

label list

Display the labels.

SYNTAX:

```
label list [name = <{Interactive|Local|Management|
SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|VoIP-Signal|
default}>]
```

where:

name	The name of a label.	OPTIONAL
------	----------------------	----------

label modify

Modify a label configuration.

SYNTAX:

```
label modify name = <{Interactive|Local|Management|SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|VoIP-Signal|default}>
[classification = <{ignore|overwrite|increase}>]
[defclass = <{0|1|2|3|4|5|6|7|8|9|10|11|12|13|14|15|dscp|default}>]
[ackclass = <{0|1|2|3|4|5|6|7|8|9|10|11|12|13|14|15|prioritize|defclass}>]
[bidirectional = <{disabled|enabled}>]
[inheritance = <{disabled|enabled}>]
[tosmarking = <{disabled|enabled}>]
[tos = <number{0-255}>]
[dscp = <{ef|af11|af12|af13|af21|af22|af23|af31|af32|af33|af41|af42|af43|cs0|cs1|cs2|cs3|cs4|cs5|cs6|cs7} or number>]
[precedence = <{routine|priority|immediate|flash|flash-override|CRITIC-ECP|internetwork-control|network-control} or number>]
[trace = <{disabled|enabled}>]
```

where:

name	The name of a label to modify.	REQUIRED
classification	The Method of classification.	OPTIONAL
defclass	The default class of assigned connection.	OPTIONAL
ackclass	The class of ACK segments of TCP connection.	OPTIONAL
bidirectional	The label is also valid for returning stream.	OPTIONAL
inheritance	The label is also valid for corresponding stream of child connection.	OPTIONAL
tosmarking	Enable/disable TOS marking.	OPTIONAL
tos	The Type Of Service specification in the IP packet (used for tos- marking).	OPTIONAL
dscp	The diffserv code point (part of tos, used for tos-marking).	OPTIONAL
precedence	The precedence (part of tos, used for tos-marking).	OPTIONAL
trace	Enable/disable IP tracing for this label.	OPTIONAL

label rule add

Add a rule.

SYNTAX:

```
label rule add                chain = <chain name>
                             [index = <number>]
                             [name = <string>]
                             [clink = <chain name>]
                             [srcintf [!] = <{wan|local|lan|tunnel|dmz|
                             guest}>]
                             [srcip [!] = <{contentsharing_ip|private|
                             sstp_ip|mdap_ip}>]
                             [dstip [!] = <{contentsharing_ip|private|
                             sstp_ip|mdap_ip}>]
                             [serv [!] = <{icmp|igmp|ftp|telnet|http|
                             httpproxy|https|RPC|NBT|SMB|imap|esp|ah|ike|
                             sip|h323|dhcp|rtsp|sstp_serv|mdap_serv|syslog|
                             VoIP-Inc-SIP-UDP|VoIP-Inc-SIP-TCP|VoIP-Inc-
                             RTP|gre|icmpv6}>]
                             [length [!] = <{}>]
                             [log = <{disabled|enabled}>]
                             [state = <{disabled|enabled}>]
                             label = <{None|link|Interactive|Local|
                             Management|SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|
                             VoIP-Signal|default}>
```

where:

chain	The name of the chain which contains the rule.	REQUIRED
index	The index of the rule in the chain.	OPTIONAL
name	The name of the new rule.	OPTIONAL
clink	The name of the chain to be parsed when this rule applies.	OPTIONAL
srcintf [!]	The name of the source interface expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL
srcip [!]	The name of the source ip expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL
dstip [!]	The name of the destination ip expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL
serv [!]	The name of the service expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL
length [!]	The name of the length expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL

LABEL COMMANDS

log	Disable/Enable logging when this rule applies.	OPTIONAL
state	Disable/Enable this rule.	OPTIONAL
label	None, link (when clink is used) or label name.	REQUIRED

label rule debug clear

Clear rule statistics.

SYNTAX:

```
label rule debug clear      [chain = <chain name>]
                             [index = <number>]
```

where:

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:

```
label rule debug stats      [chain = <chain name>]
                           [index = <number>]
```

where:

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:

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

where:

state	Disable/Enable rule traces.	OPTIONAL
-------	-----------------------------	----------

label rule delete

Delete a rule.

SYNTAX:

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

where:

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:

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

where:

chain	The name of the chain to flush.	OPTIONAL
-------	---------------------------------	----------

label rule list

Display a list of rules.

SYNTAX:

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

where:

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:

```
label rule modify          chain = <chain name>
                           [index = <number>]
                           [newindex = <number>]
                           [name = <string>]
                           [clink = <chain name>]
                           [[!]srcintf] = <chain name>]
                           [[!]srcip] = <chain name>]
                           [[!]dstip] = <chain name>]
                           [[!]serv] = <chain name>]
                           [[!]length] = <chain name>]
                           [log = <{disabled|enabled}>]
                           [state = <{disabled|enabled}>]
                           [label = <{None|link|Interactive|Local|
Management|SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|
VoIP-Signal|default}>]
```

where:

chain	The name of the chain which contains the rule.	REQUIRED
index	The index of the rule in the chain.	OPTIONAL
newindex	The new index of the rule in the chain.	OPTIONAL
name	The name of the new rule.	OPTIONAL
clink	The name of the chain to be parsed when this rule applies.	OPTIONAL
[[!]srcintf]	The name of the source interface expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL
[[!]srcip]	The name of the source ip expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL
[[!]dstip]	The name of the destination ip expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL
[[!]serv]	The name of the service expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL
[[!]length]	The name of the length expression. If a value is preceded by a “!”, it means NOT.	OPTIONAL
log	Disable/Enable logging when this rule applies.	OPTIONAL
state	Disable/Enable this rule.	OPTIONAL

LABEL COMMANDS

label	None, link (when clink is used) or label name.	OPTIONAL
-------	--	----------

language Commands

<i>language config</i>	<i>Select a language.</i>	see page 750
<i>language delete</i>	<i>Delete one or all language archives.</i>	see page 751
<i>language list</i>	<i>List available languages archives.</i>	see page 752

language config

Select a language.

SYNTAX:

```
language config          [language = <string>]
                        [complete = <{yes|no}>]
```

where:

language	Language code : OSI language code (2 chars) for language (en=English)	OPTIONAL
complete	Enable translation for expert pages.	OPTIONAL

language delete

Delete one or all language archives.

SYNTAX:

```
language delete          [file = <string>]
                        [all = <{yes|no}>]
```

where:

file	Filename : name of language archive to delete	OPTIONAL
all	Deletes all languages archives.	OPTIONAL

language list

List available languages archives.

led Command

Configures led behavior.

SYNTAX:

```
led config [infotimeout = <number{0-255}>]
           [alwayson = <{disabled|enabled}>]
           [checkinternetservice = <{disabled|enabled}>]
           [checkvoiceservice = <{disabled|enabled}>]
           [checkvideoservice = <{disabled|enabled}>]
```

where:

infotimeout	Sets the amount of seconds the status of the leds will be shown when a button is pressed.	OPTIONAL
alwayson	Enable/disable the powering off of LEDs when everything is OK!.	OPTIONAL
checkinternetservice	Enable/disable the INTERNET service check.	OPTIONAL
checkvoiceservice	Enable/disable the VOICE service check.	OPTIONAL
checkvideoservice	Enable/disable the VIDEO service check.	OPTIONAL

mbus Commands

<i>mbus client authenticate</i>	<i>Authenticate a session</i>	see page 756
<i>mbus client config</i>	<i>Modify client parameters</i>	see page 757
<i>mbus client exec</i>	<i>Execute mbus command</i>	see page 758
<i>mbus client register</i>	<i>Register cli client to mbus</i>	see page 760
<i>mbus client termsession</i>	<i>Terminate a session</i>	see page 761
<i>mbus client unregister</i>	<i>Unregister cli client from mbus</i>	see page 762
<i>mbus debug clearstats</i>	<i>Reset mbus statistics.</i>	see page 763
<i>mbus debug commconfig</i>	<i>Modify communication settings.</i>	see page 764
<i>mbus debug loadobjects</i>	<i>Load/sync object instances from plugins</i>	see page 765
<i>mbus debug stats</i>	<i>Display mbus statistics.</i>	see page 766
<i>mbus debug traceconfig</i>	<i>Modify mbus trace settings.</i>	see page 767
<i>mbus debug unloadobjects</i>	<i>Unload object instances</i>	see page 768
<i>mbus listcontexts</i>	<i>Display the context instances</i>	see page 769
<i>mbus listenums</i>	<i>Display the registered enumtypes</i>	see page 770
<i>mbus listobjects</i>	<i>Display the object instances</i>	see page 771
<i>mbus listsubscriptions</i>	<i>Display the subscription instances</i>	see page 772
<i>mbus listtypes</i>	<i>Display the registered objecttypes</i>	see page 773
<i>mbus pluginevent</i>	<i>Simulate event from plugin</i>	see page 774
<i>mbus unregister</i>	<i>Unregister a client/plugin context</i>	see page 775
<i>mbus xmldump</i>	<i>Dump the registered datamodel to an XML file</i>	see page 776

mbus client authenticate

Authenticate a session

SYNTAX:

```
mbus client authenticate      type = <{cleartext|crypt|digest|defaultuser}>
                               [username = <quoted string>]
                               [password = <password>]
                               [addr = <ipv4-address>]
```

where:

type	Authentication type	REQUIRED
username	User name	OPTIONAL
password	password	OPTIONAL
addr	IP address of peer who initiated the authentication request.	OPTIONAL

mbus client config

Modify client parameters

SYNTAX:

```
mbus client config      [writelock = <{enabled|disabled}>]
                        [wlgettimeout = <number>]
                        [wldletimeout = <number>]
                        [path = <quoted string>]
                        [type = <{indexpath|keystpath}>]
                        [id = <number>]
```

where:

writelock	Get/release mbus writelock	OPTIONAL
wlgettimeout	Writelock get timeout in seconds (forever=-1, *default=nowait=0)	OPTIONAL
wldletimeout	Writelock idle timeout in seconds (forever=-1, *default=30)	OPTIONAL
path	Fully qualified mbus path	OPTIONAL
type	Path type (default = indexpath)	OPTIONAL
id	sessionid to use	OPTIONAL

mbus client exec

Execute mbus command

SYNTAX:

```

mbus client exec          cmd = <{getpath|getcount|getnames|getvalues|
                           setvalue|addobject|deleteobject|subscribe|
                           unsubscribe|getaccessrights|setaccessrights}>
                           [param = <quoted string>]
                           [value = <quoted string>]
                           [gettype = <{parameter|path|object}>]
                           [depth = <number>]
                           [processcmd = <{enabled|disabled}>]
                           [onerrorrollback = <{enabled|disabled}>]
                           [usecallback = <{enabled|disabled}>]
                           [filter = <quoted string>]
                           [path = <quoted string>]
                           [flags = <[+/-]flag[+/-flag...]{indexpath
                           keystopath uncommitted dynamic xref_localidx
                           xref_keypath exact_depth noparamvalue
                           applyonparamsapplyrecursive typetreepath
                           non_persistent}>]
                           [accesslist = <quoted string>]
                           [action = <[+/-]flag[+/-flag...]{read write
                           attrchg}>]
                           [modifier = <{add|delete|allow_only|
                           allow_except}>]
                           [replytype = <{getallowed|getdisallowed|
                           getasconfigured}>]
                           [attribute = <{ar_archg|ar_read|ar_write|
                           param_cached|param_enums|param_readable|
                           param_type|param_writable|param_xrefs|
                           objtype_cached|objtype_max|objtype_writable|
                           object_clean|object_dynamic|type|param_ipv4|
                           param_ipv6}>]
                           [timing = <{disabled|enabled}>]
                           [no_output = <{disabled|enabled}>]

```

where:

cmd	Mbus command name	REQUIRED
param	Parameter name	OPTIONAL
value	Parameter value to set	OPTIONAL
gettype	Get type elements (default=param)	OPTIONAL
depth	Number of levels to recurse, default=-1 (all)	OPTIONAL
processcmd	Process SET_VALUE command flag (default=enabled)	OPTIONAL
onerrorrollback	on error rollback flag (default=enabled)	OPTIONAL

usecallback	Use result callback function (default=enabled)	OPTIONAL
filter	The filter should be formatted as '(operator operand operand)'. Possible operators are ==, !=, <, <=, >, >=, and, or, not. The left operand is a parameter name. The right operand is a parameter value. For boolean operators the operands are filters. Example: '(= Name eth0)'	OPTIONAL
path	Fully qualified mbus path	OPTIONAL
flags	Client command data flags	OPTIONAL
accesslist	Comma separated names of accessrights groups	OPTIONAL
action	Type of accessright action	OPTIONAL
modifier	Accessrights modifier	OPTIONAL
replytype	Type of accessrights reply	OPTIONAL
attribute	Requested attribute-type	OPTIONAL
timing	Print duration of command invocation (default=disabled)	OPTIONAL
no_output	Discard the output of the command (default=disabled)	OPTIONAL

mbus client register

Register cli client to mbus

SYNTAX:

```
mbus client register      [dmtree = <{igd|atomic|system}>]
                          [type = <{indexpath|keystspath}>]
                          [dlink = <{local_ipc|remote_inet}>]
                          [mbusd_addr = <quoted string>]
                          [refresolv = <{disabled|enabled}>]
                          [state_events = <{disabled|enabled}>]
                          [persistent = <{enabled|disabled}>]
```

where:

dmtree	Select mbusd datamodel tree.	OPTIONAL
type	Path type (default = indexpath)	OPTIONAL
dlink	Daemon link (default = local_ipc)	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
persistent	Context's actions are persistent or not (default=enabled)	OPTIONAL

mbus client termsession

Terminate a session

SYNTAX:

```
mbus client termsession      id = <number>
```

where:

id	id of session to terminate	REQUIRED
----	----------------------------	----------

mbus client unregister

Unregister cli client from mbus

mbus debug clearstats

Reset mbus statistics.

mbus debug commconfig

Modify communication settings.

SYNTAX:

```
mbus debug commconfig [pong-to = <number>]
```

where:

pong-to	Mbus message communication pong time-out.	OPTIONAL
---------	---	----------

mbus debug loadobjects

Load/sync object instances from plugins

SYNTAX:

```
mbus debug loadobjects      [dmtree = <{igd|atomic|system}>]
                             [path = <quoted string>]
                             [type = <{indexpath|keystopath}>]
                             [flush = <{disabled|enabled}>]
```

where:

dmtree	Select mbusd datamodel tree.	OPTIONAL
path	Fully qualified mbus path	OPTIONAL
type	Path type (default = indexpath)	OPTIONAL
flush	Flush objects before load (default=disabled)	OPTIONAL

mbus debug stats

Display mbus statistics.

mbus debug traceconfig

Modify mbus trace settings.

SYNTAX:

```
mbus debug traceconfig [level = <number{0-4}>]
```

where:

level	Select mbus trace level (0-4).	OPTIONAL
-------	--------------------------------	----------

mbus debug unloadobjects

Unload object instances

SYNTAX:

```
mbus debug unloadobjects      [dmtree = <{igd|atomic|system}>]
                               [path = <quoted string>]
                               [type = <{indexpath|keystpath}>]
                               [flush = <{disabled|enabled}>]
```

where:

dmtree	Select mbusd datamodel tree.	OPTIONAL
path	Fully qualified mbus path	OPTIONAL
type	Path type	OPTIONAL
flush	Flush objects before load (default=disabled)	OPTIONAL

mbus listcontexts

Display the context instances

SYNTAX:

```
mbus listcontexts          [dmtree = <{igd|atomic|system}>]
                           [expand = <{disabled|enabled}>]
```

where:

dmtree	Select mbusd datamodel tree.	OPTIONAL
expand	Details enabled/disabled	OPTIONAL

mbus listenums

Display the registered enumtypes

SYNTAX:

```
mbus listenums [dmtree = <{igd|atomic|system}>]
               [name = <quoted string>]
               [expand = <{disabled|enabled}>]
```

where:

dmtree	Select mbusd datamodel tree.	OPTIONAL
name	Filter enumtypes by (part of) the name	OPTIONAL
expand	Details enabled/disabled	OPTIONAL

mbus listobjects

Display the object instances

SYNTAX:

```
mbus listobjects          [dmtree = <{igd|atomic|system}>]
                          [path = <quoted string>]
                          [type = <{indexpath|keystpath}>]
                          [output = <{tree|list}>]
                          [showflags = <{disabled|enabled}>]
```

where:

dmtree	Select mbusd datamodel tree.	OPTIONAL
path	Fully qualified mbus path to list.	OPTIONAL
type	Path type (default = indexpath)	OPTIONAL
output	List output type	OPTIONAL
showflags	Display object flags (Clean or Dirty / Persistent or Volatile)	OPTIONAL

mbus listsubscriptions

Display the subscription instances

SYNTAX:

```
mbus listsubscriptions [dmtree = <{igd|atomic|system}>]
```

where:

dmtree	Select mbusd datamodel tree.	OPTIONAL
--------	------------------------------	----------

mbus listtypes

Display the registered objecttypes

SYNTAX:

```
mbus listtypes [dmtree = <{igd|atomic|system}>]
               [path = <quoted string>]
               [expand = <{disabled|enabled}>]
```

where:

dmtree	Select mbusd datamodel tree.	OPTIONAL
path	Fully qualified mbus path to list.	OPTIONAL
expand	Details enabled/disabled	OPTIONAL

mbus pluginevent

Simulate event from plugin

SYNTAX:

```
mbus pluginevent          ctxid = <number>
                          type = <{addobj|delobj|updoobj}>
                          path = <quoted string>
                          [name = <quoted string>]
                          [value = <quoted string>]
                          [orivalue = <quoted string>]
                          [flags = <[+/-]flag[+/-flag...]{dynamic
save}>]
```

where:

ctxid	Plugin context id	REQUIRED
type	Event type	REQUIRED
path	Plugin event subpath	REQUIRED
name	Plugin event name	OPTIONAL
value	Plugin event value	OPTIONAL
orivalue	Plugin event orivalue	OPTIONAL
flags	Plug-in event flags	OPTIONAL

mbus unregister

Unregister a client/plugin context

SYNTAX:

```
mbus unregister          id = <number>
```

where:

id	Select message-based client/plugin context id.	REQUIRED
----	--	----------

mbus xmldump

Dump the registered datamodel to an XML file

SYNTAX:

```
mbus xmldump filename = <string>
              [format = <{unix|mac|windows}>]
```

where:

filename	Filename.	REQUIRED
format	Select output file format.	OPTIONAL

memm Commands

<i>memm debug clearstats</i>	<i>Clear time statistics.</i>	see page 778
<i>memm debug lock stats</i>	<i>Display lock statistics.</i>	see page 779
<i>memm debug lock traceconfig</i>	<i>Modify lock trace settings.</i>	see page 780
<i>memm debug stats</i>	<i>Display memm time statistics.</i>	see page 781
<i>memm debug tag</i>	<i>(Un)tag memory manager objects.</i>	see page 782
<i>memm debug traceconfig</i>	<i>Modify memm trace settings.</i>	see page 783
<i>memm listobjects</i>	<i>Display objects.</i>	see page 784
<i>memm stats</i>	<i>Display memm statistics.</i>	see page 785

memm debug clearstats

Clear time statistics.

memm debug lock stats

Display lock statistics.

memm debug lock traceconfig

Modify lock trace settings.

SYNTAX:

```
memm debug lock traceconfig    [level = <number{0-4}>]
                               [name = <quoted string>]
                               [showtid = <{no|yes}>]
```

where:

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:

```
memm debug stats [name = <quoted string>]
```

where:

name	Select typename(s) to list (supports partial typename)	OPTIONAL
------	--	----------

memm debug tag

(Un)tag memory manager objects.

SYNTAX:

```
memm debug tag [name = <quoted string>]
               [tag = <{enabled|disabled}>]
```

where:

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:

```
memm debug traceconfig [level = <number{0-4}>]
```

where:

level	Select memm trace level (0-4).	OPTIONAL
-------	--------------------------------	----------

memm listobjects

Display objects.

SYNTAX:

```
memm listobjects [name = <quoted string>]
                 [tagged = <{no|yes}>]
                 [hidedeldynstr = <{no|yes}>]
```

where:

name	Select typename(s) to list (supports partial typename)	OPTIONAL
tagged	Show only tagged (yes) or untagged (no) objects	OPTIONAL
hidedeldynstr	Hide (yes) / show (no) deleted dynstrings (default = show)	OPTIONAL

memm stats

Display memm statistics.

SYNTAX:

```
memm stats [name = <quoted string>]
```

where:

name	Select typename(s) to list (supports partial typename)	OPTIONAL
------	--	----------

mld Commands

<i>mld host config</i>	<i>Display/Modify global MLD configuration.</i>	see page 788
<i>mld host debug block</i>	<i>Block a multicast source (when filter mode is EXCLUDE).</i>	see page 789
<i>mld host debug clear</i>	<i>Clear MLD statistics.</i>	see page 790
<i>mld host debug filter</i>	<i>Change the source filter of a multicast group.</i>	see page 791
<i>mld host debug join</i>	<i>Join a multicast group (and source when filter mode is INCLUDE).</i>	see page 792
<i>mld host debug leave</i>	<i>Leave a multicast group (and source when filter mode is INCLUDE).</i>	see page 793
<i>mld host debug stats</i>	<i>Print MLD statistics.</i>	see page 794
<i>mld host debug unblock</i>	<i>Unblock a multicast source (when filter mode is EXCLUDE).</i>	see page 795
<i>mld host flush</i>	<i>Flush MLD configuration.</i>	see page 796
<i>mld host ifconfig</i>	<i>Configure MLD on an interface.</i>	see page 797
<i>mld host iflist</i>	<i>Display the configuration of an MLD interface(s).</i>	see page 798
<i>mld host list</i>	<i>List the multicast groups.</i>	see page 799
<i>mld proxy config</i>	<i>Configure the MLD proxy.</i>	see page 800
<i>mld proxy debug clear</i>	<i>Clear MLD proxy statistics</i>	see page 801
<i>mld proxy debug stats</i>	<i>Print MLD proxy statistics</i>	see page 802
<i>mld proxy debug traceconfig</i>	<i>Modify MLD proxy trace configuration</i>	see page 803
<i>mld proxy flush</i>	<i>Flush all MLD proxy settings and learned groups</i>	see page 804
<i>mld proxy grouplist</i>	<i>Show the learned groups on an MLD proxy interface.</i>	see page 805
<i>mld proxy ifconfig</i>	<i>Configure an MLD proxy interface.</i>	see page 806
<i>mld proxy iflist</i>	<i>Show the configuration of an MLD proxy interface.</i>	see page 807
<i>mld proxy mbslist</i>	<i>Show the MLD proxy membership database (merge of all learned groups).</i>	see page 808

mld host config

Display/Modify global MLD configuration.

SYNTAX:

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

where:

requirera	Enable/Disable the router alert IPv6 option check.	OPTIONAL
-----------	--	----------

mld host debug block

Block a multicast source (when filter mode is EXCLUDE).

SYNTAX:

```
mld host debug block      intf = <{loop|Internet|LocalNetwor}>
                          group = <ipv6-address>
                          source = <ipv6-address>
```

where:

intf	The IPv6 interface name.	REQUIRED
group	The IPv6 multicast group.	REQUIRED
source	The IPv6 multicast source.	REQUIRED

mld host debug clear

Clear MLD statistics.

SYNTAX:

```
mld host debug clear          intf = <{loop|Internet|LocalNetwor}>
```

where:

intf	The IPv6 interface name.	REQUIRED
------	--------------------------	----------

mld host debug filter

Change the source filter of a multicast group.

SYNTAX:

```
mld host debug filter      intf = <{loop|Internet|LocalNetwor}>
                           group = <ipv6-address>
                           mode = <{exclude|include}>
                           source1 = <ipv6-address>
                           [source2 = <ipv6-address>]
```

where:

intf	The IPv6 interface name.	REQUIRED
group	The IPv6 multicast group.	REQUIRED
mode	The multicast filter mode.	REQUIRED
source1	A multicast source.	REQUIRED
source2	A multicast source.	OPTIONAL

mld host debug join

Join a multicast group (and source when filter mode is INCLUDE).

SYNTAX:

```
mld host debug join      intf = <{loop|Internet|LocalNetwor}>
                        group = <ipv6-address>
                        [source = <ipv6-address>]
```

where:

intf	The IPv6 interface name.	REQUIRED
group	The IPv6 multicast group.	REQUIRED
source	The IPv6 multicast source.	OPTIONAL

mld host debug leave

Leave a multicast group (and source when filter mode is INCLUDE).

SYNTAX:

```
mld host debug leave      intf = <{loop|Internet|LocalNetwor}>
                          group = <ipv6-address>
                          [source = <ipv6-address>]
```

where:

intf	The IPv6 interface name.	REQUIRED
group	The IPv6 multicast group.	REQUIRED
source	The IPv6 multicast source.	OPTIONAL

mld host debug stats

Print MLD statistics.

SYNTAX:

```
mld host debug stats          intf = <{loop|Internet|LocalNetwor}>
```

where:

intf	The IPv6 interface name.	REQUIRED
------	--------------------------	----------

mld host debug unblock

Unblock a multicast source (when filter mode is EXCLUDE).

SYNTAX:

```
mld host debug unblock      intf = <{loop|Internet|LocalNetwor}>
                             group = <ipv6-address>
                             source = <ipv6-address>
```

where:

intf	The IPv6 interface name.	REQUIRED
group	The IPv6 multicast group.	REQUIRED
source	The IPv6 multicast source.	REQUIRED

mld host flush

Flush MLD configuration.

mld host ifconfig

Configure MLD on an interface.

SYNTAX:

```
mld host ifconfig          intf = <{loop|Internet|LocalNetwor}>
                           version = <{none|MLDv1}>
```

where:

intf	The IPv6 interface name.	REQUIRED
version	The MLD version host on the IPv6 interface (None = follows RFC 3810; MLDv1 = forces version 1).	REQUIRED

mld host iflist

Display the configuration of an MLD interface(s).

SYNTAX:

```
mld host iflist [intf = <{loop|Internet|LocalNetwor}>]
                [expand = <{disabled|enabled}>]
```

where:

intf	The IPv6 interface name.	OPTIONAL
expand	Expanded listing.	OPTIONAL

mld host list

List the multicast groups.

SYNTAX:

```
mld host list [intf = <{loop|Internet|LocalNetwor}>]
               [expand = <{disabled|enabled}>]
```

where:

intf	The IPv6 interface name.	OPTIONAL
expand	Expanded listing.	OPTIONAL

mld proxy config

Configure the MLD proxy.

SYNTAX:

```
mld proxy config          [state = <{disabled|enabled}>]
                          [qi = <number{1-31744}>]
                          [qri = <number{1-3175}>]
                          [llqi = <number{1-3175}>]
                          [rv = <number{2-8}>]
                          [requirera = <{disabled|enabled}>]
                          [localgroup = <{disabled|enabled}>]
```

where:

state	Enable/Disable the MLD proxy.	OPTIONAL
qi	The interval in seconds between general queries sent by the querier.	OPTIONAL
qri	The maximum response time to general queries (in seconds).	OPTIONAL
llqi	The maximum response time to group specific queries (in seconds).	OPTIONAL
rv	The robustness variable allows tuning the protocol according to the expected packet loss.	OPTIONAL
requirera	Enable/Disable the router alert IPv6 option check.	OPTIONAL
localgroup	Enable/Disable the processing of a link-local multicast group in an MLD packet.	OPTIONAL

mld proxy debug clear

Clear MLD proxy statistics

mld proxy debug stats

Print MLD proxy statistics

mld proxy debug traceconfig

Modify MLD proxy trace configuration

SYNTAX:

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

where:

state	Enable/Disable tracing.	OPTIONAL
-------	-------------------------	----------

mld proxy flush

Flush all MLD proxy settings and learned groups

mld proxy grouplist

Show the learned groups on an MLD proxy interface.

SYNTAX:

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

where:

intf	The name of the MLD proxy interface to be listed.	OPTIONAL
expand	Expanded listing.	OPTIONAL

mld proxy ifconfig

Configure an MLD proxy interface.

SYNTAX:

```
mld proxy ifconfig          intf = <{LocalNetwork|Internet}>
                             [state = <{inactive|downstream|upstream}>]
                             [version = <{MLDv1|MLDv2}>]
                             [fastdone = <{disabled|enabled}>]
                             [exptrack = <{disabled|enabled}>]
```

where:

intf	The name of the MLD proxy interface to be configured.	REQUIRED
state	The state of the MLD proxy interface.	OPTIONAL
version	The MLD version of the proxy interface.	OPTIONAL
fastdone	Enable/Disable the immediate deletion of a group when a done is received.	OPTIONAL
exptrack	Enable/Disable explicit host tracking.	OPTIONAL

mld proxy iflist

Show the configuration of an MLD proxy interface.

SYNTAX:

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

where:

expand	Expanded listing.	OPTIONAL
--------	-------------------	----------

mld proxy mbslist

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

mlp Commands

<i>mlp debug export</i>	<i>Export all scores.</i>	see page 810
<i>mlp debug stats</i>	<i>Display mlp statistics.</i>	see page 811
<i>mlp debug traceconfig</i>	<i>Modify mlp trace settings.</i>	see page 812
<i>mlp flush</i>	<i>Flush all mlp structures.</i>	see page 813
<i>mlp import</i>	<i>Import all scores.</i>	see page 814
<i>mlp privilege add</i>	<i>Add a privilege.</i>	see page 815
<i>mlp privilege addzone</i>	<i>Add a zone to a privilege.</i>	see page 816
<i>mlp privilege config</i>	<i>Modify the privilege.</i>	see page 817
<i>mlp privilege delete</i>	<i>Delete a privilege.</i>	see page 818
<i>mlp privilege list</i>	<i>Display the privileges.</i>	see page 819
<i>mlp privilege removezone</i>	<i>Remove a zone from a privilege.</i>	see page 820
<i>mlp role add</i>	<i>Add a role.</i>	see page 821
<i>mlp role addpriv</i>	<i>Add a privilege.</i>	see page 822
<i>mlp role config</i>	<i>Modify the role.</i>	see page 823
<i>mlp role delete</i>	<i>Delete a role.</i>	see page 824
<i>mlp role list</i>	<i>Display the roles.</i>	see page 825
<i>mlp role removepriv</i>	<i>Remove a privilege.</i>	see page 826
<i>mlp wlanorigin</i>	<i>WLAN origin support</i>	see page 827

mlp debug export

Export all scores.

mlp debug stats

Display mlp statistics.

mlp debug traceconfig

Modify mlp trace settings.

SYNTAX:

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

where:

trace	Select mlp trace level.	OPTIONAL
-------	-------------------------	----------

mlp flush

Flush all mlp structures.

mlp import

Import all scores.

SYNTAX:

```
mlp import [allow_dl = <{no|yes}>]
           [trace = <{disabled|enabled|full}>]
```

where:

allow_dl	Enable/disable support for /dl/ folder	OPTIONAL
trace	Select import trace level.	OPTIONAL

mlp privilege add

Add a privilege.

SYNTAX:

```
mlp privilege add          name = <string>
                           type = <{access|service}>
                           [descr = <quoted string>]
```

where:

name	Privilege name.	REQUIRED
type	Privilege type.	REQUIRED
descr	Privilege description.	OPTIONAL

mlp privilege addzone

Add a zone to a privilege.

