



CLI REFERENCE GUIDE R8.4

Technicolor TG582n



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THOMSON Telecom Belgium
Prins Boudewijnlaan, 47
B-2650 Edegem
Belgium

www.technicolor.com

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atm cac config

Configure ATM connection admission control.

SYNTAX:

```
atm cac config          port = <{dsl0|dsl1|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 aal5stats

Display AAL5 port specific atm statistics.

SYNTAX:

```
atm debug aal5stats      port = <{dsl0|dsl1|atm2|atm3|aal5|atm5} or
                           number>
                           vpi = <number{0-31}>
                           [vci = <number{0-511}>]
                           [clear = <{disabled|enabled}>]
```

where:

port	The port number for which statistics will be retrieved.	REQUIRED
vpi	The VPI number for which statistics will be retrieved.	REQUIRED
vci	The VCI number for which statistics will be retrieved.	OPTIONAL
clear	Clear the statistics after request.	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 portstats

Display port specific atm statistics.

SYNTAX:

```
atm debug portstats      port = <{dsl10|dsl11|atm2|atm3|aal5|atm5} or  
                           number>  
                           [clear = <{disabled|enabled}>]
```

where:

port	The port for which statistics will be retrieved.	REQUIRED
clear	Clear the statistics after the request.	OPTIONAL

atm debug traceconfig

Display/Modify AAL5 debug trace configuration.

SYNTAX:

```
atm debug traceconfig      [len = <mber{1-4}>]  
                           [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 debug vcstats

Display VC specific atm statistics.

SYNTAX:

```
atm debug vcstats      port = <{dsl0|dsl1|atm2|atm3|aal5|atm5} or  
                        number>  
                        vpi = <number{0-31}>  
                        [vci = <number{0-511}>]  
                        [clear = <{disabled|enabled}>]
```

where:

port	The port number for which statistics will be retrieved.	REQUIRED
vpi	The VPI number for which statistics will be retrieved.	REQUIRED
vci	The VCI number for which statistics will be retrieved.	OPTIONAL
clear	Clear the statistics after request.	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}>]
                      [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
retry	The number of times the WAN connection setup should retry before giving up.	OPTIONAL

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 = <{dsl0|dsl1|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 = <{dsl0|dsl1|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 = <{dsl10|dsl11|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=dsl0|dsl1|...>
```

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 ctddelete

Delete a connection traffic descriptor.

SYNTAX:

```
atm qosbook ctddelete      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.

SYNTAX:

```
atm qosbook flush          filename = <user configuration filename>
```

where:

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

atm qosbook list

Display the qosbook.

atm qos list

Display the Qos list.

SYNTAX:

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

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 = <>]
```

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 62
<i>config dump</i>	<i>Show the saved configuration file</i>	see page 63
<i>config flush</i>	<i>Flush the loaded configuration.</i>	see page 64
<i>config list</i>	<i>Show the current configuration set</i>	see page 65
<i>config load</i>	<i>Load saved or default configuration.</i>	see page 66

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

SYNTAX:

```
config dump [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

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

connection Commands

<i>connection appconfig</i>	<i>Modify a CONN/NAT application helper configuration</i>	see page 69
<i>connection appinfo</i>	<i>Display CONN/NAT application specific info</i>	see page 70
<i>connection applist</i>	<i>Display the available CONN/NAT application helpers.</i>	see page 71
<i>connection bind</i>	<i>Create a CONN/NAT application helper/port binding.</i>	see page 72
<i>connection bindblacklist add</i>	<i>Add bind blacklist entry.</i>	see page 73
<i>connection bindblacklist delete</i>	<i>Delete bind blacklist entry.</i>	see page 74
<i>connection bindblacklist list</i>	<i>List all bind blacklist entries.</i>	see page 75
<i>connection bindlist</i>	<i>Display the CONN/NAT application helper/port bindings.</i>	see page 76
<i>connection clean</i>	<i>Clean connection database by forcing timeouts.</i>	see page 77
<i>connection clear</i>	<i>Kill all connections.</i>	see page 78
<i>connection debug</i>	<i>Connection debug commands.</i>	see page 79
<i>connection describe</i>	<i>Describe the streams of a connection.</i>	see page 80
<i>connection flow add</i>	<i>Add flow</i>	see page 81
<i>connection flow delete</i>	<i>Delete flow</i>	see page 82
<i>connection flow flush</i>	<i>Flush flow configuration</i>	see page 83
<i>connection flow list</i>	<i>List all flows</i>	see page 84
<i>connection flow qoslabeladd</i>	<i>Assign qos label to flow</i>	see page 85
<i>connection flow qoslabeldel</i>	<i>Remove qos label from flow</i>	see page 86
<i>connection flush</i>	<i>Flush the connection configuration.</i>	see page 87
<i>connection info</i>	<i>Display all modules with some info.</i>	see page 88
<i>connection list</i>	<i>Display the currently known connections.</i>	see page 89
<i>connection refresh</i>	<i>Invalidate all cached decisions.</i>	see page 91
<i>connection release</i>	<i>Release connections.</i>	see page 92
<i>connection reserve</i>	<i>Reserve connections.</i>	see page 93
<i>connection stats</i>	<i>Display connection and stream statistics.</i>	see page 94
<i>connection timerclear</i>	<i>Clear connection timeout to default.</i>	see page 95

connection timerconfig

Modify connection timeout handling.

see page 96

connection unbind

Delete a CONN/NAT application helper/port binding.

see page 97

connection appconfig

Modify a CONN/NAT application helper configuration

SYNTAX:

```
connection appconfig          application = <{IP6TO4|PPTP|ESP|IKE|SIP|
                               JABBER|CU/SeeMe|RAUDIO(PNA)|RTSP|SNMP_TRAP|
                               FTP}>
                               [trace = <{disabled|enabled}>]
                               [timeout = <number{0-32000}>]
                               [childqos = <{None|DSCP|Interactive|
                               Management|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	SIP only: SIP trace level: 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 = <{ IP6TO4 | PPTP | ESP | IKE | SIP |  
                                JABBER | CU/SeeMe | RAUDIO (PNA) | RTSP | SNMP_TRAP |  
                                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 = <{ IP6TO4 | PPTP | ESP | IKE | SIP |  
                                                JABBER | CU/SeeMe | RAUDIO(PNA) | RTSP | SNMP_TRAP |  
                                                FTP } >  
                                                [port = <port-range>]
```

where:

application	The name of a CONN/NAT application helper as listed by 'connection applist'.	REQUIRED
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|igmp|
                                pup|rdp|rsvp|tcp|udp|vines|xns-idp|6to4|ipip}
                                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 delete ip = <ip-address>
                                [proto = <{ah|egp|esp|gpp|gre|hmp|icmp|igmp|
                                pup|rdp|rsvp|tcp|udp|vines|xns-idp|6to4|ipip}
                                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 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 = <>]
```

where:

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

connection flow flush

Flush flow configuration

SYNTAX:

```
connection flow flush      [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

connection flow list

List all flows

connection flow qoslabeladd

Assign qos label to flow

SYNTAX:

```
connection flow qoslabeladd      [flow = <>]  
                                [qoslabel = <{None|DSCP|Interactive|  
                                Management|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 = <>]
                                  [qoslabel = <{None|DSCP|Interactive|
                                  Management|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|esp|ggp|gre|hmp|icmp|igmp|
                pup|rdp|rsvp|tcp|udp|vines|xns-idp|6to4|ipip}
                or number>]
                [ip = <ip-range>]
                [port = <port-range>]
                [intf = <{loop|Internet|LocalNetwork}>]
                [routelabel = <{None|DSCP|Interactive|
                Management|Video|VoIP-RTP|VoIP-Signal|
                default}>]
                [qoslabel = <{None|DSCP|Interactive|
                Management|Video|VoIP-RTP|VoIP-Signal|
                default}>]
                [application = <{IP6TO4|PPTP|ESP|IKE|SIP|
                JABBER|CU/SeeMe|RAUDIO(PNA)|RTSP|SNMP_TRAP|
                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 = <>]
```

where:

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

connection reserve

Reserve connections.

SYNTAX:

```
connection reserve          [flow = <>]
                           [amount = <>]
```

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|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|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 = <{ IP6TO4 | PPTP | ESP | IKE | SIP |  
                             JABBER | CU/SeeMe | RAUDIO(PNA) | RTSP | SNMP_TRAP |  
                             FTP } >  
                             [port = <port-range>]
```

where:

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

contentsharing Commands

<i>contentsharing cifs list</i>	<i>To display CIFS service context.</i>	see page 100
<i>contentsharing ftp config</i>	<i>To enable/disable FTP service.</i>	see page 101
<i>contentsharing ftp list</i>	<i>To display FTP service context.</i>	see page 102
<i>contentsharing upnpav config</i>	<i>To enable/disable UPnP AV service, to set the friendly name.</i>	see page 103
<i>contentsharing upnpav list</i>	<i>To display UPnP AV service context.</i>	see page 104
<i>contentsharing upnpav radiostation config</i>	<i>To enable/disable radiostations service.</i>	see page 105
<i>contentsharing upnpav radiostation list</i>	<i>To display radiostations service context.</i>	see page 106
<i>contentsharing upnpav radiostation station add</i>	<i>Add an option.</i>	see page 107
<i>contentsharing upnpav radiostation station delete</i>	<i>Delete an option.</i>	see page 108
<i>contentsharing upnpav radiostation station list</i>	<i>List all options.</i>	see page 109

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.

SYNTAX:

```
contentsharing upnpav      [state = <{disabled|enabled}>]
radiostation station list [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 = <{none|basic|digest}>]
                           [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 string as the standard requests.	OPTIONAL
urlSource	The name of DHCP client which the URL comes from.	OPTIONAL

cwmp Commands

cwmp debug traceconfig

Enable or disable tracing.

see page 112

cwmp server config

Configure the cwmpd towards the ACS.

see page 113

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>]
                        Execute a 'Trace & Debug' command. For
                        qualified personnel only. = <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. Command: debug exec	OPTIONAL
Execute a 'Trace & Debug' command. For qualified personnel only.	Syntax : exec cmd = <quoted string>	REQUIRED

SYNTAX:

```
cwmp server config      cmd = <quoted string>
                        Create a DHCP client. = <quoted string>
```

where:

cmd	Quoted 'Trace & Debug' command string Command: dhcp client ifadd	REQUIRED
Create a DHCP client.	Syntax : ifadd intf = <{Internet LocalNetwork}>	REQUIRED

SYNTAX:

```
cwmp server config      intf = <{Internet|LocalNetwork}>
```

where:

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

dhcp Commands

<i>dhcp client debug clear</i>	<i>Clear DHCP client statistics</i>	see page 118
<i>dhcp client debug stats</i>	<i>Print DHCP client statistics</i>	see page 119
<i>dhcp client debug traceconfig</i>	<i>Modify DHCP client trace configuration</i>	see page 120
<i>dhcp client flush</i>	<i>Delete all DHCP clients.</i>	see page 121
<i>dhcp client ifattach</i>	<i>Activate a DHCP client.</i>	see page 122
<i>dhcp client ifconfig</i>	<i>Configure a DHCP client.</i>	see page 123
<i>dhcp client ifdelete</i>	<i>Delete a DHCP client.</i>	see page 124
<i>dhcp client ifdetach</i>	<i>De-activate a DHCP client and releases its lease.</i>	see page 125
<i>dhcp client iflist</i>	<i>List DHCP clients.</i>	see page 126
<i>dhcp client ifrenew</i>	<i>Renew a DHCP lease.</i>	see page 127
<i>dhcp client roptions add</i>	<i>Add a DHCP Option Code to the Parameter Request List.</i>	see page 128
<i>dhcp client roptions delete</i>	<i>Delete a DHCP Option Code from the Parameter Request List.</i>	see page 129
<i>dhcp client roptions list</i>	<i>List all DHCP Option Codes in the Parameter Request List.</i>	see page 130
<i>dhcp client roptions optionlist</i>	<i>List all DHCP Option Codes that can be used in the Parameter Request List.</i>	see page 131
<i>dhcp client txoptions add</i>	<i>Add an option.</i>	see page 132
<i>dhcp client txoptions delete</i>	<i>Delete an option.</i>	see page 134
<i>dhcp client txoptions list</i>	<i>List all options.</i>	see page 135
<i>dhcp client txoptions optionlist</i>	<i>Lists all DHCP Option Codes that can be used.</i>	see page 136
<i>dhcp relay add</i>	<i>Add an entry to the DHCP forward list.</i>	see page 137
<i>dhcp relay config</i>	<i>Sets the relay configuration settings.</i>	see page 138
<i>dhcp relay debug stats</i>	<i>Print DHCP relay statistics.</i>	see page 139
<i>dhcp relay debug traceconfig</i>	<i>Modify DHCP relay trace configuration</i>	see page 140
<i>dhcp relay delete</i>	<i>Delete an entry from the DHCP forward list.</i>	see page 141
<i>dhcp relay flush</i>	<i>Flushes the DHCP relay settings.</i>	see page 142
<i>dhcp relay ifconfig</i>	<i>Configure a relay interface.</i>	see page 143

<i>dhcp relay iflist</i>	<i>Show the configuration of the relay interfaces.</i>	see page 144
<i>dhcp relay list</i>	<i>List the DHCP forward list.</i>	see page 145
<i>dhcp relay modify</i>	<i>Modify an entry from the DHCP forward list.</i>	see page 146
<i>dhcp relay ruleadd</i>	<i>Add a selection rule to a DHCP forward entry</i>	see page 147
<i>dhcp relay ruledel</i>	<i>Delete a selection rule from a DHCP forward entry</i>	see page 148
<i>dhcp rule add</i>	<i>Add a rule for DHCP conditional selection</i>	see page 149
<i>dhcp rule debug traceconfig</i>	<i>Modify DHCP rule trace configuration</i>	see page 151
<i>dhcp rule delete</i>	<i>Delete a DHCP rule</i>	see page 152
<i>dhcp rule flush</i>	<i>Flush all DHCP rules</i>	see page 153
<i>dhcp rule list</i>	<i>List all DHCP rules</i>	see page 154
<i>dhcp server config</i>	<i>Print DHCP server configuration settings</i>	see page 155
<i>dhcp server debug clear</i>	<i>Clear DHCP server statistics</i>	see page 156
<i>dhcp server debug stats</i>	<i>Print DHCP server statistics</i>	see page 157
<i>dhcp server debug traceconfig</i>	<i>Modify DHCP server trace configuration</i>	see page 158
<i>dhcp server flush</i>	<i>Flush all DHCP server pool and lease entries</i>	see page 159
<i>dhcp server lease add</i>	<i>Add a DHCP server lease</i>	see page 160
<i>dhcp server lease delete</i>	<i>Delete a DHCP server lease</i>	see page 161
<i>dhcp server lease flush</i>	<i>Flush all DHCP server leases</i>	see page 162
<i>dhcp server lease list</i>	<i>List all DHCP server leases</i>	see page 163
<i>dhcp server option flush</i>	<i>Flush all DHCP server option templates and instances</i>	see page 164
<i>dhcp server option instadd</i>	<i>Add a DHCP server option instance</i>	see page 165
<i>dhcp server option instdelete</i>	<i>Delete a DHCP server option instance</i>	see page 166
<i>dhcp server option instlist</i>	<i>List all DHCP server option instances</i>	see page 167
<i>dhcp server option ruleadd</i>	<i>Add a selection rule to a DHCP server option instance</i>	see page 168
<i>dhcp server option ruledel</i>	<i>Delete a selection rule from a DHCP server option instance</i>	see page 169
<i>dhcp server option tmpladd</i>	<i>Add a DHCP server option template</i>	see page 170
<i>dhcp server option tmpldelete</i>	<i>Delete a DHCP server option template</i>	see page 171
<i>dhcp server option tmpllist</i>	<i>List all DHCP server option templates</i>	see page 172

<i>dhcp server policy</i>	<i>Print DHCP server policy settings</i>	see page 173
<i>dhcp server pool add</i>	<i>Add a DHCP server pool</i>	see page 174
<i>dhcp server pool config</i>	<i>Configure a DHCP server pool</i>	see page 175
<i>dhcp server pool delete</i>	<i>Delete a DHCP server pool</i>	see page 177
<i>dhcp server pool flush</i>	<i>Flush all DHCP server pools</i>	see page 178
<i>dhcp server pool list</i>	<i>List all DHCP server pools</i>	see page 179
<i>dhcp server pool optadd</i>	<i>Add an option instance to the DHCP server pool</i>	see page 180
<i>dhcp server pool optdelete</i>	<i>Delete an option instance from the DHCP server pool</i>	see page 181
<i>dhcp server pool rtadd</i>	<i>Add a route to the DHCP server pool</i>	see page 182
<i>dhcp server pool rtdelete</i>	<i>Delete a route from the DHCP server pool</i>	see page 183
<i>dhcp server pool ruleadd</i>	<i>Add a selection rule to the DHCP server pool</i>	see page 184
<i>dhcp server pool ruledel</i>	<i>Delete a selection rule from the DHCP server pool</i>	see page 185
<i>dhcp spoofing add</i>	<i>Add a Spoofing-Association</i>	see page 186
<i>dhcp spoofing attach</i>	<i>Enable a Spoofing-Association</i>	see page 187
<i>dhcp spoofing config</i>	<i>Display/modify dhcp spoofing state</i>	see page 188
<i>dhcp spoofing debug traceconfig</i>	<i>Display/modify DHCP spoofing trace configuration</i>	see page 189
<i>dhcp spoofing delete</i>	<i>Delete a Spoofing-Association</i>	see page 190
<i>dhcp spoofing detach</i>	<i>Disable a Spoofing-Association</i>	see page 191
<i>dhcp spoofing flush</i>	<i>Flush all the associations and the options.</i>	see page 192
<i>dhcp spoofing list</i>	<i>List the available Spoofing-Associations</i>	see page 193
<i>dhcp spoofing option-add</i>	<i>Add a DHCP Option Code to a Spoofing-Association.</i>	see page 194
<i>dhcp spoofing option-delete</i>	<i>Delete a DHCP Option Code from a Spoofing-Association.</i>	see page 195

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 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 = <>
                              [label = <{None|DSCP|Interactive|Management|
                              Video|VoIP-RTP|VoIP-Signal|default}>]
                              [metric = <number{0-255}>]
                              [dnsmetric = <number{0-100}>]
                              [broadcast = <{disabled|enabled}>]
                              [serverroute = <{disabled|enabled}>]
                              [followlabel = <{disabled|enabled}>]
```

where:

intf	The name of the dynamic interface to be configured.	REQUIRED
label	Label for default gateway and static routes.	OPTIONAL
metric	Route metric for default gateway and static routes.	OPTIONAL
dnsmetric	DNS route metric.	OPTIONAL
broadcast	Operate client in unicast/broadcast mode.	OPTIONAL
serverroute	Insert a route for the DHCP server IP	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

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|streettalk-
                               server|streettalk-directory-assistance-
                               server|slp-directory-agent|slp-service-scope|
                               rapid_commit|client-fqdn|internet-storage-
                               name-servers|#84|nds-servers|nds-tree-name|
                               nds-context|#88|#89|dhcp-msg-authentication|
                               client-last-transaction-time|...} or number>
                               [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|ienll6-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|ienll6-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, >
                               [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|ienll6-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 txoptions list

List all options.

SYNTAX:

```
dhcp client txoptions 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 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 = <ip-address>]
                           [intf = <{None|LocalNetwork|Internet}>]
                           [giaddr = <ip-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 rule add

Add a rule for DHCP conditional selection

SYNTAX:

```
dhcp rule add
    name = <string>
    type = <{option|mac|root}>
    option [!] = <{subnet-mask|time-offset|
    default-routers|time-servers|ienll6-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; type being
    addr, ascii, byte_array, >]
    [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
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 = <ip-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>
                                tmplname = <>
                                [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, >
```

where:

name	The name of the DHCP server option instance.	REQUIRED
tmplname	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 tmpladd

Add a DHCP server option template

SYNTAX:

```
dhcp server option tmpladd      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 tmplist

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 = <ip-address>]
                             [poolend = <ip-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 = <ip-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 = <ip-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 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              Add a DNS server. = <{disabled|enabled}>
```

where:

state	Enable/Disable tracing.Command: dns client dnsadd	OPTIONAL
Add a DNS server.	Syntax : dnsadd addr = <string> [port = <number>]	REQUIRED

SYNTAX:

```
dhcp spoofing debug      addr = <string>
traceconfig              [port = <number>]
```

where:

addr	The DNS server IP address.	REQUIRED
port	The DNS server port number.	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 = <>>
```

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 = <{}>

```

where:

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

dns Commands

<i>dns client config</i>	<i>Modify the DNS resolver configuration.</i>	see page 198
<i>dns client dnsdelete</i>	<i>Delete a DNS server.</i>	see page 199
<i>dns client dnslist</i>	<i>List all DNS servers.</i>	see page 200
<i>dns client flush</i>	<i>Remove all DNS servers.</i>	see page 201
<i>dns client nslookup</i>	<i>DNS lookup for a domain name or an address.</i>	see page 202
<i>dns server config</i>	<i>DNS server configuration settings</i>	see page 203
<i>dns server debug clear</i>	<i>Clear the DNS server/forwarder statistics.</i>	see page 204
<i>dns server debug spoof clear</i>	<i>Clear the intercept cache table</i>	see page 205
<i>dns server debug spoof getaddress</i>	<i>Get the real ip for the given spoofed ip</i>	see page 206
<i>dns server debug spoof getflags</i>	<i>Get the error flags for the given spoofed ip</i>	see page 207
<i>dns server debug spoof list</i>	<i>List the intercept cache table.</i>	see page 208
<i>dns server debug spoof update</i>	<i>update the intercept cache table</i>	see page 209
<i>dns server debug stats</i>	<i>Print the DNS server/forwarder statistics.</i>	see page 210
<i>dns server flush</i>	<i>Flush all local DNS hosts and routes.</i>	see page 211
<i>dns server host add</i>	<i>Add a local DNS host</i>	see page 212
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<i>dns server host list</i>	<i>List all local DNS hosts</i>	see page 215
<i>dns server route add</i>	<i>Creates a DNS forwarding entry or template</i>	see page 216
<i>dns server route delete</i>	<i>Deletes a DNS forwarding entry or template</i>	see page 217
<i>dns server route flush</i>	<i>Removes all DNS forwarding entries and templates</i>	see page 218
<i>dns server route list</i>	<i>Lists all DNS forwarding entries and templates</i>	see page 219