SYNTAX:

```
mlp privilege addzone          name = <>
                               zone = <{Read/LAN/WAN/Local|Write/LAN/WAN/
Local|r_lan|r_wan|r_fs_view|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|
origin_wlan|trace}>
```

where:

name	Privilege name.	REQUIRED
zone	Zone name.	REQUIRED

mlp privilege config

Modify the privilege.

SYNTAX:

```
mlp privilege config      name = <>
                          [descr = <quoted string>]
                          [score = <{hex-word}[:{hex-word}] ex:
                          'a12:c30f'>]
```

where:

name	Select the privilege by name.	REQUIRED
descr	Set the description.	OPTIONAL
score	Set the score.	OPTIONAL

mlp privilege delete

Delete a privilege.

SYNTAX:

```
mlp privilege delete          name = <>
```

where:

name	Privilege name.	REQUIRED
------	-----------------	----------

mlp privilege list

Display the privileges.

SYNTAX:

```
mlp privilege list          [name = <>]
                           [type = <{access|service}>]
                           [verbose = <{minimal|medium|all}>]
```

where:

name	Privilege name.	OPTIONAL
type	Privilege type.	OPTIONAL
verbose	Limit the output list.	OPTIONAL

mlp privilege removezone

Remove a zone from a privilege.

SYNTAX:

```
mlp privilege removezone      name = <>
                              zone = <{Read/LAN/WAN/Local|Write/LAN/WAN/
Local|r_lan|r_wan|r_fs_view|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|
origin_wlan|trace}>
```

where:

name	Privilege name.	REQUIRED
zone	Zone name.	REQUIRED

mlp role add

Add a role.

SYNTAX:

```
mlp role add          name = <string>
                    parent = <>
                    [descr = <quoted string>]
```

where:

name	Role name.	REQUIRED
parent	Parent role name.	REQUIRED
descr	Role description.	OPTIONAL

mlp role addpriv

Add a privilege.

SYNTAX:

```
mlp role addpriv          name = <>
                          access = <>
                          service = <{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}>
```

where:

name	Role name.	REQUIRED
access	Access privilege to add.	REQUIRED
service	Privilege name to add.	REQUIRED

mlp role config

Modify the role.

SYNTAX:

```
mlp role config          name = <>
                        [parent = <>]
                        [descr = <quoted string>]
```

where:

name	Role name.	REQUIRED
parent	Parent role name.	OPTIONAL
descr	Role description.	OPTIONAL

mlp role delete

Delete a role.

SYNTAX:

```
mlp role delete          name = <>
```

where:

name	Role name.	REQUIRED
------	------------	----------

mlp role list

Display the roles.

SYNTAX:

```
mlp role list [name = <>]
              [verbose = <{minimal|medium|all}>]
```

where:

name	Role name.	OPTIONAL
verbose	Limit the output list.	OPTIONAL

mlp role removepriv

Remove a privilege.

SYNTAX:

```
mlp role removepriv      name = <>
                        access = <>
                        [service = <>]
```

where:

name	Role name.	REQUIRED
access	Access privilege to delete.	REQUIRED
service	Privilege name to delete.	OPTIONAL

mlp wlanorigin

WLAN origin support

mobile Commands

<i>mobile debug operator</i>	<i>Shows the currently selected operator.</i>	see page 830
<i>mobile debug sendat</i>	<i>Send AT command to the modem card.</i>	see page 831
<i>mobile debug showsq</i>	<i>Shows signal quality (RSSI & BER).</i>	see page 832
<i>mobile debug traceconfig</i>	<i>Modify trace configuration</i>	see page 833
<i>mobile device list</i>	<i>List mobile devices</i>	see page 834
<i>mobile ifadd</i>	<i>Create a new Mobile interface.</i>	see page 835
<i>mobile ifattach</i>	<i>Attach an Mobile interface.</i>	see page 836
<i>mobile ifconfig</i>	<i>Configure an Mobile interface.</i>	see page 837
<i>mobile ifdelete</i>	<i>Delete an Mobile interface.</i>	see page 838
<i>mobile ifdetach</i>	<i>Detach an Mobile interface.</i>	see page 839
<i>mobile iflist</i>	<i>Display the Mobile interfaces.</i>	see page 840
<i>mobile simcard</i>	<i>Get a state of the SIM card.</i>	see page 841

mobile debug operator

Shows the currently selected operator.

SYNTAX:

```
mobile debug operator [list = <{current|all}>]
```

where:

list	List only the current or all	OPTIONAL
------	------------------------------	----------

mobile debug sendat

Send AT command to the modem card.

SYNTAX:

```
mobile debug sendat          command = <quoted string>
```

where:

command	AT command	REQUIRED
---------	------------	----------

mobile debug showsq

Shows signal quality (RSSI & BER).

mobile debug traceconfig

Modify trace configuration

SYNTAX:

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

where:

state	Enable/disable tracing.	OPTIONAL
-------	-------------------------	----------

mobile device list

List mobile devices

mobile ifadd

Create a new Mobile interface.

SYNTAX:

```
mobile ifadd          intf = <string>
```

where:

intf	The name of the new mobile interface	REQUIRED
------	--------------------------------------	----------

mobile ifattach

Attach an Mobile interface.

SYNTAX:

```
mobile ifattach          intf = <>
```

where:

intf	The name of the Mobile interface.	REQUIRED
------	-----------------------------------	----------

mobile ifconfig

Configure an Mobile interface.

SYNTAX:

```
mobile ifconfig          intf = <>
                        [pin = <password>]
                        [puk = <string>]
                        [apn = <string>]
                        [mode = <{automatic|manual}>]
                        [operator = <number{0-99999}>]
                        [technology = <{2G|3G}>]
                        [initcommand = <string>]
```

where:

intf	The name of the Mobile interface to configure.	REQUIRED
pin	PIN code.	OPTIONAL
puk	PUK code.	OPTIONAL
apn	Access Point Name.	OPTIONAL
mode	Operator selection (automatic, manual).	OPTIONAL
operator	Location area identifier + network code.	OPTIONAL
technology	Radio access technology (2G, 3G).	OPTIONAL
initcommand	AT command executed after SIM verification.	OPTIONAL

mobile ifdelete

Delete an Mobile interface.

SYNTAX:

```
mobile ifdelete          intf = <>
```

where:

intf	The name of the Mobile interface.	REQUIRED
------	-----------------------------------	----------

mobile ifdetach

Detach an Mobile interface.

SYNTAX:

```
mobile ifdetach          intf = <>
```

where:

intf	The name of the Mobile interface.	REQUIRED
------	-----------------------------------	----------

mobile iflist

Display the Mobile interfaces.

SYNTAX:

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

where:

intf	The name of the Mobile interface.	OPTIONAL
------	-----------------------------------	----------

mobile simcard

Get a state of the SIM card.

nat Commands

<i>nat config</i>	<i>Modify global NAT configuration.</i>	see page 844
<i>nat flush</i>	<i>Flush current NAT configuration.</i>	see page 845
<i>nat ifconfig</i>	<i>Modify address translation on an IP interface.</i>	see page 846
<i>nat iflist</i>	<i>Display all interfaces.</i>	see page 847
<i>nat mapadd</i>	<i>Add an address mapping to a nat enabled interface.</i>	see page 848
<i>nat mapdelete</i>	<i>Delete an address mapping from a nat enabled interface.</i>	see page 849
<i>nat maplist</i>	<i>Display address mappings.</i>	see page 850
<i>nat tmpladd</i>	<i>Add an address mapping template.</i>	see page 851
<i>nat tmpldelete</i>	<i>Delete an address mapping template.</i>	see page 853
<i>nat tmplinst</i>	<i>Instantiate address mapping templates for a given dynamic address.</i>	see page 854
<i>nat tmplist</i>	<i>Display address mapping templates.</i>	see page 855

nat config

Modify global NAT configuration.

SYNTAX:

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

where:

trace	Enable/disable traces.	OPTIONAL
randomports	Enable/disable randomization of port translations.	OPTIONAL

nat flush

Flush current NAT configuration.

nat ifconfig

Modify address translation on an IP interface.

SYNTAX:

```
nat ifconfig          intf = <{loop|Internet|LocalNetwork}>  
                    translation = <{disabled|enabled|transparent}>
```

where:

intf	The IP interface name.	REQUIRED
translation	Disabled, enabled or transparent address translation.	REQUIRED

nat iflist

Display all interfaces.

nat mapadd

Add an address mapping to a nat enabled interface.

SYNTAX:

```

nat mapadd                               intf = <{loop|Internet|LocalNetwork}>
                                           [type = <{napt|nat}>]
                                           [outside_addr = <ip-range>]
                                           [inside_addr = <ip-range>]
                                           [access_list = <ip-range>]
                                           [foreign_addr = <ip-range>]
                                           [protocol = <{ah|egp|esp|ggp|gre|hmp|icmp|
                                           icmpv6|igmp|pup|rdp|rsvp|tcp|udp|vines|xns-
                                           idp|ipv6|ipip|frag} or number>]
                                           [outside_port = <port-range>]
                                           [inside_port = <port-range>]
                                           [mode = <{auto|inbound|outbound}>]
                                           [weight = <number{0-255}>]
                                           [status = <{up|down}>]

```

where:

intf	The IP interface name.	REQUIRED
type	The type of mapping.	OPTIONAL
outside_addr	The outside (typically public) IP address (range for NAT).	OPTIONAL
inside_addr	The inside (typically private) IP address (range for NAT).	OPTIONAL
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
protocol	The IP protocol.	OPTIONAL
outside_port	The outside port number or range (only for NAPT).	OPTIONAL
inside_port	The inside port number or range (only for NAPT).	OPTIONAL
mode	The mode to create the portmap.	OPTIONAL
weight	The weight for the portmap.	OPTIONAL
status	The administrative state of mapping.	OPTIONAL

nat mapdelete

Delete an address mapping from a nat enabled interface.

SYNTAX:

```
nat mapdelete          intf = <{loop|Internet|LocalNetwork}>
                       index = <number>
```

where:

intf	The IP interface name.	REQUIRED
index	The map index as listed by ':nat maplist'.	REQUIRED

nat maplist

Display address mappings.

SYNTAX:

```
nat maplist [intf = <{loop|Internet|LocalNetwork}>]
            [expand = <{disabled|enabled}>]
```

where:

intf	The IP interface name.	OPTIONAL
expand	Expanded listing.	OPTIONAL

nat tmladd

Add an address mapping template.

SYNTAX:

```

nat tmladd [intf = <{loop|Internet|LocalNetwork}>]
           [group = <{wan|local|lan|tunnel|dmz|guest} or
           number>]
           [timeout = <number{0-65535}>]
           [type = <{napt|nat}>]
           outside_addr = <ip-range>
           [inside_addr = <ip-range>]
           [access_list = <ip-range>]
           [foreign_addr = <ip-range>]
           [protocol = <{ah|egp|esp|gpp|gre|hmp|icmp|
           icmpv6|igmp|pup|rdp|rsvp|tcp|udp|vines|xns-
           idp|ipv6|ipip|frag} or number>]
           [outside_port = <port-range>]
           [inside_port = <port-range>]
           [mode = <{auto|inbound|outbound}>]
           [weight = <number{0-255}>]
           [status = <{up|down}>]

```

where:

intf	The IP interface name scope for this template.	OPTIONAL
group	The IP interface group scope for this template.	OPTIONAL
timeout	Lifetime (seconds) for this template.	OPTIONAL
type	The type of template.	OPTIONAL
outside_addr	The outside (typically public) IP address or index (range for NAT).	REQUIRED
inside_addr	The inside (typically private) IP address or index (range for NAT).	OPTIONAL
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
protocol	The IP protocol.	OPTIONAL
outside_port	The outside port number or range (only for NAPT).	OPTIONAL
inside_port	The inside port number or range (only for NAPT).	OPTIONAL
mode	The mode to create the portmap.	OPTIONAL
weight	The weight to be used for the template instance(s).	OPTIONAL

status	The administrative state of template.	OPTIONAL
--------	---------------------------------------	----------

nat tmpldelete

Delete an address mapping template.

SYNTAX:

```
nat tmpldelete          index = <number>
```

where:

index	The template index as listed by ':nat tmplist'.	REQUIRED
-------	---	----------

nat tmlinst

Instantiate address mapping templates for a given dynamic address.

SYNTAX:

```
nat tmlinst          intf = <{loop|Internet|LocalNetwork}>
                    addr_index = <ipv4-address>
                    dynamic_addr = <ipv4-address>
```

where:

intf	The IP interface name.	REQUIRED
addr_index	The outside IP address index/key to instantiate for.	REQUIRED
dynamic_addr	The dynamic address to substitute the index/key with.	REQUIRED

nat tmplist

Display address mapping templates.

SYNTAX:

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

where:

expand	Expanded listing.	OPTIONAL
--------	-------------------	----------

ppp Commands

<i>ppp flush</i>	<i>Flush all PPP interfaces.</i>	see page 858
<i>ppp ifadd</i>	<i>Create a new PPP interface.</i>	see page 859
<i>ppp ifattach</i>	<i>Attach a PPP interface.</i>	see page 860
<i>ppp ifconfig</i>	<i>Modify a PPP interface.</i>	see page 861
<i>ppp ifdelete</i>	<i>Delete a PPP interface.</i>	see page 864
<i>ppp ifdetach</i>	<i>Detach a PPP interface.</i>	see page 865
<i>ppp iflist</i>	<i>Display the PPP interfaces.</i>	see page 866
<i>ppp ifscan</i>	<i>Scan a PPP interface for available interfaces.</i>	see page 867
<i>ppp relay flush</i>	<i>Remove all ethernet interfaces from the PPP relay agent list and terminate all</i>	see page 868
<i>ppp relay ifadd</i>	<i>Add an ethernet interface to the PPP relay list.</i>	see page 869
<i>ppp relay ifconfig</i>	<i>Modify an ethernet interface from the PPP relay agent list.</i>	see page 870
<i>ppp relay ifdelete</i>	<i>Delete an ethernet interface from the PPP relay agent list.</i>	see page 871
<i>ppp relay iflist</i>	<i>Display all ethernet interfaces added to the PPP relay agent list.</i>	see page 872
<i>ppp relay sesslist</i>	<i>Display all active PPP relay sessions.</i>	see page 873
<i>ppp rtadd</i>	<i>Add a route to the routing table when PPP link comes up.</i>	see page 874
<i>ppp rtdelete</i>	<i>Delete the route for a PPP link.</i>	see page 875

ppp flush

Flush all PPP interfaces.

ppp ifadd

Create a new PPP interface.

SYNTAX:

```
ppp ifadd                intf = <string>
```

where:

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:

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

where:

intf	The name of the PPP interface.	REQUIRED
------	--------------------------------	----------

ppp ifconfig

Modify a PPP interface.

SYNTAX:

```
ppp ifconfig          intf = <{Internet}>
                    [dest = <{RELAY|eth_ge}>]
                    [user = <string>]
                    [password = <password>]
                    [acname = <quoted string>]
                    [servicename = <quoted string>]
                    [pppoebackoffscale = <number{1-1024}>]
                    [pppoebackofflimit = <number{1-10}>]
                    [ppp-max-payload = <{disabled|enabled}>]
                    [class = <{0|1|2|3|4|5|6|7|8|9|10|11|12|13|14|
                    15}>]
                    [pool = <{none}>]
                    [accomp = <{enabled|disabled|negotiate}>]
                    [trace = <{disabled|enabled}>]
                    [concentrator = <{disabled|enabled}>]
                    [auth = <{pap|chap|auto}>]
                    [restart = <{disabled|enabled}>]
                    [retryinterval = <number{0-65535}>]
                    [passive = <{disabled|enabled}>]
                    [silent = <{disabled|enabled}>]
                    [echotolerance = <number{1-100}>]
                    [echo = <number>]
                    [mru = <number{256-1600}>]
                    [laddr = <ipv4-address>]
                    [raddr = <ipv4-address>]
                    [netmask = <ip-mask(dotted or cidr)>]
                    [format = <{cidr|dotted|none}>]
                    [subnetfirstip = <{disabled|enabled}>]
                    [savepwd = <{disabled|enabled}>]
                    [demanddial = <{disabled|enabled}>]
                    [doddelay = <number{0-3600}>]
                    [primdns = <ipv4-address>]
                    [secdns = <ipv4-address>]
                    [dnsmetric = <number{0-100}>]
                    [idletime = <number{0-1000000}>]
                    [idletrigger = <{RxTx|Rx|Tx}>]
                    [unnumbered = <{disabled|enabled}>]
                    [ipcpstartinterval = <number{0-65535}>]
                    [ipv6cpstartinterval = <number{0-65535}>]
                    [ipv4 = <{disabled|enabled}>]
                    [ipv6 = <{disabled|enabled}>]
                    [lintfid6 = <ipv6-address>]
                    [rintfid6 = <ipv6-address>]
                    [gracefulrestart = <{disabled|enabled}>]
```

where:

intf	The name of the PPP interface to configure.	REQUIRED
dest	The destination interface for this PPP interface.	OPTIONAL
user	The username for remote PAP/CHAP authentication.	OPTIONAL
password	The password for remote PAP/CHAP authentication.	OPTIONAL
acname	The access concentrator name for a PPP session.	OPTIONAL
servicename	The service name for a PPP session.	OPTIONAL
pppoebackoffscale	The pppoe exponential backoff scale for a PPP session.	OPTIONAL
pppoebackofflimit	The pppoe exponential backoff limit for a PPP session.	OPTIONAL
ppp-max-payload	Enable/Disable the use of the PPPoE ppp-max-payload tag.	OPTIONAL
class	The prio class of the PPP packets.	OPTIONAL
pool	Acquire IP subnet and assign it to a free DHCP pool.	OPTIONAL
accomp	Try to negotiate PPP address & control field compression (LCP ACCOMP).	OPTIONAL
trace	Enable verbose console logging.	OPTIONAL
concentrator	The access concentrator is on this side of the PPP connection.	OPTIONAL
auth	Authentication protocol to be used.	OPTIONAL
restart	Automatically restart when LCP link goes down.	OPTIONAL
retryinterval	The number of seconds between retries.	OPTIONAL
passive	When LCP times out, put link in a listening state.	OPTIONAL
silent	Do not send anything at startup, just listen for incoming LCP messages.	OPTIONAL
echotolerance	Number of failed LCP echo requests needed to trigger a link failure.	OPTIONAL
echo	LCP echo request interval.	OPTIONAL
mru	Negotiate maximum packet size we can handle.	OPTIONAL
laddr	Negotiate this IP address at our side of the link.	OPTIONAL
raddr	Negotiate this IP address at remote side of the link.	OPTIONAL
netmask	Negotiate IP subnet mask at remote side of the link.	OPTIONAL
format	The format used to represent the IP subnet.	OPTIONAL
subnetfirstip	Take the first ip address out of the received IP as local address.	OPTIONAL

savepwd	Select whether or not password is saved.	OPTIONAL
demanddial	Enable dial-on-demand feature. Nothing happens until packets are sent to this PPP interface.	OPTIONAL
doddelay	During this initial interval (seconds) packets do not trigger PPP interface.	OPTIONAL
primdns	Negotiate this IP address as primary DNS server.	OPTIONAL
secdns	Negotiate this IP address as secondary DNS server.	OPTIONAL
dnsmetric	DNS route metric to be used for the negotiated DNS servers.	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
unnumbered	Take local IP address from 'laddr' field and remote IP address from the pool. SVC only.	OPTIONAL
ipcprestartinterval	The number of seconds between ipcp restarts.	OPTIONAL
ipv6cprestartinterval	The number of seconds between ipv6cp restarts.	OPTIONAL
ipv4	Enable ipcp.	OPTIONAL
ipv6	Enable ipv6cp.	OPTIONAL
lintfid6	The 64 bit ipv6 local interface identifier.	OPTIONAL
rintfid6	The 64 bit ipv6 remote interface identifier.	OPTIONAL
gracefulrestart	Send LCP termination request before establishing new PPP link	OPTIONAL

ppp ifdelete

Delete a PPP interface.

SYNTAX:

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

where:

intf	The name of the PPP interface.	REQUIRED
------	--------------------------------	----------

ppp ifdetach

Detach a PPP interface.

SYNTAX:

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

where:

intf	The name of the PPP interface.	REQUIRED
------	--------------------------------	----------

ppp iflist

Display the PPP interfaces.

SYNTAX:

```
ppp iflist [intf = <{Interface}>]
```

where:

intf	The name of a PPP interface.	OPTIONAL
------	------------------------------	----------

ppp ifscan

Scan a PPP interface for available interfaces.

SYNTAX:

```
ppp ifscan                intf = <{Internet}>  
                          [time = <number{0-36000}>]
```

where:

intf	The name of the PPP interface to scan.	REQUIRED
time	The time to scan for services (in seconds).	OPTIONAL

ppp relay flush

Remove all ethernet interfaces from the PPP relay agent list and terminate all

ppp relay ifadd

Add an ethernet interface to the PPP relay list.

SYNTAX:

```
ppp relay ifadd          intf = <{eth_ge}>
```

where:

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:

```
ppp relay ifconfig          intf = <{bridge|ethoa_8_35}>
                           hwaddr = <hardware-address>
```

where:

intf	The ethernet intf to be added to the PPP relay agent list.	REQUIRED
hwaddr	The hardware address (e.g. Ethernet MAC address) of this interface.	REQUIRED

ppp relay ifdelete

Delete an ethernet interface from the PPP relay agent list.

SYNTAX:

```
ppp relay ifdelete          intf = <{bridge|ethoa_8_35}>
```

where:

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.

ppp relay sesslist

Display all active PPP relay sessions.

ppp rtadd

Add a route to the routing table when PPP link comes up.

SYNTAX:

```
ppp rtadd                intf = <{Internet}>
                        dst = <ipv4-address>
                        [dstmsk = <ip-mask(dotted or cidr)>]
                        [label = <{None|Interactive|Local|Management|
SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|VoIP-Signal|
default}>]
                        [src = <ipv4-address>]
                        [srcmsk = <ip-mask(dotted or cidr)>]
                        [metric = <number{0-100}>]
```

where:

intf	The name of a PPP interface.	REQUIRED
dst	The IP destination address specification for the route to be added when the link comes up.	REQUIRED
dstmsk	The IP destination mask. Special values : 1 = remote net; 32 = remote host;	OPTIONAL
label	The name of the label.	OPTIONAL
src	The IP source address specification. i.e. who can use this link.	OPTIONAL
srcmsk	The IP source mask.	OPTIONAL
metric	The route metric.	OPTIONAL

ppp rtdelete

Delete the route for a PPP link.

SYNTAX:

```
ppp rtdelete          intf = <{Internet}>
```

where:

intf	The PPP interface name for which to delete the route settings.	REQUIRED
------	--	----------

pptp Commands

<i>pptp flush</i>	<i>Flushes the PPTP configuration.</i>	see page 878
<i>pptp ifadd</i>	<i>Adds a PPTP profile (backwards compatible with previous release, use profiles)</i>	see page 879
<i>pptp list</i>	<i>Shows PPTP configuration.</i>	see page 880
<i>pptp profadd</i>	<i>Defines a new PPTP profile.</i>	see page 881
<i>pptp profdelete</i>	<i>Deletes a PPTP profile.</i>	see page 882
<i>pptp proflist</i>	<i>Lists PPTP profiles.</i>	see page 883

pptp flush

Flushes the PPTP configuration.

pptp ifadd

Adds a PPTP profile (backwards compatible with previous release, use profiles

SYNTAX:

```
pptp ifadd                dest = <string>
                          [rate = <number{10-10000}>]
                          [encaps = <{vcmux|nlpid}>]
                          [ac = <{never|always|keep}>]
```

where:

dest	The WAN destination for this PPTP tunnel. Typically a phonebook name.	REQUIRED
rate	Transmit speed in kbits/s for the WAN link.	OPTIONAL
encaps	The WAN protocol encapsulation.	OPTIONAL
ac	Enable/disable sending address and control field (0xFF03) on the WAN link.	OPTIONAL

pptp list

Shows PPTP configuration.

pptp profadd

Defines a new PPTP profile.

SYNTAX:

```
pptp profadd          name = <string>
                      [qos = <{default}>]
                      [encaps = <{vcmux|nlpid}>]
                      [ac = <{never|always|keep}>]
```

where:

name	The name for the new PPTP profile.	REQUIRED
qos	The name of the qosbook entry, containing the settings for this profile.	OPTIONAL
encaps	The WAN protocol encapsulation to be used with this profile.	OPTIONAL
ac	Enable/disable sending address and control field (0xFF03) on the WAN link.	OPTIONAL

pptp profdelete

Deletes a PPTP profile.

SYNTAX:

```
pptp profdelete name = <>
```

where:

name	The name of the profile to delete.	REQUIRED
------	------------------------------------	----------

pptp proflist

Lists PPTP profiles.

printersharing Commands

<i>printersharing LPD config</i>	<i>To enable/disable LPD service.</i>	see page 886
<i>printersharing LPD list</i>	<i>To display LPD service context.</i>	see page 887
<i>printersharing LPD queue add</i>	<i>Add an option.</i>	see page 888
<i>printersharing LPD queue delete</i>	<i>Delete an option.</i>	see page 889
<i>printersharing LPD queue list</i>	<i>List all options.</i>	see page 890

printersharing LPD config

To enable/disable LPD service.

SYNTAX:

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

where:

state	Enabled/disabled LPD printer service.	OPTIONAL
-------	---------------------------------------	----------

printersharing LPD list

To display LPD service context.

printersharing LPD queue add

Add an option.

SYNTAX:

```
printersharing LPD queue add    name = <string>
                                [type = <{Feed|Raw}>]
                                [default = <{no|yes}>]
```

where:

name	LPD queue name.	REQUIRED
type	Queue Type	OPTIONAL
default	Set default queue	OPTIONAL

printersharing LPD queue delete

Delete an option.

SYNTAX:

```
printersharing LPD queue      name = <string>
delete
```

where:

name	LPD queue name.	REQUIRED
------	-----------------	----------

printersharing LPD queue list

List all options.

ptrace Commands

<i>ptrace action add</i>	<i>Add an action</i>	see page 892
<i>ptrace action delete</i>	<i>Delete an action</i>	see page 893
<i>ptrace action list</i>	<i>List all actions</i>	see page 894
<i>ptrace action modify</i>	<i>Modify an action</i>	see page 895
<i>ptrace add</i>	<i>Add a filter/action pair (=rule)</i>	see page 896
<i>ptrace debug traceconfig</i>	<i>Modify trace configuration</i>	see page 897
<i>ptrace delete</i>	<i>Delete a rule</i>	see page 898
<i>ptrace filter add</i>	<i>Add a filter</i>	see page 899
<i>ptrace filter delete</i>	<i>Delete a filter</i>	see page 900
<i>ptrace filter list</i>	<i>List all filters</i>	see page 901
<i>ptrace filter modify</i>	<i>Modify a filter</i>	see page 902
<i>ptrace flush</i>	<i>Flush all settings</i>	see page 903
<i>ptrace list</i>	<i>List all rules</i>	see page 904
<i>ptrace modify</i>	<i>Modify a rule</i>	see page 905

ptrace action add

Add an action

SYNTAX:

```
ptrace action add name = <string>
```

where:

name	Action name	REQUIRED
------	-------------	----------

ptrace action delete

Delete an action

SYNTAX:

```
ptrace action delete          name = <>
```

where:

name	Action name	REQUIRED
------	-------------	----------

ptrace action list

List all actions

ptrace action modify

Modify an action

SYNTAX:

```
ptrace action modify      name = <>
                          type = <{dump|mirror|}>
                          intf = <{}>
                          len = <number>
```

where:

name	Action name	REQUIRED
type	Action type	REQUIRED
intf	Device on which to mirror frames	REQUIRED
len	Nbr of bytes to dump	REQUIRED

ptrace add

Add a filter/action pair (=rule)

SYNTAX:

```
ptrace add          name = <string>
                   filter = <>
                   action = <>
```

where:

name	Rule name	REQUIRED
filter	Filter	REQUIRED
action	Action	REQUIRED

ptrace debug traceconfig

Modify trace configuration

SYNTAX:

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

where:

state	Enable/Disable tracing.	OPTIONAL
-------	-------------------------	----------

ptrace delete

Delete a rule

SYNTAX:

```
ptrace delete name = <>
```

where:

name	Rule name	REQUIRED
------	-----------	----------

ptrace filter add

Add a filter

SYNTAX:

```
ptrace filter add name = <string>
```

where:

name	Filter name	REQUIRED
------	-------------	----------

ptrace filter delete

Delete a filter

SYNTAX:

```
ptrace filter delete          name = <>
```

where:

name	Filter name	REQUIRED
------	-------------	----------

ptrace filter list

List all filters

ptrace filter modify

Modify a filter

SYNTAX:

```
ptrace filter modify          name = <>
                             intf = <{bridge|OBC|ethport1|RELAY|ethport2|
                             ethport3|ethport4|WLAN|virt|ethoa_8_35|
                             eth_ge}>
```

where:

name	Filter name	REQUIRED
intf	Interface on which to trace frames	REQUIRED

ptrace flush

Flush all settings

ptrace list

List all rules

ptrace modify

Modify a rule

SYNTAX:

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

where:

name	Rule name	REQUIRED
state	Rule enable/disable	OPTIONAL

pwr Commands

<i>pwr config</i>	<i>Modify/Display ECO-manager configuration</i>	see page 908
<i>pwr debug traceconfig</i>	<i>Enable/disable the ECO manager traces</i>	see page 909
<i>pwr wlan-pwr-options</i>	<i>Modify/Display the WLAN power control options</i>	see page 910

pwr config

Modify/Display ECO-manager configuration

SYNTAX:

```
pwr config [eco-manager = <{disabled|enabled}>]
           [cpu-microsleep = <{disabled|enabled}>]
           [cpu-lowspeed = <{disabled|enabled}>]
           [usb-controller = <{disabled|enabled}>]
           [wlan-pwrcontrol = <{disabled|enabled}>]
           [eth-phy = <{disabled|enabled}>]
```

where:

eco-manager	(Enables / Disables the ECO-manager).	OPTIONAL
cpu-microsleep	(Allows the CPU to use low power instructions).	OPTIONAL
cpu-lowspeed	(Allows the CPU to adjust its internal clock).	OPTIONAL
usb-controller	(Enables / Disables the USB-Controller)	OPTIONAL
wlan-pwrcontrol	(Enables / Disables Wireless LAN (WLAN) power control).	OPTIONAL
eth-phy	(Enables / Disables the Ethernet Phy power control)	OPTIONAL

pwr debug traceconfig

Enable/disable the ECO manager traces

SYNTAX:

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

where:

state	enable/disable the ECO manager traces	OPTIONAL
-------	---------------------------------------	----------

pwr wlan-pwr-options

Modify/Display the WLAN power control options

SYNTAX:

```
pwr wlan-pwr-options          [t-on = <number{1-600}>]
                               [t-off = <number{1-600}>]
                               [t-ext = <number{1-600}>]
                               [slow-radio-toggle = <{disabled|enabled}>]
                               [fast-radio-toggle = <{disabled|enabled}>]
                               [single-rxchain = <{disabled|enabled}>]
```

where:

t-on	Slow toggle on-time (s)	OPTIONAL
t-off	Slow toggle off-time(s)	OPTIONAL
t-ext	Slow toggle on-time Extension (s)	OPTIONAL
slow-radio-toggle	Slow toggle of radio state	OPTIONAL
fast-radio-toggle	Fast toggle of radio state	OPTIONAL
single-rxchain	Use single rx chain	OPTIONAL

script Commands

<i>script add</i>	<i>Add line to script.</i>	see page 912
<i>script delete</i>	<i>Delete complete script or line from script.</i>	see page 913
<i>script flush</i>	<i>Flush scripts.</i>	see page 914
<i>script list</i>	<i>List script.</i>	see page 915
<i>script run</i>	<i>Run script.</i>	see page 916

script add

Add line to script.