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 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 = <ip-address>]
```

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

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 = <ip-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 = <ip-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 routes.

dns server host add

Add a local DNS host

SYNTAX:

```
dns server host add      name = <string>
                        [addr = <ip-address>]
                        [ttl = <p-address>]
```

where:

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

dns server host delete

Delete a local DNS host

SYNTAX:

```
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

dns server route add

Creates a DNS forwarding entry or template

SYNTAX:

```
dns server route add      dns = <ip-address>
                          [src = <ip-address>]
                          [srcmask = <ip-mask(dotted or cidr)>]
                          [domain = <string>]
                          [metric = <number{0-100}>]
                          [label = <{None|DSCP|Interactive|Management|
Video|VoIP-RTP|VoIP-Signal|default}>]
                          [intf = <{loop|Internet|LocalNetwork}>]
```

where:

dns	The IP address of a DNS server. If 0.0.0.0 is used, the entry becomes a DNS-Template which is instantiated if DNS Server IPs are configured on an IP interface.	REQUIRED
src	If specified, only DNS queries from machines of which the source IP address matches the source prefix of the DNS entry will be forwarded to the corresponding DNS server.	OPTIONAL
srcmask	The IP address mask for the source prefix.	OPTIONAL
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
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
label	The label associated with the DNS entry or DNS Template.	OPTIONAL
intf	The interface associated with the DNS entry or DNS Template.	OPTIONAL

dns server route delete

Deletes a DNS forwarding entry or template

SYNTAX:

```
dns server route delete      dns = <ip-address>
                             [domain = <string>]
                             [intf = <{loop|Internet|LocalNetwork}>]
```

where:

dns	The IP address of a DNS server.	REQUIRED
domain	The DNS domain string.	OPTIONAL
intf	The interface associated with the DNS entry or DNS Template.	OPTIONAL

dns server route flush

Removes all DNS forwarding entries and templates

dns server route list

Lists all DNS forwarding entries and templates

SYNTAX:

```
dns server route list [state = <{disabled|enabled|automatic}>]
```

where:

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

dsd Commands

<i>dsd debug config</i>	<i>Display/modify DSD debug settings</i>	see page 223
<i>dsd debug connection list</i>	<i>Display internal connection pool usage</i>	see page 224
<i>dsd debug proxy</i>	<i>Display/modify HTTP/ fixed proxy settings</i>	see page 225
<i>dsd debug recycling</i>	<i>Display/modify HTTP/ recycling settings</i>	see page 226
<i>dsd debug stats</i>	<i>Display/clear DSD framework and module statistics</i>	see page 227
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<i>dsd urlfilter rule add</i>	<i>Add a rule</i>	see page 232
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<i>dsd webfilter professional level delete</i>	<i>Delete a web filtering level</i>	see page 249
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<i>dsd webfilter professional level list</i>	<i>Display levels</i>	see page 251
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<i>dsd webfilter professional level set</i>	<i>Set current web filtering level</i>	see page 253
<i>dsd webfilter professional rule clear</i>	<i>Reset level to default rule</i>	see page 254
<i>dsd webfilter professional rule list</i>	<i>List all rules</i>	see page 255
<i>dsd webfilter professional rule modify</i>	<i>Modify a rule</i>	see page 256
<i>dsd webfilter server add</i>	<i>Add a web filter server</i>	see page 257
<i>dsd webfilter server config</i>	<i>Configure web filter server</i>	see page 258
<i>dsd webfilter server delete</i>	<i>Delete a web filter server</i>	see page 259
<i>dsd webfilter server flush</i>	<i>Flush server list</i>	see page 260
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<i>dsd webfilter standard category create</i>	<i>Create a category or group</i>	see page 264
<i>dsd webfilter standard category delete</i>	<i>Delete a category or group</i>	see page 265
<i>dsd webfilter standard category flush</i>	<i>Delete all categories and groups</i>	see page 266
<i>dsd webfilter standard category list</i>	<i>List all categories and groups</i>	see page 267
<i>dsd webfilter standard category remove</i>	<i>Remove a category from a group</i>	see page 268
<i>dsd webfilter standard config</i>		see page 269
<i>dsd webfilter standard level add</i>	<i>Add a new web filtering level</i>	see page 270
<i>dsd webfilter standard level delete</i>	<i>Delete a web filtering level</i>	see page 271
<i>dsd webfilter standard level flush</i>	<i>Delete all levels</i>	see page 272
<i>dsd webfilter standard level list</i>	<i>Display levels</i>	see page 273
<i>dsd webfilter standard level modify</i>	<i>Modify a web filtering level</i>	see page 274
<i>dsd webfilter standard level set</i>	<i>Set current web filtering level</i>	see page 275
<i>dsd webfilter standard rule clear</i>	<i>Reset level to default rule</i>	see page 276
<i>dsd webfilter standard rule list</i>	<i>List all rules</i>	see page 277
<i>dsd webfilter standard rule modify</i>	<i>Modify a rule</i>	see page 278

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 HTTP/I fixed proxy settings

SYNTAX:

```
dsd debug proxy [state = <{disabled|enabled}>]
                [dest = <ip-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|ipcsrv|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 = <ip-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 = <ip-address>
                              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>
```

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 = <ip-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 = <ip-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|ipserver|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>
```

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 = <ip-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                            Add a dynamic DNS client. = <string>
```

where:

level	Level nameCommand: dyndns add	REQUIRED
Add a dynamic DNS client.	Syntax : add name = <string>	REQUIRED

SYNTAX:

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

where:

name	The dynamic DNS client 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 delete</i>	<i>Delete a dynamic DNS client.</i>	see page 280
<i>dyndns flush</i>	<i>Delete all dynamic DNS clients.</i>	see page 281
<i>dyndns host add</i>	<i>Add a fully qualified host name</i>	see page 282
<i>dyndns host delete</i>	<i>Delete a host name</i>	see page 283
<i>dyndns host flush</i>	<i>Delete all host names</i>	see page 284
<i>dyndns host list</i>	<i>List all host names</i>	see page 285
<i>dyndns list</i>	<i>List all dynamic DNS clients.</i>	see page 286
<i>dyndns modify</i>	<i>Modify a dynamic DNS client.</i>	see page 287
<i>dyndns service list</i>	<i>List all dynamic DNS services</i>	see page 288
<i>dyndns service modify</i>	<i>Modify specific dynamic DNS service settings</i>	see page 289

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

SYNTAX:

```
dyndns service list          var = <string>
                              value = <translated string>
```

where:

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

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|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>]
                           [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 292
<i>env get</i>	<i>Gets an environment variable.</i>	see page 293
<i>env list</i>	<i>List all environment variables.</i>	see page 294
<i>env unset</i>	<i>Deletes an environment variable.</i>	see page 295

env flush

Remove all non-system environment variables.

SYNTAX:

```
env flush                               intf = <string>
```

where:

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

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|_PRL|_FIA|
_BOARD_NAME|_COMPANY_ID|_COPYRIGHT|_TPVERSION|
_PROD_ID|_PROD_FRIENDLY_NAME|_VARIANT_ID|
_VARIANT_FRIENDLY_NAME|_MACADDR|_LMACADDR|
_WL_VERSION_0|_WL_VERSION|_WL0_WEPKEY_SERIAL|
_WL0_WPAKEY_SERIAL|_WL0_SSID_SERIAL|
_WL0_SSID_PREFIX|_WL0_BASE52_SERIAL|
_WL0_MAC_POSTFIX|_WL0_PIN_SERIAL|
_WL0_UUID_E_SERIAL|_WL0_UUID_R_SERIAL|
_WL1_WEPKEY_SERIAL|_WL1_WPAKEY_SERIAL|
_WL1_SSID_SERIAL|_WL1_BASE52_SERIAL|
_WL1_PIN_SERIAL|_WL1_UUID_E_SERIAL|
_WL1_UUID_R_SERIAL|_WL2_WEPKEY_SERIAL|
_WL2_WPAKEY_SERIAL|_WL2_SSID_SERIAL|
_WL2_BASE52_SERIAL|_WL2_PIN_SERIAL|
_WL2_UUID_E_SERIAL|_WL2_UUID_R_SERIAL|
_WL3_WEPKEY_SERIAL|_WL3_WPAKEY_SERIAL|
_WL3_SSID_SERIAL|_WL3_BASE52_SERIAL|
_WL3_PIN_SERIAL|_WL3_UUID_E_SERIAL|
_WL3_UUID_R_SERIAL|_SSID_WL_MACADDR_POSTFIX|
_SSID_POSTFIX_LEGACY_OR_MAC|
_WL_MACADDR|_LWL_MACADDR|_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|
@CWMPUSER|WL0_SSID_PREFIX_CUSTOM|
@WL1_SSID_PREFIX_CUSTOM|
@WL2_SSID_PREFIX_CUSTOM|
@WL3_SSID_PREFIX_CUSTOM|@WL0_SSID|@WL1_SSID|
ACS_URL}>
```

where:

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

env list

List all environment variables.

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|_PRL|_FIA|
_BOARD_NAME|_COMPANY_ID|_COPYRIGHT|_TPVERSION|
_PROD_ID|_PROD_FRIENDLY_NAME|_VARIANT_ID|
_VARIANT_FRIENDLY_NAME|_MACADDR|_LMACADDR|
_WL_VERSION_0|_WL_VERSION|_WL0_WEPKEY_SERIAL|
_WL0_WPAKEY_SERIAL|_WL0_SSID_SERIAL|
_WL0_SSID_PREFIX|_WL0_BASE52_SERIAL|
_WL0_MAC_POSTFIX|_WL0_PIN_SERIAL|
_WL0_UUID_E_SERIAL|_WL0_UUID_R_SERIAL|
_WL1_WEPKEY_SERIAL|_WL1_WPAKEY_SERIAL|
_WL1_SSID_SERIAL|_WL1_BASE52_SERIAL|
_WL1_PIN_SERIAL|_WL1_UUID_E_SERIAL|
_WL1_UUID_R_SERIAL|_WL2_WEPKEY_SERIAL|
_WL2_WPAKEY_SERIAL|_WL2_SSID_SERIAL|
_WL2_BASE52_SERIAL|_WL2_PIN_SERIAL|
_WL2_UUID_E_SERIAL|_WL2_UUID_R_SERIAL|
_WL3_WEPKEY_SERIAL|_WL3_WPAKEY_SERIAL|
_WL3_SSID_SERIAL|_WL3_BASE52_SERIAL|
_WL3_PIN_SERIAL|_WL3_UUID_E_SERIAL|
_WL3_UUID_R_SERIAL|_SSID_WL_MACADDR_POSTFIX|
_SSID_POSTFIX_LEGACY_OR_MAC|
_WL_MACADDR|_LWL_MACADDR|_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|
@CWMPUSER|WL0_SSID_PREFIX_CUSTOM|
@WL1_SSID_PREFIX_CUSTOM|
@WL2_SSID_PREFIX_CUSTOM|
@WL3_SSID_PREFIX_CUSTOM|@WL0_SSID|@WL1_SSID|
ACS_URL}>
```

where:

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

eth Commands

<i>eth bridge add</i>	<i>Add a new bridge instance.</i>	see page 302
<i>eth bridge clear</i>	<i>Clear bridge statistics.</i>	see page 303
<i>eth bridge config</i>	<i>Modify/Display the bridge configuration settings.</i>	see page 304
<i>eth bridge delete</i>	<i>Delete a bridge instance.</i>	see page 305
<i>eth bridge dynvlan actlist</i>	<i>Display the active MAC entries for the dynamic VLAN membership.</i>	see page 306
<i>eth bridge dynvlan add</i>	<i>Add a dynamic VLAN membership entry.</i>	see page 307
<i>eth bridge dynvlan config</i>	<i>Modify the dynamic VLAN membership configuration.</i>	see page 308
<i>eth bridge dynvlan delete</i>	<i>Delete a dynamic VLAN membership entry.</i>	see page 309
<i>eth bridge dynvlan flush</i>	<i>Flush all dynamic VLAN membership entries.</i>	see page 310
<i>eth bridge dynvlan list</i>	<i>Display a dynamic VLAN membership entry.</i>	see page 311
<i>eth bridge filter add</i>	<i>Add a filter.</i>	see page 312
<i>eth bridge filter attach</i>	<i>Enable a filter.</i>	see page 313
<i>eth bridge filter config</i>	<i>Change filter configuration</i>	see page 314
<i>eth bridge filter delete</i>	<i>Delete a filter.</i>	see page 315
<i>eth bridge filter detach</i>	<i>Disable a filter.</i>	see page 316
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<i>eth bridge ifattach</i>	<i>Attach a bridge interface.</i>	see page 325
<i>eth bridge ifconfig</i>	<i>Modify a bridge interface configuration.</i>	see page 326
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<i>eth bridge macdelete</i>	<i>Remove a MAC address from the database.</i>	see page 341
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<i>eth bridge unknownvlan ifconfig</i>	<i>Modify bridge interface from unknown 'VLAN'.</i>	see page 349
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<i>eth bridge unknownvlan iflist</i>	<i>Display all interfaces of the unknown 'VLAN'.</i>	see page 351
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<i>eth bridge vlan ifconfig</i>	<i>Modify bridge interface from virtual LAN.</i>	see page 353
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<i>eth bridge vlan iflist</i>	<i>Display all virtual LAN's.</i>	see page 355
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<i>eth filter operand list</i>	<i>Display the filter operands.</i>	see page 374
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<i>eth filter operand prioritydelete</i>	<i>Delete a ip priority from the set.</i>	see page 376
<i>eth filter operand reset</i>	<i>Reset an operand to its default initial state (removes all content, set to</i>	see page 377
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<i>eth ifattach</i>	<i>Attach an ETH interface.</i>	see page 391
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<i>eth switch qos ifconfig</i>	<i>Configure per port qos parameters.</i>	see page 405
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<i>eth switch shaper ifconfig</i>	<i>Configure per port shaper parameters.</i>	see page 409
<i>eth switch shaper iflist</i>	<i>Display shaper configuration per port.</i>	see page 410

<i>eth switch share add</i>	<i>Add a port to be shared.</i>	see page 411
<i>eth switch share delete</i>	<i>Delete a shared port.</i>	see page 412
<i>eth switch share list</i>	<i>Display shared ports.</i>	see page 413
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<i>eth vlan flush</i>	<i>Flush all virtual LAN's.</i>	see page 418
<i>eth vlan list</i>	<i>Display all virtual LAN's.</i>	see page 419
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<i>eth vlan priomap list</i>	<i>Display the VLAN/DE to/from internal priority mappings.</i>	see page 421

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}>]
                           [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
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}>]
                        [priotransparent = <{disabled|enabled}>]
                        [bpdufiltering = <{disabled|enabled}>]
                        [xtrntagging = <{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
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{0-31744}>]
```

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 ippriomap

Modify the IP priority mappings for a bridge.

SYNTAX:

```
eth bridge ippriomap      [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 ippriomapreset

Reset the IP priority mappings to its defaults.

SYNTAX:

```
eth bridge ippriomapreset      [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 rule add

Add a new constraint to the VLAN learning system.

SYNTAX:

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

where:

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

where:

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.

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

where:

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      name = <{default}>
                              intf = <{OBC|ethport1|ethport2|ethport3|
                              ethport4|WLAN|virt}>
                              untagged = <{disabled|enabled}>
```

where:

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      name = <{default}>
                              intf = <{OBC|ethport1|ethport2|ethport3|
                              ethport4|WLAN|virt}>
```

where:

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.

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 xtrntag config

Configure an extra tag mapping entry.

SYNTAX:

```
eth bridge xtrntag 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 xtrntag delete

Delete an extra tag mapping entry.

SYNTAX:

```
eth bridge xtrntag 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 xtrntag list

Display all extra tag mapping entries.

eth device ifautoneg

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

SYNTAX:

```
eth device ifautoneg      intf = <{ethif1|ethif2|ethif3|ethif4|}>
                           [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|}>
                             [state = <{enabled|disabled}>]
                             [type = <{auto|10BaseTHD|10BaseTFD|100BaseTHD|
                             100BaseTFD}>]
                             [mtu = <number{1518-1534}>]
```

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|}>
```

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|CheckIPProto|
                               CheckSize|Match|Modify|CheckChecksum|
                               UpdateChecksum}>
                               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}>
```

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

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 frameclasse 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/disabled 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 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}>
                                           [dest = <{bridge|ethoa_8_35}>]
                                           [retry = <number{0-65535}>]
                                           [wan = <{disabled|enabled}>]
                                           [priotag = <{disabled|enabled}>]
                                           [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
vlan	The VLAN for this ETH interface.	OPTIONAL

eth ifdelete

Delete an ETH interface.

SYNTAX:

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

where:

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

eth ifdetach

Detach an ETH interface.

SYNTAX:

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

where:

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

eth iflist

Display the ETH interfaces.

SYNTAX:

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

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{1-4}>
```

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{1-4}>
```

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{1-4}>
```

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{1-4}>
                               [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{1-4}>
                               [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{1-4}>
                             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{1-4}>
                                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{1-4}>
                              shared = <number{1-4}>
```

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

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{1-4}>
                                [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}>
                      [addrule = <{disabled|enabled}>]
```

where:

name	The new VLAN name.	REQUIRED
vid	The new VLAN id.	REQUIRED
addrule	Add the default bridge constraint.	OPTIONAL

eth vlan delete

Delete a virtual LAN.

SYNTAX:

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

where:

name	The VLAN name.	REQUIRED
------	----------------	----------

eth vlan flush

Flush all virtual LAN's.

eth vlan list

Display all virtual LAN's.

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.

SYNTAX:

```
eth vlan priomap list
name = <{wan|local|lan|tunnel|dmz|guest|
private|ssdp_ip|mdap_ip|imap|imap3|imap4-
ssl|imaps|pop2|pop3|pop3s|smtp|ssh|dns|nntp|
ipsec|esp|ah|ike|DiffServ|sip|h323|dhcp|rtsp|
ssdp_serv|mdap_serv|syslog}>
[type = <{intf|ip|serv|mac|length}>]
mac [!] = <hardware-address>
addr [!] = <ip-range>
[mask [ = <ip-mask(dotted or cidr)>]
[intf [!] = <{loop|Internet|LocalNetwork}>]
[intfgroup [!] = <{wan|local|lan|tunnel|dmz|
guest} or number>]
[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|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|ipcserv|ipx|
irc-o|irc-u|kerberos|ldap|login|netbios-dgm|
netbios-ns|netbios-ssn|netwall|netware-ip|new-
rwho|nfsd|nickname|nntp|ntalk|ntp|pcmail-srv|
pop2|pop3|printer|qotd|realaudio|rip|rtelnet|
rtsp|sip|smtp|snmp|snmptrap|snpp|snmp|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|ipcserv|ipx|
irc-o|irc-u|kerberos|ldap|login|netbios-dgm|
netbios-ns|netbios-ssn|netwall|netware-ip|new-
rwho|nfsd|nickname|nntp|ntalk|ntp|pcmail-srv|
pop2|pop3|printer|qotd|realaudio|rip|rtelnet|
rtsp|sip|smtp|snmp|snmptrap|snpp|snmp|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|ipcserv|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|qotd|realaudio|rip|rtelnet|
rtsp|sip|smtp|snmp|snmptrap|snpp|snpp|snpp|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|ipcserv|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|qotd|realaudio|rip|rtelnet|
rtsp|sip|smtp|snmp|snmptrap|snpp|snpp|snpp|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 [!] = <{echo-reply|destination-
unreachable|source-quench|redirect|exceeded|
parameter-problems|timestamp-request|
timestamp-reply|information-request|
information-reply|address-mask-request|
address-mask-reply} or number>]
[icmpcode [!] = <number{0-15}>]
[icmpcodeend = <number{0-15}>]
[iplengthmin [!] = <er{0-15}>]
[iplengthmax = <er{0-15}>]

```

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 source 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
icmptype [!]	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 Commands

<i>expr delete</i>	<i>Delete an expression.</i>	see page 426
<i>expr flush</i>	<i>Flush all expressions.</i>	see page 427
<i>expr list</i>	<i>List expressions.</i>	see page 428
<i>expr modify</i>	<i>Modify an expression.</i>	see page 429

expr delete

Delete an expression.

SYNTAX:

```
expr delete                                name = <{wan|local|lan|tunnel|dmz|guest|
                                           private|ssdp_ip|mdap_ip|imap|imap3|imap4-
                                           ssl|imaps|pop2|pop3|pop3s|smtp|ssh|dns|nntp|
                                           ipsec|esp|ah|ike|DiffServ|sip|h323|dhcp|rtsp|
                                           ssdp_serv|mdap_serv|syslog}>
                                           [index = <number>]
```

where:

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

expr flush

Flush all expressions.

SYNTAX:

```
expr flush [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

expr list

List expressions.

SYNTAX:

```
expr list [name = <{_intf_0|UPnP-HTTP_if_0|_intf_1|_intf_2|DHCP-R_if_0|wan|local|lan|HTTPs_if_0|FTP_if_0|TELNET_if_0|DNS-S_if_0|PING_RESPONDER_if_0|MDAP_if_0|PPTPD_if_0|PPTPGRE_if_0|_addr_127_0_0_1|_addr_10_0_0_138|_addr_192_168_1_254|private|ssdp_ip|mdap_ip|192.168.1.253|UPnP-HTTP_sv_0|DHCP-R_sv_0|icmp|igmp|ftp|telnet|http|httpproxy|https|RPC|NBT|SMB|imap|imap3|imap4-ssl|imaps|pop2|pop3|pop3s|smtp|ssh|dns|nntp|ipsec|esp|ah|ike|DiffServ|sip|h323|dhcp|rtsp|ssdp_serv|mdap_serv|syslog|HTTP_I_sv_0|SSDP_sv_0|DHCP-S_sv_0|HTTP_sv_0|HTTPs_sv_0|FTP_sv_0|TELNET_sv_0|IGMP-Proxy_sv_0|DNS-S_sv_0|PING_RESPONDER_sv_0|MDAP_sv_0|PPTPD_sv_0|PPTPGRE_sv_0}>] [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|
private|ssdp_ip|mdap_ip|imap|imap3|imap4-
ssl|imaps|pop2|pop3|pop3s|smtp|ssh|dns|nntp|
ipsec|esp|ah|ike|DiffServ|sip|h323|dhcp|rtsp|
ssdp_serv|mdap_serv|syslog}>
[type = <{intf|ip|serv|mac|length}>]
index = <number>
mac [!] = <hardware-address>
addr [!] = <ip-range>
[mask [ = <ip-mask(dotted or cidr)>]
[intf [!] = <{loop|Internet|LocalNetwork}>]
[intfgroup [!] = <{wan|local|lan|tunnel|dmz|
guest} or number>]
[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|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|nfsd|nickname|nntp|ntalk|ntp|pcmail-srv|
pop2|pop3|printer|qotd|realaudio|rip|rtelnet|
rtsp|sip|smtp|snmp|snmptrap|snpp|snmp|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|nfsd|nickname|nntp|ntalk|ntp|pcmail-srv|
pop2|pop3|printer|qotd|realaudio|rip|rtelnet|
rtsp|sip|smtp|snmp|snmptrap|snpp|snmp|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|ipcserv|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|qotd|realaudio|rip|rtelnet|
rtsp|sip|smtp|snmp|snmptrap|snpp|snpp|snpp|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|ipcserv|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|qotd|realaudio|rip|rtelnet|
rtsp|sip|smtp|snmp|snmptrap|snpp|snpp|snpp|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 [!] = <{echo-reply|destination-
unreachable|source-quench|redirect|exceeded|
parameter-problems|timestamp-request|
timestamp-reply|information-request|
information-reply|address-mask-request|
address-mask-reply} or number>]
[icmpcode [!] = <number{0-15}>]
[icmpcodeend = <number{0-15}>]
[iplengthmin [!] = <er{0-15}>]
[iplengthmax = <er{0-15}>]

```

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 source 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
icmpcode [!]	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

firewall Commands

<i>firewall chain add</i>	<i>Add a chain.</i>	see page 434
<i>firewall chain delete</i>	<i>Delete a chain.</i>	see page 435
<i>firewall chain flush</i>	<i>Flush all chains.</i>	see page 436
<i>firewall chain list</i>	<i>Display a list of chains.</i>	see page 437
<i>firewall clear</i>	<i>Clear firewall configuration.</i>	see page 438
<i>firewall debug clear</i>	<i>Clear firewall statistics.</i>	see page 439
<i>firewall debug stats</i>	<i>Display firewall statistics.</i>	see page 440
<i>firewall debug traceconfig</i>	<i>Display/Modify firewall trace configuration.</i>	see page 441
<i>firewall level add</i>	<i>Add a new security level.</i>	see page 442
<i>firewall level delete</i>	<i>Delete a security level.</i>	see page 443
<i>firewall level flush</i>	<i>Flush security level configuration.</i>	see page 444
<i>firewall level list</i>	<i>List all security levels.</i>	see page 445
<i>firewall level modify</i>	<i>Modify a security level.</i>	see page 446
<i>firewall level set</i>	<i>Set/Display active security level.</i>	see page 447
<i>firewall list</i>	<i>Display firewall configuration.</i>	see page 448
<i>firewall rule add</i>	<i>Add a rule.</i>	see page 449
<i>firewall rule debug clear</i>	<i>Clear rule statistics.</i>	see page 451
<i>firewall rule debug stats</i>	<i>Display rule statistics.</i>	see page 452
<i>firewall rule debug traceconfig</i>	<i>Display/Modify rule trace configuration.</i>	see page 453
<i>firewall rule delete</i>	<i>Delete a rule.</i>	see page 454
<i>firewall rule flush</i>	<i>Flush all rules.</i>	see page 455
<i>firewall rule list</i>	<i>Display a list of rules.</i>	see page 456
<i>firewall rule modify</i>	<i>Modify a rule.</i>	see page 457

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 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|strict|
                        loose}>]
```

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 name>
```

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

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 name>]
```

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 [!] = <{private|ssdp_ip|mdap_ip|
                           192.168.1.253}>]
                           [dstintf [!] = <{wan|local|lan|tunnel|dmz|
                           guest}>]
                           [dstip [!] = <{private|ssdp_ip|mdap_ip|
                           192.168.1.253}>]
                           [serv [!] = <{icmp|igmp|ftp|telnet|http|
                           httpproxy|https|RPC|NBT|SMB|imap|esp|ah|
                           ike|DiffServ|sip|h323|dhcp|rtsp|ssdp_serv|
                           mdap_serv|syslog}>]
                           [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>]
                               Show the current routes in the grp routing
                               table. = <number>
```

where:

chain	The name of the chain.	OPTIONAL
index	The index of the rule in the chain.Command: grp rtlist	OPTIONAL
Show the current routes in the grp routing table.	Syntax : rtlist [dst = <ip-address>] [dstmsk = <ip-mask(dotted or cidr)>]	REQUIRED

SYNTAX:

```
firewall rule debug clear      [dst = <ip-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

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.	OPTIONAL
	If a value is preceded by a “!”, it means NOT.	
[!]srcip]	The name of the source ip expression.	OPTIONAL
	If a value is preceded by a “!”, it means NOT.	
[!]dstintf]	The name of the destination interface expression.	OPTIONAL
	If a value is preceded by a “!”, it means NOT.	
[!]dstip]	The name of the destination ip expression.	OPTIONAL
	If a value is preceded by a “!”, it means NOT.	
[!]serv]	The name of the service expression.	OPTIONAL
	If a value is preceded by a “!”, it means NOT.	
[!]length]	The name of the length expression.	OPTIONAL
	If a value is preceded by a “!”, it means NOT.	

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).	OPTIONAL

grp Commands

<i>grp config</i>	<i>Set the grp configuration settings.</i>	see page 460
<i>grp flush</i>	<i>Flush grp interface settings and parameters.</i>	see page 461
<i>grp rip config</i>	<i>Set the RIP configuration settings.</i>	see page 462
<i>grp rip flush</i>	<i>Flush RIP interface settings and global parameters.</i>	see page 463
<i>grp rip ifconfig</i>	<i>Configure a RIP interface.</i>	see page 464
<i>grp rip show</i>	<i>Show the RIP settings and the routes in the RIP database.</i>	see page 465

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.

help Command

Delete an ATM interface.

SYNTAX:

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

where:

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

hostmgr Commands

<i>hostmgr add</i>	<i>Add host device</i>	see page 470
<i>hostmgr config</i>	<i>Configure Device Discovery daemon</i>	see page 471
<i>hostmgr delete</i>	<i>Delete host device</i>	see page 472
<i>hostmgr flush</i>	<i>Flush Device Discovery configuration (i.e. clear & to defaults)</i>	see page 473
<i>hostmgr list</i>	<i>List all host devices</i>	see page 474
<i>hostmgr update</i>	<i>Update host device parameters</i>	see page 475

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 config

Configure Device Discovery deamon

SYNTAX:

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

where:

state	Enable/disable Device Discovery deamon	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 = <known|L2-FXS|L2-USB|L2-BT|L3-IP|L7-
                                             UPNP|L2-PPPOERELAY|L2-WLAN}> ]
```

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}>]
Display/Modify IDS configuration. =
<{disabled|enabled}>
```

where:

expand	Expanded listing.Command: ids config	OPTIONAL
Display/Modify IDS configuration.	Syntax : config [state = <{disabled enabled}>] [trace = <{disabled enabled}>]	REQUIRED

SYNTAX:

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

where:

state	Enable/Disable ids checks.	OPTIONAL
trace	Enable/Disable ids traces.	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 478
<i>ids parser list</i>	<i>Display ids parser configuration.</i>	see page 479
<i>ids parser modify</i>	<i>Modify ids parser configuration.</i>	see page 480
<i>ids pattern clear</i>	<i>Reset pattern tracker.</i>	see page 481
<i>ids pattern list</i>	<i>Display patterns in pattern tracker.</i>	see page 482
<i>ids pattern stats</i>	<i>Display pattern tracker statistics.</i>	see page 483
<i>ids signature list</i>	<i>Display ids signature configuration.</i>	see page 484
<i>ids signature modify</i>	<i>Modify ids signature configuration.</i>	see page 485
<i>ids threshold clear</i>	<i>Reset IDS thresholds.</i>	see page 486
<i>ids threshold list</i>	<i>Display IDS thresholds.</i>	see page 487
<i>ids threshold modify</i>	<i>Modify IDS threshold.</i>	see page 488

ids clear

Clear IDS statistics.

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_urgent_offset|udp_null_port|icmp_type_unknown|icmp_code_unknown|ip_zero_payload|tcp_rate_limiting|udp_rate_limiting|icmp_rate_limiting|ip_rate_limiting}>]
```

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_urgent_offset|udp_null_port|
                           icmp_type_unknown|icmp_code_unknown|
                           ip_zero_payload|tcp_rate_limiting|
                           udp_rate_limiting|icmp_rate_limiting|
                           ip_rate_limiting}>]
                           state = <{disabled|enabled}>
```

where:

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

ids threshold clear

Reset IDS thresholds.

SYNTAX:

```
ids threshold clear [requirera = <{disabled|enabled}>]
```

where:

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

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 debug clear</i>	<i>Clear IGMP statistics.</i>	see page 490
<i>igmp host debug stats</i>	<i>Print IGMP statistics.</i>	see page 491
<i>igmp host flush</i>	<i>Flush the IGMP settings.</i>	see page 492
<i>igmp host ifconfig</i>	<i>Configure an IGMP interface.</i>	see page 493
<i>igmp host iflist</i>	<i>Show the configuration of the IGMP interfaces.</i>	see page 494
<i>igmp host list</i>	<i>Show the IGMP groups.</i>	see page 495
<i>igmp proxy config</i>	<i>Configure the IGMP proxy.</i>	see page 496
<i>igmp proxy debug clear</i>	<i>Clear IGMP proxy statistics</i>	see page 497
<i>igmp proxy debug stats</i>	<i>Print IGMP proxy statistics</i>	see page 498
<i>igmp proxy debug traceconfig</i>	<i>Modify IGMP proxy trace configuration</i>	see page 499
<i>igmp proxy flush</i>	<i>Flush all IGMP proxy settings and learned groups</i>	see page 500
<i>igmp proxy grouplist</i>	<i>Show the learned groups on an IGMP proxy interface.</i>	see page 501
<i>igmp proxy ifconfig</i>	<i>Configure an IGMP proxy interface.</i>	see page 502
<i>igmp proxy iflist</i>	<i>Show the configuration of an IGMP proxy interface.</i>	see page 503
<i>igmp proxy mbslist</i>	<i>Show the IGMP proxy membership database (merge of all learned groups).</i>	see page 504

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{2-7}>]
                  [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

SYNTAX:

```
igmp proxy debug clear      [expand = <{disabled|enabled}>]
                             [reverse = <{disabled|enabled}>]
                             Create an IP interface. = <{disabled|enabled}>
```

where:

expand	Expanded listing.	OPTIONAL
reverse	Reverse listing (lower layer iso. upper layer). Command: ip ifadd	OPTIONAL
Create an IP interface.	Syntax : ifadd intf = <string> dest = <{ethoa_8_35}>	REQUIRED

SYNTAX:

```
igmp proxy debug clear      intf = <string>
                             dest = <{ethoa_8_35}>
```

where:

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

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}>]
                        [spoofing = <{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
spoofing	Enable/Disable spoofing of IGMP packets on upstream interfaces.	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).