SYNTAX:

```
script add                name = <string>  
                          [index = <number>]  
                          command = <quoted string>
```

where:

name	Name of script.	REQUIRED
index	Line number (0 = add).	OPTIONAL
command	Command.	REQUIRED

script delete

Delete complete script or line from script.

SYNTAX:

```
script delete name = <{autopvc_add_qos|autopvc_delete_qos|
autopvc_add_bridge|autopvc_delete_pppoerelay|
autopvc_add_ipoa|autopvc_delete_ipoa|
autopvc_add_ethoa|autopvc_delete_ethoa|
autopvc_add_pppoa|autopvc_delete_pppoa|
autopvc_add_pppoe|autopvc_delete_pppoe|
autopvc_change_qos|wlbrintfadd|wlbrintfdel}>
[index = <number>]
```

where:

name	Name of script.	REQUIRED
index	Line number.	OPTIONAL

script flush

Flush scripts.

script list

List script.

SYNTAX:

```
script list [name = <{autopvc_add_qos|autopvc_delete_qos|
autopvc_add_bridge|autopvc_delete_pppoerelay|
autopvc_add_ipoa|autopvc_delete_ipoa|
autopvc_add_ethoa|autopvc_delete_ethoa|
autopvc_add_pppoa|autopvc_delete_pppoa|
autopvc_add_pppoe|autopvc_delete_pppoe|
autopvc_change_qos|wlbrintfadd|wlbrintfdel}>]
```

where:

name	Name of script.	OPTIONAL
------	-----------------	----------

script run

Run script.

SYNTAX:

```
script run name = <{autopvc_add_qos|autopvc_delete_qos|
autopvc_add_bridge|autopvc_delete_pppoerelay|
autopvc_add_ipoa|autopvc_delete_ipoa|
autopvc_add_ethoa|autopvc_delete_ethoa|
autopvc_add_pppoa|autopvc_delete_pppoa|
autopvc_add_pppoe|autopvc_delete_pppoe|
autopvc_change_qos|wlbrintfadd|wlbrintfdel}>
pars = <quoted string>
```

where:

name	Name of script.	REQUIRED
pars	Parameters separated with comma e.q. a,b,c .	REQUIRED

service Commands

<i>service host add</i>	<i>Add a service.</i>	see page 918
<i>service host assign</i>	<i>Assign a service to a host.</i>	see page 919
<i>service host category add</i>	<i>Create/define service category.</i>	see page 920
<i>service host category delete</i>	<i>Delete a service category.</i>	see page 921
<i>service host category list</i>	<i>List the available service categories.</i>	see page 922
<i>service host category rename</i>	<i>Rename a service category.</i>	see page 923
<i>service host delete</i>	<i>Delete a service.</i>	see page 924
<i>service host disable</i>	<i>Disable a service.</i>	see page 925
<i>service host flush</i>	<i>Flush all services.</i>	see page 926
<i>service host list</i>	<i>Display list of services.</i>	see page 927
<i>service host rule add</i>	<i>Create/define service portmap.</i>	see page 928
<i>service host rule delete</i>	<i>Delete a service portmap.</i>	see page 930
<i>service host stats</i>	<i>Service statistics.</i>	see page 932
<i>service host triggerlist</i>	<i>List all triggers.</i>	see page 933
<i>service system ifadd</i>	<i>Add an interface to the access list.</i>	see page 934
<i>service system ifdelete</i>	<i>Delete an interface from the access list.</i>	see page 935
<i>service system ipadd</i>	<i>Add an IP address (range) to the access list.</i>	see page 936
<i>service system ipdelete</i>	<i>Delete an IP address (range) from the access list.</i>	see page 937
<i>service system list</i>	<i>Display services.</i>	see page 938
<i>service system mapadd</i>	<i>Add a port map for a service.</i>	see page 939
<i>service system mapdelete</i>	<i>Delete a port map for a service.</i>	see page 940
<i>service system modify</i>	<i>Modify a service.</i>	see page 941

service host add

Add a service.

SYNTAX:

```
service host add          name = <quoted string>
                          [mode = <{server|client|custom}>]
                          [category = <>]
```

where:

name	The name of the service.	REQUIRED
mode	server, client or custom service ?	OPTIONAL
category	The category to which the service belongs.	OPTIONAL

service host assign

Assign a service to a host.

SYNTAX:

```
service host assign      name = <{AIM Talk|BearShare|BitTorrent|
                        Checkpoint FW1 VPN|Counter Strike|Server
                        (World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail
                        Server (SMTP)|Microsoft Remote Desktop|MSN
                        Game Zone|MSN Game Zone (DX)|NNTPServer|PPTP
                        Server|Secure Shell Server (SSH)|Steam Games|
                        TelnetServer|VNC|Xbox Live}>
                        [host = <ip-address>]
                        [log = <{disabled|enabled}>]
```

where:

name	The name of the service.	REQUIRED
host	The IP address of the host.	OPTIONAL
log	Enable/disable logging.	OPTIONAL

service host category add

Create/define service category.

SYNTAX:

```
service host category add      name = <string>
```

where:

name	The name of the category.	REQUIRED
------	---------------------------	----------

service host category delete

Delete a service category.

SYNTAX:

```
service host category delete    name = <>
```

where:

name	The name of the category.	REQUIRED
------	---------------------------	----------

service host category list

List the available service categories.

service host category rename

Rename a service category.

SYNTAX:

```
service host category rename    name = <>
                                new_name = <string>
```

where:

name	The name of the existing category.	REQUIRED
new_name	The new name of the category.	REQUIRED

service host delete

Delete a service.

SYNTAX:

```
service host delete name = <{AIM Talk|BearShare|BitTorrent|
Checkpoint FW1 VPN|Counter Strike|Server
(World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail
Server (SMTP)|Microsoft Remote Desktop|MSN
Game Zone|MSN Game Zone (DX)|NNTPServer|PPTP
Server|Secure Shell Server (SSH)|Steam Games|
TelnetServer|VNC|Xbox Live}>
```

where:

name	The name of the service.	REQUIRED
------	--------------------------	----------

service host disable

Disable a service.

SYNTAX:

```
service host disable [name = <{AIM Talk|BearShare|BitTorrent|
Checkpoint FW1 VPN|Counter Strike|Server
(World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail
Server (SMTP)|Microsoft Remote Desktop|MSN
Game Zone|MSN Game Zone (DX)|NNTPServer|PPTP
Server|Secure Shell Server (SSH)|Steam Games|
TelnetServer|VNC|Xbox Live}>]
```

where:

name	The name of the service.	OPTIONAL
------	--------------------------	----------

service host flush

Flush all services.

service host list

Display list of services.

SYNTAX:

```
service host list [name = <{AIM Talk|BearShare|BitTorrent|
Checkpoint FW1 VPN|Counter Strike|Server
(World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail
Server (SMTP)|Microsoft Remote Desktop|MSN
Game Zone|MSN Game Zone (DX)|NNTPServer|PPTP
Server|Secure Shell Server (SSH)|Steam Games|
TelnetServer|VNC|Xbox Live}>]
```

where:

name	The name of the service.	OPTIONAL
------	--------------------------	----------

service host rule add

Create/define service portmap.

SYNTAX:

```
service host rule add      name = <{AIM Talk|BearShare|BitTorrent|
                          Checkpoint FW1 VPN|Counter Strike|Server
                          (World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail
                          Server (SMTP)|Microsoft Remote Desktop|MSN
                          Game Zone|MSN Game Zone (DX)|NNTPServer|PPTP
                          Server|Secure Shell Server (SSH)|Steam Games|
                          TelnetServer|VNC|Xbox Live}>
                          [protocol = <{any|tcp|udp}>]
                          [baseport = <{undefined|at-echo|at-nbp|at-
                          rtmp|at-zis|auth|bgp|biff|bootpc|exec|finger|
                          ftp|ftp-data|gopher|h323|httpproxy|ike|ils|
                          imap2|imap3|ingres-net|ipcserv|ipx|irc-o|
                          irc-u|kerberos|ldap|login|netbios-dgm|netbios-
                          ns|netbios-ssn|netwall|netware-ip|new-rwho|
                          nfd|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|sysstat|talk|
                          telnet|time|timed|tftp|ulistserv|utime|uucp|
                          uucp-rlogin|who|www-http|whoami|xwindows} or
                          number>]
                          portrange = <port-range>
                          [triggerport = <{undefined|at-echo|at-nbp|
                          at-rtmp|at-zis|auth|bgp|biff|doom|echo|exec|
                          finger|ftp|ftp-data|gopher|h323|httpproxy|
                          ike|ils|imap2|imap3|ingres-net|ipcserv|ipx|
                          irc-o|irc-u|kerberos|ldap|login|netbios-dgm|
                          netbios-ns|netbios-ssn|netwall|netware-ip|new-
                          rwho|nfd|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|sysstat|talk|
                          telnet|time|timed|tftp|ulistserv|utime|uucp|
                          uucp-rlogin|who|www-http|whoami|xwindows}
                          ornumber>]
                          [triggerprotocol = <{any|tcp|udp}>]
                          [mode = <{inbound|outbound|auto}>]
```

where:

name	The name of the service.	REQUIRED
protocol	Protocol type.	OPTIONAL
baseport	Inbound base port.	OPTIONAL
portrange	The outbound portrange.	REQUIRED
triggerport	Defines outbound trigger port.	OPTIONAL

triggerprotocol	Protocol of the trigger port.	OPTIONAL
mode	Port map mode.	OPTIONAL

service host rule delete

Delete a service portmap.

SYNTAX:

```
service host rule delete      name = <{AIM Talk|BearShare|BitTorrent|
                             Checkpoint FW1 VPN|Counter Strike|Server
                             (World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail
                             Server (SMTP)|Microsoft Remote Desktop|MSN
                             Game Zone|MSN Game Zone (DX)|NNTPServer|PPTP
                             Server|Secure Shell Server (SSH)|Steam Games|
                             TelnetServer|VNC|Xbox Live}>
                             [protocol = <{any|tcp|udp}>]
                             [baseport = <{undefined|at-echo|at-nbp|at-
                             rtmp|at-zis|auth|bgp|biff|bootpc|exec|finger|
                             ftp|ftp-data|gopher|h323|httpproxy|ike|ils|
                             imap2|imap3|ingres-net|ipcserv|ipx|irc-o|
                             irc-u|kerberos|ldap|login|netbios-dgm|netbios-
                             ns|netbios-ssn|netwall|netware-ip|new-rwho|
                             nfd|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|sysstat|talk|
                             telnet|time|timed|tftp|ulistserv|utime|uucp|
                             uucp-rlogin|who|www-http|whoami|xwindows} or
                             number>]
                             portrange = <port-range>
                             [triggerport = <{undefined|at-echo|at-nbp|
                             at-rtmp|at-zis|auth|bgp|biff|doom|echo|exec|
                             finger|ftp|ftp-data|gopher|h323|httpproxy|
                             ike|ils|imap2|imap3|ingres-net|ipcserv|ipx|
                             irc-o|irc-u|kerberos|ldap|login|netbios-dgm|
                             netbios-ns|netbios-ssn|netwall|netware-ip|new-
                             rwho|nfd|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|sysstat|talk|
                             telnet|time|timed|tftp|ulistserv|utime|uucp|
                             uucp-rlogin|who|www-http|whoami|xwindows}
                             ornumber>]
                             [triggerprotocol = <{any|tcp|udp}>]
                             [mode = <{inbound|outbound|auto}>]
```

where:

name	The name of the service.	REQUIRED
protocol	Protocol type.	OPTIONAL
baseport	Inbound base port.	OPTIONAL
portrange	The outbound portrange.	REQUIRED
triggerport	Defines outbound trigger port.	OPTIONAL

triggerprotocol	Protocol of the trigger port.	OPTIONAL
mode	Port map mode.	OPTIONAL

service host stats

Service statistics.

service host triggerlist

List all triggers.

service system ifadd

Add an interface to the access list.

SYNTAX:

```
service system ifadd          name = <{PPTP|HTTP|HTTPS|webservice|
                               FTP|TELNET|RIP-Query|DNS-S|SNMPV3_AGENT|
                               IPv6_REDIR}>
                               [group = <{wan|local|lan|tunnel|dmz|guest} or
                               number>]
                               [intf = <{loop|Internet|LocalNetwork}>]
```

where:

name	The name of the service for this access list.	REQUIRED
group	The interface group for this access list.	OPTIONAL
intf	The interface for this access list.	OPTIONAL

service system ifdelete

Delete an interface from the access list.

SYNTAX:

```
service system ifdelete      name = <{PPTP|HTTP|HTTPS|webservice|
                             FTP|TELNET|RIP-Query|DNS-S|SNMPV3_AGENT|
                             IPv6_REDIR}>
                             [group = <{wan|local|lan|tunnel|dmz|guest} or
                             number>]
                             [intf = <{loop|Internet|LocalNetwork}>]
```

where:

name	The name of the service for this access list.	REQUIRED
group	The interface group for this access list.	OPTIONAL
intf	The interface for this access list.	OPTIONAL

service system ipadd

Add an IP address (range) to the access list.

SYNTAX:

```
service system ipadd          name = <{PPTP|HTTP|HTTPS|webservice|
                               FTP|TELNET|RIP-Query|DNS-S|SNMPV3_AGENT|
                               IPv6_REDIR}>
                               ip = <ip-range>
```

where:

name	The name of the service for this access list.	REQUIRED
ip	The IP address (range) for this access list.	REQUIRED

service system ipdelete

Delete an IP address (range) from the access list.

SYNTAX:

```
service system ipdelete      name = <{PPTP|HTTP|HTTPS|webservice|
                             FTP|TELNET|RIP-Query|DNS-S|SNMPV3_AGENT|
                             IPv6_REDIR}>
                             ip = <ip-range>
```

where:

name	The name of the service for this access list.	REQUIRED
ip	The IP address (range) for this access list.	REQUIRED

service system list

Display services.

SYNTAX:

```
service system list [name = <{Remote-MBus | PPTP | PPTPD | PPTPGRE |
SNTP | SNTP-S | SLA_ICMP_PING | C | FTP | TELNET |
RIP | RIP-Query | IGMP-Proxy | MLD-Proxy | DNS-
S | DNS-S-UDP | DNS-S-TCP | DNS-C | DYNAMIC_DNS |
dyndns | statdns | custom | No-IP | DtDNS | gnudip |
DHCP-S | DHCPv6-S | DHCP-R | DHCPv6-R | DHCPv6-R-
C | DHCPv6-R-SR | DHCP-C | DHCPv6-C | SNMPV3_AGENT |
SNMPV3_TRAPS | MDAP | CWMP-C | CWMP-S | UPGD-C | SSDP |
GRE | IPIP | IP6TO4 | SIP_SERVER | SIP_SERVER_SIG |
SIP_SERVER RTP | VOIP_SIP | VOIP_SIP RTP |
VOIP_SIP_SIG | VOIP_SIP_UDP | VOIP_SIP_TCP |
IP_COMMANDS | ICMP_PING | ICMPv6_PING | SENDTO |
UDP_TRACEROUTE | HTTPPROBE | PING_RESPONDER |
PINGv6_RESP | IP_REDIR | IPv6_MANAGEMENT | MLD |
NDSOL | NDADV | RTSOL | RTADV | IPv6_REDIR}>]
[expand = <{disabled|enabled}>]
[dynamics = <{disabled|enabled}>]
[members = <{disabled|enabled}>]
```

where:

name	The name of the service.	OPTIONAL
expand	Expanded listing.	OPTIONAL
dynamics	Display dynamic services.	OPTIONAL
members	Display service group members.	OPTIONAL

service system mapadd

Add a port map for a service.

SYNTAX:

```
service system mapadd      name = <{PPTP|HTTP|HTTPS|webservice|HTTPI|FTP|
                           TELNET|DNS-S|SNMPV3_AGENT|MDAP|SSDP}>
                           intf = <{loop|Internet|LocalNetwork}>
                           port = <{undefined|at-echo|at-nbp|at-rtmp|at-
                                   zis|auth|bgp|biff|bootpc|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|nfs|nicname|
                                   nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
                                   gotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
                                   snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
                                   sunrpc|syslog|sysstat|talk|telnet|time|timed|
                                   tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-
                                   http|whoami|xwindows} or number>
```

where:

name	The name of the service for this map.	REQUIRED
intf	The interface for this map.	REQUIRED
port	The port for this map.	REQUIRED

service system mapdelete

Delete a port map for a service.

SYNTAX:

```
service system mapdelete      name = <{PPTP|HTTP|HTTPS|webservice|HTTPI|FTP|
                             TELNET|DNS-S|SNMPV3_AGENT|MDAP|SSDP}>
                             intf = <{loop|Internet|LocalNetwork}>
                             port = <{undefined|at-echo|at-nbp|at-rtmp|at-
                                     zis|auth|bgp|biff|bootpc|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|nfs|nicname|
                                     nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
                                     gotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
                                     snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
                                     sunrpc|syslog|sysstat|talk|telnet|time|timed|
                                     tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-
                                     http|whoami|xwindows} or number>
```

where:

name	The name of the service for this map.	REQUIRED
intf	The interface for this map.	REQUIRED
port	The port for this map.	REQUIRED

service system modify

Modify a service.

SYNTAX:

```
service system modify      name = <{Remote-MBus|PPTP|PPTPD|PPTPGRE|SNTP|
                          SNTP-S|SLA_ICMP_PING|C|FTP|TELNET|RIP|IGMP-
                          Proxy|MLD-Proxy|DNS-S|DNS-C|DHCP-S|DHCPv6-S|
                          DHCP-R|DHCPv6-R-C|DHCPv6-R-SR|DHCP-C|DHCPv6-
                          C|SNMPV3_AGENT|SNMPV3_TRAPS|MDAP|CWMP-C|CWMP-
                          S|UPGD-C|SSDP|GRE|IPIP|IP6TO4|SIP_SERVER|
                          SIP_SERVER_SIG|SIP_SERVER_RTP|VOIP_SIP|
                          VOIP_SIP_RTP|VOIP_SIP_SIG|IP_COMMANDS|
                          PING_RESPONDER|PINGv6_RESP|IP_REDIR|
                          IPv6_MANAGEMENT|IPv6_REDIR}>
                          [state = <{disabled|enabled}>]
                          [port = <{undefined|at-echo|at-nbp|at-rtmp|at-
                          zis|auth|bgp|biff|bootpc|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|nfsd|nicname|
                          nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
                          gotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
                          snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
                          sunrpc|syslog|sysstat|talk|telnet|time|timed|
                          tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-
                          http|whoami|xwindows} or number>]
                          [dynportrange = <port-range>]
                          [qoslabel = <{None|Interactive|Local|
                          Management|SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|
                          VoIP-Signal|default}>]
                          [routelabel = <{None|Interactive|Local|
                          Management|SIPS_RTP|SIPS_SIG|Video|VoIP-RTP|
                          VoIP-Signal|default}>]
                          [srcintf = <{loop|Internet|LocalNetwork}>]
                          [log = <{disabled|enabled}>]
                          [forward = <{disabled|enabled}>]
                          [natpmweight = <number{0-255}>]
```

where:

parameter	description	required
name	The name of the service.	REQUIRED
state	Disable/Enable this service.	OPTIONAL
port	The port of the service.	OPTIONAL
dynportrange	The dynamic port range for this service.	OPTIONAL
qoslabel	QOS label for service data.	OPTIONAL
routelabel	Route label for service data.	OPTIONAL

srcintf	The primary IP interface for this service.	OPTIONAL
log	Disable/Enable service logging.	OPTIONAL
forward	Disable/Enable service forwarding.	OPTIONAL
natpweight	The nat portmap weight for this service.	OPTIONAL

snmp Commands

<i>snmp community add</i>	<i>Config an SNMP community string.</i>	see page 946
<i>snmp community delete</i>	<i>Delete an SNMP community string.</i>	see page 947
<i>snmp community flush</i>	<i>Flush all SNMP community strings.</i>	see page 948
<i>snmp community list</i>	<i>List all SNMP community strings.</i>	see page 949
<i>snmp community modify</i>	<i>Modify an SNMP community string.</i>	see page 950
<i>snmp config</i>	<i>Configure global SNMP parameters.</i>	see page 951
<i>snmp context add</i>	<i>Add context name.</i>	see page 952
<i>snmp context delete</i>	<i>Delete context name</i>	see page 953
<i>snmp context flush</i>	<i>Flush context names</i>	see page 954
<i>snmp context list</i>	<i>List context names</i>	see page 955
<i>snmp get</i>	<i>Get from supplied Object Identity. e.g. get ObjectId=1.3.6.1.2.1.1.1.0</i>	see page 956
<i>snmp getnext</i>	<i>GetNext from supplied Object Identity. e.g. getNext ObjectId=1.3.6.1.2.1.1.1.0</i>	see page 957
<i>snmp group add</i>	<i>Add a access group.</i>	see page 958
<i>snmp group delete</i>	<i>Delete access group</i>	see page 959
<i>snmp group flush</i>	<i>Flush access groups</i>	see page 960
<i>snmp group list</i>	<i>List access groups</i>	see page 961
<i>snmp group modify</i>	<i>Modify a access group.</i>	see page 962
<i>snmp notify add</i>	<i>Add notify entry.</i>	see page 963
<i>snmp notify delete</i>	<i>Delete notify entry.</i>	see page 964
<i>snmp notifyfilter add</i>	<i>Add notify filter entry.</i>	see page 965
<i>snmp notifyfilter delete</i>	<i>Delete notify filter entry.</i>	see page 966
<i>snmp notifyfilter flush</i>	<i>Flush notify filter entries.</i>	see page 967
<i>snmp notifyfilter list</i>	<i>List notify filter entries.</i>	see page 968
<i>snmp notifyfilter modify</i>	<i>Modify notify filter entry.</i>	see page 969
<i>snmp notify flush</i>	<i>Flush all notify entries.</i>	see page 970
<i>snmp notify list</i>	<i>List notify entries.</i>	see page 971
<i>snmp notify modify</i>	<i>Modify notify entry.</i>	see page 972

<i>snmp notifyprofile add</i>	<i>Add notify filter profile entry.</i>	see page 973
<i>snmp notifyprofile delete</i>	<i>Delete notify filter profile entry.</i>	see page 974
<i>snmp notifyprofile flush</i>	<i>Flush notify filter profile entries.</i>	see page 975
<i>snmp notifyprofile list</i>	<i>List notify filter profile entries.</i>	see page 976
<i>snmp notifyprofile modify</i>	<i>Modify notify filter profile entry.</i>	see page 977
<i>snmp securitytogroup add</i>	<i>Add user to an access control group.</i>	see page 978
<i>snmp securitytogroup delete</i>	<i>Delete user from an access control group</i>	see page 979
<i>snmp securitytogroup flush</i>	<i>Flush user versus access control group</i>	see page 980
<i>snmp securitytogroup list</i>	<i>List user versus access control group</i>	see page 981
<i>snmp securitytogroup modify</i>	<i>Modify user to an access control group.</i>	see page 982
<i>snmp target add</i>	<i>Add a target address.</i>	see page 983
<i>snmp target delete</i>	<i>Delete a target address.</i>	see page 985
<i>snmp target flush</i>	<i>Flush all target addresses.</i>	see page 986
<i>snmp target list</i>	<i>List all target addresses.</i>	see page 987
<i>snmp target modify</i>	<i>Modify a target address.</i>	see page 988
<i>snmp targetparams add</i>	<i>Add target parameter entry.</i>	see page 990
<i>snmp targetparams delete</i>	<i>Delete target parameter entry.</i>	see page 991
<i>snmp targetparams flush</i>	<i>Flush all target parameters.</i>	see page 992
<i>snmp targetparams list</i>	<i>List target parmeters.</i>	see page 993
<i>snmp targetparams modify</i>	<i>Modify target parameter entry.</i>	see page 994
<i>snmp user add</i>	<i>Add a snmp user.</i>	see page 995
<i>snmp user delete</i>	<i>Delete a snmp user</i>	see page 996
<i>snmp user flush</i>	<i>Flush snmp users</i>	see page 997
<i>snmp user list</i>	<i>List snmp users</i>	see page 998
<i>snmp user modify</i>	<i>Modify a snmp user.</i>	see page 999
<i>snmp view add</i>	<i>Add a view family.</i>	see page 1000
<i>snmp view delete</i>	<i>Delete view family</i>	see page 1001
<i>snmp view flush</i>	<i>Flush view families</i>	see page 1002
<i>snmp view list</i>	<i>List view families</i>	see page 1003
<i>snmp view modify</i>	<i>Modify a view family.</i>	see page 1004

snmp walk

*Walk from supplied Object Identity. e.g. walk
ObjectId=1.3.6.1.2.1.1*

see page 1005

snmp community add

Config an SNMP community string.

SYNTAX:

```
snmp community add          index = <string>
                             securityname = <string>
                             communityname = <password>
                             [context = <{" "}>]
                             [targettag = <string>]
                             [storage = <{other|volatile|nonVolatile|
                             permanent|readOnly}>]
```

where:

index	Configure a human readable string uniquely identifying an entry in the snmpCommunityTable.	REQUIRED
securityname	Configure a security name for this community string.	REQUIRED
communityname	Configure SNMP community string.	REQUIRED
context	Configure a context name.	OPTIONAL
targettag	Configure a string which is used to select a set of entries in the snmpTargetAddrTable for source address checking.	OPTIONAL
storage	Configure the storage type.	OPTIONAL

snmp community delete

Delete an SNMP community string.

SYNTAX:

```
snmp community delete          index = <{ROCommunity}>
```

where:

index	A human readable string uniquely identifying an entry in the snmpCommunityTable.	REQUIRED
-------	--	----------

snmp community flush

Flush all SNMP community strings.

snmp community list

List all SNMP community strings.

snmp community modify

Modify an SNMP community string.

SYNTAX:

```
snmp community modify      index = <{ROCommunity}>
                           [securityname = <string>]
                           [communityname = <password>]
                           [context = <{" "}>]
                           [targettag = <string>]
                           [storage = <{other|volatile|nonVolatile|
                           permanent|readOnly}>]
```

where:

index	A human readable string uniquely identifying an entry in the snmpCommunityTable.	REQUIRED
securityname	Configure a security name for this community string.	OPTIONAL
communityname	Configure SNMP community string.	OPTIONAL
context	Configure a context name.	OPTIONAL
targettag	Configure a string which is used to select a set of entries in the snmpTargetAddrTable for source address checking.	OPTIONAL
storage	Configure the storage type.	OPTIONAL

snmp config

Configure global SNMP parameters.

SYNTAX:

```
snmp config [sysContact = <quoted string>]
            [sysName = <quoted string>]
            [sysLocation = <quoted string>]
            [traps = <{disabled|enabled}>]
```

where:

sysContact	SNMP System Contact	OPTIONAL
sysName	SNMP System Name	OPTIONAL
sysLocation	SNMP System Location	OPTIONAL
traps	Disable or enable sending of SNMP traps.	OPTIONAL

snmp context add

Add context name.

SYNTAX:

```
snmp context add contextname = <string>
```

where:

contextname	Configure context name.	REQUIRED
-------------	-------------------------	----------

snmp context delete

Delete context name

SYNTAX:

```
snmp context delete          contextname = <{ " " }>
```

where:

contextname	Configure the context name to removed from the context list.	REQUIRED
-------------	--	----------

snmp context flush

Flush context names

snmp context list

List context names

snmp get

Get from supplied Object Identity. e.g. get Objectid=1.3.6.1.2.1.1.1.0

SYNTAX:

```
snmp get [objectid = <string>]
```

where:

objectid	Object identity to get from ... must include the instance which is 0 for scalar objects e.g. 1.3.6.1.2.1.1.1.0 or sysDescription.0	OPTIONAL
----------	--	----------

snmp getnext

GetNext from supplied Object Identity. e.g. getNext ObjectId=1.3.6.1.2.1.1.0

SYNTAX:

```
snmp getnext [objectid = <string>]
```

where:

objectid	Object identity to getNext from e.g. .1.3.6.1.2.1.1 system returns sysDescription	OPTIONAL
----------	--	----------

snmp group add

Add a access group.

SYNTAX:

```
snmp group add          groupname = <string>
                        [contextname = <{" "}>]
                        securitymodel = <{snmpv1|snmpv2c|usm}>
                        securitylevel = <{noAuthNoPriv|authNoPriv|
                        authPriv}>
                        [readview = <{V1View|View_all|basic_readview|
                        WanAdmin_readview|extended_readview|
                        WanAdmin_writeview|extended_writeview}>]
                        [writeview = <{V1View|View_all|basic_readview|
                        WanAdmin_readview|extended_readview|
                        WanAdmin_writeview|extended_writeview}>]
                        [notifyview = <{V1View|View_all|
                        basic_readview|WanAdmin_readview|
                        extended_readview|WanAdmin_writeview|
                        extended_writeview}>]
                        [storage = <{other|volatile|nonVolatile|
                        permanent|readOnly}>]
```

where:

groupname	Configure a human readable string representing a name of a group.	REQUIRED
contextname	Configure a context name used to match the context name in a management request.	OPTIONAL
securitymodel	Configure the security model for this access control group.	REQUIRED
securitylevel	Configure the security level for this access control group.	REQUIRED
readview	Configure a view name identifying the view subtrees accessible for read requests.	OPTIONAL
writeview	Configure a view name identifying the view subtrees accessible for write requests.	OPTIONAL
notifyview	Configure a view name identifying the view subtrees from which objects can be included in notifications.	OPTIONAL
storage	Configure the storage type.	OPTIONAL

snmp group delete

Delete access group

SYNTAX:

```
snmp group delete          groupname = <{SU_Group|V1ROGroup|V1RWGroup|
                           Basic_Group|Extended_Group|WanAdmin_Group}>
                           [contextname = <{" ">]
                           securitymodel = <{snmpv1|snmpv2c|usm}>
                           securitylevel = <{noAuthNoPriv|authNoPriv|
                           authPriv}>
```

where:

groupname	Configure a name of a group.	REQUIRED
contextname	Configure a context name.	OPTIONAL
securitymodel	Configure the security model of the access control group to be deleted.	REQUIRED
securitylevel	Configure the security level of the access control group to be deleted.	REQUIRED

snmp group flush

Flush access groups

snmp group list

List access groups

snmp group modify

Modify a access group.

SYNTAX:

```
snmp group modify          groupname = <{SU_Group|V1ROGroup|V1RWGroup|
                          Basic_Group|Extended_Group|WanAdmin_Group}>
                          [contextname = <{" "}>]
                          securitymodel = <{snmpv1|snmpv2c|usm}>
                          securitylevel = <{noAuthNoPriv|authNoPriv|
                          authPriv}>
                          [readview = <{V1View|View_all|basic_readview|
                          WanAdmin_readview|extended_readview|
                          WanAdmin_writeview|extended_writeview}>]
                          [writeview = <{V1View|View_all|basic_readview|
                          WanAdmin_readview|extended_readview|
                          WanAdmin_writeview|extended_writeview}>]
                          [notifyview = <{V1View|View_all|
                          basic_readview|WanAdmin_readview|
                          extended_readview|WanAdmin_writeview|
                          extended_writeview}>]
                          [storage = <{other|volatile|nonVolatile|
                          permanent|readOnly}>]
```

where:

groupname	Configure a name of an access control group.	REQUIRED
contextname	Configure a context name used to match the context name in a management request.	OPTIONAL
securitymodel	Configure the security model of the access control group to be modified.	REQUIRED
securitylevel	Configure the security level of the access control group to be modified.	REQUIRED
readview	Configure a view name identifying the view subtrees accessible for read requests.	OPTIONAL
writeview	Configure a view name identifying the view subtrees accessible for write requests.	OPTIONAL
notifyview	Configure a view name identifying the view subtrees from which objects can be included in notifications.	OPTIONAL
storage	Configure the storage type.	OPTIONAL

snmp notify add

Add notify entry.

SYNTAX:

```
snmp notify add          name = <string>
                        tag = <string>
                        [type = <{trap|inform}>]
                        [storage = <{other|volatile|nonVolatile|
                        permanent|readOnly}>]
```

where:

name	Configure a human readable string representing the name of this notification.	REQUIRED
tag	Configure a human readable string that is used to select a set of entries in the snmpTargetAddrTable	REQUIRED
type	Configure the notify type.	OPTIONAL
storage	Configure the storage type.	OPTIONAL

snmp notify delete

Delete notify entry.

SYNTAX:

```
snmp notify delete          name = <{V1Trap}>
```

where:

name	Delete a snmp notify entry.	REQUIRED
------	-----------------------------	----------

snmp notifyfilter add

Add notify filter entry.

SYNTAX:

```
snmp notifyfilter add      profilename = <string>
                           subtree = <string>
                           [mask = <string>]
                           [type = <{include|exclude}>]
                           [storage = <{other|volatile|nonVolatile|
                           permanent|readOnly}>]
```

where:

profilename	Configure a human readable string representing the name of this notification filter.	REQUIRED
subtree	Configure an object identifier which specifies the MIB subtree containing the notifications objects to be filtered.	REQUIRED
mask	Configure a hexadecimal bitmask (i.e ff:a0) which, in combination with the corresponding object identifier of the subtree is used for masking out parts of the filter. Each bit of the mask is matched against the corresponding subidentifier of the subtree. If there are more bits in the mask than subidentifiers in the subtree, the excess least significant bits of the mask are ignored. If there are fewer bits in the mask than subidentifiers in the subtree, the mask is extended, from the least- significant side, with 1's to be the required length. If the mask bit is 1, the subidentifier is used; if the mask bit is 0, then the corresponding subidentifier position is treated as 'wildcard' in which any value may appear.	OPTIONAL
type	Indicate whether the subtree defined by this entry is include or exclude from a filter.	OPTIONAL
storage	Configure the storage type.	OPTIONAL

snmp notifyfilter delete

Delete notify filter entry.

SYNTAX:

```
snmp notifyfilter delete      profilename = <>
                               subtree = <>
```

where:

profilename	Configure the name of a notify filter to be deleted.	REQUIRED
subtree	Configure the MIB subtree which identifies the entry to be deleted.	REQUIRED

snmp notifyfilter flush

Flush notify filter entries.

snmp notifyfilter list

List notify filter entries.

snmp notifyfilter modify

Modify notify filter entry.

SYNTAX:

```
snmp notifyfilter modify      profilename = <>
                              subtree = <>
                              [mask = <string>]
                              [type = <{include|exclude}>]
                              [storage = <{other|volatile|nonVolatile|
                              permanent|readOnly}>]
```

where:

profilename	Configure a human readable string representing the name of this notification filter.	REQUIRED
subtree	Configure an object identifier which specifies the MIB subtree containing the notifications objects to be filtered.	REQUIRED
mask	Configure a hexadecimal bitmask (i.e ff:a0) which, in combination with the corresponding object identifier of the subtree is used for masking out parts of the filter. Each bit of the mask is matched against the corresponding subidentifier of the subtree. If there are more bits in the mask than subidentifiers in the subtree, the excess least significant bits of the mask are ignored. If there are fewer bits in the mask than subidentifiers in the subtree, the mask is extended, from the least- significant side, with 1's to be the required length. If the mask bit is 1, the subidentifier is used; if the mask bit is 0, then the corresponding subidentifier position is treated as 'wildcard' in which any value may appear.	OPTIONAL
type	Indicate whether the subtree defined by this entry is include or exclude from a filter.	OPTIONAL
storage	Configure the storage type.	OPTIONAL

snmp notify flush

Flush all notify entries.

snmp notify list

List notify entries.

snmp notify modify

Modify notify entry.

SYNTAX:

```
snmp notify modify          name = <{V1Trap}>
                             [tag = <string>]
                             [type = <{trap|inform}>]
                             [storage = <{other|volatile|nonVolatile|
                             permanent|readOnly}>]
```

where:

name	Configure a human readable string representing the name of this notification.	REQUIRED
tag	Configure a human readable string that is used to select a set of entries in the snmpTargetAddrTable.	OPTIONAL
type	Configure the notify type.	OPTIONAL
storage	Configure the storage type.	OPTIONAL

snmp notifyprofile add

Add notify filter profile entry.

SYNTAX:

```
snmp notifyprofile add      paramname = <{V1Params}>
                           profilename = <>
                           [storage = <{other|volatile|nonVolatile|
                           permanent|readOnly}>]
```

where:

paramname	Configure a name of a target Parameter defined in the snmpTargetParamsTable.	REQUIRED
profilename	Configure a name of a notify filter.	REQUIRED
storage	Configure the storage type.	OPTIONAL

snmp notifyprofile delete

Delete notify filter profile entry.

SYNTAX:

```
snmp notifyprofile delete paramname = <{V1Params}>
```

where:

paramname	Configure a name of a target parameter.	REQUIRED
-----------	---	----------

snmp notifyprofile flush

Flush notify filter profile entries.

snmp notifyprofile list

List notify filter profile entries.

snmp notifyprofile modify

Modify notify filter profile entry.

SYNTAX:

```
snmp notifyprofile modify      paramname = <{V1Params}>
                               [profilename = <>]
                               [storage = <{other|volatile|nonVolatile|
                               permanent|readOnly}>]
```

where:

paramname	Configure a name of a target Parameter defined in the snmpTargetParamsTable.	REQUIRED
profilename	Configure a name of a notify filter.	OPTIONAL
storage	Configure the storage type.	OPTIONAL

snmp securitytogroup add

Add user to an access control group.

SYNTAX:

```
snmp securitytogroup add      securitymodel = <{snmpv1|snmpv2c|usm}>
                              securityname = <{ROCommunity|SU|user|LanAdmin|
                              WanAdmin|PowerUser|TechAdmin|Administrator}>
                              groupname = <{SU_Group|V1ROGroup|V1RWGroup|
                              Basic_Group|Extended_Group|WanAdmin_Group}>
                              [storage = <{other|volatile|nonVolatile|
                              permanent|readOnly}>]
```

where:

securitymodel	Configure a security model.	REQUIRED
securityname	Configure a name of a user.	REQUIRED
groupname	Configure the name of a group to which the user is assigned.	REQUIRED
storage	Configure the storage type.	OPTIONAL

snmp securitytogroup delete

Delete user from an access control group

SYNTAX:

```
snmp securitytogroup delete securitymodel = <{snmpv1|snmpv2c|usm}>
securityname = <{ROCommunity|RWCommunity|SU|
user|LanAdmin|WanAdmin|PowerUser|TechAdmin|
Administrator}>
```

where:

securitymodel	Configure the security model.	REQUIRED
securityname	Configure the name of the user.	REQUIRED

snmp securitytogroup flush

Flush user versus access control group

snmp securitytogroup list

List user versus access control group

snmp securitytogroup modify

Modify user to an access control group.

SYNTAX:

```
snmp securitytogroup modify securitymodel = <{snmpv1|snmpv2c|usm}>
securityname = <{ROCommunity|RWCommunity|SU|
user|LanAdmin|WanAdmin|PowerUser|TechAdmin|
Administrator}>
[groupname = <{SU_Group|V1ROGroup|V1RWGroup|
Basic_Group|Extended_Group|WanAdmin_Group}>]
[storage = <{other|volatile|nonVolatile|
permanent|readOnly}>]
```

where:

securitymodel	Configure the security model.	REQUIRED
securityname	Configure the name of the user.	REQUIRED
groupname	Configure the name of an access group to which the user is assigned.	OPTIONAL
storage	Configure the storage type.	OPTIONAL

snmp target add

Add a target address.

SYNTAX:

```
snmp target add          name = <string>
                        addr = <ipv4-address>
                        [port = <number{0-65535}>]
                        [mask = <ip-mask(dotted or cidr)>]
                        [timeout = <number{0-2147483647}>]
                        [retries = <number{0-255}>]
                        [maxpertime = <number{0-255}>]
                        [windowtime = <number{0-3600}>]
                        [taglist = <quoted string>]
                        [params = <{V1Params}>]
                        [storage = <{other|volatile|nonVolatile|
permanent|readOnly}>]
                        [mms = <number{484-65535}>]
```

where:

name	Configure a human readable string representing the name of this target.	REQUIRED
addr	Configure a valid target IP address.	REQUIRED
port	Configure the target port number.	OPTIONAL
mask	Configure the IP bitfield mask, only applicable in case of source address checking.	OPTIONAL
timeout	Configure the snmp expected maximum round trip time (in hundredths seconds) for communicating with the target address.	OPTIONAL
retries	Configure the number of times the snmp entity will attempt to retransmit an inform when no response is received.	OPTIONAL
maxpertime	Configure the maximum number of notifications that can be sent within a limited time base, defined as window time.	OPTIONAL
windowtime	Configure the time base (in seconds) that limits the number of notifications. A window time of 0 deactivates the trap rate limitation mechanism.	OPTIONAL
taglist	Configure a string containing one or more tags. A tag corresponds to a tag in the usmUserTable, the snmpCommunityTable or the snmpNotifyTable.	OPTIONAL
params	Configure a human readable string that is used to select a set of entries in the snmpTargetParamsTable.	OPTIONAL
storage	Configure the storage type.	OPTIONAL

mms	Configure the maximum message size that can be retransmitted without risk of fragmentation.	OPTIONAL
-----	---	----------

snmp target delete

Delete a target address.

SYNTAX:

```
snmp target delete          name = <>
```

where:

name	Delete a snmp target address.	REQUIRED
------	-------------------------------	----------

snmp target flush

Flush all target addresses.

snmp target list

List all target addresses.

snmp target modify

Modify a target address.

SYNTAX:

```
snmp target modify          name = <>
                             [addr = <ipv4-address>]
                             [port = <number{0-65535}>]
                             [mask = <ip-mask(dotted or cidr)>]
                             [timeout = <number{0-2147483647}>]
                             [retries = <number{0-255}>]
                             [maxpertime = <number{0-255}>]
                             [windowtime = <number{0-3600}>]
                             [taglist = <quoted string>]
                             [params = <{V1Params}>]
                             [storage = <{other|volatile|nonVolatile|
                             permanent|readOnly}>]
                             [mms = <number{484-65535}>]
```

where:

name	Configure a human readable string representing the name of this target.	REQUIRED
addr	Configure a valid target IP address.	OPTIONAL
port	Configure the target port number. Port number 0 defaults to the default snmp trap port.	OPTIONAL
mask	Configure the IP bitfield mask, only applicable in case of source address checking.	OPTIONAL
timeout	Configure the snmp expected maximum round trip time (in hundredths of seconds) for communicating with the target address.	OPTIONAL
retries	Configure the number of times the snmp entity will attempt to retransmit an inform when no response is received.	OPTIONAL
maxpertime	Configure the maximum number of notifications that can be sent within a limited time base, defined as window time.	OPTIONAL
windowtime	Configure the time base (in seconds) that limits the number of notifications. A window time of 0 deactivates the trap rate limitation mechanism.	OPTIONAL
taglist	Configure a string containing one or more tags. A tag corresponds to tag in the usmUserTable, the snmpCommunityTable or the snmpNotifyTable.	OPTIONAL
params	Configure a human readable string that is used to select a set of entries in the snmpTargetParamsTable.	OPTIONAL
storage	Configure the storage type.	OPTIONAL

mms	Configure maximum message size that can be retransmitted without risk of fragmentation.	OPTIONAL
-----	---	----------

snmp targetparams add

Add target parameter entry.

SYNTAX:

```
snmp targetparams add          paramname = <string>
                               [mpmodel = <{v1|v2c|v2u_v2|v3}>]
                               securitymodel = <{snmpv1|snmpv2c|usm}>
                               securityname = <{ROCommunity|SU|user|LanAdmin|
                               WanAdmin|PowerUser|TechAdmin|Administrator}>
                               securitylevel = <{noAuthNoPriv|authNoPriv|
                               authPriv}>
                               [storage = <{other|volatile|nonVolatile|
                               permanent|readOnly}>]
```

where:

paramname	Configure a human readable string representing the name of this parameter.	REQUIRED
mpmodel	Configure the message processing model used to determine the type of notifications to send.	OPTIONAL
securitymodel	Configure the security model used to determine the type of notifications to send.	REQUIRED
securityname	Configure a user name to be used in the notification.	REQUIRED
securitylevel	Configure the security level of the notification to send.	REQUIRED
storage	Configure the storage type.	OPTIONAL

snmp targetparams delete

Delete target parameter entry.

SYNTAX:

```
snmp targetparams delete      paramname = <{V1Params}>
```

where:

paramname	Delete a snmp target paramater.	REQUIRED
-----------	---------------------------------	----------

snmp targetparams flush

Flush all target parameters.

snmp targetparams list

List target parameters.

snmp targetparams modify

Modify target parameter entry.

SYNTAX:

```
snmp targetparams modify      paramname = <{V1Params}>
                               [mpmodel = <{v1|v2c|v2u_v2|v3}>]
                               [securitymodel = <{snmpv1|snmpv2c|usm}>]
                               [securityname = <{ROCommunity|SU|user|
                               LanAdmin|WanAdmin|PowerUser|TechAdmin|
                               Administrator}>]
                               [securitylevel = <{noAuthNoPriv|authNoPriv|
                               authPriv}>]
                               [storage = <{other|volatile|nonVolatile|
                               permanent|readOnly}>]
```

where:

paramname	Configure a human readable string representing the name of this parameter.	REQUIRED
mpmodel	Configure the message processing model used to determine the type of notifications to send.	OPTIONAL
securitymodel	Configure the security model used to determine the type of notifications to send.	OPTIONAL
securityname	Configure a user name to be used in the notification.	OPTIONAL
securitylevel	Configure the security level of the notification to send.	OPTIONAL
storage	Configure the storage type.	OPTIONAL

snmp user add

Add a snmp user.

SYNTAX:

```
snmp user add                securityname = <string>
                             snmpengineID = <string>
                             authprot = <{usmNoAuthProtocol|
                             usmHMACMD5AuthProtocol|
                             usmHMACSHAAuthProtocol}>
                             [authpass = <string>]
                             privprot = <{usmNoPrivProtocol|
                             usmDESPrivProtocol|usmAESCfb128PrivProtocol|
                             usmAESCfb192PrivProtocol|
                             usmAESCfb256PrivProtocol}>
                             [privpass = <string>]
                             [storage = <{other|volatile|nonVolatile|
                             permanent|readOnly}>]
                             [targettag = <string>]
```

where:

securityname	Configure a human readable string representing the name of a user.	REQUIRED
snmpengineID	Configure the authoritative SNMP engine's administratively-unique identifier, specified as hexadecimal numbers (00-ff) and delimited with colons. Or use the default value 'localSnmpID' to refer to the snmpEngineID of the local SNMP agent.	REQUIRED
authprot	Configure the authentication protocol to be used on behalf of this user.	REQUIRED
authpass	Configure a human readable string representing the user's authentication password. The password will be converted to a key.	OPTIONAL
privprot	Configure the privacy protocol to be used on behalf of this user.	REQUIRED
privpass	Configure a human readable string representing the user's privacy password.	OPTIONAL
storage	Configure the storage type.	OPTIONAL
targettag	Configure a human readable string used to select a set of entries in the snmpTargetAddrTable for source address checking.	OPTIONAL

snmp user delete

Delete a snmp user

SYNTAX:

```
snmp user delete          securityname = <{SU|user|LanAdmin|WanAdmin|
                          PowerUser|TechAdmin|Administrator}>
                          snmpengineID = <string>
```

where:

securityname	Delete an existing snmpv3 user.	REQUIRED
snmpengineID	The authoritative SNMP engine's administratively-unique identifier, specified as hexadecimal numbers (00-ff) and delimited with colons. Or use the default value 'localSnmpID' to refer to the snmpEngineID of the local SNMP agent.	REQUIRED

snmp user flush

Flush snmp users

snmp user list

List snmp users

snmp user modify

Modify a snmp user.

SYNTAX:

```
snmp user modify          securityname = <{SU|user|LanAdmin|WanAdmin|
                          PowerUser|TechAdmin|Administrator}>
                          snmpengineID = <string>
                          [authprot = <{usmNoAuthProtocol|
                          usmHMACMD5AuthProtocol|
                          usmHMACSHAAuthProtocol}>]
                          [authpass = <string>]
                          [privprot = <{usmNoPrivProtocol|
                          usmDESPrivProtocol|usmAESCfb128PrivProtocol|
                          usmAESCfb192PrivProtocol|
                          usmAESCfb256PrivProtocol}>]
                          [privpass = <string>]
                          [storage = <{other|volatile|nonVolatile|
                          permanent|readOnly}>]
                          [targettag = <string>]
```

where:

securityname	Configure a human readable string representing the name of a user.	REQUIRED
snmpengineID	Configure the authoritative SNMP engine's administratively-unique identifier, specified as hexadecimal numbers (00-ff) and delimited with colons. Or use the default value 'localSnmpID' to refer to the snmpEngineID of the local SNMP agent.	REQUIRED
authprot	Configure the authentication protocol to be used on behalf of this user.	OPTIONAL
authpass	Configure a human readable string representing the user's authentication password. The password will be converted to a key.	OPTIONAL
privprot	Configure the privacy protocol to be used on behalf of this user.	OPTIONAL
privpass	Configure privacy password.	OPTIONAL
storage	Configure the storage type.	OPTIONAL
targettag	Configure a human readable string used to select a set of entries in the snmpTargetAddrTable for source address checking.	OPTIONAL

snmp view add

Add a view family.

SYNTAX:

```
snmp view add          viewname = <{V1View|View_all|basic_readview|
                        WanAdmin_readview|extended_readview|
                        WanAdmin_writeview|extended_writeview}>
                        viewtree = <string>
                        type = <{include|exclude}>
                        [storage = <{other|volatile|nonVolatile|
                        permanent|readOnly}>]
```

where:

viewname	Configure a human readable string representing the name of this family of view subtrees.	REQUIRED
viewtree	Configure an object identifier that identifies a subtree of the MIB.	REQUIRED
type	Indicate whether the subtree is explicitly accessible or not in this family of view subtrees.	REQUIRED
storage	Configure the storage type.	OPTIONAL

snmp view delete

Delete view family

SYNTAX:

```
snmp view delete          viewname = <{V1View|View_all|basic_readview|
                          WanAdmin_readview|extended_readview|
                          WanAdmin_writeview|extended_writeview}>
                          viewtree = <string>
```

where:

viewname	Configure the name of the family of view subtrees of which an entry is to be deleted.	REQUIRED
viewtree	Configure the object Identifier of a subtree of the MIB which is to be deleted from this family of view subtrees.	REQUIRED

snmp view flush

Flush view families

snmp view list

List view families

SYNTAX:

```
snmp view list [viewname = <{V1View|View_all|basic_readview|
WanAdmin_readview|extended_readview|
WanAdmin_writeview|extended_writeview}>]
```

where:

viewname	Configure the name of the family of view subtrees to show.	OPTIONAL
----------	--	----------

snmp view modify

Modify a view family.

SYNTAX:

```
snmp view modify          viewname = <{V1View|View_all|basic_readview|
                          WanAdmin_readview|extended_readview|
                          WanAdmin_writeview|extended_writeview}>
                          viewtree = <string>
                          [type = <{include|exclude}>]
                          [storage = <{other|volatile|nonVolatile|
                          permanent|readOnly}>]
```

where:

viewname	Configure the name of this family of view subtrees.	REQUIRED
viewtree	Configure an object identifier that identifies a subtree of a MIB.	REQUIRED
type	Indicate whether the subtree is explicitly accessible or not in this family of view subtrees.	OPTIONAL
storage	Configure the storage type.	OPTIONAL

snmp walk

Walk from supplied Object Identity. e.g. walk ObjectId=1.3.6.1.2.1.1

SYNTAX:

```
snmp walk [objectid = <string>]
```

where:

objectid	Object identity to walk from e.g. .1.3.6.1.2.1.1 system walks the system group	OPTIONAL
----------	--	----------

sntp Commands

<i>sntp add</i>	<i>Add NTP server</i>	see page 1008
<i>sntp config</i>	<i>Modify/Display configuration</i>	see page 1009
<i>sntp debug traceconfig</i>	<i>Modify SNTP client trace configuration</i>	see page 1010
<i>sntp delete</i>	<i>Delete NTP server from list</i>	see page 1011
<i>sntp flush</i>	<i>Flush NTP server list and SNTP client configuration</i>	see page 1012
<i>sntp list</i>	<i>List the NTP servers</i>	see page 1013
<i>sntp Server config</i>	<i>Modify/Display SNTP Server configuration</i>	see page 1014

sntp add

Add NTP server

SYNTAX:

```
sntp add [addr = <ipv4-address>]
         [name = <string>]
         [version = <number{1-4}>]
```

where:

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:

```
sntp config [state = <{enabled|disabled}>]
            [poll = <number{1-10080}>]
            [pollpresync = <number{1-60}>]
            [wanSubscribe = <{enabled|disabled}>]
```

where:

state	Enable/Disable SNTP client	OPTIONAL
poll	polling interval (1 min, ... ,10080min(=7days))	OPTIONAL
pollpresync	polling interval before first sync (1 min, ... ,60min)	OPTIONAL
wanSubscribe	Enable/Disable subscribe wan connection	OPTIONAL

sntp debug traceconfig

Modify SNTP client trace configuration

SYNTAX:

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

where:

state	Enable/Disable tracing.	OPTIONAL
-------	-------------------------	----------

sntp delete

Delete NTP server from list

SYNTAX:

```
sntp delete [addr = <ipv4-address>]
            [name = <string>]
```

where:

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

sntp list

List the NTP servers

sntp Server config

Modify/Display SNTP Server configuration

SYNTAX:

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

where:

state	Enable/Disable SNTP Server.	OPTIONAL
LocalClockSource	Enable/Disable Local clock as source.	OPTIONAL

software Commands

<i>software deletepassive</i>	<i>Delete passive image.</i>	see page 1016
<i>software download</i>	<i>Download parameters.</i>	see page 1017
<i>software duplicate</i>	<i>Duplicate the active firmware (passive = active).</i>	see page 1018
<i>software switchover</i>	<i>Switch from active to passive firmware & reboot.</i>	see page 1019
<i>software upgrade</i>	<i>Force the gateway into LAN upgrade mode (Ctrl-BOOTP).</i>	see page 1020
<i>software version</i>	<i>Display the software version.</i>	see page 1021

software deletepassive

Delete passive image.

software download

Download parameters.

SYNTAX:

```
software download          filetype = <{firmware}>
                          url = <string>
                          [username = <string>]
                          [password = <string>]
                          [filesize = <string>]
                          [targetfilename = <string>]
```

where:

filetype	The type of the file to be downloaded.	REQUIRED
url	Set the HTTP URL where the file is to be found including remote filename.	REQUIRED
username	Set the name to be used to authenticate to the download server.	OPTIONAL
password	Set the password to be used to authenticate to the download server.	OPTIONAL
filesize	Set the size of the file to be downloaded.	OPTIONAL
targetfilename	Set the filename used to save the file on the modem.	OPTIONAL

software duplicate

Duplicate the active firmware (passive = active).

software switchover

Switch from active to passive firmware & reboot.

SYNTAX:

```
software switchover [reuseconfig = <{yes|no}>]
```

where:

reuseconfig	Confirm to use the existing configuration.	OPTIONAL
-------------	--	----------

software upgrade

Force the gateway into LAN upgrade mode (Ctrl-BOOTP).

software version

Display the software version.

statecheck Commands

<i>statecheck checkadd</i>	<i>Add a check object.</i>	see page 1024
<i>statecheck checkdelete</i>	<i>Delete a check object.</i>	see page 1025
<i>statecheck config</i>	<i>Configure checkd parameters.</i>	see page 1026
<i>statecheck groupadd</i>	<i>Add a group object.</i>	see page 1027
<i>statecheck groupdelete</i>	<i>Delete a group object.</i>	see page 1028
<i>statecheck list</i>	<i>List checks.</i>	see page 1029
<i>statecheck statecheckadd</i>	<i>Add a statecheck object.</i>	see page 1030
<i>statecheck statecheckdelete</i>	<i>Delete a statecheck object.</i>	see page 1031

statecheck checkadd

Add a check object.

SYNTAX:

```
statecheck checkadd      [statecheck = <{}>]
                        group = <{}>
                        name = <string>
                        object = <string>
                        paramname = <string>
                        paramtype = <{string|uint|bool}>
                        [paramop = <{and|or|single}>]
                        matchtype = <{equal|differ|statdelta}>
                        match = <quoted string>
                        [conschecks = <number>]
```

where:

statecheck	The name of the statecheck.	OPTIONAL
group	The name of the group.	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
paramop	The parameter operator type.	OPTIONAL
matchtype	The match type.	REQUIRED
match	The match value.	REQUIRED
conschecks	The number of consecutive checks the result has to be inactive before the inactive parameter changes	OPTIONAL

statecheck checkdelete

Delete a check object.

SYNTAX:

```
statecheck checkdelete      statecheck = <{}>
                             group = <{}>
                             name = <{}>
```

where:

statecheck	The name of the statecheck.	REQUIRED
group	The name of the group.	REQUIRED
name	The name of the check.	REQUIRED

statecheck config

Configure checkd parameters.

SYNTAX:

```
statecheck config      [statecheck = <{ }>]
                      interval = <number>
                      timeout = <number>
                      [groupop = <{and|or}>]
                      [dmtree = <{igd|atomic}>]
```

where:

statecheck	The name of the statecheck.	OPTIONAL
interval	The interval seconds between checks.	REQUIRED
timeout	The Timeout seconds after which checking stops.	REQUIRED
groupop	Group operator type.	OPTIONAL
dmtree	Client type.	OPTIONAL

statecheck groupadd

Add a group object.

SYNTAX:

```
statecheck groupadd      [statecheck = <{}>]
                        name = <string>
                        [checkop = <{and|or}>]
```

where:

statecheck	The name of the statecheck.	OPTIONAL
name	The name of the group.	REQUIRED
checkop	Check operator type.	OPTIONAL

statecheck groupdelete

Delete a group object.

SYNTAX:

```
statecheck groupdelete      statecheck = <{}>
                             name = <{}>
```

where:

statecheck	The name of the statecheck.	REQUIRED
name	The name of the group.	REQUIRED

statecheck list

List checks.

statecheck statecheckadd

Add a statecheck object.

SYNTAX:

```
statecheck statecheckadd      name = <string>
```

where:

name	The name of the statecheck.	REQUIRED
------	-----------------------------	----------

statecheck statecheckdelete

Delete a statecheck object.

SYNTAX:

```
statecheck statecheckdelete statecheck = <{}>
```

where:

statecheck	The name of the statecheck.	REQUIRED
------------	-----------------------------	----------

syslog Commands

<i>syslog config</i>	<i>Set/Display configuration</i>	see page 1034
<i>syslog flush</i>	<i>Flushes syslog rules.</i>	see page 1035
<i>syslog list</i>	<i>List the current syslog configuration</i>	see page 1036
<i>syslog msgbuf flush</i>	<i>Flush all messages in syslog message buffer.</i>	see page 1037
<i>syslog msgbuf send</i>	<i>Send messages to remote syslog server.</i>	see page 1038
<i>syslog msgbuf show</i>	<i>Show messages in the syslog message buffer.</i>	see page 1039
<i>syslog ruleadd</i>	<i>Add a new rule to the syslog configuration.</i>	see page 1040
<i>syslog ruledel</i>	<i>Delete a rule in the syslog configuration</i>	see page 1041

syslog config

Set/Display configuration

SYNTAX:

```
syslog config          [activate = <{disabled|enabled}>]
                      [timeout = <number{0-60}>]
                      [format = <{standard|welf}>]
```

where:

activate	Syslog send to collectors enabled.	OPTIONAL
timeout	Syslog flooding timeout (in secs) to collectors.	OPTIONAL
format	Syslog contents format	OPTIONAL

syslog flush

Flushes syslog rules.

syslog list

List the current syslog configuration

syslog msgbuf flush

Flush all messages in syslog message buffer.

syslog msgbuf send

Send messages to remote syslog server.

SYNTAX:

```
syslog msgbuf send      [fac = <{kern|user|mail|daemon|auth|syslog|
                        lpr|news|uucp|cron|security|ftp|local6|
                        local7}>]
                        [sev = <{emerg|alert|crit|err|warning|notice|
                        info|debug}>]
                        [hist = <{disabled|enabled}>]
                        dest = <ipv4-address>
```

where:

fac	Syslog facility level.	OPTIONAL
sev	Syslog severity level.	OPTIONAL
hist	Syslog display message history (over several bootups)	OPTIONAL
dest	Remote syslog server destination: an ip-address.	REQUIRED

syslog msgbuf show

Show messages in the syslog message buffer.

SYNTAX:

```
syslog msgbuf show [fac = <{kern|user|mail|daemon|auth|syslog|
                    lpr|news|uucp|cron|security|ftp|local6|
                    local7}>]
                    [sev = <{emerg|alert|crit|err|warning|notice|
                    info|debug}>]
                    [hist = <{disabled|enabled}>]
```

where:

fac	Syslog facility level.	OPTIONAL
sev	Syslog severity level.	OPTIONAL
hist	Syslog display message history (over several bootups)	OPTIONAL

syslog ruleadd

Add a new rule to the syslog configuration.