ip Commands

<i>ip arpadd</i>	<i>Add an entry to the ARP cache of a broadcast IP interface.</i>	see page 507
<i>ip arpdelete</i>	<i>Delete an ARP entry.</i>	see page 508
<i>ip arplist</i>	<i>Display the ARP cache.</i>	see page 509
<i>ip auto debug traceconfig</i>	<i>Modify autoIP trace configuration</i>	see page 510
<i>ip auto flush</i>	<i>Flushes autoIP interfaces.</i>	see page 511
<i>ip auto ifadd</i>	<i>Creates a new autoIP interface.</i>	see page 512
<i>ip auto ifattach</i>	<i>Select and assign a link-local address to an autoIP interface.</i>	see page 513
<i>ip auto ifconfig</i>	<i>Configures an autoIP interface.</i>	see page 514
<i>ip auto ifdelete</i>	<i>Deletes an existing autoIP interface.</i>	see page 515
<i>ip auto ifdetach</i>	<i>Release the link-local address for the given autoIP interface.</i>	see page 516
<i>ip auto iflist</i>	<i>Shows the autoIP interfaces.</i>	see page 517
<i>ip config</i>	<i>Display/Modify global IP stack configuration.</i>	see page 518
<i>ip debug httpprobe</i>	<i>Send HTTP probe to measure the round trip time taken to connect and access</i>	see page 519
<i>ip debug sendto</i>	<i>Send UDP packets.</i>	see page 520
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<i>ip debug traceconfig</i>	<i>Display/Modify IP stack trace configuration.</i>	see page 522
<i>ip flush</i>	<i>Flush all static IP parameters. Dynamic info (e.g. from PPP links) remains.</i>	see page 523
<i>ip ifattach</i>	<i>Attach an IP interface.</i>	see page 524
<i>ip ifconfig</i>	<i>Modify an IP interface configuration.</i>	see page 525
<i>ip ifdelete</i>	<i>Delete an IP interface.</i>	see page 526
<i>ip ifdetach</i>	<i>Detach an IP interface.</i>	see page 527
<i>ip iflist</i>	<i>Display all IP interfaces.</i>	see page 528
<i>ip ifwait</i>	<i>Wait for a status change of an IP interface.</i>	see page 529
<i>ip ipadd</i>	<i>Assign an IP address to an IP interface.</i>	see page 530
<i>ip ipconfig</i>	<i>Modify an IP address configuration.</i>	see page 531

<i>ip ipdelete</i>	<i>Remove an IP address from an IP interface.</i>	see page 532
<i>ip iplist</i>	<i>Display all configured IP addresses.</i>	see page 533
<i>ip mcast flush</i>	<i>Flush the multicast routing table.</i>	see page 534
<i>ip mcast rtadd</i>	<i>Add a multicast route to the multicast routing table.</i>	see page 536
<i>ip mcast rtdelete</i>	<i>Delete a multicast route from the multicast routing table.</i>	see page 537
<i>ip mcast rtlist</i>	<i>Display the multicast routing table.</i>	see page 538
<i>ip rtadd</i>	<i>Add a route to the routing table.</i>	see page 539
<i>ip rtconfig</i>	<i>Modify a route of the routing table.</i>	see page 540
<i>ip rtdelete</i>	<i>Delete a route from the routing table.</i>	see page 541
<i>ip rtlist</i>	<i>Display the routing table.</i>	see page 542

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 = <ip-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 = <ip-address>]
                           [poolstart = <ip-address>]
                           [poolend = <ip-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 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}>]
[acceleration = <{disabled|enabled}>]
```

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
acceleration	Disable/Enable IP acceleration.	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 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|udp|tcp|icmp}>
```

where:

proto	The protocol for which to display the statistics.	REQUIRED
-------	---	----------

ip debug traceconfig

Display/Modify IP stack trace configuration.

SYNTAX:

```
ip debug traceconfig      [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}>]
                           [path = <{none|label|-telnet|-host|-broadcast|
                           all}>]
                           [mode = <{line|dump}>]
                           [arp = <{none|all}>]
```

where:

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
path	Define the packet that will be path-traced.	OPTIONAL
mode	Packet dump method.	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 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}>]
                    [status = <{down|up}>]
                    [hwaddr = <hardware-address>]
                    [arpcachetimeout = <number{0-7200}>]
                    [group = <{wan|local|lan|tunnel|dmz|guest} or
                    number>]
                    [linksensing = <{disabled|enabled}>]
                    [primary = <{disabled|enabled}>]
                    [mcastpromisc = <{disabled|enabled}>]
                    [symmetric = <{disabled|enabled}>]
                    [arpprobe = <{unicast|broadcast}>]
```

where:

intf	An IP interface name.	REQUIRED
mtu	The maximum packet size (including IP header) to use on this interface.	OPTIONAL
status	The administrative state of the interface.	OPTIONAL
hwaddr	The hardware address (e.g. Ethernet MAC address) of this interface.	OPTIONAL
arpcachetimeout	Set the ARP cache timeout to be used for this interface (0 = use global ARP cache timeout).	OPTIONAL
group	The group this interface belongs to. Can be used by e.g. firewalling.	OPTIONAL
linksensing	The IP interface's awareness of link state transitions.	OPTIONAL
primary	Make the IP interface the primary interface.	OPTIONAL
mcastpromisc	Make the IP interface multicast promiscuous.	OPTIONAL
symmetric	The routing mode of the IP interface.	OPTIONAL
arpprobe	The ARP mode of the interface.	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 [expand = <{disabled|enabled}>]
          [legend = <{disabled|enabled}>]
```

where:

expand	Expanded listing.	OPTIONAL
legend	Expanded Legend listing.	OPTIONAL

ip ifwait

Wait for a status change of an IP interface.

SYNTAX:

```
ip ifwait                               intf = <{loop|Internet|LocalNetwork}>
                                         [timeout = <number{1-600000}>]
                                         [adminstatus = <{down|up}>]
                                         [operstatus = <{down|up}>]
                                         [linkstatus = <{down|up}>]
```

where:

intf	An IP interface name.	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-address>
                                       [netmask = <ip-mask(dotted or cidr)>]
                                       [pointopoint = <ip-address>]
                                       [addroute = <{disabled|enabled}>]
```

where:

intf	The IP interface name.	REQUIRED
addr	The new IP address to add.	REQUIRED
netmask	The subnetmask associated with this address.	OPTIONAL
pointopoint	The remote address in case of a point-to-point link.	OPTIONAL
addroute	Add typical net/subnet routes automatically.	OPTIONAL

ip ipconfig

Modify an IP address configuration.

SYNTAX:

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

where:

addr	The IP address to delete.	REQUIRED
------	---------------------------	----------

ip iplist

Display all configured IP addresses.

SYNTAX:

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

where:

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

ip mcast flush

Flush the multicast routing table.

SYNTAX:

```
ip mcast flush
dest = <{atm_pvc_8_35}>
[state = <{disabled|enabled}>]
[discard = <{tail|early}>]
[priority = <{wfq|strict|wrr}>]
[realtime = <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
realtime	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

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}>]
```

where:

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

ip rtadd

Add a route to the routing table.

SYNTAX:

```
ip rtadd                                dst = <ip-address>
                                         [dstmsk = <ip-mask(dotted or cidr)>]
                                         [label = <{None|DSCP|Interactive|Management|
Video|VoIP-RTP|VoIP-Signal|default}>]
                                         [gateway = <ip-address>]
                                         [intf = <{loop|Internet|LocalNetwork}>]
                                         [srcintf = <{loop|Internet|LocalNetwork}>]
                                         [static = <{enabled|disabled}>]
                                         [status = <{up|down}>]
                                         [metric = <number{0-255}>]
```

where:

dst	The destination IP address(es) using this route. Supports ip/ mask notation.	REQUIRED
dstmsk	The destination IP address mask.	OPTIONAL
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
metric	The metric for this route (weight factor).	OPTIONAL

ip rtconfig

Modify a route of the routing table.

SYNTAX:

```
ip rtconfig                dst = <ip-address>
                           [dstmsk = <ip-mask(dotted or cidr)>]
                           [label = <{None|DSCP|Interactive|Management|
                           Video|VoIP-RTP|VoIP-Signal|default}>]
                           [gateway = <ip-address>]
                           [intf = <{loop|Internet|LocalNetwork}>]
                           [srcintf = <{loop|Internet|LocalNetwork|
                           None}>]
                           [static = <{disabled|enabled}>]
                           [status = <{down|up}>]
                           [metric = <number{0-255}>]
```

where:

dst	The destination IP address(es) using this route. Supports ip/mask notation.	REQUIRED
dstmsk	The destination IP address mask.	OPTIONAL
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
metric	The metric for this route (weight factor).	OPTIONAL

ip rtdelete

Delete a route from the routing table.

SYNTAX:

```
ip rtdelete          dst = <ip-address>
                    [dstmsk = <ip-mask(dotted or cidr)>]
                    [label = <{None|DSCP|Interactive|Management|
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. Supports ip/mask notation.	REQUIRED
dstmsk	The destination IP address mask.	OPTIONAL
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}>]
```

where:

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

ipqos Commands

<i>ipqos ef config</i>	<i>Modify an IP QoS EF timer configuration for an interface.</i>	see page 544
<i>ipqos ef list</i>	<i>Display the IP QoS EF timers.</i>	see page 545
<i>ipqos ef stats</i>	<i>Display the IP QoS EF timer statistics.</i>	see page 546
<i>ipqos list</i>	<i>Display the IP QoS configuration.</i>	see page 547
<i>ipqos meter add</i>	<i>Add an IP QoS meter.</i>	see page 548
<i>ipqos meter clear</i>	<i>Clear the IP QoS meter statistics.</i>	see page 549
<i>ipqos meter config</i>	<i>Modify an IP QoS meter configuration.</i>	see page 550
<i>ipqos meter delete</i>	<i>Delete an IP QoS meter.</i>	see page 551
<i>ipqos meter flush</i>	<i>Flush all IP QoS meters.</i>	see page 552
<i>ipqos meter list</i>	<i>Display the IP QoS meters.</i>	see page 553
<i>ipqos meter start</i>	<i>Start an IP QoS meter.</i>	see page 554
<i>ipqos meter stats</i>	<i>Display the IP QoS meter statistics.</i>	see page 555
<i>ipqos meter stop</i>	<i>Stop an IP QoS meter.</i>	see page 556
<i>ipqos queue clear</i>	<i>Clear the IP QoS statistics.</i>	see page 557
<i>ipqos queue config</i>	<i>Modify the IP QoS subqueue configuration.</i>	see page 558
<i>ipqos queue list</i>	<i>Display the IP QoS subqueue configuration.</i>	see page 560
<i>ipqos queue stats</i>	<i>Display the IP QoS subqueue statistics.</i>	see page 561

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 mili 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 = <{DSCP|Interactive|Management|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}>]
```

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
class	The class or offset used for classification.	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.