SYNTAX:

```
syslog ruleadd          fac = <{kern|user|mail|daemon|auth|syslog|lpr|
                        news|uucp|cron|security|ftp|local6|local7|all
                        or comma-seperated }>
                        sev = <{emerg|alert|crit|err|warning|notice|
                        info|debug}>
                        dest = <ipv4-address>
```

where:

fac	Syslog rule facility.	REQUIRED
sev	Syslog rule severity.	REQUIRED
dest	Syslog rule destination: an ip-address.	REQUIRED

syslog ruledelete

Delete a rule in the syslog configuration

SYNTAX:

```
syslog ruledelete          rule_index = <number{1-16}>
```

where:

rule_index	Syslog rule index.	REQUIRED
------------	--------------------	----------

system Commands

<i>system config</i>	<i>Set or change system config parameters.</i>	see page 1044
<i>system debug autosave</i>	<i>Autosave debugging commands</i>	see page 1045
<i>system debug cpu</i>	<i>CPU usage statistics</i>	see page 1046
<i>system debug mem</i>	<i>Memory usage statistics</i>	see page 1047
<i>system dst</i>	<i>Set daylight saving values</i>	see page 1048
<i>system flush</i>	<i>Flush system configuration.</i>	see page 1049
<i>system ipc config</i>	<i>IPC configuration</i>	see page 1050
<i>system ra config</i>	<i>Configure remote access parameters.</i>	see page 1051
<i>system ra instadd</i>	<i>Add a remote access instances.</i>	see page 1052
<i>system ra instdelete</i>	<i>Delete remote access instances.</i>	see page 1053
<i>system ra list</i>	<i>List remote access instances.</i>	see page 1054
<i>system ra start</i>	<i>Starts temporary mode.</i>	see page 1055
<i>system ra stop</i>	<i>Stops temporary mode.</i>	see page 1056
<i>system reboot</i>	<i>Reboot the modem.</i>	see page 1057
<i>system reset</i>	<i>Reset to (factory or ISP) defaults: user specific settings will be cleared !</i>	see page 1058
<i>system settime</i>	<i>Set/Get date, time, timezone, daylight savings time, uptime.</i>	see page 1059
<i>system timedreboot</i>	<i>Set or change editing mode timed reboot</i>	see page 1060

system config

Set or change system config parameters.

SYNTAX:

```
system config [upnp = <{disabled|enabled}>]
               [tr64 = <{disabled|enabled}>]
               [tr64sessiontimeout = <number{30-45}>]
               [tr64auth = <{disabled|enabled}>]
               [mdap = <{disabled|enabled}>]
               [led = <{blue|green|red|orange|flash|off}>]
               [resetbutton = <{disabled|enabled}>]
               [defaultconnection = <{loop|Internet|
LocalNetwork}>]
               [autosave = <{enabled|disabled}>]
               [autosavedelay = <number{0-600}>]
               [WANMode = <{ADSL|VDSL|SHDSL|ETH|UMTS}>]
               [WANEthPort = <{ethif1|ethif2|ethif3|ethif4|
ethif5}>]
```

where:

upnp	Enable/Disable upnp discovery	OPTIONAL
tr64	Enable/Disable TR-64 discovery	OPTIONAL
tr64sessiontimeout	TR-64 session timeout value (sec)	OPTIONAL
tr64auth	Enable/Disable TR-64 digest authentication	OPTIONAL
mdap	Enable/Disable mdap discovery	OPTIONAL
led	Set system LED color	OPTIONAL
resetbutton	Enable/Disable reset-to-factory-defaults pushbutton	OPTIONAL
defaultconnection	The name of the default internet connection.	OPTIONAL
autosave	Enable/Disable autosaves	OPTIONAL
autosavedelay	Autosave delay in seconds (0 for immediate save)	OPTIONAL
WANMode	Set autosensing wan mode	OPTIONAL
WANEthPort	Set autosensing eth wan port	OPTIONAL

system debug autosave

Autosave debugging commands

SYNTAX:

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

where:

trace	Enable/Disable autosave traces	OPTIONAL
-------	--------------------------------	----------

system debug cpu

CPU usage statistics

SYNTAX:

```
system debug cpu [delay = <number{1-60}>]
                 [iterations = <number{1-4000000}>]
                 [tasks = <{disabled|enabled}>]
```

where:

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:

```
system debug mem [expand = <{disabled|enabled}>]
```

where:

expand	Dump of /proc/meminfo	OPTIONAL
--------	-----------------------	----------

system dst

Set daylight saving values

SYNTAX:

```
system dst [mode = <{Absolute|Relative}>]
           [startdate = <dd/mm/yyyy>]
           [starttime = <hh:mm:ss>]
           [enddate = <dd/mm/yyyy>]
           [endtime = <hh:mm:ss>]
           [startweekday = <{Sunday|Monday|Tuesday|
Wednesday|Thursday|Friday|Saturday}>]
           [starthour = <number{0-23}>]
           [startweek = <number{1-5}>]
           [startmonth = <number{1-12}>]
           [endweekday = <{Sunday|Monday|Tuesday|
Wednesday|Thursday|Friday|Saturday}>]
           [endhour = <number{0-23}>]
           [endweek = <number{1-5}>]
           [endmonth = <number{1-12}>]
```

where:

mode	Set daylight saving mode	OPTIONAL
startdate	Set the start date of the daylight saving in the absolute mode	OPTIONAL
starttime	Set the start time of the daylight saving in the absolute mode	OPTIONAL
enddate	Set the end date of the daylight saving in the absolute mode	OPTIONAL
endtime	Set the end time of the daylight saving in the absolute mode	OPTIONAL
startweekday	Set the start weekday of the daylight saving in the relative mode	OPTIONAL
starthour	Set the start hour of the daylight saving in the relative mode	OPTIONAL
startweek	Set the start week of the daylight saving in the relative mode	OPTIONAL
startmonth	Set the start month of the daylight saving in the relative mode	OPTIONAL
endweekday	Set the end weekday of the daylight saving in the relative mode	OPTIONAL
endhour	Set the end hour of the daylight saving in the relative mode	OPTIONAL
endweek	Set the end week of the daylight saving in the relative mode	OPTIONAL
endmonth	Set the end month of the daylight saving in the relative mode	OPTIONAL

system flush

Flush system configuration.

system ipc config

IPC configuration

SYNTAX:

```
system ipc config [prio-level = <number{0-255}>]
```

where:

prio-level	IPC priority traffic level	OPTIONAL
------------	----------------------------	----------

system ra config

Configure remote access parameters.

SYNTAX:

```
system ra config          name = <{ }>
                        [state = <{disabled|enabled}>]
                        [secure = <{enabled|disabled}>]
                        [port = <number>]
                        [timeout = <number>]
                        [mode = <{Permanent|Temporary|Schedule}>]
                        [ipintf = <string>]
                        [randompassword = <{enabled|disabled}>]
                        [randomport = <{enabled|disabled}>]
                        [group = <string>]
                        [user = <string>]
                        [todschedule = <string>]
                        [systemservice = <{GUI|webservice}>]
```

where:

name	Instance name	REQUIRED
state	Enable/disable RAD.	OPTIONAL
secure	Use secure mode (https).	OPTIONAL
port	The port number.	OPTIONAL
timeout	The timeout value.	OPTIONAL
mode	Mode Permanent or Temporary.	OPTIONAL
ipintf	The name of the xref to the IP interface.	OPTIONAL
randompassword	Create a random password.	OPTIONAL
randomport	Use a random port.	OPTIONAL
group	The name of the xref to the group keypath.	OPTIONAL
user	The name of the xref to the user keypath.	OPTIONAL
todschedule	The name of the xref to the ToD schedule.	OPTIONAL
systemservice	The system service type.	OPTIONAL

system ra instadd

Add a remote access instances.

SYNTAX:

```
system ra instadd          name = <string>
```

where:

name	Instance name	REQUIRED
------	---------------	----------

system ra instdelete

Delete remote access instances.

SYNTAX:

```
system ra instdelete          name = <{ }>
```

where:

name	Instance name	REQUIRED
------	---------------	----------

system ra list

List remote access instances.

SYNTAX:

```
system ra list [name = <{}>]
```

where:

name	The name of the instance.	OPTIONAL
------	---------------------------	----------

system ra start

Starts temporary mode.

SYNTAX:

```
system ra start          name = <{}>
```

where:

name	Instance name	REQUIRED
------	---------------	----------

system ra stop

Stops temporary mode.

SYNTAX:

```
system ra stop          name = <{ }>
```

where:

name	Instance name	REQUIRED
------	---------------	----------

system reboot

Reboot the modem.

system reset

Reset to (factory or ISP) defaults: user specific settings will be cleared !

SYNTAX:

```
system reset          factory = <{yes|no}>
                    proceed = <{no|yes}>
```

where:

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:

```
system settime          [date = <dd/mm/yyyy>]
                        [time = <hh:mm:ss>]
                        [timezone = <( + or -)hh:mm>]
                        [daylightsaving = <{disabled|enabled}>]
                        [geotimezonename = <{(UTC-12:00)|(UTC-11:00)|
(UTC-10:00)|(UTC-09:00)|(UTC-(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)}>]
                        [rtc = <{disabled|enabled}>]
```

where:

date	Set the system date	OPTIONAL
time	Set the system time	OPTIONAL
timezone	Set the system timezone(-12:00...+14:00 / 15 minute resolution)	OPTIONAL
daylightsaving	Enable/Disable daylight saving	OPTIONAL
geotimezonename	Set the geographical timezone by name	OPTIONAL
rtc	Enable/Disable the real time clock	OPTIONAL

system timedreboot

Set or change editing mode timed reboot

SYNTAX:

```
system timedreboot      [state = <{disabled|enabled}>]
                        [time = <number{0-983040}>]
                        [date = <string>]
```

where:

state	Enable/Disable timed reboot	OPTIONAL
time	Change default countdown time (Min).	OPTIONAL
date	Set date/time to reboot (DD/MM/YYYY/HH:MM).	OPTIONAL

tls Commands

<i>tls acs-client cert add</i>	<i>Add a new certificate</i>	see page 1062
<i>tls acs-client cert delete</i>	<i>Delete a certificate</i>	see page 1063
<i>tls acs-client cert list</i>	<i>List certificates</i>	see page 1064
<i>tls acs-client config</i>	<i>Display/modify tls settings</i>	see page 1065
<i>tls https-server cert add</i>	<i>Add a new certificate</i>	see page 1066
<i>tls https-server cert delete</i>	<i>Delete a certificate</i>	see page 1067
<i>tls https-server cert list</i>	<i>List certificates</i>	see page 1068
<i>tls https-server config</i>	<i>Display/modify tls settings</i>	see page 1069
<i>tls remote-upgraded cert add</i>	<i>Add a new certificate</i>	see page 1070
<i>tls remote-upgraded cert delete</i>	<i>Delete a certificate</i>	see page 1071
<i>tls remote-upgraded cert list</i>	<i>List certificates</i>	see page 1072
<i>tls remote-upgraded config</i>	<i>Display/modify tls settings</i>	see page 1073
<i>tls self cert list</i>	<i>List certificates</i>	see page 1074

tls acs-client cert add

Add a new certificate

SYNTAX:

```
tls acs-client cert add filename = <string>
```

where:

filename	name of the certificate file	REQUIRED
----------	------------------------------	----------

tls acs-client cert delete

Delete a certificate

SYNTAX:

```
tls acs-client cert delete      index = <number>
```

where:

index	Certificate index	REQUIRED
-------	-------------------	----------

tls acs-client cert list

List certificates

SYNTAX:

```
tls acs-client cert list      [index = <number>]
                             [expand = <{disabled|enabled}>]
```

where:

index	Certificate index	OPTIONAL
expand	Display more information	OPTIONAL

tls acs-client config

Display/modify tls settings

SYNTAX:

```
tls acs-client config [state = <{disabled|enabled}>]
                    [auth-serv = <{disabled|enabled}>]
                    [valid-date = <{disabled|enabled}>]
                    [valid-domain = <{disabled|enabled}>]
```

where:

state	SSL/TLS client for ACS state	OPTIONAL
auth-serv	Request server authentication	OPTIONAL
valid-date	Check certificate validity date	OPTIONAL
valid-domain	Check certificate domain	OPTIONAL

tls https-server cert add

Add a new certificate

SYNTAX:

```
tls https-server cert add filename = <string>
```

where:

filename	name of the certificate file	REQUIRED
----------	------------------------------	----------

tls https-server cert delete

Delete a certificate

SYNTAX:

```
tls https-server cert delete    index = <number>
```

where:

index	Certificate index	REQUIRED
-------	-------------------	----------

tls https-server cert list

List certificates

SYNTAX:

```
tls https-server cert list      [index = <number>]
                               [expand = <{disabled|enabled}>]
```

where:

index	Certificate index	OPTIONAL
expand	Display more information	OPTIONAL

tls https-server config

Display/modify tls settings

SYNTAX:

```
tls https-server config      [state = <{disabled|enabled}>]
                             [auth-client = <{disabled|enabled}>]
                             [valid-date = <{disabled|enabled}>]
```

where:

state	SSL/TLS server for HTTPS state	OPTIONAL
auth-client	Request client authentication	OPTIONAL
valid-date	Check certificate validity date	OPTIONAL

tls remote-upgraded cert add

Add a new certificate

SYNTAX:

```
tls remote-upgraded cert add filename = <string>
```

where:

filename	name of the certificate file	REQUIRED
----------	------------------------------	----------

tls remote-upgraded cert delete

Delete a certificate

SYNTAX:

```
tls remote-upgraded cert      index = <number>
delete
```

where:

index	Certificate index	REQUIRED
-------	-------------------	----------

tls remote-upgraded cert list

List certificates

SYNTAX:

```
tls remote-upgraded cert list [index = <number>]
                             [expand = <{disabled|enabled}>]
```

where:

index	Certificate index	OPTIONAL
expand	Display more information	OPTIONAL

tls remote-upgraded config

Display/modify tls settings

SYNTAX:

```
tls remote-upgraded config      [state = <{disabled|enabled}>]
                                [auth-serv = <{disabled|enabled}>]
                                [valid-date = <{disabled|enabled}>]
```

where:

state	SSL/TLS client for remote upgraded state	OPTIONAL
auth-serv	Request server authentication	OPTIONAL
valid-date	Check certificate validity date	OPTIONAL

tls self cert list

List certificates

SYNTAX:

```
tls self cert list          [index = <number>]
                           [expand = <{disabled|enabled}>]
```

where:

index	Certificate index	OPTIONAL
expand	Display more information	OPTIONAL

tunnel Commands

<i>tunnel 6in4 add</i>	<i>add a 6in4 tunnel</i>	see page 1076
<i>tunnel 6in4 delete</i>	<i>delete a 6in4 tunnel</i>	see page 1077
<i>tunnel 6in4 flush</i>	<i>remove all 6in4 tunnels</i>	see page 1078
<i>tunnel 6in4 list</i>	<i>list all 6in4 tunnels</i>	see page 1079
<i>tunnel 6in4 modify</i>	<i>configure a 6in4 tunnel</i>	see page 1080
<i>tunnel 6rd add</i>	<i>add a 6rd tunnel</i>	see page 1081
<i>tunnel 6rd delete</i>	<i>delete a 6rd tunnel</i>	see page 1082
<i>tunnel 6rd flush</i>	<i>remove all 6rd tunnels</i>	see page 1083
<i>tunnel 6rd list</i>	<i>list all 6rd tunnels</i>	see page 1084
<i>tunnel 6rd modify</i>	<i>configure a 6rd tunnel</i>	see page 1085
<i>tunnel 6to4 add</i>	<i>add a 6to4 tunnel</i>	see page 1086
<i>tunnel 6to4 delete</i>	<i>delete a 6to4 tunnel</i>	see page 1087
<i>tunnel 6to4 flush</i>	<i>remove all 6to4 tunnels</i>	see page 1088
<i>tunnel 6to4 list</i>	<i>list all 6to4 tunnels</i>	see page 1089
<i>tunnel 6to4 modify</i>	<i>configure a 6to4 tunnel</i>	see page 1090
<i>tunnel dslite add</i>	<i>add a DS-lite tunnel</i>	see page 1091
<i>tunnel dslite delete</i>	<i>delete a DS-lite tunnel</i>	see page 1092
<i>tunnel dslite flush</i>	<i>remove all DS-lite tunnels</i>	see page 1093
<i>tunnel dslite list</i>	<i>list all DS-lite tunnels</i>	see page 1094
<i>tunnel dslite modify</i>	<i>configure a DS-lite tunnel</i>	see page 1095
<i>tunnel gre add</i>	<i>add a gre tunnel</i>	see page 1096
<i>tunnel gre delete</i>	<i>delete a gre tunnel</i>	see page 1097
<i>tunnel gre flush</i>	<i>remove all gre tunnels</i>	see page 1098
<i>tunnel gre list</i>	<i>list all gre tunnels</i>	see page 1099
<i>tunnel gre modify</i>	<i>configure a gre tunnel</i>	see page 1100
<i>tunnel list</i>	<i>Lists all tunnels.</i>	see page 1101

tunnel 6in4 add

add a 6in4 tunnel

SYNTAX:

```
tunnel 6in4 add ifname = <quoted string>
```

where:

ifname	the name of this 6in4 interface	REQUIRED
--------	---------------------------------	----------

tunnel 6in4 delete

delete a 6in4 tunnel

SYNTAX:

```
tunnel 6in4 delete          ifname = <{>
```

where:

ifname	the name of the 6in4 interface	REQUIRED
--------	--------------------------------	----------

tunnel 6in4 flush

remove all 6in4 tunnels

tunnel 6in4 list

list all 6in4 tunnels

tunnel 6in4 modify

configure a 6in4 tunnel

SYNTAX:

```
tunnel 6in4 modify          ifname = <{>
                             [sourceintf = <{loop|Internet|LocalNetwork}>]
                             [source = <ipv4-address>]
                             destination = <ipv4-address>
                             [mtu = <number{1280-65535}>]
                             [dynmtu = <{disabled|enabled}>]
                             [copytos = <{disabled|enabled}>]
```

where:

ifname	the name of the 6in4 interface	REQUIRED
sourceintf	interface used for outer ip header source address selection	OPTIONAL
source	source address of outer ip header	OPTIONAL
destination	destination address of outer ip header	REQUIRED
mtu	6in4 interface MTU	OPTIONAL
dynmtu	enable dynamic MTU	OPTIONAL
copytos	enable TOS field copying from inner to outer ip header	OPTIONAL

tunnel 6rd add

add a 6rd tunnel

SYNTAX:

```
tunnel 6rd add ifname = <quoted string>
```

where:

ifname	the name of this 6rd interface	REQUIRED
--------	--------------------------------	----------

tunnel 6rd delete

delete a 6rd tunnel

SYNTAX:

```
tunnel 6rd delete ifname = <{>
```

where:

ifname	the name of the 6rd interface	REQUIRED
--------	-------------------------------	----------

tunnel 6rd flush

remove all 6rd tunnels

tunnel 6rd list

list all 6rd tunnels

tunnel 6rd modify

configure a 6rd tunnel

SYNTAX:

```
tunnel 6rd modify          ifname = <{>
                           prefix = <ipv6-mask>
                           [sourceintf = <{loop|Internet|LocalNetwork}>]
                           [source = <ipv4-address>]
                           masklen = <number{0-32}>
                           brs = <ipv4-address list separated by '|'>
                           [mtu = <number{1280-65535}>]
                           [subnet = <ipv6-mask>]
                           [copytos = <{disabled|enabled}>]
                           [pltime = <number>]
                           [vltime = <number>]
```

where:

ifname	the name of the 6rd interface	REQUIRED
prefix	6rd domain prefix	REQUIRED
sourceintf	interface used for outer ip header source address selection	OPTIONAL
source	source address of outer ip header	OPTIONAL
masklen	IPv4 mask length of the 6rd domain	REQUIRED
brs	border relays list	REQUIRED
mtu	6rd interface MTU	OPTIONAL
subnet	subnet bits used to instantiate an IPv6 address on the 6rd tunnel interface.	OPTIONAL
copytos	enable TOS field copying from inner to outer ip header	OPTIONAL
pltime	IPv6 prefix preferred lifetime	OPTIONAL
vltime	IPv6 prefix valid lifetime	OPTIONAL

tunnel 6to4 add

add a 6to4 tunnel

SYNTAX:

```
tunnel 6to4 add ifname = <quoted string>
```

where:

ifname	the name of this 6to4 interface	REQUIRED
--------	---------------------------------	----------

tunnel 6to4 delete

delete a 6to4 tunnel

SYNTAX:

```
tunnel 6to4 delete ifname = <{>
```

where:

ifname	the name of the 6to4 interface	REQUIRED
--------	--------------------------------	----------

tunnel 6to4 flush

remove all 6to4 tunnels

tunnel 6to4 list

list all 6to4 tunnels

tunnel 6to4 modify

configure a 6to4 tunnel

SYNTAX:

```
tunnel 6to4 modify          ifname = <{>
                             [sourceintf = <{loop|Internet|LocalNetwork}>]
                             [source = <ipv4-address>]
                             rrs = <ipv4-address list separated by '|'>
                             [mtu = <number{1280-65535}>]
                             [subnet = <ipv6-mask>]
                             [copytos = <{disabled|enabled}>]
                             [pltime = <number>]
                             [vltime = <number>]
```

where:

ifname	the name of the 6to4 interface	REQUIRED
sourceintf	interface used for outer ip header source address selection	OPTIONAL
source	source address of outer ip header	OPTIONAL
rrs	relay routers list	REQUIRED
mtu	6to4 interface MTU	OPTIONAL
subnet	subnet bits used to instantiate an IPv6 address on the 6to4 tunnel interface.	OPTIONAL
copytos	enable TOS field copying from inner to outer ip header	OPTIONAL
pltime	IPv6 prefix preferred lifetime	OPTIONAL
vltime	IPv6 prefix valid lifetime	OPTIONAL

tunnel dslite add

add a DS-lite tunnel

SYNTAX:

```
tunnel dslite add ifname = <quoted string>
```

where:

ifname	the name of this DS-lite interface	REQUIRED
--------	------------------------------------	----------

tunnel dslite delete

delete a DS-lite tunnel

SYNTAX:

```
tunnel dslite delete          ifname = <{>
```

where:

ifname	the name of the DS-lite interface	REQUIRED
--------	-----------------------------------	----------

tunnel dslite flush

remove all DS-lite tunnels

tunnel dslite list

list all DS-lite tunnels

tunnel dslite modify

configure a DS-lite tunnel

SYNTAX:

```
tunnel dslite modify      ifname = <{>
                          [sourceintf = <{loop|Internet|LocalNetwork}>]
                          [source = <ipv6-address>]
                          aftr = <ipv6-address>
                          [mtu = <number{1240-65535}>]
                          [dynmtu = <{disabled|enabled}>]
                          [copytos = <{disabled|enabled}>]
```

where:

ifname	the name of the DS-lite interface	REQUIRED
sourceintf	interface used for outer ip header source address selection	OPTIONAL
source	source address of outer ip header	OPTIONAL
aftr	address family transition router	REQUIRED
mtu	DS-lite interface MTU	OPTIONAL
dynmtu	enable dynamic MTU	OPTIONAL
copytos	enable TOS field copying from inner to outer ip header	OPTIONAL

tunnel gre add

add a gre tunnel

SYNTAX:

```
tunnel gre add                ifname = <quoted string>  
                               [protocol = <{ipv4|ipv6|ethbridging}>]
```

where:

ifname	the name of this gre interface	REQUIRED
protocol	Specifies the protocol type of the payload	OPTIONAL

tunnel gre delete

delete a gre tunnel

SYNTAX:

```
tunnel gre delete ifname = <{>
```

where:

ifname	the name of this gre interface	REQUIRED
--------	--------------------------------	----------

tunnel gre flush

remove all gre tunnels

tunnel gre list

list all gre tunnels

tunnel gre modify

configure a gre tunnel

SYNTAX:

```
tunnel gre modify          ifname = <{>
                           [sourceintf = <{loop|Internet|LocalNetwork}>]
                           [source = <ipv4-address>]
                           [destination = <ipv4-address>]
                           [key = <string>]
                           [checksum = <{disabled|enabled}>]
                           [mtu = <number{68-65535}>]
                           [dynmtu = <{disabled|enabled}>]
                           [copytos = <{disabled|enabled}>]
```

where:

ifname	the name of the gre interface	REQUIRED
sourceintf	interface used for outer ip header source address selection	OPTIONAL
source	source address of outer ip header	OPTIONAL
destination	destination address of outer ip header	OPTIONAL
key	tunnel key	OPTIONAL
checksum	gre checksum option.	OPTIONAL
mtu	gre interface MTU	OPTIONAL
dynmtu	enable dynamic MTU	OPTIONAL
copytos	enable TOS field copying from inner to outer ip header	OPTIONAL

tunnel list

Lists all tunnels.

upgrade Commands

<i>upgrade config</i>	<i>Display/modify upgrade settings</i>	see page 1104
<i>upgrade debug config</i>	<i>Display debug parameters</i>	see page 1105
<i>upgrade image list</i>	<i>List images</i>	see page 1106
<i>upgrade image modify</i>	<i>Change image parameters</i>	see page 1107
<i>upgrade lastUpgradeInfo</i>	<i>Display last upgrade information</i>	see page 1108

upgrade config

Display/modify upgrade settings

SYNTAX:

```
upgrade config          [enable = <{no|yes}>]
                        [attempt = <number>]
                        [trace_level = <number>]
                        [acsContactTimeout = <number>]
                        [guiContactTimeout = <number>]
```

where:

enable	Enable firmware upgrade	OPTIONAL
attempt	Track the number of upgrade attempts	OPTIONAL
trace_level	Set the trace level	OPTIONAL
acsContactTimeout	Set acsContactTimeout (minutes)	OPTIONAL
guiContactTimeout	Set guiContactTimeout (minutes)	OPTIONAL

upgrade debug config

Display debug parameters

upgrade image list

List images

upgrade image modify

Change image parameters

SYNTAX:

```
upgrade image modify      [url = <quoted string>]
                          [username = <string>]
                          [password = <string>]
                          [key = <string>]
```

where:

url	Image location URL	OPTIONAL
username	HTTP authentication username	OPTIONAL
password	HTTP authentication password	OPTIONAL
key	Image identifier	OPTIONAL

upgrade lastUpgradeInfo

Display last upgrade information

upnp Commands

<i>upnp config</i>	<i>Config upnp parameter(s)</i>	see page 1110
<i>upnp debug nonce</i>	<i>To re-generate the nonce string.</i>	see page 1111
<i>upnp debug traceconfig</i>	<i>Enable or disable tracing.</i>	see page 1112
<i>upnp flush</i>	<i>Flushes upnp config (i.e. to defaults)</i>	see page 1113
<i>upnp list</i>	<i>List all registered devices</i>	see page 1114
<i>upnp listmask</i>	<i>List all mask and security devices</i>	see page 1115

upnp config

Config upnp parameter(s)

SYNTAX:

```
upnp config [maxage = <number{60-999999}>]
            [writemode = <{full|natonly|readonly}>]
            [safenat = <{disabled|enabled}>]
            [preferredaddresses = <string>]
            [upnpautosave = <{disabled|enabled}>]
            [dslfautosave = <{disabled|enabled}>]
            [autosavedelay = <number{30-45}>]
            [onlydefault = <{disabled|enabled}>]
```

where:

maxage	ssdp advertisements MAX-AGE (default = 1800)	OPTIONAL
writemode	Configuration access level for UPnP	OPTIONAL
safenat	Enable / disable check on safe nat entries (limited to own host)	OPTIONAL
preferredaddresses	CSV list of preferred ip addresses for UPnP (1 per lan ip-interface)	OPTIONAL
upnpautosave	Enable / disable upnp auto save	OPTIONAL
dslfautosave	Enable / disable TR-064 auto save	OPTIONAL
autosavedelay	Auto save delay time (sec)	OPTIONAL
onlydefault	Only advertise the default WAN connection	OPTIONAL

upnp debug nonce

To re-generate the nonce string.

SYNTAX:

```
upnp debug nonce [type = <{upnp|tr64|wfa}>]
```

where:

type	Specify device type for nonce string	OPTIONAL
------	--------------------------------------	----------

upnp debug traceconfig

Enable or disable tracing.

SYNTAX:

```
upnp debug traceconfig [level = <number>]
```

where:

level	Set the tracelevel (0-2)	OPTIONAL
-------	--------------------------	----------

upnp flush

Flushes upnp config (i.e. to defaults)

upnp list

List all registered devices

SYNTAX:

```
upnp list [verbose = <number{0-2}>]
```

where:

verbose	Verbose level (default = 1)	OPTIONAL
---------	-----------------------------	----------

upnp listmask

List all mask and security devices

user Commands

<i>user add</i>	<i>Add a user.</i>	see page 1118
<i>user config</i>	<i>Modify the user.</i>	see page 1119
<i>user delete</i>	<i>Delete a user.</i>	see page 1120
<i>user flush</i>	<i>Flush the users.</i>	see page 1121
<i>user list</i>	<i>Display the users.</i>	see page 1122
<i>user rights</i>	<i>Display session rights.</i>	see page 1123

user add

Add a user.

SYNTAX:

```
user add          name = <string>
                  password = <password>
                  role = <>
                  [hash2 = <string>]
                  [crypt = <string>]
                  [descr = <quoted string>]
                  [defuser = <{disabled|enabled}>]
                  [defremadmin = <{disabled|enabled}>]
                  [deflocadmin = <{disabled|enabled}>]
```

where:

name	User name.	REQUIRED
password	User password.	REQUIRED
role	Role name.	REQUIRED
hash2	The MD5 hash.	OPTIONAL
crypt	The crypt password.	OPTIONAL
descr	User description.	OPTIONAL
defuser	Set this user as the default user.	OPTIONAL
defremadmin	Set this user as the default remote administrator.	OPTIONAL
deflocadmin	Set this user as the default local administrator.	OPTIONAL

user config

Modify the user.

SYNTAX:

```
user config          name = <{Administrator|tech}>
                    [password = <password>]
                    [role = <>]
                    [descr = <quoted string>]
                    [defuser = <{disabled|enabled}>]
                    [defremadmin = <{disabled|enabled}>]
                    [deflocadmin = <{disabled|enabled}>]
```

where:

name	User name.	REQUIRED
password	User password.	OPTIONAL
role	Role name.	OPTIONAL
descr	User description.	OPTIONAL
defuser	Set this user as the default user.	OPTIONAL
defremadmin	Set this user as the default remote administrator.	OPTIONAL
deflocadmin	Set this user as the default local administrator.	OPTIONAL

user delete

Delete a user.

SYNTAX:

```
user delete name = <{Administrator|tech}>
```

where:

name	User name.	REQUIRED
------	------------	----------

user flush

Flush the users.

user list

Display the users.