SYNTAX:

```
ipqos queue clear          name = <string>
```

where:

name	The name of a label to add.	REQUIRED
------	-----------------------------	----------

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 chain add</i>	<i>Add a chain.</i>	see page 564
<i>label chain delete</i>	<i>Delete a chain.</i>	see page 565
<i>label chain flush</i>	<i>Flush all chains.</i>	see page 566
<i>label chain list</i>	<i>Display a list of chains.</i>	see page 567
<i>label delete</i>	<i>Delete a label.</i>	see page 568
<i>label flush</i>	<i>Flush all label.</i>	see page 569
<i>label list</i>	<i>Display the labels.</i>	see page 570
<i>label modify</i>	<i>Modify a label configuration.</i>	see page 571
<i>label rule add</i>	<i>Add a rule.</i>	see page 572
<i>label rule debug clear</i>	<i>Clear rule statistics.</i>	see page 574
<i>label rule debug stats</i>	<i>Display rule statistics.</i>	see page 575
<i>label rule debug traceconfig</i>	<i>Display/Modify rule trace configuration.</i>	see page 576
<i>label rule delete</i>	<i>Delete a rule.</i>	see page 577
<i>label rule flush</i>	<i>Flush all rules.</i>	see page 578
<i>label rule list</i>	<i>Display a list of rules.</i>	see page 579
<i>label rule modify</i>	<i>Modify a rule.</i>	see page 580

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 = <{DSCP|Interactive|Management|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 = <{DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|default}>]
```

where:

name	The name of a label.	OPTIONAL
------	----------------------	----------

label modify

Modify a label configuration.

SYNTAX:

```
label modify name = <{DSCP|Interactive|Management|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 [!] = <{private|ssdp_ip|mdap_ip|
               192.168.1.253}>]
               [dstip [!] = <{private|ssdp_ip|mdap_ip|
               192.168.1.253}>]
               [serv [!] = <{icmp|igmp|ftp|telnet|http|
               httpproxy|https|RPC|NBT|SMB|imap|esp|ah|
               ike|DiffServ|sip|h323|dhcp|rtsp|ssdp_serv|
               mdap_serv|syslog}>]
               [length [!] = <{}>]
               [log = <{disabled|enabled}>]
               [state = <{disabled|enabled}>]
               label = <{None|link|DSCP|Interactive|
               Management|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
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>]
                           Select a language. = <number>
```

where:

chain	The name of the chain.	OPTIONAL
index	The index of the rule in the chain.Command: language config	OPTIONAL
Select a language.	Syntax : config [language = <string>] [complete = <{yes no}>]	REQUIRED

SYNTAX:

```
label rule debug clear      [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

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|DSCP|Interactive|
Management|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	None, link (when clink is used) or label name.	OPTIONAL
-------	--	----------

language Commands

language delete

Delete one or all language archives.

see page 584

language list

List available languages archives.

see page 585

language delete

Delete one or all language archives.

SYNTAX:

```
language delete          [file = <string>]
                        [all = <{yes|no}>]
                        Display the registered enumtypes = <{yes|no}>
```

where:

file	Filename : name of language archive to delete	OPTIONAL
all	Deletes all languages archives.Command: mbus listenums	OPTIONAL
Display the registered enumtypes	Syntax : listenums [dmtree = <{igd atomic system}>] [name = <quoted string>] [expand = <{disabled enabled}>]	REQUIRED

SYNTAX:

```
language delete          [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

language list

List available languages archives.

mbus Commands

<i>mbus client authenticate</i>	<i>Authenticate a session</i>	see page 588
<i>mbus client config</i>	<i>Modify client parameters</i>	see page 589
<i>mbus client exec</i>	<i>Execute mbus command</i>	see page 590
<i>mbus client register</i>	<i>Register cli client to mbus</i>	see page 592
<i>mbus client termssession</i>	<i>Terminate a session</i>	see page 593
<i>mbus client unregister</i>	<i>Unregister cli client from mbus</i>	see page 594
<i>mbus debug clearstats</i>	<i>Reset mbus statistics.</i>	see page 595
<i>mbus debug commconfig</i>	<i>Modify communication settings.</i>	see page 596
<i>mbus debug loadobjects</i>	<i>Load/sync object instances from plugins</i>	see page 597
<i>mbus debug stats</i>	<i>Display mbus statistics.</i>	see page 598
<i>mbus debug traceconfig</i>	<i>Modify mbus trace settings.</i>	see page 599
<i>mbus debug unloadobjects</i>	<i>Unload object instances</i>	see page 600
<i>mbus listcontexts</i>	<i>Display the context instances</i>	see page 601
<i>mbus listobjects</i>	<i>Display the object instances</i>	see page 602
<i>mbus listsubscriptions</i>	<i>Display the subscription instances</i>	see page 603
<i>mbus listtypes</i>	<i>Display the registered objecttypes</i>	see page 604
<i>mbus pluginevent</i>	<i>Simulate event from plugin</i>	see page 605
<i>mbus unregister</i>	<i>Unregister a client/plugin context</i>	see page 606
<i>mbus xmldump</i>	<i>Dump the registered datamodel to an XML file</i>	see page 607

mbus client authenticate

Authenticate a session

SYNTAX:

```
mbus client authenticate      type = <{cleartext|crypt|digest|defaultuser}>
                               [username = <quoted string>]
                               [password = <password>]
                               [addr = <ip-address>]
```

where:

type	Authentication type	REQUIRED
username	User name	OPTIONAL
password	password	OPTIONAL
addr	IP address of peer who inititated the authentication request.	OPTIONAL

mbus client config

Modify client parameters

SYNTAX:

```
mbus client config      [writelock = <{enabled|disabled}>]
                        [wlgettimeout = <number>]
                        [wlidletimeout = <number>]
                        [path = <quoted string>]
                        [type = <{indexpath|keystspath}>]
                        [id = <{indexpath|keystspath}>]
```

where:

writelock	Get/release mbus writelock	OPTIONAL
wlgettimeout	Writelock get timeout in seconds (forever=-1, *default=nowait=0)	OPTIONAL
wlidletimeout	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
                           keystrpath 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}>]
                           [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}>]
```

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

mbus client termsession

Terminate a session

SYNTAX:

```
mbus client termsession      id = <{None|link|DSCP|Interactive|Management|
                               Video|VoIP-RTP|VoIP-Signal|default}>
```

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>]
                             Display memm statistics. = <number>
```

where:

pong-to	Mbus message communication pong time-out.Command: memm stats	OPTIONAL
Display memm statistics.	Syntax : stats [name = <quoted string>]	REQUIRED

SYNTAX:

```
mbus debug commconfig      [name = <quoted string>]
```

where:

name	Select typename(s) to list (supports partial typename)	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|keystopath}>]
                               [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 listobjects

Display the object instances

SYNTAX:

```
mbus listobjects      [dmtree = <{igd|atomic|system}>]
                      [path = <quoted string>]
                      [type = <{indexpath|keystopath}>]
                      [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|updobj}>
                           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 610
<i>memm debug lock stats</i>	<i>Display lock statistics.</i>	see page 611
<i>memm debug lock traceconfig</i>	<i>Modify lock trace settings.</i>	see page 612
<i>memm debug stats</i>	<i>Display memm time statistics.</i>	see page 613
<i>memm debug tag</i>	<i>(Un)tag memory manager objects.</i>	see page 614
<i>memm debug traceconfig</i>	<i>Modify memm trace settings.</i>	see page 615
<i>memm listobjects</i>	<i>Display objects.</i>	see page 616

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}>]
                               Import all scores. = <{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) Command: mlp import	OPTIONAL
Import all scores.	Syntax : import [allow_dl = <{no yes}>] [trace = <{disabled enabled full}>]	REQUIRED

SYNTAX:

```
memm debug lock traceconfig    [allow_dl = <{no|yes}>]
                               [trace = <{disabled|enabled|full}>]
```

where:

allow_dl	Enable/disable support for /dl/ folder	OPTIONAL
trace	Select import trace level.	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

mlp Commands

<i>mlp debug export</i>	<i>Export all scores.</i>	see page 618
<i>mlp debug stats</i>	<i>Display mlp statistics.</i>	see page 619
<i>mlp debug traceconfig</i>	<i>Modify mlp trace settings.</i>	see page 620
<i>mlp flush</i>	<i>Flush all mlp structures.</i>	see page 621
<i>mlp privilege add</i>	<i>Add a privilege.</i>	see page 622
<i>mlp privilege addzone</i>	<i>Add a zone to a privilege.</i>	see page 623
<i>mlp privilege config</i>	<i>Modify the privilege.</i>	see page 624
<i>mlp privilege delete</i>	<i>Delete a privilege.</i>	see page 625
<i>mlp privilege list</i>	<i>Display the privileges.</i>	see page 626
<i>mlp privilege removezone</i>	<i>Remove a zone from a privilege.</i>	see page 627
<i>mlp role add</i>	<i>Add a role.</i>	see page 628
<i>mlp role addpriv</i>	<i>Add a privilege.</i>	see page 629
<i>mlp role config</i>	<i>Modify the role.</i>	see page 630
<i>mlp role delete</i>	<i>Delete a role.</i>	see page 631
<i>mlp role list</i>	<i>Display the roles.</i>	see page 632
<i>mlp role removepriv</i>	<i>Remove a privilege.</i>	see page 633

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 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 = <{anyaccess|anyservice|AP1|AP2|AP3|AP4|
                           AP5|AP6|AP7|AP8|AP9|SP1|SP10|SP25|SP3|SP4|SP5|
                           SP6|SP7|SP8|SP9}>
                           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|
                           Sensitive_file|channel_ftp|channel_telnet|
                           channel_http|channel_mdap|channel_serial|
                           origin_lan|origin_wan|origin_local|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|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>]
Create a new Mobile interface. = <quoted
                                string>
```

where:

name	Role name.	REQUIRED
parent	Parent role name.	OPTIONAL
descr	Role description.Command: mobile ifadd	OPTIONAL
Create a new Mobile interface.	Syntax : ifadd intf = <string>	REQUIRED

SYNTAX:

```
mlp role config                                intf = <string>
```

where:

intf	The name of the new mobile interface	REQUIRED
------	--------------------------------------	----------

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

mobile Commands

<i>mobile debug operator</i>	<i>Shows the currently selected operator.</i>	see page 636
<i>mobile debug sendat</i>	<i>Send AT command to the modem card.</i>	see page 637
<i>mobile debug showsq</i>	<i>Shows signal quality (RSSI & BER).</i>	see page 638
<i>mobile debug traceconfig</i>	<i>Modify trace configuration</i>	see page 639
<i>mobile device list</i>	<i>List mobile devices</i>	see page 640
<i>mobile ifattach</i>	<i>Attach an Mobile interface.</i>	see page 641
<i>mobile ifconfig</i>	<i>Configure an Mobile interface.</i>	see page 642
<i>mobile ifdelete</i>	<i>Delete an Mobile interface.</i>	see page 643
<i>mobile ifdetach</i>	<i>Detach an Mobile interface.</i>	see page 644
<i>mobile iflist</i>	<i>Display the Mobile interfaces.</i>	see page 645
<i>mobile simcard</i>	<i>Get a state of the SIM card.</i>	see page 646

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

SYNTAX:

```
mobile device list          intf = <{loop|Internet|LocalNetwork}>
                             translation = <{disabled|enabled|transparent}>
```

where:

intf	The IP interface name.	REQUIRED
translation	Disabled, enabled or transparent address translation.	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 indentifier + 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 648
<i>nat flush</i>	<i>Flush current NAT configuration.</i>	see page 649
<i>nat iflist</i>	<i>Display all interfaces.</i>	see page 650
<i>nat mapadd</i>	<i>Add an address mapping to a nat enabled interface.</i>	see page 651
<i>nat mapdelete</i>	<i>Delete an address mapping from a nat enabled interface.</i>	see page 652
<i>nat maplist</i>	<i>Display address mappings.</i>	see page 653
<i>nat tmpladd</i>	<i>Add an address mapping template.</i>	see page 654
<i>nat tmpldelete</i>	<i>Delete an address mapping template.</i>	see page 655
<i>nat tmplinst</i>	<i>Instantiate address mapping templates for a given dynamic address.</i>	see page 656
<i>nat tmplist</i>	<i>Display address mapping templates.</i>	see page 657

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.

SYNTAX:

```
nat flush                               intf = <string>
```

where:

intf	The name for the new PPP interface. If not specified, the destination will double as interface name.	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|gpp|gre|hmp|icmp|
igmp|pup|rdp|rsvp|tcp|udp|vines|xns-idp|6to4|
ipip} 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 tmpladd

Add an address mapping template.

SYNTAX:

```
nat tmpladd [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|esp|ggp|gre|hmp|icmp|
            igmp|pup|rdp|rsvp|tcp|udp|vines|xns-idp|6to4|
            ipip} 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 tmplinst

Instantiate address mapping templates for a given dynamic address.