SYNTAX:

```
user list [name = <{Administrator|tech}>]
          [channel = <{ftp|telnet|http|mdap|serial}>]
          [origin = <{lan|wan|local|wlan}>]
          [secure = <{disabled|enabled}>]
```

where:

name	User name.	OPTIONAL
channel	The selected channel.	OPTIONAL
origin	The selected origin.	OPTIONAL
secure	The selected security level.	OPTIONAL

user rights

Display session rights.

voice Commands

<i>voice cac config</i>	<i>Configure call admission control</i>	see page 1130
<i>voice cac list</i>	<i>Show the call admission control</i>	see page 1131
<i>voice calllist config</i>	<i>Configure the calllist general parameters</i>	see page 1132
<i>voice calllist list</i>	<i>Display the calllist general parameters</i>	see page 1133
<i>voice codec amr config</i>	<i>Enable/Disable an AMR mode</i>	see page 1134
<i>voice codec amr list</i>	<i>Show the AMR mode configuration</i>	see page 1135
<i>voice codec config</i>	<i>Configure a CODEC capability</i>	see page 1136
<i>voice codec dynamic config</i>	<i>Configure a dynamic CODEC capability</i>	see page 1137
<i>voice codec dynamic list</i>	<i>Show the dynamic CODEC capability configuration</i>	see page 1138
<i>voice codec list</i>	<i>Show the CODEC capability configuration</i>	see page 1139
<i>voice config</i>	<i>Configure the general parameters</i>	see page 1140
<i>voice country config</i>	<i>Configure country</i>	see page 1142
<i>voice country countrylist</i>	<i>List available countries</i>	see page 1143
<i>voice country list</i>	<i>Show the selected country</i>	see page 1144
<i>voice debug exec</i>	<i>Execute a 'Trace & Debug' command. For qualified personnel only.</i>	see page 1145
<i>voice dhcp config</i>	<i>Configure the DHCP parameters</i>	see page 1146
<i>voice dhcp list</i>	<i>Show the configured DHCP parameters</i>	see page 1147
<i>voice dialplan add</i>	<i>Add an entry in the dialplan</i>	see page 1148
<i>voice dialplan delete</i>	<i>Delete an entry in the dialplan</i>	see page 1149
<i>voice dialplan flush</i>	<i>Delete all user-entered dialplan entries</i>	see page 1150
<i>voice dialplan list</i>	<i>Display the complete dialplan</i>	see page 1151
<i>voice dialplan modify</i>	<i>Modify an entry in the dialplan</i>	see page 1152
<i>voice dns config</i>	<i>Configure DNS</i>	see page 1153
<i>voice dns list</i>	<i>Show the DNS configuration</i>	see page 1154
<i>voice fax config</i>	<i>Configure the fax parameters</i>	see page 1155
<i>voice fax list</i>	<i>Show the fax configuration</i>	see page 1156
<i>voice fxoport config</i>	<i>Configure the FXO port parameters</i>	see page 1157

<i>voice fxoport list</i>	<i>Show the FXO port configuration</i>	see page 1158
<i>voice fxsport config</i>	<i>Configure the FXS port parameters</i>	see page 1159
<i>voice fxsport list</i>	<i>Show the FXS port configuration</i>	see page 1160
<i>voice list</i>	<i>Display the general parameters</i>	see page 1161
<i>voice localmap add</i>	<i>Add a dialplan for local/internal calls</i>	see page 1162
<i>voice localmap delete</i>	<i>Remove a dialplan for local/internal calls</i>	see page 1163
<i>voice localmap flush</i>	<i>Flush all dialplan for local/internal calls</i>	see page 1164
<i>voice localmap list</i>	<i>List all dialplan info for local/internal calls</i>	see page 1165
<i>voice localmap modify</i>	<i>Modify a dialplan for local/internal calls</i>	see page 1166
<i>voice localmap ports add</i>	<i>Add a mapping between the localmap and a port</i>	see page 1167
<i>voice localmap ports delete</i>	<i>Remove a mapping between the localmap and a port</i>	see page 1168
<i>voice localmap ports flush</i>	<i>Flush all mappings between the localmap and a port</i>	see page 1169
<i>voice numbertranslAC add</i>	<i>Add one number translate</i>	see page 1170
<i>voice numbertranslAC delete</i>	<i>Delete one number translate</i>	see page 1171
<i>voice numbertranslAC flush</i>	<i>Flush all number translate</i>	see page 1172
<i>voice numbertranslAC list</i>	<i>Show all number translate</i>	see page 1173
<i>voice numbtransl config</i>	<i>Configure number translation</i>	see page 1174
<i>voice numbtransl list</i>	<i>Show the number translation</i>	see page 1175
<i>voice pb add</i>	<i>Add phonebook entry in the phonebook</i>	see page 1176
<i>voice portmap add</i>	<i>Add portmap</i>	see page 1177
<i>voice portmap delete</i>	<i>Delete portmap</i>	see page 1178
<i>voice portmap flush</i>	<i>Flush all portmap entries</i>	see page 1179
<i>voice portmap list</i>	<i>Show all portmaps</i>	see page 1180
<i>voice profile add</i>	<i>Add profile</i>	see page 1181
<i>voice profile delete</i>	<i>Delete profile</i>	see page 1182
<i>voice profile flush</i>	<i>Flush all profiles</i>	see page 1183
<i>voice profile list</i>	<i>Show all profiles</i>	see page 1184
<i>voice profile modify</i>	<i>Modify profile</i>	see page 1185
<i>voice qos config</i>	<i>Configure the QOS parameters</i>	see page 1186

<i>voice qos list</i>	<i>Show the QOS configuration</i>	see page 1187
<i>voice ringing descrtable add</i>	<i>Add a ringing description</i>	see page 1188
<i>voice ringing descrtable delete</i>	<i>Delete a ringing description</i>	see page 1189
<i>voice ringing descrtable flush</i>	<i>Flush all ringing descriptions</i>	see page 1190
<i>voice ringing descrtable list</i>	<i>Show all ringing descriptions</i>	see page 1191
<i>voice ringing descrtable modify</i>	<i>Modify ring description</i>	see page 1192
<i>voice ringing descrtable set</i>	<i>Set a specific profile for future ringing modifications (current value = all)</i>	see page 1193
<i>voice ringing eventtable flush</i>	<i>Flush all ringing events</i>	see page 1194
<i>voice ringing eventtable list</i>	<i>Show all ringing events</i>	see page 1195
<i>voice ringing eventtable modify</i>	<i>Modify a ringing event</i>	see page 1196
<i>voice ringing eventtable set</i>	<i>Set a specific profile for future ringing modifications (current value = all)</i>	see page 1197
<i>voice ringing patterntable add</i>	<i>Add a ringing pattern</i>	see page 1198
<i>voice ringing patterntable delete</i>	<i>Delete a ringing pattern</i>	see page 1199
<i>voice ringing patterntable flush</i>	<i>Flush all ringing patterns</i>	see page 1200
<i>voice ringing patterntable list</i>	<i>Show all ringing patterns</i>	see page 1201
<i>voice ringing patterntable modify</i>	<i>Modify a ringing pattern</i>	see page 1202
<i>voice ringing patterntable set</i>	<i>Set a specific profile for future ringing modifications (current value = all)</i>	see page 1203
<i>voice security config</i>	<i>Configure the security parameters</i>	see page 1204
<i>voice security list</i>	<i>Show the security configuration</i>	see page 1205
<i>voice services 3gpp config</i>	<i>General 3gpp configuration</i>	see page 1206
<i>voice services 3gpp list</i>	<i>Show the 3gpp configuration</i>	see page 1207
<i>voice services activate</i>	<i>Activate a supplementary service</i>	see page 1208
<i>voice services assign</i>	<i>Assign a servicecode to a supplementary service in standard mode</i>	see page 1209
<i>voice services assign_pxsc</i>	<i>Assign a servicecode to a supplementary service in non_standard mode</i>	see page 1210
<i>voice services config</i>	<i>General supplementary service configuration</i>	see page 1211
<i>voice services deactivate</i>	<i>Deactivate a supplementary service</i>	see page 1213
<i>voice services flush</i>	<i>Flush all supplementary services</i>	see page 1214

<i>voice services list</i>	<i>Show the supplementary service configuration</i>	see page 1215
<i>voice services provision</i>	<i>Provision a supplementary service</i>	see page 1216
<i>voice services servicelist</i>	<i>Show the supplementary service configuration</i>	see page 1217
<i>voice services soc config</i>	<i>General switching order configuration</i>	see page 1218
<i>voice services soc list</i>	<i>Show the switching order configuration</i>	see page 1219
<i>voice services soc modify</i>	<i>Configure switching order codes</i>	see page 1220
<i>voice services soc soclist</i>	<i>Show the switching order codes</i>	see page 1221
<i>voice services withdraw</i>	<i>Withdraw a supplementary service</i>	see page 1222
<i>voice sip config</i>	<i>Configure the SIP general parameters</i>	see page 1223
<i>voice sip inboundauth config</i>	<i>Configure which methods should be authenticated</i>	see page 1228
<i>voice sip inboundauth list</i>	<i>List the methods</i>	see page 1229
<i>voice sip list</i>	<i>Display the SIP general parameters</i>	see page 1230
<i>voice sip responsemap add</i>	<i>Add a SIP response</i>	see page 1231
<i>voice sip responsemap delete</i>	<i>Delete a SIP response</i>	see page 1232
<i>voice sip responsemap flush</i>	<i>Flush all SIP responses</i>	see page 1233
<i>voice sip responsemap list</i>	<i>Show all SIP responses</i>	see page 1234
<i>voice sip responsemap modify</i>	<i>Modify a SIP response</i>	see page 1235
<i>voice sip sdp annexa config</i>	<i>Configure the SDP AnnexA parameters</i>	see page 1236
<i>voice sip sdp annexb config</i>	<i>Configure the SDP annexb parameters</i>	see page 1237
<i>voice sip sdp config</i>	<i>Configure the SDP general parameters</i>	see page 1238
<i>voice sip sdp list</i>	<i>List the SDP general parameters</i>	see page 1239
<i>voice sip sdp silencesupp config</i>	<i>Configure the SDP Silence Supp parameters</i>	see page 1240
<i>voice sip sdp vad config</i>	<i>Configure the SDP Vad parameters</i>	see page 1241
<i>voice state</i>	<i>show VOIP service states</i>	see page 1242
<i>voice stats list</i>	<i>Show voice statistics</i>	see page 1243
<i>voice stats reset</i>	<i>Reset voice statistics</i>	see page 1244
<i>voice tone descrtable add</i>	<i>Add tone description</i>	see page 1245
<i>voice tone descrtable delete</i>	<i>Delete tone description</i>	see page 1246
<i>voice tone descrtable flush</i>	<i>Flush all tone descriptions</i>	see page 1247
<i>voice tone descrtable list</i>	<i>Show all tone descriptions</i>	see page 1248

<i>voice tone descrtable modify</i>	<i>Modify tone description</i>	see page 1249
<i>voice tone eventtable flush</i>	<i>Flush all tone events</i>	see page 1250
<i>voice tone eventtable list</i>	<i>Show all tone events</i>	see page 1251
<i>voice tone eventtable modify</i>	<i>Modify tone event</i>	see page 1252
<i>voice tone patterntable add</i>	<i>Add tone pattern</i>	see page 1253
<i>voice tone patterntable delete</i>	<i>Delete tone pattern</i>	see page 1254
<i>voice tone patterntable flush</i>	<i>Flush all tone patterns</i>	see page 1255
<i>voice tone patterntable list</i>	<i>Show all tone patterns</i>	see page 1256
<i>voice tone patterntable modify</i>	<i>Modify tone pattern</i>	see page 1257
<i>voice uamap add</i>	<i>Add uamap</i>	see page 1258
<i>voice uamap delete</i>	<i>Delete uamap</i>	see page 1259
<i>voice uamap flush</i>	<i>Flush all uamap entries</i>	see page 1260
<i>voice uamap list</i>	<i>Show all uamaps</i>	see page 1261

voice cac config

Configure call admission control

SYNTAX:

```
voice cac config [max#portsperprofile = <{one|all}>]
```

where:

max#portsperprofile	The maximum number of ports that can be used with a common profile	OPTIONAL
---------------------	--	----------

voice cac list

Show the call admission control

voice calllist config

Configure the calllist general parameters

SYNTAX:

```
voice calllist config      [outgcallstosamedest = <{allcalls|
                           onlylastcall}>]
                           [anonymouscalls = <{include|withheld}>]
                           [privatecalls = <{include|withheld}>]
                           [incomingcallsselection = <{profile|port}>]
                           [outgoingcallsselection = <{profile|port}>]
```

where:

outgcallstosamedest	include all outgoing calls to same destination	OPTIONAL
anonymouscalls	include anonymous calls	OPTIONAL
privatecalls	include private calls	OPTIONAL
incomingcallsselection	the way incoming calls are selected	OPTIONAL
outgoingcallsselection	the way outgoing calls are selected	OPTIONAL

voice callist list

Display the callist general parameters

voice codec amr config

Enable/Disable an AMR mode

SYNTAX:

```
voice codec amr config      mode = <number{0-7}>
                             [status = <{disabled|enabled}>]
```

where:

mode	The AMR mode	REQUIRED
status	Enable or disable this mode	OPTIONAL

voice codec amr list

Show the AMR mode configuration

voice codec config

Configure a CODEC capability

SYNTAX:

```
voice codec config          type = <{g711u|g711a|g722|g723_1|g726_16|
                             g726_24|g726_32|g726_40|g729|ilbc|amr}>
                             [ptime = <{10|30|20}>]
                             [ptime_g723 = <{30}>]
                             [ptime_ilbc = <{20|30}>]
                             [vad = <{disabled|enabled}>]
                             [priority = <number{1-13}>]
                             [status = <{disabled|enabled}>]
```

where:

type	The codec type	REQUIRED
ptime	The packet time	OPTIONAL
ptime_g723	The packet time	OPTIONAL
ptime_ilbc	The packet time	OPTIONAL
vad	Enable or disable Voice Activity Detection	OPTIONAL
priority	The codec capability priority	OPTIONAL
status	Enable or disable this capability	OPTIONAL

voice codec dynamic config

Configure a dynamic CODEC capability

SYNTAX:

```
voice codec dynamic config      type = <{rfc2833|g723_1|g726_16|g726_24|
                                g726_32|g726_40|ilbc|amr}>
                                payloadtype = <number{96-128}>
```

where:

type	The codec type	REQUIRED
payloadtype	The payload type	REQUIRED

voice codec dynamic list

Show the dynamic CODEC capability configuration

voice codec list

Show the CODEC capability configuration

voice config

Configure the general parameters

SYNTAX:

```
voice config [autofxo = <{disabled|enabled}>]
             [digitrelay = <{auto|inband|rfc2833|
             signalling|forcedsignalling}>]
             [click2dial_ports = <{FXS1|FXS2|all}>]
             [rtp_porrange = <string>]
             [sign_internal = <{external|internal}>]
             [goingonhookeffect = <{endallcalls|
             endactivecall}>]
             [static_intf = <{disabled|enabled}>]
             [intf = <{loop|Internet|LocalNetwork|""}>]
             [secondintf = <{loop|Internet|
             LocalNetwork|""}>]
             [endofnumber = <{#|*|none}>]
             [countrycode = <number>]
             [delayedisconnect = <{enabled|disabled}>]
             [delayedisconnectoverride = <{none|
             INVITE_no_SDP}>]
             [delayedisconnecttimer = <number>]
             [ringmuteduration = <number>]
             [feature-mngt = <{internal|external}>]
             [call-setup-failure-timeout = <number>]
             [CCBS-invoked-timeout = <number>]
             [nocallsetupmsg = <{never|unav-numb}>]
             [syslogscope = <{none|all|only-stats|only-dm-
             events|only-msgs|all}>]
             [pstnsoftswitchover = <{enabled|disabled}>]
             [no-answer-timer = <number>]
```

where:

autofxo	Automatically make FXO calls when not registered	OPTIONAL
digitrelay	Set the digit relay mode	OPTIONAL
click2dial_ports	Set the click to dial port	OPTIONAL
rtp_porrange	The RTP port range <[startport]-[endport]>	OPTIONAL
sign_internal	Signalling for local calls is kept local or external	OPTIONAL
goingonhookeffect	Effect on Phones Going ONHOOK(EndActiveCall ENDALLCALLS)	OPTIONAL
static_intf	Use a static (configured) interface to look for the IP address or not	OPTIONAL
intf	The name of a IP interface to be used for VOIP traffic, NULL string to remove it.	OPTIONAL

secondintf	The name of a backup IP interface to be used for VOIP traffic, NULL string to remove it.	OPTIONAL
endofnumber	The end of number character for dialled number starting with a cipher	OPTIONAL
countrycode	Local countrycode	OPTIONAL
delayedisconnect	Enable or disable the delayed disconnect feature	OPTIONAL
delayedisconnectoverride	Delayed disconnect override	OPTIONAL
delayedisconnecttimer	Delayed disconnect timer (seconds)	OPTIONAL
ringmuteduration	Early media mute duration (in ms)	OPTIONAL
feature-mngt	Feature management internal or external	OPTIONAL
call-setup-failure-timeout	Timeout for the callsetup failed state (in ms). 0 means timer disabled	OPTIONAL
CCBS-invoked-timeout	Timeout for the CCBS invoked state (in ms). 0 means timer disabled	OPTIONAL
nocallsetupmsg	Send call setup message	OPTIONAL
syslogscope	Syslog Scope	OPTIONAL
pstnsoftswitchover	Enable or disable PSTN Soft Switch Over	OPTIONAL
no-answer-timer	No answer timer	OPTIONAL

voice country config

Configure country

SYNTAX:

```
voice country config          country = <{etsi|argentina|australia|austria|
                             belgium|brazil|canada|chile|greece80|hungary|
                             iceland|italy|latvia|macedonia|macedonia_dtmf|
                             mexico|netherlands|newzealand1|newzealand2|
                             northamerica|norway|portugal3|portugal2|
                             portugal1|ksa|ksa_dtmf|singapore|slovenia|
                             spain|sweden|uae|uk}>
```

where:

country	Load this country's specific settings into the DSP	REQUIRED
---------	--	----------

voice country countrylist

List available countries

voice country list

Show the selected country

voice debug exec

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

SYNTAX:

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

where:

cmd	The debug command (or help)	REQUIRED
-----	-----------------------------	----------

voice dhcp config

Configure the DHCP parameters

SYNTAX:

```
voice dhcp config [option120effect = <{dynamic|static}>]
                  [option120FQDNeffectonport = <{none|0}>]
                  [option120FQDNeffectontransport = <{none|
                  undefined}>]
```

where:

option120effect	The effect of the dynamic option 120 configuration (static dynamic)	OPTIONAL
option120FQDNeffectonport	The effect of the dynamic option 120 configuration (none 0)	OPTIONAL
option120FQDNeffectontransport	The effect of the dynamic option 120 configuration (none undefined)	OPTIONAL

voice dhcp list

Show the configured DHCP parameters

voice dialplan add

Add an entry in the dialplan

SYNTAX:

```
voice dialplan add          prefix = <string>
                           defaultport = <{FXS1|FXS2|FXO|VoIP|NA}>
                           fallbackport = <{FXS1|FXS2|FXO|VoIP|NA}>
                           priority = <{NA|Low|High}>
                           fallback = <{disabled|enabled}>
                           minimumdigits = <number{1-31}>
                           maximumdigits = <number{1-31}>
                           posofmodify = <number{0-31}>
                           remnumdigits = <number{0-31}>
                           [insert = <string>]
                           rescan = <{no|yes}>
                           data = <{no|yes}>
                           action = <{none|ROUTE_excl_eon|ROUTE_incl_eon|
ROUTE_excl_eon_PSO|ROUTE_incl_eon_PSO|
ROUTE_overlap_sending}>
```

where:

prefix	The prefix, identifies this entry	REQUIRED
defaultport	The default outgoing port	REQUIRED
fallbackport	The fallback outgoing port	REQUIRED
priority	The priority of the entry	REQUIRED
fallback	The fallback mechanism status of this entry	REQUIRED
minimumdigits	The minimum number of digits	REQUIRED
maximumdigits	The maximum number of digits	REQUIRED
posofmodify	Startposition at which a number of digits must be removed	REQUIRED
remnumdigits	The number of digits that need to be removed from the complete number	REQUIRED
insert	String which must be inserted at PosOfModify after removing RemNumDigits	OPTIONAL
rescan	Rescanning of the number needed or not	REQUIRED
data	This entry is used for data calls or not	REQUIRED
action	Action parameter	REQUIRED

voice dialplan delete

Delete an entry in the dialplan

SYNTAX:

```
voice dialplan delete          prefix = <{ }>
```

where:

prefix	The prefix	REQUIRED
--------	------------	----------

voice dialplan flush

Delete all user-entered dialplan entries

voice dialplan list

Display the complete dialplan

voice dialplan modify

Modify an entry in the dialplan

SYNTAX:

```
voice dialplan modify      prefix = <{ }>
                          newprefix = <string>
                          defaultport = <{FXS1|FXS2|FXO|VoIP|NA}>
                          fallbackport = <{FXS1|FXS2|FXO|VoIP|NA}>
                          priority = <{NA|Low|High}>
                          fallback = <{disabled|enabled}>
                          minimumdigits = <number{1-31}>
                          maximumdigits = <number{1-31}>
                          posofmodify = <number{0-31}>
                          remnumdigits = <number{0-31}>
                          [insert = <string>]
                          rescan = <{no|yes}>
                          data = <{no|yes}>
                          action = <{none|ROUTE_excl_eon|ROUTE_incl_eon|
ROUTE_excl_eon_PSO|ROUTE_incl_eon_PSO|
ROUTE_overlap_sending}>
```

where:

prefix	The prefix	REQUIRED
newprefix	The prefix, identifies this entry	REQUIRED
defaultport	The default outgoing port	REQUIRED
fallbackport	The fallback outgoing port	REQUIRED
priority	The priority of the entry	REQUIRED
fallback	The fallback mechanism status of this entry	REQUIRED
minimumdigits	The minimum number of digits	REQUIRED
maximumdigits	The maximum number of digits	REQUIRED
posofmodify	Startposition at which a number of digits must be removed	REQUIRED
remnumdigits	The number of digits that need to be removed from the complete number	REQUIRED
insert	String which must be inserted at PosOfModify after removing RemNumDigits	OPTIONAL
rescan	Rescanning of the number needed or not	REQUIRED
data	This entry is used for data calls or not	REQUIRED
action	Action parameter	REQUIRED

voice dns config

Configure DNS

SYNTAX:

```
voice dns config          [startentry = <{first|random}>]
                          [maxentries = <number{1-24}>]
```

where:

startentry	Entry to start with in the registration procedure	OPTIONAL
maxentries	Maximum nbr of used entries in a DNS response	OPTIONAL

voice dns list

Show the DNS configuration

voice fax config

Configure the fax parameters

SYNTAX:

```
voice fax config          [detect_timeout = <number{0-120}>]
                        [early-detect-faxmodem = <{enabled|disabled}>]
                        [transport = <{inband_auto|inband_reneg|
strict-inband-reneg|t38}>]
                        [udptl_redun = <number{0-3}>]
                        [VBDcodec = <{G711A|G711U|G711A+U}>]
```

where:

detect_timeout	The time-out in seconds used to detect FAX(0 is no time-out)	OPTIONAL
early-detect-faxmodem	Detect fax or modem early	OPTIONAL
transport	The type of fax transport	OPTIONAL
udptl_redun	The number of secondary IFP packets	OPTIONAL
VBDcodec	VBDcodec to use during fax re-invite	OPTIONAL

voice fax list

Show the fax configuration

voice fxoport config

Configure the FXO port parameters

SYNTAX:

```
voice fxoport config          [fxodisconnect = <number{500-5000}>]
                             [incfxodest = <{FXS|FXS1|FXS2|all|none}>]
```

where:

fxodisconnect	The FXO disconnect timer (in ms)	OPTIONAL
incfxodest	Select destination for incoming FXO calls	OPTIONAL

voice fxoport list

Show the FXO port configuration

voice fxsport config

Configure the FXS port parameters

SYNTAX:

```
voice fxsport config          [widebandsupport = <{disabled|enabled}>]
                             [interdigit = <number{10-30000}>]
                             [interdigitOpen = <number{10-30000}>]
                             [fxs1txgain = <number{-20-20}>]
                             [fxs1rxgain = <number{-20-20}>]
                             [fxs2txgain = <number{-20-20}>]
                             [fxs2rxgain = <number{-20-20}>]
```

where:

widebandsupport	Support wideband codecs on FXS phones	OPTIONAL
interdigit	The interdigit timer (in ms)	OPTIONAL
interdigitOpen	The closed number interdigit timer (in ms)	OPTIONAL
fxs1txgain	The FXS1 egress Dsp gain value (in db)	OPTIONAL
fxs1rxgain	The FXS1 ingress Dsp gain value (in db)	OPTIONAL
fxs2txgain	The FXS2 egress Dsp gain value (in db)	OPTIONAL
fxs2rxgain	The FXS2 ingress Dsp gain value (in db)	OPTIONAL

voice fxsport list

Show the FXS port configuration

voice list

Display the general parameters

voice localmap add

Add a dialplan for local/internal calls

SYNTAX:

```
voice localmap add          name = <quoted string>
                             number = <string>
                             [hidden = <{yes|no}>]
```

where:

name	The name of the local/internal call dialplan	REQUIRED
number	The number to identify the internal call dialplan	REQUIRED
hidden	should this number be hidden in internal call list	OPTIONAL

voice localmap delete

Remove a dialplan for local/internal calls

SYNTAX:

```
voice localmap delete          index = <{0|1}>
```

where:

index	The index of the local/internal call dialplan	REQUIRED
-------	---	----------

voice localmap flush

Flush all dialplan for local/internal calls

voice localmap list

List all dialplan info for local/internal calls

voice localmap modify

Modify a dialplan for local/internal calls

SYNTAX:

```
voice localmap modify          index = <{0|1}>
                               [name = <quoted string>]
                               [number = <string>]
                               [hidden = <{yes|no}>]
```

where:

index	The index of the local/internal call dialplan	REQUIRED
name	The name of the local/internal call dialplan	OPTIONAL
number	The number to identify the internal call dialplan	OPTIONAL
hidden	should this number be hidden in internal call list	OPTIONAL

voice localmap ports add

Add a mapping between the localmap and a port

SYNTAX:

```
voice localmap ports add      index = <{0|1}>  
                             voiceport = <{FXS1|FXS2}>
```

where:

index	The index of the local/internal call dialplan	REQUIRED
voiceport	The specific phone to be linked to the localmap	REQUIRED

voice localmap ports delete

Remove a mapping between the localmap and a port

SYNTAX:

```
voice localmap ports delete      index = <{0|1}>  
                                voiceport = <{FXS1|FXS2}>
```

where:

index	The index of the local/internal call dialplan	REQUIRED
voiceport	The specific phone to be linked to the localmap	REQUIRED

voice localmap ports flush

Flush all mappings between the localmap and a port

SYNTAX:

```
voice localmap ports flush      index = <{0|1}>
```

where:

index	The index of the local/internal call dialplan	REQUIRED
-------	---	----------

voice numbertranslAC add

Add one number translate

SYNTAX:

```
voice numbertranslAC add      level = <number>
                              areacode = <string>
                              [action = <{showareacode|hideareacode}>]
                              [prefix = <string>]
                              [delete = <number>]
                              [executeprefdel = <{always|insideareacode}>]
```

where:

level	The prefix name you want to delete	REQUIRED
areacode	Area code you want to set	REQUIRED
action	Show area code or not	OPTIONAL
prefix	Prefix you like to add before area code	OPTIONAL
delete	How many chars you want to delete	OPTIONAL
executeprefdel	When to execute prefix or delete	OPTIONAL

voice numbertranslAC delete

Delete one number translate

SYNTAX:

```
voice numbertranslAC delete level = <number>
```

where:

level	The level you want to delete	REQUIRED
-------	------------------------------	----------

voice numbertranslAC flush

Flush all number translate

voice numbertranslAC list

Show all number translate

voice numbtransl config

Configure number translation

SYNTAX:

```
voice numbtransl config      [Globalnumbpostprocess = <{disabled|enabled}>]
                             [pbmatchlastdigits = <number>]
```

where:

Globalnumbpostprocess	Enables or disables the number postprocessing	OPTIONAL
pbmatchlastdigits	Set the number of digits that are taken into account to perform PhoneBook matching	OPTIONAL

voice numbrtransl list

Show the number translation

voice pb add

Add phonebook entry in the phonebook

SYNTAX:

```
voice pb add                Lastname = <quoted string>
                             Firstname = <quoted string>
                             [Business = <quoted string>]
                             [Home = <quoted string>]
                             [Mobile = <quoted string>]
                             [Other = <quoted string>]
                             [E-mail = <quoted string>]
```

where:

Lastname	The lastname	REQUIRED
Firstname	The firstname	REQUIRED
Business	The business number	OPTIONAL
Home	The home number	OPTIONAL
Mobile	The mobile number	OPTIONAL
Other	Any other number	OPTIONAL
E-mail	E-mail address	OPTIONAL

voice portmap add

Add portmap

SYNTAX:

```
voice portmap add          voiceport = <{FXS1|FXS2}>
                           profile = <{0}>
                           [priority = <number>]
```

where:

voiceport	The specific phone	REQUIRED
profile	The SIP URI related to this voice port	REQUIRED
priority	The priority this profile has for this port	OPTIONAL

voice portmap delete

Delete portmap

SYNTAX:

```
voice portmap delete          voiceport = <{FXS1|FXS2}>
                               profile = <{0}>
```

where:

voiceport	The specific phone	REQUIRED
profile	The SIP URI related to this voice port	REQUIRED

voice portmap flush

Flush all portmap entries

voice portmap list

Show all portmaps

SYNTAX:

```
voice portmap list          voiceport = <{FXS1|FXS2}>
```

where:

voiceport	The specific phone	REQUIRED
-----------	--------------------	----------

voice profile add

Add profile

SYNTAX:

```
voice profile add          SIP_URI = <string>
                           [username = <string>]
                           [password = <password>]
                           [displayname = <quoted string>]
                           [voiceport = <{FXS1|FXS2|COMMON}>]
                           [abbr = <string>]
                           [enable = <{disabled|enabled}>]
                           [linename = <string>]
                           [internalnumber = <{no|yes}>]
```

where:

SIP_URI	The SIP URI related to this voice port	REQUIRED
username	The authentication username related to this voice port	OPTIONAL
password	The authentication password related to this voice port	OPTIONAL
displayname	An alias name for the SIP_URI	OPTIONAL
voiceport	The analogue line number	OPTIONAL
abbr	An abbreviated number that will be mapped to the SIP_URI	OPTIONAL
enable	Enable or disable this profile	OPTIONAL
linename	The line name to identify profile with	OPTIONAL
internalnumber	Mark this profile as an internalnumber	OPTIONAL

voice profile delete

Delete profile

SYNTAX:

```
voice profile delete          SIP_URI = <string>
```

where:

SIP_URI	The SIP URI related to this voice port	REQUIRED
---------	--	----------

voice profile flush

Flush all profiles

voice profile list

Show all profiles

voice profile modify

Modify profile

SYNTAX:

```
voice profile modify      Index = <{0}>
                        [SIP_URI = <string>]
                        [username = <string>]
                        [password = <password>]
                        [displayname = <quoted string>]
                        [abbr = <string>]
                        [enable = <{disabled|enabled}>]
                        [linename = <string>]
```

where:

Index	The index of the profile you wish to modify	REQUIRED
SIP_URI	The SIP URI related to this voice port	OPTIONAL
username	The authentication username related to this voice port	OPTIONAL
password	The authentication password related to this voice port	OPTIONAL
displayname	An alias name for the SIP_URI	OPTIONAL
abbr	An abbreviated number that will be mapped to the SIP_URI	OPTIONAL
enable	Enable or disable this profile	OPTIONAL
linename	The line name to identify profile with	OPTIONAL

voice qos config

Configure the QOS parameters

SYNTAX:

```
voice qos config          type = <{Signaling|Realtime}>
                          qosfield = <{DSCP|precedence}>
                          dscp = <{ef|af11|af12|af13|af21|af22|af23|
                          af31|af32|af33|af41|af42|af43|cs0|cs1|cs2|cs3|
                          cs4|cs5|cs6|cs7} or number>
                          precedence = <{routine|priority|immediate|
                          flash|flash-override|CRITIC-ECP|internetwork-
                          control|network-control} or number>
```

where:

type	The type of traffic that needs qos	REQUIRED
qosfield	The QOS field to be used	REQUIRED
dscp	The DSCP value	REQUIRED
precedence	The precedence value	REQUIRED

voice qos list

Show the QOS configuration

voice ringing descrtable add

Add a ringing description

SYNTAX:

```
voice ringing descrtable add    ringid = <number>
                                status = <{disabled|enabled}>
                                ringname = <quoted string>
                                [patternentryid = <number>]
                                [dectringentryid = <number>]
                                maxduration = <number>
                                [alertinfo = <quoted string>]
```

where:

ringid	Ring ID	REQUIRED
status	Enable or disable this ringing	REQUIRED
ringname	Name of the ringing	REQUIRED
patternentryid	Entry ID in pattern table	OPTIONAL
dectringentryid	DECT ringtone identifier	OPTIONAL
maxduration	Max. duration	REQUIRED
alertinfo	Exact content of the linked Alert-Info header	OPTIONAL

voice ringing descrtable delete

Delete a ringing description

SYNTAX:

```
voice ringing descrtable      ringid = <number>
delete
```

where:

ringid	Ring ID	REQUIRED
--------	---------	----------

voice ringing descrtable flush

Flush all ringing descriptions

voice ringing descrtable list

Show all ringing descriptions

SYNTAX:

```
voice ringing descrtable list profile = <string>
```

where:

profile	Profile on which future ringing operations must be done	REQUIRED
---------	---	----------

voice ringing descrtable modify

Modify ring description

SYNTAX:

```
voice ringing descrtable      ringid = <number>
modify                        [status = <{disabled|enabled}>]
                              [ringname = <quoted string>]
                              [patternentryid = <number>]
                              [dectringentryid = <number>]
                              [maxduration = <number>]
                              [alertinfo = <quoted string>]
```

where:

ringid	Ring ID	REQUIRED
status	Enable or disable this ringing	OPTIONAL
ringname	Name of the ringing	OPTIONAL
patternentryid	Entry ID in pattern table	OPTIONAL
dectringentryid	DECT ringtone identifier	OPTIONAL
maxduration	Max. duration	OPTIONAL
alertinfo	Exact content of the linked Alert-Info header	OPTIONAL

voice ringing descrtable set

Set a specific profile for future ringing modifications (current value = all)

SYNTAX:

```
voice ringing descrtable set    profile = <string>
```

where:

profile	Profile on which future ringing operations must be done	REQUIRED
---------	---	----------

voice ringing eventtable flush

Flush all ringing events

voice ringing eventtable list

Show all ringing events

SYNTAX:

```
voice ringing eventtable list profile = <string>
```

where:

profile	Profile on which future ringing operations must be done	REQUIRED
---------	---	----------

voice ringing eventtable modify

Modify a ringing event

SYNTAX:

```
voice ringing eventtable      eventid = <number>
modify                        ringid = <number>
```

where:

eventid	Event ID	REQUIRED
ringid	Ring ID	REQUIRED

voice ringing eventtable set

Set a specific profile for future ringing modifications (current value = all)

SYNTAX:

```
voice ringing eventtable set    profile = <string>
```

where:

profile	Profile on which future ringing operations must be done	REQUIRED
---------	---	----------

voice ringing patterntable add

Add a ringing pattern

SYNTAX:

```
voice ringing patterntable add id = <number>
ringing = <{off|on}>
duration = <number>
[nextentry = <number>]
```

where:

id	ID of the ring pattern	REQUIRED
ringing	Enable or disable this ring	REQUIRED
duration	Duration (ms)	REQUIRED
nextentry	Next pattern entry	OPTIONAL

voice ringing patterntable delete

Delete a ringing pattern

SYNTAX:

```
voice ringing patterntable      id = <number>  
delete
```

where:

id	ID of the ring pattern	REQUIRED
----	------------------------	----------

voice ringing patterntable flush

Flush all ringing patterns

voice ringing patterntable list

Show all ringing patterns

SYNTAX:

```
voice ringing patterntable    profile = <string>  
list
```

where:

profile	Profile on which future ringing operations must be done	REQUIRED
---------	---	----------

voice ringing patterntable modify

Modify a ringing pattern

SYNTAX:

```
voice ringing patterntable      id = <number>
modify                          [ringing = <{off|on}>]
                                [duration = <number>]
                                [nextentry = <number>]
```

where:

id	ID of the ring pattern	REQUIRED
ringing	Enable or disable this ring	OPTIONAL
duration	Duration (ms)	OPTIONAL
nextentry	Next pattern entry	OPTIONAL

voice ringing patterntable set

Set a specific profile for future ringing modifications (current value = all)

SYNTAX:

```
voice ringing patterntable set profile = <string>
```

where:

profile	Profile on which future ringing operations must be done	REQUIRED
---------	---	----------

voice security config

Configure the security parameters

SYNTAX:

```
voice security config          [antispamlevel = <{none|stickyoutbproxy}>]  
                              [mediapolicy = <{none|symmetric}>]
```

where:

antispamlevel	Security level to apply on incoming SIP messages	OPTIONAL
mediapolicy	Security level to apply on incoming media	OPTIONAL

voice security list

Show the security configuration

voice services 3gpp config

General 3gpp configuration

SYNTAX:

```
voice services 3gpp config [overlapsignaling = <{disabled|enabled}>]
```

where:

overlapsignaling	Enable/Disable overlap signaling	OPTIONAL
------------------	----------------------------------	----------

voice services 3gpp list

Show the 3gpp configuration

voice services activate

Activate a supplementary service

SYNTAX:

```
voice services activate          type = <{3pty|acr|bargin|cfbs|cfnr|cfu|clip|
                                clir|forcedFXO|hold|mce|mwi|transfer|vmnr|
                                waiting|warmline}>
```

where:

type	The supplementary service type	REQUIRED
------	--------------------------------	----------

voice services assign

Assign a servicecode to a supplementary service in standard mode

SYNTAX:

```
voice services assign          type = <{3pty|acr|bargin|callreturn|ccbs|
                             cfbs|cfnr|cfu|clip|clir|forcedFXO|hold|
                             internalcall|mce|mwi|transfer|vmnr|waiting|
                             warmline}>
                             servicecode = <string>
```

where:

type	The supplementary service type	REQUIRED
servicecode	The service activation code	REQUIRED

voice services assign_pxsc

Assign a servicecode to a supplementary service in non_standard mode

SYNTAX:

```
voice services assign_pxsc      type = <{3pty|acr|bargin|callreturn|ccbs|
                                cfbs|cfnr|cfu|clip|clir|waitingoncall|
                                warmline}>
                                action = <{activate|deactivate|interrogate}>
                                action_oncall = <{activate|deactivate}>
                                action_cf = <{activate|deactivate|register|
                                activate_and_register|interrogate}>
                                action_act = <{activate}>
                                [servicecode = <string>]
```

where:

type	The supplementary service type	REQUIRED
action	The supplementary service action	REQUIRED
action_oncall	The supplementary service action	REQUIRED
action_cf	The supplementary service action	REQUIRED
action_act	The supplementary service action	REQUIRED
servicecode	The service code	OPTIONAL

voice services config

General supplementary service configuration

SYNTAX:

```
voice services config      [mwi_phone = <{immediate|deferred|both}>]
                          [mwi_network = <{solicited|unsolicited}>]
                          [prefix_servcode = <{standard|nonstandard}>]
                          [servcode_cmd = <{standard|nonstandard}>]
                          [cfu_dest = <string>]
                          [cfnr_timer = <number{0-600}>]
                          [cfnr_dest = <string>]
                          [cfbs_dest = <string>]
                          [hfhf_feature = <{disabled|enabled}>]
                          [cw_reject_persistence = <{disabled|enabled}>]
                          [cw_timer = <number{0-120}>]
                          [cw_reject_scope = <{specific|common}>]
                          [warm-line-timer = <number{1-60}>]
                          [warm-line-dest = <string>]
                          [aes_from_email_address = <string>]
                          [aes_to_email_address = <string>]
                          [aes_outg_smtp_server = <string>]
                          [vmnr_timer = <number{0-600}>]
                          [voice_mail_size_limit = <number>]
                          [transfer3ptywhenonhook = <{disabled|
                          enabled}>]
```

where:

mwi_phone	The way the phone reacts on a message waiting indication	OPTIONAL
mwi_network	The way the network protocol implements the message waiting indication service	OPTIONAL
prefix_servcode	The way the service codes are assigned	OPTIONAL
servcode_cmd	The way the service code command is used	OPTIONAL
cfu_dest	The destination for the CFU service	OPTIONAL
cfnr_timer	The CFNR timer value	OPTIONAL
cfnr_dest	The destination for the CFNR service	OPTIONAL
cfbs_dest	The destination for the CFBS service	OPTIONAL
hfhf_feature	Enable/disable hfhf_feature	OPTIONAL
cw_reject_persistence	Enable/disable cw_reject_persistence	OPTIONAL
cw_timer	The CW timer value	OPTIONAL
cw_reject_scope	The scope of the rejection when the huntgroup is involved	OPTIONAL

warm-line-timer	The Warm-line timer value	OPTIONAL
warm-line-dest	The destination for the Warm-line service	OPTIONAL
aes_from_email_address	The from email address for the AES services	OPTIONAL
aes_to_email_address	The to email address for the AES services	OPTIONAL
aes_outg_smtp_server	The FQDN or IP address of your ISPs outgoing SMTP server	OPTIONAL
vmnr_timer	The VMNR timer value	OPTIONAL
voice_mail_size_limit	The size limit of VoiceMail	OPTIONAL
transfer3ptywhenonhook	Enable/disable transfer when going on hook when involved in 3pty call	OPTIONAL

voice services deactivate

Deactivate a supplementary service

SYNTAX:

```
voice services deactivate      type = <{3pty|acr|bargin|cfbs|cfnr|cfu|clip|
                               clir|forcedFXO|hold|mce|mwi|transfer|vmnr|
                               waiting|warmline}>
```

where:

type	The supplementary service type	REQUIRED
------	--------------------------------	----------

voice services flush

Flush all supplementary services

voice services list

Show the supplementary service configuration

voice services provision

Provision a supplementary service

SYNTAX:

```
voice services provision          type = <{3pty|acr|bargin|callreturn|ccbs|
                                cfbs|cfnr|cfu|clip|clir|forcedFXO|hold|
                                internalcall|mce|mwi|transfer|vmnr|waiting|
                                warmline}>
```

where:

type	The supplementary service type	REQUIRED
------	--------------------------------	----------

voice services servicelist

Show the supplementary service configuration

voice services soc config

General switching order configuration

SYNTAX:

```
voice services soc config      [Registerrecalltimer = <number{0-60}>]  
                               [Digitcollectiontimer = <number{0-60}>]
```

where:

Registerrecalltimer	The Register recall timer value in seconds	OPTIONAL
Digitcollectiontimer	The Digit Collection timer value in seconds	OPTIONAL

voice services soc list

Show the switching order configuration

voice services soc modify

Configure switching order codes

SYNTAX:

```
voice services soc modify      function = <{HoldActiveCallAndEnableCallSetup |
                               NoActiveCallRetrieveHeld |
                               SwitchBetweenActiveAndHeld |
                               SwitchBetweenActiveAndWaiting}>
                               SOC = <{HF | HF1 | HF2 | HFTO | HFTOorHF2 | HF3}>
```

where:

function	Switching function	REQUIRED
SOC	Switching order code	REQUIRED

voice services soc soclist

Show the switching order codes

voice services withdraw

Withdraw a supplementary service

SYNTAX:

```
voice services withdraw          type = <{3pty|acr|bargin|callreturn|ccbs|
                                cfbs|cfnr|cfu|clip|clir|forcedFXO|hold|
                                internalcall|mce|mwi|transfer|vmnr|waiting|
                                warmline}>
```

where:

type	The supplementary service type	REQUIRED
------	--------------------------------	----------

voice sip config

Configure the SIP general parameters

SYNTAX:

```
voice sip config      [useragentdomain = <string>]
                    [primproxyaddr = <string>]
                    [secproxyaddr = <string>]
                    [proxyport = <{undefined|at-echo|at-nbp|at-
rtmp|at-zis|auth|bgp|biff|bootpc|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|
nfs|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|sysstat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or
number>]
                    [secproxyport = <{undefined|at-echo|at-nbp|
at-rtmp|at-zis|auth|bgp|biff|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|nfs|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|sysstat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or
number>]
                    [primregaddr = <string>]
                    [secregaddr = <string>]
                    [regport = <{undefined|at-echo|at-nbp|at-rtmp|
at-zis|auth|bgp|biff|bootpc|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|nfs|
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|sysstat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|
who|www-http|whoami|xwindows} or number>]
                    [regexpire = <number{60-86400}>]
                    [regexpire_Tbefore = <number{1-86400}>]
                    [notifier_addr = <string>]
```

```

[notifier_port = <{undefined|at-echo|at-nbp|
at-rtmp|at-zis|auth|bgp|biff|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|
ike|ils|imap2|imap3|ingres-net|ipserver|ipx|
irc-o|irc-u|kerberos|ldap|login|netbios-dgm|
netbios-ns|netbios-ssn|netwall|netware-ip|new-
rwho|nfs|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|sysstat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or
number>]
[subscribe_expire = <number{60-86400}>]
[failbehaviour = <{stop|continue}>]
[CWreply = <{182|180}>]
[transport = <{undefined|UDP|TCP|TLS}>]
[rtpmapstaticPT = <{disabled|enabled}>]
[reinvite_stop_audio = <{disabled|enabled}>]
[MethodUpdate = <{disabled|enabled}>]
[PRACK = <{disabled|enabled|unsupported|
supported|required|when_supported}>]
[clirformat = <{standard|nonstandard}>]
[DTMF*#inINFO = <{*#|1011}>]
[clip_consider_displayname = <{no|yes}>]
[sdp_ptime = <{10|20|30|notsent}>]
[replace# = <{enabled|disabled}>]
[symmetriccodec = <{enabled|disabled}>]
[reinvite_at_cgfax_detect = <{enabled|
disabled}>]
[SIPURI_port = <{enabled|disabled}>]
[rport = <{enabled|disabled}>]
[SDP_username = <string>]
[t38portincrement = <number{0-65535}>]
[ping = <number{0-86400}>]
[min-se = <0 or a number{90-604800}>]
[session-expires = <0 or a number{90-604800}>]
[expires = <number{0-3600}>]
[register-backoff-timer = <number{0-86400}>]
[mwi-resubscribe-delay = <number{0-86400}>]
[stickyoutbproxy = <{disabled|enabled}>]
[privacy = <{ignore|strict|loose}>]
[SDP_username_per_UA = <{disabled|enabled}>]
[stop_register_on_403 = <{disabled|enabled}>]
[403waiting = <number{0-86400}>]
[distinct_t38_port = <{disabled|enabled}>]
[transport_in_contact = <{disabled|enabled}>]
[401407waiting = <number{0-86400}>]
[400503waiting = <number{0-86400}>]
[other4xx5xx6xxwaiting = <number{0-86400}>]
[timer_f_expired_waiting = <number{0-86400}>]
[stop_register_on_408 = <{disabled|enabled}>]
[stop_register_on_timerfexpired = <{disabled|
enabled}>]
[provisional_timer = <number{0-3600}>]

```



```

[timert1 = <number{1-1048575}>]
[timert2 = <number{1-1048575}>]
[timertb = <number{1-1048575}>]
[timertf = <number{1-1048575}>]
[response420 = <{disabled|enabled}>]
[realm = <quoted string>]
[realmcheck = <{disabled|enabled}>]
[regpersistency = <{disabled|permanent}>]
[no-answer-reply = <{480|486}>]
[CWrejectreply = <{480|486}>]
[SIPURIsupport = <{legacy|TR104}>]
[XSerialnumAction = <{disabled|enabled}>]
[redirecton3xx = <{disabled|enabled}>]

```

where:

useragentdomain	User Agent domain	OPTIONAL
primproxyaddr	Primary outbound proxy address or FQDN	OPTIONAL
secproxyaddr	Secondary outbound proxy address or FQDN	OPTIONAL
proxyport	Primary outbound proxy port	OPTIONAL
secproxyport	Secondary outbound proxy port	OPTIONAL
primregaddr	Primary registrar address or domain	OPTIONAL
secregaddr	Secondary registrar address or domain	OPTIONAL
regport	Registrar port	OPTIONAL
regexpire	The registration expire time	OPTIONAL
regexpire_Tbefore	Time to send new registration request before registration expires	OPTIONAL
notifier_addr	Notifier address or FQDN used for MWI	OPTIONAL
notifier_port	Notifier port used for MWI	OPTIONAL
subscribe_expire	The subscription expire time	OPTIONAL
failbehaviour	Behaviour on failed INVITE: re-register (stop) or use DNS logic (continue)	OPTIONAL
CWreply	The reply to be sent for a waiting call (180/182)	OPTIONAL
transport	The transport type	OPTIONAL
rtpmapstaticPT	Enable or disable adding RTP map i.c.o. static PT	OPTIONAL
reinvite_stop_audio	Explicitly stop audio stream in the SDP when sending a re-invite	OPTIONAL
MethodUpdate	Enable or disable Update Method	OPTIONAL

PRACK	No support , support or required provisional responses	OPTIONAL
clirformat	The clir format	OPTIONAL
DTMF*#inINFO	Format used for */# in INFO method	OPTIONAL
clip_consider_displayname	Consider the displayname for CLIP or not	OPTIONAL
sdp_ptime	The packet time used in the SDP message	OPTIONAL
replace#	Enable or disable the # in INVITE to be replaced by %23	OPTIONAL
symmetriccodec	Enable or disable symmetric codecs	OPTIONAL
reinvite_at_cgfax_detect	Send re_invite when calling fax is detected	OPTIONAL
SIPURI_port	Enable or disable the SIPURI port	OPTIONAL
rport	Enable or disable the parameter rport	OPTIONAL
SDP_username	SDP user name	OPTIONAL
t38portincrement	Offset of T38 port number vs RTP port number.	OPTIONAL
ping	Time between two keepalive ping requests.	OPTIONAL
min-se	The minimum session expires timer.	OPTIONAL
session-expires	The session expires timer.	OPTIONAL
expires	The INVITE expires timer.	OPTIONAL
register-backoff-timer	Fixed backoff timer in registration procedure	OPTIONAL
mwi-resubscribe-delay	Delay between 2 un-answered MWI subscribe requests	OPTIONAL
stickyoutbproxy	Outband proxy lock over transactions	OPTIONAL
privacy	The privacy type can be ignore, strict or loose.	OPTIONAL
SDP_username_per_UA	SDP user name per ua	OPTIONAL
stop_register_on_403	Stop register on 403	OPTIONAL
403waiting	Time in sec. before retrying after a 403 response	OPTIONAL
distinct_t38_port	Used distinct port for T38	OPTIONAL
transport_in_contact	Transporttype in contact header	OPTIONAL
401407waiting	Time in sec. before a new registration (if 0, stops)	OPTIONAL
400503waiting	Time in sec. before a new registration attempt (0 = no wait)	OPTIONAL
other4xx5xx6xxwaiting	Time in sec. before retrying after a 4xx/5xx/6xx resp.	OPTIONAL
timer_f_expired_waiting	Time in sec. before retrying after timer f expired	OPTIONAL
stop_register_on_408	Stop register on 408	OPTIONAL

stop_register_on_timerexpired	Stop register on Timer F expired	OPTIONAL
provisional_timer	Set provisional timer	OPTIONAL
timert1	The T1 expires timer.	OPTIONAL
timert2	The T2 expires timer.	OPTIONAL
timertb	The Timer B expires timer.	OPTIONAL
timertf	The Timer F expires timer.	OPTIONAL
response420	Enable or disable sip 420 bad extension response when receiving bad extensions	OPTIONAL
realm	Realm to be used in outbound and inbound authentication	OPTIONAL
realmcheck	Should realm be checked on authentication	OPTIONAL
regpersistence	number of times UA registration stays with the last known good proxy address. <disabled permanent> or <value>.	OPTIONAL
no-answer-reply	No answer reply	OPTIONAL
CWrejectreply	CW reject reply	OPTIONAL
SIPURIsupport	SIPURI support legacy or TR104	OPTIONAL
XSerialnumAction	Enable or disable X_Serialnum header	OPTIONAL
redirecton3xx	redirect to new server when receiving 3xx except 305	OPTIONAL

voice sip inboundauth config

Configure which methods should be authenticated

SYNTAX:

```
voice sip inboundauth config [noncelifetime = <number{1-86400}>]
                              [BYE = <{disabled|enabled}>]
                              [INFO = <{disabled|enabled}>]
                              [INVITE = <{disabled|enabled}>]
                              [NOTIFY = <{disabled|enabled}>]
                              [OPTIONS = <{disabled|enabled}>]
                              [PING = <{disabled|enabled}>]
                              [PRACK = <{disabled|enabled}>]
                              [REFER = <{disabled|enabled}>]
                              [SUBSCRIBE = <{disabled|enabled}>]
                              [UPDATE = <{disabled|enabled}>]
```

where:

noncelifetime	maximum lifetime of a nonce	OPTIONAL
BYE		OPTIONAL
INFO		OPTIONAL
INVITE		OPTIONAL
NOTIFY		OPTIONAL
OPTIONS		OPTIONAL
PING		OPTIONAL
PRACK		OPTIONAL
REFER		OPTIONAL
SUBSCRIBE		OPTIONAL
UPDATE		OPTIONAL

voice sip inboundauth list

List the methods

voice sip list

Display the SIP general parameters

voice sip responsemap add

Add a SIP response

SYNTAX:

```
voice sip responsemap add      responsecode = <string>
                               tone = <{dial|none|remotecallhold|callhold|
                               remotecallwaiting|callwaiting|specialdial|
                               stutterdial|bargain}>
                               [textmessage = <quoted string>]
```

where:

responsecode	SIP Response Code	REQUIRED
tone	Tone to be played	REQUIRED
textmessage	Text message to display	OPTIONAL

voice sip responsemap delete

Delete a SIP response

SYNTAX:

```
voice sip responsemap delete responsecode = <{1xx|180|181|182|183|2xx|3xx|4xx|486|5xx|6xx}>
```

where:

responsecode	SIP Response Code	REQUIRED
--------------	-------------------	----------

voice sip responsemap flush

Flush all SIP responses

voice sip response map list

Show all SIP responses

voice sip responsemap modify

Modify a SIP response

SYNTAX:

```
voice sip responsemap modify    responsecode = <{1xx|180|181|182|183|2xx|3xx|
                                4xx|486|5xx|6xx}>
                                [tone = <{dial|none|remotecallhold|callhold|
                                remotecallwaiting|callwaiting|specialdial|
                                stutterdial|bargain}>]
                                [textmessage = <quoted string>]
```

where:

responsecode	SIP Response Code	REQUIRED
tone	Tone to be played	OPTIONAL
textmessage	Text message to display	OPTIONAL

voice sip sdp annexa config

Configure the SDP AnnexA parameters

SYNTAX:

```
voice sip sdp annexa config      [scopeadd = <{g723-1}>]  
                                  [scopedel  = <{g723-1}>]
```

where:

scopeadd	Scope add list	OPTIONAL
scopedel	Scope del list	OPTIONAL

voice sip sdp annexb config

Configure the SDP annexb parameters

SYNTAX:

```
voice sip sdp annexb config      [scopeadd = <{g729}>]  
                                  [scopedel  = <{g729}>]
```

where:

scopeadd	Scope add list	OPTIONAL
scopedel	Scope del list	OPTIONAL

voice sip sdp config

Configure the SDP general parameters

SYNTAX:

```
voice sip sdp config      [remotesupportsilencesupp = <{on-specified|
                          off-not-specified}>]
                          [callholddirection = <{sendonly|inactive}>]
                          [versioncheck = <{no|yes}>]
                          [includedefaultsendrecv = <{no|yes}>]
                          [enable_ANNEXE_g726_32 = <{no|yes}>]
```

where:

remotesupportsilencesupp	Remote support SilenceSupp	OPTIONAL
callholddirection	Call Hold Direction	OPTIONAL
versioncheck	Check version in SDP header	OPTIONAL
includedefaultsendrecv	Include default sendrecv in SDP	OPTIONAL
enable_ANNEXE_g726_32	Enable or Disable AnnexE for Codec G726_32	OPTIONAL

voice sip sdp list

List the SDP general parameters

voice sip sdp silencesupp config

Configure the SDP Silence Supp parameters

SYNTAX:

```
voice sip sdp silencesupp      [scopeadd = <{g711|g726|g723-1|g729}>]
config                        [scopedel  = <{g711|g726|g723-1|g729}>]
                               [priority  = <{off|on}>]
```

where:

scopeadd	Scope add list	OPTIONAL
scopedel	Scope del list	OPTIONAL
priority	silenceSupp priority	OPTIONAL

voice sip sdp vad config

Configure the SDP Vad parameters

SYNTAX:

```
voice sip sdp vad config      [scopeadd = <{g711|g726}>]  
                             [scopedel  = <{g711|g726}>]
```

where:

scopeadd	Scope add list	OPTIONAL
scopedel	Scope del list	OPTIONAL

voice state

show VOIP service states

voice stats list

Show voice statistics

SYNTAX:

```
voice stats list          voiceport = <{FXS1|FXS2|all}>
                          type = <{detailed|generic|all}>
```

where:

voiceport	The voice port used to get/reset the statistics	REQUIRED
type	Type of statistics to be listed/reset	REQUIRED

voice stats reset

Reset voice statistics

SYNTAX:

```
voice stats reset          voiceport = <{FXS1|FXS2|all}>
                           type = <{detailed|generic|all}>
```

where:

voiceport	The voice port used to get/reset the statistics	REQUIRED
type	Type of statistics to be listed/reset	REQUIRED

voice tone descrtable add

Add tone description

SYNTAX:

```
voice tone descrtable add      tone = <string>
                               status = <{disabled|enabled}>
                               delay = <number>
                               [patternentryid = <number>]
                               [file = <string>]
                               [filerepeat = <number>]
                               text = <quoted string>
                               [maxduration = <number>]
                               [nexttone = <string>]
                               repeatafter = <number>
```

where:

tone	Name of the tone	REQUIRED
status	Enable or disable this tone	REQUIRED
delay	Delay (in ms)	REQUIRED
patternentryid	Entry ID in pattern table	OPTIONAL
file	Audio file name	OPTIONAL
filerepeat	File repetitions	OPTIONAL
text	Text to display on the phone	REQUIRED
maxduration	Max. duration	OPTIONAL
nexttone	Name of the tone	OPTIONAL
repeatafter	Time after which the tone must be repeated (in ms)	REQUIRED

voice tone descrtable delete

Delete tone description

SYNTAX:

```
voice tone descrtable delete    tone = <{bargain}>
```

where:

tone	Name of the tone	REQUIRED
------	------------------	----------

voice tone descrtable flush

Flush all tone descriptions

voice tone descrtable list

Show all tone descriptions

voice tone descrtable modify

Modify tone description

SYNTAX:

```
voice tone descrtable modify    tone = <{dial|none|remotecallhold|callhold|
                                remotecallwaiting|callwaiting|specialdial|
                                stutterdial|bargain}>
                                [status = <{disabled|enabled}>]
                                [delay = <number>]
                                [patternentryid = <number>]
                                [file = <string>]
                                [filerepeat = <number>]
                                [text = <string>]
                                [maxduration = <number>]
                                [nexttone = <string>]
                                [repeatafter = <number>]
```

where:

tone	Name of the tone	REQUIRED
status	Enable or disable this tone	OPTIONAL
delay	Delay (in ms)	OPTIONAL
patternentryid	Entry ID in pattern table	OPTIONAL
file	Audio file name	OPTIONAL
filerepeat	File repetitions	OPTIONAL
text	Text to display on the phone	OPTIONAL
maxduration	Max. duration	OPTIONAL
nexttone	Name of the tone	OPTIONAL
repeatafter	Time after which the tone must be repeated (in ms)	OPTIONAL

voice tone eventtable flush

Flush all tone events

voice tone eventtable list

Show all tone events

voice tone eventtable modify

Modify tone event

SYNTAX:

```
voice tone eventtable modify eventid = <{1|2|3|4|5|6|7|8|9|10|11|12|13|14|
15|16|17|18|19|20|101|102|103|404|405|406|407|
408|409|410|501|502|503|999}>
tone = <{dial|none|remotecallhold|callhold|
remotecallwaiting|callwaiting|specialdial|
stutterdial|bargin}>
```

where:

eventid	Event ID	REQUIRED
tone	Tone to play for this event	REQUIRED

voice tone patterntable add

Add tone pattern

SYNTAX:

```
voice tone patterntable add      id = <number>
                                tone = <{off|on}>
                                [freq1 = <number>]
                                [power1 = <number>]
                                [freq2 = <number>]
                                [power2 = <number>]
                                [freq3 = <number>]
                                [power3 = <number>]
                                [freq4 = <number>]
                                [power4 = <number>]
                                [duration = <number>]
                                [nextentry = <number>]
                                [maxloops = <number>]
                                [nextentryafterloops = <number>]
```

where:

id	ID of the tone pattern	REQUIRED
tone	Enable or disable this tone	REQUIRED
freq1	Frequency 1	OPTIONAL
power1	Power 1	OPTIONAL
freq2	Frequency 2	OPTIONAL
power2	Power 2	OPTIONAL
freq3	Frequency 3	OPTIONAL
power3	Power 3	OPTIONAL
freq4	Frequency 4	OPTIONAL
power4	Power 4	OPTIONAL
duration	Duration (ms)	OPTIONAL
nextentry	Next pattern entry	OPTIONAL
maxloops	Max loops	OPTIONAL
nextentryafterloops	Next entry after loops	OPTIONAL

voice tone patterntable delete

Delete tone pattern

SYNTAX:

```
voice tone patterntable delete id = <{1|2|11|12|13|21|22|31|41|42|51|61|62|
63|71|72|81|82|83|84|91|92|101|102|103|104|
111|112|121|131|132|141|142|151|161}>
[endentryid = <{1|2|11|12|13|21|22|31|41|42|
51|61|62|63|71|72|81|82|83|84|91|92|101|102|
103|104|111|112|121|131|132|141|142|151|161}>]
```

where:

id	ID of the tone pattern	REQUIRED
endentryid	ID of the tone pattern	OPTIONAL

voice tone patterntable flush

Flush all tone patterns

voice tone patterntable list

Show all tone patterns

voice tone patterntable modify

Modify tone pattern

SYNTAX:

```
voice tone patterntable modify id = <{1|2|11|12|13|21|22|31|41|42|51|61|62|
63|71|72|81|82|83|84|91|92|101|102|103|104|
111|112|121|131|132|141|142|151|161}>
[tone = <{off|on}>]
[freq1 = <number>]
[power1 = <number>]
[freq2 = <number>]
[power2 = <number>]
[freq3 = <number>]
[power3 = <number>]
[freq4 = <number>]
[power4 = <number>]
[duration = <number>]
[nextentry = <number>]
[maxloops = <number>]
[nextentryafterloops = <number>]
```

where:

id	ID of the tone pattern	REQUIRED
tone	Enable or disable this tone	OPTIONAL
freq1	Frequency 1	OPTIONAL
power1	Power 1	OPTIONAL
freq2	Frequency 2	OPTIONAL
power2	Power 2	OPTIONAL
freq3	Frequency 3	OPTIONAL
power3	Power 3	OPTIONAL
freq4	Frequency 4	OPTIONAL
power4	Power 4	OPTIONAL
duration	Duration (ms)	OPTIONAL
nextentry	Next pattern entry	OPTIONAL
maxloops	Max loops	OPTIONAL
nextentryafterloops	Next entry after loops	OPTIONAL

voice uamap add

Add uamap

SYNTAX:

```
voice uamap add                profile = <{0}>  
                               voiceport = <{FXS1|FXS2}>
```

where:

profile	The SIP URI related to this voice port	REQUIRED
voiceport	The specific phone	REQUIRED

voice uamap delete

Delete uamap

SYNTAX:

```
voice uamap delete          profile = <{0}>
                             voiceport = <{FXS1|FXS2}>
```

where:

profile	The SIP URI related to this voice port	REQUIRED
voiceport	The specific phone	REQUIRED

voice uamap flush

Flush all uamap entries

voice uamap list

Show all uamaps

SYNTAX:

```
voice uamap list [profile = <{0}>]
```

where:

profile	User Agent index	OPTIONAL
---------	------------------	----------

wansensing Commands

<i>wansensing config</i>	<i>Configure parameters</i>	see page 1264
<i>wansensing debug traceconfig</i>	<i>Tracing settings</i>	see page 1265
<i>wansensing flush</i>	<i>Clean configuration</i>	see page 1266
<i>wansensing list</i>	<i>Display parameters</i>	see page 1267
<i>wansensing mode add</i>	<i>Add mode</i>	see page 1268
<i>wansensing mode delete</i>	<i>Delete mode</i>	see page 1269
<i>wansensing mode list</i>	<i>List all modes</i>	see page 1270
<i>wansensing requestmode</i>	<i>Request to enter certain mode</i>	see page 1271

wansensing config

Configure parameters

SYNTAX:

```
wansensing config [state = <{disabled|enabled}>]
                  [errorinterval = <number>]
                  [errorsript = <string>]
```

where:

state	Enable/disable	OPTIONAL
errorinterval	Error interval value	OPTIONAL
errorsript	Error script name	OPTIONAL

wansensing debug traceconfig

Tracing settings

SYNTAX:

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

where:

state	Enable/disable	OPTIONAL
-------	----------------	----------

wansensing flush

Clean configuration

wansensing list

Display parameters

wansensing mode add

Add mode

SYNTAX:

```
wansensing mode add          name = <string>
                             maininterval = <number>
                             scriptname = <string>
                             [redirectgui = <{disabled|enabled}>]
```

where:

name	Mode name	REQUIRED
maininterval	Main interval value	REQUIRED
scriptname	Script name	REQUIRED
redirectgui	Redirect GUI	OPTIONAL

wansensing mode delete

Delete mode

SYNTAX:

```
wansensing mode delete          name = <string>
```

where:

name	Mode name	REQUIRED
------	-----------	----------

wansensing mode list

List all modes

wansensing requestmode

Request to enter certain mode

SYNTAX:

```
wansensing requestmode mode = <string>
```

where:

mode	Mode to enter (its name)	REQUIRED
------	--------------------------	----------

webserver Commands

<i>webserver ssl commonname add</i>	<i>Add an CommonName</i>	see page 1274
<i>webserver ssl commonname delete</i>	<i>Delete an option.</i>	see page 1275
<i>webserver ssl commonname list</i>	<i>List all options.</i>	see page 1276

webserver ssl commonname add

Add an CommonName

SYNTAX:

```
webserver ssl commonname add commonname = <string>
```

where:

commonname	CommonName	REQUIRED
------------	------------	----------

webservice ssl commonname delete

Delete an option.

SYNTAX:

```
webservice ssl commonname      id = <string>
delete
```

where:

id	id	REQUIRED
----	----	----------

webserver ssl commonname list

List all options.

wireless Commands

<i>wireless acs config</i>	<i>ACS configuration parameters</i>	see page 1279
<i>wireless acs debug acsprofile</i>	<i>Configuration of ACS profiles</i>	see page 1281
<i>wireless acs debug config</i>	<i>Configuration of Advanced ACS parameters and traces</i>	see page 1282
<i>wireless acs debug dumpacsmeas</i>	<i>ACS detailed scan summaries of the last performed scan</i>	see page 1283
<i>wireless acs rescan</i>	<i>Performs Automatic Channel Selection</i>	see page 1284
<i>wireless acs scanhistory</i>	<i>Shows ACS scanhistory</i>	see page 1285
<i>wireless acs scanreport</i>	<i>Shows report for last performed scan</i>	see page 1286
<i>wireless debug stats</i>	<i>Transfer statistics</i>	see page 1287
<i>wireless debug traceconfig</i>	<i>Tracing configuration, configurable per module.</i>	see page 1288
<i>wireless debug txtest</i>	<i>Transmit test</i>	see page 1289
<i>wireless macacl add</i>	<i>Add an ACL MAC entry</i>	see page 1290
<i>wireless macacl config</i>	<i>Access Control List configuration</i>	see page 1291
<i>wireless macacl delete</i>	<i>Delete an ACL MAC entry</i>	see page 1292
<i>wireless macacl flush</i>	<i>Flushes ACL entries</i>	see page 1293
<i>wireless macacl list</i>	<i>Shows a list of all configured ACL entries</i>	see page 1294
<i>wireless macacl modify</i>	<i>Modify an ACL entry</i>	see page 1295
<i>wireless macacl register</i>	<i>Start a registration process (only for register mode)</i>	see page 1296
<i>wireless mssid ifadd</i>	<i>Add an extra ssid context</i>	see page 1297
<i>wireless mssid ifattach</i>	<i>Attach a ssid context</i>	see page 1298
<i>wireless mssid ifconfig</i>	<i>Configure a ssid context</i>	see page 1299
<i>wireless mssid ifdelete</i>	<i>Delete a ssid context</i>	see page 1301
<i>wireless mssid ifdetach</i>	<i>Detach a ssid context</i>	see page 1302
<i>wireless mssid iflist</i>	<i>Multiple ssid configuration</i>	see page 1303
<i>wireless qos apacconfig</i>	<i>configure AP EDCA parameters</i>	see page 1304
<i>wireless qos config</i>	<i>configure QoS settings</i>	see page 1305
<i>wireless qos staacconfig</i>	<i>configure STA EDCA parameters</i>	see page 1306

<i>wireless radio</i>	<i>Configures radio settings.</i>	see page 1307
<i>wireless radius config</i>	<i>RADIUS configuration</i>	see page 1308
<i>wireless radius server config</i>	<i>RADIUS server configuration</i>	see page 1309
<i>wireless reset</i>	<i>Reset Wireless interface settings to defaults</i>	see page 1310
<i>wireless stations history config</i>	<i>Configure station history</i>	see page 1311
<i>wireless stations history list</i>	<i>List the station history</i>	see page 1312
<i>wireless stations history reset</i>	<i>Reset history</i>	see page 1313
<i>wireless stations history save</i>	<i>Save history</i>	see page 1314
<i>wireless stations list</i>	<i>List of the currently associated stations</i>	see page 1315
<i>wireless wps config</i>	<i>Configure/Show the WPS settings</i>	see page 1316
<i>wireless wps pin</i>	<i>Enroll a WSC Station by entering its device password or PIN</i>	see page 1317

wireless acs config

ACS configuration parameters

SYNTAX:

```
wireless acs config [state = <{Disabled|Monitoring|Selecting}>]
                    [mode = <{Legacy|Interference|
                    Interference&Busy|Optimized|Custom1|Custom2}>]
                    - Legacy = <{Legacy|Interference|
                    Interference&Busy|Optimized|Custom1|Custom2}>
                    - Intf = <{Legacy|Interference|
                    Interference&Busy|Optimized|Custom1|Custom2}>
                    - Intf&Busy = <{Legacy|Interference|
                    Interference&Busy|Optimized|Custom1|Custom2}>
                    - Optimized = <{Legacy|Interference|
                    Interference&Busy|Optimized|Custom1|Custom2}>
                    - Custo1 = <{Legacy|Interference|
                    Interference&Busy|Optimized|Custom1|Custom2}>
                    - Custo2 = <{Legacy|Interference|
                    Interference&Busy|Optimized|Custom1|Custom2}>
                    0 = <{Legacy|Interference|Interference&Busy|
                    Optimized|Custom1|Custom2}>
                    [rescandelay = <number{10-3600}>]
                    [rescandelaypolicy = <{Always|NoStation|
                    NoTraffic}>]
                    - Always = <{Always|NoStation|NoTraffic}>
                    - NoStation = <{Always|NoStation|NoTraffic}>
                    - NoTraffic = <{Always|NoStation|NoTraffic}>
                    [rescandelaymaxevents = <number{1-999}>]
                    [chmonitorperiod = <number{1-10}>]
                    [chfailtriggervalid = <number{1-10}>]
                    [chfailmaxevents = <number{1-10}>]
                    [chfaillockoutperiod = <number{1-86400}>]
                    [radio_id = <number{0-9999}>]
```

where:

state	Operational state of the Automatic Channel Selection	OPTIONAL
mode	The operational mode of the Automatic Channel Selection:	OPTIONAL
- Legacy	Consider only AP counts per channel	REQUIRED
- Intf	statistics per channel	REQUIRED
- Intf&Busy	occupancy statistics per channel	REQUIRED
- Optimized	occupancy and background noise per channel	REQUIRED
- Custo1	operational mode 1	REQUIRED
- Custo2	[rescanperiod = <number{0-604800}>] Periodic rescan period [s], must be at least 60s	REQUIRED

0	time	REQUIRED
rescandelay	Delay period [s] before a re-evaluation is done of the rescan policy	OPTIONAL
rescandelaypolicy	Defines when the periodic scan is executed:	OPTIONAL
- Always	execute the rescan immediately	REQUIRED
- NoStation	associated, execute the rescan, if not delay it	REQUIRED
- NoTraffic	unicast RX/TX traffic is detected, execute the rescan, if not delay it	REQUIRED
rescandelaymaxevents	The maximum amount of rescan delay events that is allowed, if the counter is exceeded the rescan is executed	OPTIONAL
chmonitorperiod	The period [s] during which channel statistics are monitored	OPTIONAL
chfailtriggervalid	The amount of consecutive channel failure triggers required to launch a valid bad channel event	OPTIONAL
chfailmaxevents	The maximum amount of bad channel events within a lockout period	OPTIONAL
chfaillockoutperiod	The period [s] which is activated directly after a valid channel change, preventing a flood of channel change events	OPTIONAL
radio_id	radio	OPTIONAL

wireless acs debug acsprofile

Configuration of ACS profiles

SYNTAX:

```
wireless acs debug acsprofile [radio_id = <number{0-9999}>]
                               [value = <quoted string>]
                               [profile_id = <number>]
```

where:

radio_id	radio	OPTIONAL
value	Space separated list of the profile parameters	OPTIONAL
profile_id	Index of profile to edit	OPTIONAL

wireless acs debug config

Configuration of Advanced ACS parameters and traces

SYNTAX:

```
wireless acs debug config      [radio_id = <number{0-9999}>]
                               [txtraffichreshold = <number{1-9999}>]
                               [rxtraffichreshold = <number{1-9999}>]
                               [trafficsenseperiod = <number{5-60}>]
                               [chanimtracing = <{disabled|enabled}>]
                               [trafficttracing = <{disabled|enabled}>]
                               [tracelevel = <number{0-3}>]
                               [interferencespan = <number{0-4}>]
                               [chnoisethreshold = <number{0-100}>]
                               [chscorethreshold = <number{0-100}>]
```

where:

radio_id	radio	OPTIONAL
txtraffichreshold	TX traffic detection threshold [packets/s]	OPTIONAL
rxtraffichreshold	RX traffic detection threshold [packets/s]	OPTIONAL
trafficsenseperiod	Period [s] over which the traffic on the WLAN interface is monitored	OPTIONAL
chanimtracing	Enable or disable CHANIM (Channel Interference Monitor) traces	OPTIONAL
trafficttracing	Enable or disable traffic detection traces	OPTIONAL
tracelevel	ACS debug trace level	OPTIONAL
interferencespan	Defines the number of channels before/after the target channel that are considered when measuring interference	OPTIONAL
chnoisethreshold	The noise threshold that is used by the CHANIM to compare the current measurement with the best one, if the threshold is exceeded a channel fail event is generated	OPTIONAL
chscorethreshold	The percentage of the total channel score difference that is needed to make the decision of switching channels after a rescan.	OPTIONAL

wireless acs debug dumpacsmeas

ACS detailed scan summaries of the last performed scan

SYNTAX:

```
wireless acs debug dumpacsmeas topic = <{bss|chanim|candidate|bsslist}>
                                [radio_id = <number{0-9999}>]
```

where:

topic	Dump ACS Measurement results	REQUIRED
radio_id	radio	OPTIONAL

wireless acs rescan

Performs Automatic Channel Selection

SYNTAX:

```
wireless acs rescan [radio_id = <number{0-9999}>]
```

where:

radio_id	radio	OPTIONAL
----------	-------	----------

wireless acs scanhistory

Shows ACS scanhistory

SYNTAX:

```
wireless acs scanhistory [radio_id = <number{0-9999}>]
```

where:

radio_id	radio	OPTIONAL
----------	-------	----------

wireless acs scanreport

Shows report for last performed scan

SYNTAX:

```
wireless acs scanreport [radio_id = <number{0-9999}>]
```

where:

radio_id	radio	OPTIONAL
----------	-------	----------

wireless debug stats

Transfer statistics

wireless debug traceconfig

Tracing configuration, configurable per module.

SYNTAX:

```
wireless debug traceconfig    [ssid_id = <number{0-9999}>]
                               [radio_id = <number{0-9999}>]
                               [radius = <{enabled|disabled}>]
                               [acs = <{enabled|disabled}>]
                               [wps = <{enabled|disabled}>]
                               [dot1x = <{enabled|disabled}>]
                               [level = <{some|more|detail}>]
```

where:

ssid_id	ssid id	OPTIONAL
radio_id	radio	OPTIONAL
radius	RADIUS related traces	OPTIONAL
acs	Automatic Channel Selection related traces, see acs configuration submenu for more detailed configuration options	OPTIONAL
wps	WPS related traces	OPTIONAL
dot1x	IEEE802.1x related traces	OPTIONAL
level	Trace level	OPTIONAL

wireless debug txttest

Transmit test

SYNTAX:

```
wireless debug txttest [hwaddr = <hardware-address>]
                        [radio_id = <number{0-9999}>]
                        [state = <{enabled|disabled}>]
                        [duration = <number{0-86400}>]
                        [packetsize = <number{64-2346}>]
                        [ampdu = <{enabled|disabled}>]
                        [modulation = <{auto|CCK|OFDMLegacy|OFDMCS}>]
                        [rateindex = <number{0-32}>]
                        [priority = <number{0-15}>]
```

where:

hwaddr	MAC Address	OPTIONAL
radio_id	Radio	OPTIONAL
state	State	OPTIONAL
duration	Test time	OPTIONAL
packetsize	Packet size	OPTIONAL
ampdu	Use ampdu	OPTIONAL
modulation	Modulation	OPTIONAL
rateindex	Index	OPTIONAL
priority	Priority	OPTIONAL

wireless macacl add

Add an ACL MAC entry

SYNTAX:

```
wireless macacl add          [ssid_id = <number{0-9999}>]
                             [radio_id = <number{0-9999}>]
                             hwaddr = <hardware-address>
                             permission = <{allow|deny}>
                             [name = <quoted string>]
```

where:

ssid_id	ssid id	OPTIONAL
radio_id	radio	OPTIONAL
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

wireless macacl config

Access Control List configuration

SYNTAX:

```
wireless macacl config      [ssid_id = <number{0-9999}>]
                             [radio_id = <number{0-9999}>]
                             [control = <{lock|unlock|register}>]
                             [regtime = <number{15-3600}>]
```

where:

ssid_id	ssid id	OPTIONAL
radio_id	radio	OPTIONAL
control	Access Control List mode	OPTIONAL
regtime	Registration time	OPTIONAL

wireless macacl delete

Delete an ACL MAC entry

SYNTAX:

```
wireless macacl delete      [ssid_id = <number{0-9999}>]
                             [radio_id = <number{0-9999}>]
                             hwaddr = <hardware-address>
```

where:

ssid_id	ssid id	OPTIONAL
radio_id	radio	OPTIONAL
hwaddr	hardware address of the ACL entry	REQUIRED

wireless macacl flush

Flushes ACL entries

SYNTAX:

```
wireless macacl flush      [ssid_id = <number{0-9999}>]
                           [radio_id = <number{0-9999}>]
                           proceed = <{disabled|enabled}>
```

where:

ssid_id	ssid id	OPTIONAL
radio_id	radio	OPTIONAL
proceed	Confirmation required	REQUIRED

wireless macacl list

Shows a list of all configured ACL entries

SYNTAX:

```
wireless macacl list [ssid_id = <number{0-9999}>]  
                    [radio_id = <number{0-9999}>]
```

where:

ssid_id	ssid id	OPTIONAL
radio_id	radio	OPTIONAL

wireless macacl modify

Modify an ACL entry

SYNTAX:

```
wireless macacl modify      [ssid_id = <number{0-9999}>]
                             [radio_id = <number{0-9999}>]
                             hwaddr = <hardware-address>
                             [permission = <{allow|deny}>]
                             [name = <quoted string>]
```

where:

ssid_id	ssid id	OPTIONAL
radio_id	radio	OPTIONAL
hwaddr	The Ethernet MAC address of the ACL entry	REQUIRED
permission	The action to be performed on ACL entry	OPTIONAL
name	The name of the station	OPTIONAL

wireless macacl register

Start a registration process (only for register mode)

SYNTAX:

```
wireless macacl register      [ssid_id = <number{0-9999}>]
                              [radio_id = <number{0-9999}>]
                              proceed = <{disabled|enabled}>
```

where:

ssid_id	ssid id	OPTIONAL
radio_id	radio	OPTIONAL
proceed	Confirmation required	REQUIRED

wireless mssid ifadd

Add an extra ssid context

SYNTAX:

```
wireless mssid ifadd          [ssid = <quoted string>]  
                              [radio_id = <number{0-9999}>]
```

where:

ssid	ssid	OPTIONAL
radio_id	radio	OPTIONAL

wireless mssid ifattach

Attach a ssid context

SYNTAX:

```
wireless mssid ifattach          ssid_id = <number{0-9999}>  
                                [radio_id = <number{0-9999}>]
```

where:

ssid_id	ssid	REQUIRED
radio_id	radio	OPTIONAL

wireless mssid ifconfig

Configure a ssid context

SYNTAX:

```
wireless mssid ifconfig      ssid_id = <number{0-9999}>
                             [ssid = <quoted string>]
                             [apisolation = <{disabled|enabled}>]
                             [any = <{disabled|enabled}>]
                             [secmode = <{disable|wep|wpa-psk|wpa}>]
                             [WEPkey = <quoted string>]
                             [WPAPSKkey = <quoted string>]
                             [WPAPSKversion = <{WPA|WPA2|WPA+WPA2}>]
                             [maxassociations = <number{0-125}>]
                             [radio_id = <number{0-9999}>]
                             [WPAradiuskey = <quoted string>]
                             [WPArekeysec = <number>]
                             [WPAradiusip = <ipv4-address>]
                             [WPAradiusport = <number{0-65535}>]
                             [WPAradiussto = <number{1800-604800}>]
                             [WPAversion = <{WPA|WPA2|WPA+WPA2}>]
                             [stationhistory = <{disabled|enabled}>]
                             [convertmcast4 = <{disabled|flood|snopping|
                             snopping+flood}>]
                             [convertmcast6 = <{disabled|flood|snopping|
                             snopping+flood}>]
                             [convertbcast = <{disabled|flood}>]
```

where:

ssid_id	ssid id	REQUIRED
ssid	ssid	OPTIONAL
apisolation	ap isolation	OPTIONAL
any	public network	OPTIONAL
secmode	security mode	OPTIONAL
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
maxassociations	max amount of associations	OPTIONAL
radio_id	radio	OPTIONAL
WPAradiuskey	Radius key.	OPTIONAL

WPArekeysec	Rekey interval	OPTIONAL
WPAradiusip	Radius server ip	OPTIONAL
WPAradiusport	Radius server port	OPTIONAL
WPAradiussto	Radius Session Timeout	OPTIONAL
WPAversion	wpa version	OPTIONAL
stationhistory	keep station history	OPTIONAL
convertmcast4	Convert IPv4 multicast	OPTIONAL
convertmcast6	Convert IPv6 multicast	OPTIONAL
convertbcast	Convert broadcast	OPTIONAL

wireless mssid ifdelete

Delete a ssid context

SYNTAX:

```
wireless mssid ifdelete          ssid_id = <number{0-9999}>  
                                [radio_id = <number{0-9999}>]
```

where:

ssid_id	ssid	REQUIRED
radio_id	radio	OPTIONAL

wireless mssid ifdetach

Detach a ssid context

SYNTAX:

```
wireless mssid ifdetach          ssid_id = <number{0-9999}>  
                                [radio_id = <number{0-9999}>]
```

where:

ssid_id	ssid	REQUIRED
radio_id	radio	OPTIONAL

wireless mssid iflist

Multiple ssid configuration

SYNTAX:

```
wireless mssid iflist          [ssid_id = <number{0-9999}>]  
                               [radio_id = <number{0-9999}>]
```

where:

ssid_id	ssid	OPTIONAL
radio_id	radio	OPTIONAL

wireless qos apacconfig

configure AP EDCA parameters

SYNTAX:

```
wireless qos apacconfig      [class = <{AC_BE|AC_BK|AC_VI|AC_VO}>]
                               [cwmax = <{0|1|3|7|15|31|63|127|255|511|1023|
                               2047|4095|8191|16383|32767}>]
                               [cwmin = <{0|1|3|7|15|31|63|127|255}>]
                               [aifsn = <number{1-15}>]
                               [txop = <number>]
                               [radio_id = <number{0-9999}>]
```

where:

class	AC class	OPTIONAL
cwmax	CWmax configuration	OPTIONAL
cwmin	CWmin configuration	OPTIONAL
aifsn	Aifsn configuration	OPTIONAL
txop	txoplimit [us] configuration	OPTIONAL
radio_id	radio	OPTIONAL

wireless qos config

configure QoS settings

SYNTAX:

```
wireless qos config [mode = <{disabled|wmm}>]
                    [radio_id = <number{0-9999}>]
```

where:

mode	WMM active	OPTIONAL
radio_id	radio	OPTIONAL

wireless qos staaconfig

configure STA EDCA parameters

SYNTAX:

```
wireless qos staaconfig      [class = <{AC_BE|AC_BK|AC_VI|AC_VO}>]
                             [cwmax = <{0|1|3|7|15|31|63|127|255|511|1023|
                             2047|4095|8191|16383|32767}>]
                             [cwmin = <{0|1|3|7|15|31|63|127|255}>]
                             [aifsn = <number{1-15}>]
                             [txop = <number>]
                             [radio_id = <number{0-9999}>]
```

where:

class	AC class	OPTIONAL
cwmax	CWmax configuration	OPTIONAL
cwmin	CWmin configuration	OPTIONAL
aifsn	Aifsn configuration	OPTIONAL
txop	txoplimit [us] configuration	OPTIONAL
radio_id	radio	OPTIONAL

wireless radio

Configures radio settings.

SYNTAX:

```
wireless radio [state = <{enabled|disabled}>]
                [channel = <{auto|1|2|3|4|5|6|7|8|9|10|11|12|
                13}>]
                [interop = <{802.11b/g|802.11b/g/n}>]
                [frameburst = <{disabled|enabled}>]
                [channelwidth = <{20|20/40}>]
                [sgi = <{disabled|enabled}>]
                [cdd = <{disabled|enabled}>]
                [stbc = <{disabled|enabled}>]
                [frameaggregation = <{off|ampdu|amsdu}>]
                [radio_id = <number{0-9999}>]
```

where:

state	Interface operational status of wireless access point	OPTIONAL
channel	Communication channel number	OPTIONAL
interop	Interoperability mode	OPTIONAL
frameburst	Framebursting	OPTIONAL
channelwidth	channelwidth	OPTIONAL
sgi	Short Guard Time Interval	OPTIONAL
cdd	Cyclic Delay Diversity	OPTIONAL
stbc	Space Time Block Coding	OPTIONAL
frameaggregation	Frame aggregation method	OPTIONAL
radio_id	radio	OPTIONAL

wireless radius config

RADIUS configuration

SYNTAX:

```
wireless radius config      [radio_id = <number{0-9999}>]
                             [ssid_id = <number{0-9999}>]
                             [auth_order = <quoted string>]
                             [acct_order = <quoted string>]
                             [deadto = <number>]
```

where:

radio_id	Physical radio on which the server is created	OPTIONAL
ssid_id	Logical interface (BSSID) on which the server is created	OPTIONAL
auth_order	Order in which the defined authentication servers per BSSID are (re)tried. The definition is done via a quoted, comma separated string. E.g. "1,2,3"	OPTIONAL
acct_order	Order in which the defined accounting servers per BSSID are (re)tried. The definition is done via a quoted, comma separated string. E.g. "1,2,3"	OPTIONAL
deadto	the period after which a RADIUS server that was marked as dead will be reanimated	OPTIONAL

wireless radius server config

RADIUS server configuration

SYNTAX:

```
wireless radius server config [radio_id = <number{0-9999}>]
                               [ssid_id = <number{0-9999}>]
                               [radius_id = <number{0-2}>]
                               [state = <{enabled|disabled}>]
                               [ip = <ipv4-address>]
                               [fqdn = <quoted string>]
                               [port = <{undefined|at-echo|at-nbp|at-rtmp|at-
ziss|auth|bgp|biff|bootpc|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|nfs|nicname|
nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
gotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
sunrpc|syslog|sysstat|talk|telnet|time|timed|
tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-
http|whoami|xwindows} or number>]
                               [dhcpaccounting = <{no|yes}>]
                               [type = <{authentication|accounting}>]
                               [secret = <password>]
```

where:

radio_id	Physical radio on which the server is created	OPTIONAL
ssid_id	Logical interface (BSSID) on which the server is created	OPTIONAL
radius_id	RADIUS server id per BSSID	OPTIONAL
state	Enable or disable server	OPTIONAL
ip	RADIUS server ip address	OPTIONAL
fqdn	RADIUS server fully qualified domain name	OPTIONAL
port	RADIUS server communication port	OPTIONAL
dhcpaccounting	RADIUS server dhcp accounting state	OPTIONAL
type	RADIUS server type	OPTIONAL
secret	RADIUS server secret - RADIUS key	OPTIONAL

wireless reset

Reset Wireless interface settings to defaults

SYNTAX:

```
wireless reset                proceed = <{disabled|enabled}>
```

where:

proceed	Confirmation required	REQUIRED
---------	-----------------------	----------

wireless stations history config

Configure station history

SYNTAX:

```
wireless stations history      [persistent = <{disabled|enabled}>]  
config                        [autosavedelay = <number{0-240}>]
```

where:

persistent	Persistency	OPTIONAL
autosavedelay	Auto save delay	OPTIONAL

wireless stations history list

List the station history

SYNTAX:

```
wireless stations history list [ssid_id = <number{0-9999}>]
                               [radio_id = <number{0-9999}>]
                               [hwaddr = <hardware-address>]
```

where:

ssid_id	Selected BSS	OPTIONAL
radio_id	radio	OPTIONAL
hwaddr	The Ethernet MAC address of the station	OPTIONAL

wireless stations history reset

Reset history

wireless stations history save

Save history

wireless stations list

List of the currently associated stations

SYNTAX:

```
wireless stations list      [ssid_id = <number{0-9999}>]
                             [radio_id = <number{0-9999}>]
                             [hwaddr = <hardware-address>]
```

where:

ssid_id	Selected BSS	OPTIONAL
radio_id	radio	OPTIONAL
hwaddr	The Ethernet MAC address of the station	OPTIONAL

wireless wps config

Configure/Show the WPS settings

SYNTAX:

```
wireless wps config [ssid_id = <number{0-9999}>]
                    [radio_id = <number{0-9999}>]
                    [state = <{disabled|enabled}>]
                    [apsetuplocked = <{disabled|enabled}>]
                    [wscstate = <{notconfigured|configured}>]
                    [ap_pin = <quoted string>]
```

where:

ssid_id	ssid id	OPTIONAL
radio_id	radio	OPTIONAL
state	WPS state	OPTIONAL
apsetuplocked	AP Setup Lock	OPTIONAL
wscstate	WSC State	OPTIONAL
ap_pin	Modify the PIN that is used to configure the AP with an External Registrar	OPTIONAL

wireless wps pin

Enroll a WSC Station by entering its device password or PIN

SYNTAX:

```
wireless wps pin          [ssid_id = <number{0-9999}>]
                          [radio_id = <number{0-9999}>]
                          value = <quoted string>
```

where:

ssid_id	ssid id	OPTIONAL
radio_id	radio	OPTIONAL
value	Enrollee Station PIN	REQUIRED

xdsl Commands

<i>xdsl config</i>	<i>Modify/Display dsl configuration</i>	see page 1320
<i>xdsl debug bitloadinginfo</i>	<i>Displays # bits per tone</i>	see page 1321
<i>xdsl debug deltcconfig</i>	<i>Dual Ended Line Testing interface</i>	see page 1322
<i>xdsl debug deltinfor</i>	<i>Dual Ended Line Test result display</i>	see page 1323
<i>xdsl debug modemoptioninfo</i>	<i>The modem options bitmap display</i>	see page 1324
<i>xdsl debug multimode</i>	<i>Config custom multimode</i>	see page 1325
<i>xdsl debug traceconfig</i>	<i>Config the adsl tracelevel</i>	see page 1326
<i>xdsl info</i>	<i>Displays status information about modem</i>	see page 1327
<i>xdsl version</i>	<i>Display xdsl version information.</i>	see page 1328

xdsl config

Modify/Display dsl configuration

SYNTAX:

```
xdsl config [adslmultimode = <{disable|adsl|adsl2|
adsl2plus}>]
[detect-lop = <{disabled|enabled}>]
[syslog = <{disabled|enabled}>]
[status = <{down|up}>]
```

where:

adslmultimode	Set/Show selected multimode type of the modem	OPTIONAL
detect-lop	Detect Loss Of Power	OPTIONAL
syslog	Log in syslog during showtime	OPTIONAL
status	configure adsl line up or down (setting can't be saved!)	OPTIONAL

xdsl debug bitloadinginfo

Displays # bits per tone

xdsl debug deltconfig

Dual Ended Line Testing interface

SYNTAX:

```
xdsl debug deltconfig [state = <{disabled|enabled}>]
```

where:

state	Enable/Disable dual ended line testing	OPTIONAL
-------	--	----------

xdsl debug delinfo

Dual Ended Line Test result display

xdsl debug modemoptioninfo

The modem options bitmap display

xdsl debug multimode

Config custom multimode

SYNTAX:

```
xdsl debug multimode [config = <[+/-]flag[+/-flag...]{default
t1.413issue2 g992.1_annex_a g992.2
g992.5_annex_m}>]
```

where:

config	The custom multimode bitmap	OPTIONAL
--------	-----------------------------	----------

xdsl debug traceconfig

Config the adsl tracelevel

SYNTAX:

```
xdsl debug traceconfig          level = <{0|1|2|3|4}>
```

where:

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:

```
xdsl info [expand = <{disabled|enabled}>]
          [g.997.1 = <{disabled|enabled}>]
          [counter_period_filter = <{current|15_minutes|
          24_hours}>]
          [counters_reset = <{no|yes}>]
```

where:

expand	Condensed / Expanded listing link information	OPTIONAL
g.997.1	Condensed / Expanded listing link information	OPTIONAL
counter_period_filter	Specify the statistics period	OPTIONAL
counters_reset	Reset all counters	OPTIONAL

xdsl version

Display xdsl version information.