SYNTAX:

```
nat tmplinst          intf = <{loop|Internet|LocalNetwork}>
                      addr_index = <ip-address>
                      dynamic_addr = <ip-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 660
<i>ppp ifattach</i>	<i>Attach a PPP interface.</i>	see page 661
<i>ppp ifconfig</i>	<i>Modify a PPP interface.</i>	see page 662
<i>ppp ifdelete</i>	<i>Delete a PPP interface.</i>	see page 665
<i>ppp ifdetach</i>	<i>Detach a PPP interface.</i>	see page 666
<i>ppp iflist</i>	<i>Display the PPP interfaces.</i>	see page 667
<i>ppp ifscan</i>	<i>Scan a PPP interface for available interfaces.</i>	see page 668
<i>ppp relay flush</i>	<i>Remove all ethernet interfaces from the PPP relay agent list and terminate all</i>	see page 669
<i>ppp relay ifadd</i>	<i>Add an ethernet interface to the PPP relay list.</i>	see page 670
<i>ppp relay ifconfig</i>	<i>Modify an ethernet interface from the PPP relay agent list.</i>	see page 671
<i>ppp relay ifdelete</i>	<i>Delete an ethernet interface from the PPP relay agent list.</i>	see page 672
<i>ppp relay iflist</i>	<i>Display all ethernet interfaces added to the PPP relay agent list.</i>	see page 673
<i>ppp relay sesslist</i>	<i>Display all active PPP relay sessions.</i>	see page 674
<i>ppp rtadd</i>	<i>Add a route to the routing table when PPP link comes up.</i>	see page 675
<i>ppp rtdelete</i>	<i>Delete the route for a PPP link.</i>	see page 676

ppp flush

Flush all PPP interfaces.

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}>]
                      [user = <string>]
                      [password = <password>]
                      [acname = <quoted string>]
                      [servicename = <quoted string>]
                      [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{1-100}>]
                      [mru = <number{256-1500}>]
                      [laddr = <ip-address>]
                      [raddr = <ip-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 = <ip-address>]
                      [secdns = <ip-address>]
                      [dnsmetric = <number{0-100}>]
                      [idletime = <number{0-1000000}>]
                      [idletrigger = <{RxTx|Rx|Tx}>]
                      [unnumbered = <{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

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

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 = <{Internet}>]
```

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{0-3600}>]
```

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 = <{}>
```

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 = <ip-address>
                        [dstmsk = <ip-mask(dotted or cidr)>]
                        [label = <{None|DSCP|Interactive|Management|
Video|VoIP-RTP|VoIP-Signal|default}>]
                        [src = <ip-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 678
<i>pptp ifadd</i>	<i>Adds a PPTP profile (backwards compatible with previous release, use profiles</i>	see page 679
<i>pptp profadd</i>	<i>Defines a new PPTP profile.</i>	see page 680
<i>pptp profdelete</i>	<i>Deletes a PPTP profile.</i>	see page 681
<i>pptp proflist</i>	<i>Lists PPTP profiles.</i>	see page 682

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}>]
                                           To enable/disable LPD service. = <{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.Command: printersharing LPD config	OPTIONAL
To enable/disable LPD service.	Syntax : config [state = <{disabled enabled}>]	REQUIRED

SYNTAX:

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

where:

state	Enabled/disabled LPD printer service.	OPTIONAL
-------	---------------------------------------	----------

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 list</i>	<i>To display LPD service context.</i>	see page 684
<i>printersharing LPD queue add</i>	<i>Add an option.</i>	see page 685
<i>printersharing LPD queue delete</i>	<i>Delete an option.</i>	see page 686
<i>printersharing LPD queue list</i>	<i>List all options.</i>	see page 687

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.

SYNTAX:

```
printersharing LPD queue list    name = <string>
                                filter = <>
                                action = <>
```

where:

name	Rule name	REQUIRED
filter	Filter	REQUIRED
action	Action	REQUIRED

ptrace Commands

<i>ptrace action add</i>	<i>Add an action</i>	see page 690
<i>ptrace action delete</i>	<i>Delete an action</i>	see page 691
<i>ptrace action list</i>	<i>List all actions</i>	see page 692
<i>ptrace action modify</i>	<i>Modify an action</i>	see page 693
<i>ptrace debug traceconfig</i>	<i>Modify trace configuration</i>	see page 694
<i>ptrace delete</i>	<i>Delete a rule</i>	see page 695
<i>ptrace filter add</i>	<i>Add a filter</i>	see page 696
<i>ptrace filter delete</i>	<i>Delete a filter</i>	see page 697
<i>ptrace filter list</i>	<i>List all filters</i>	see page 698
<i>ptrace filter modify</i>	<i>Modify a filter</i>	see page 699
<i>ptrace flush</i>	<i>Flush all settings</i>	see page 700
<i>ptrace list</i>	<i>List all rules</i>	see page 701
<i>ptrace modify</i>	<i>Modify a rule</i>	see page 702

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 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}>
                             Modify/Display ECO-manager configuration =
                             <{bridge|OBC|ethport1|RELAY|ethport2|ethport3|
                             ethport4|WLAN|virt|ethoa_8_35}>
```

where:

name	Filter name	REQUIRED
intf	Interface on which to trace frames Command: pwr config	REQUIRED
Modify/Display ECO-manager configuration	Syntax : config [eco-manager = <{disabled enabled}>] [cpu-microsleep = <{disabled enabled}>] [cpu-lowspeed = <{disabled enabled}>] [usb-controller = <{disabled enabled}>] [wlan-pwrcontrol = <{disabled enabled}>]	REQUIRED

SYNTAX:

```
ptrace filter modify          [eco-manager = <{disabled|enabled}>]
                             [cpu-microsleep = <{disabled|enabled}>]
                             [cpu-lowspeed = <{disabled|enabled}>]
                             [usb-controller = <{disabled|enabled}>]
                             [wlan-pwrcontrol = <{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

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

pwr debug traceconfig

Enable/disable the ECO manager traces

see page 704

pwr wlan-pwr-options

Modify/Display the WLAN power control options

see page 705

pwr debug traceconfig

Enable/disable the ECO manager traces

SYNTAX:

```
pwr debug traceconfig          [state = <{disabled|enabled}>]
                                Add line to script. = <{disabled|enabled}>
```

where:

state	enable/disable the ECO manager traces Command: script add	OPTIONAL
Add line to script.	Syntax : add name = <string> [index = <number>] command = <quoted string>	REQUIRED

SYNTAX:

```
pwr debug traceconfig          name = <string>
                                [index = <number>]
                                command = <quoted string>
```

where:

name	Name of script.	REQUIRED
index	Line number (0 = add).	OPTIONAL
command	Command.	REQUIRED

pwr wlan-pwr-options

Modify/Display the WLAN power control options

SYNTAX:

```
pwr wlan-pwr-options      [t-on = <number{4-600}>]  
                           [t-off = <number{4-600}>]  
                           [t-ext = <number{2-600}>]
```

where:

t-on	Wireless subsystem On-time (s)	OPTIONAL
t-off	Wireless subsystem Off-time(s)	OPTIONAL
t-ext	Wireless subsystem On-time Extension (s)	OPTIONAL

script Commands

<i>script delete</i>	<i>Delete complete script or line from script.</i>	see page 708
<i>script flush</i>	<i>Flush scripts.</i>	see page 709
<i>script list</i>	<i>List script.</i>	see page 710
<i>script run</i>	<i>Run script.</i>	see page 711

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>
                                          Display list of services. = <quoted string>
```

where:

name	Name of script.	REQUIRED
pars	Parameters separated with comma e.q. a,b,c .Command: service host list	REQUIRED
Display list of services.	Syntax : list [name = <{AIM Talk BearShare BitTorrent Checkpoint FW1 VPN Counter Strike DirectX 7 DirectX 8 DirectX 9 eMule FTP Server Gamespy Arcade HTTP Server (World Wide Web) HTTPS Server iMesh KaZaA Mail Server (SMTP) Microsoft Remote Desktop MSN Game Zone MSN Game Zone (DX) NNTP Server PPTP Server Secure Shell Server (SSH) Steam Games Telnet Server VNC Xbox Live}>]	REQUIRED

SYNTAX:

```
script run                                [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 Commands

<i>service host add</i>	<i>Add a service.</i>	see page 714
<i>service host assign</i>	<i>Assign a service to a host.</i>	see page 715
<i>service host category add</i>	<i>Create/define service category.</i>	see page 716
<i>service host category delete</i>	<i>Delete a service category.</i>	see page 717
<i>service host category list</i>	<i>List the available service categories.</i>	see page 718
<i>service host category rename</i>	<i>Rename a service category.</i>	see page 719
<i>service host delete</i>	<i>Delete a service.</i>	see page 720
<i>service host disable</i>	<i>Disable a service.</i>	see page 721
<i>service host flush</i>	<i>Flush all services.</i>	see page 722
<i>service host rule add</i>	<i>Create/define service portmap.</i>	see page 723
<i>service host rule delete</i>	<i>Delete a service portmap.</i>	see page 725
<i>service host stats</i>	<i>Service statistics.</i>	see page 727
<i>service host triggerlist</i>	<i>List all triggers.</i>	see page 728
<i>service system ifadd</i>	<i>Add an interface to the access list.</i>	see page 729
<i>service system ifdelete</i>	<i>Delete an interface from the access list.</i>	see page 730
<i>service system ipadd</i>	<i>Add an IP address (range) to the access list.</i>	see page 731
<i>service system ipdelete</i>	<i>Delete an IP address (range) from the access list.</i>	see page 732
<i>service system list</i>	<i>Display services.</i>	see page 733
<i>service system mapadd</i>	<i>Add a port map for a service.</i>	see page 734
<i>service system mapdelete</i>	<i>Delete a port map for a service.</i>	see page 735
<i>service system modify</i>	<i>Modify a service.</i>	see page 736

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 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|snpp|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|snpp|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|
nfs|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|
pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|
sip|smtp|snmp|snmptrap|snpp|snpp|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|nfs|nicname|nntp|ntalk|ntp|pcmail-srv|
pop2|pop3|printer|qotd|realaudio|rip|rtelnet|
rtsp|sip|smtp|snmp|snmptrap|snpp|snpp|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>]
    [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|MDAP|SSDP|
                           PING_RESPONDER}>
                           [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|MDAP|SSDP|
                             PING_RESPONDER}>
                             [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|MDAP|SSDP|
                           PING_RESPONDER}>
                           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|web service|
                             FTP|TELNET|RIP-Query|DNS-S|MDAP|SSDP|
                             PING_RESPONDER}>
                             ip = <ip-range>
                             Add NTP server = <ip-range>
```

where:

name	The name of the service for this access list.	REQUIRED
ip	The IP address (range) for this access list. Command: sntp add	REQUIRED
Add NTP server	Syntax : add [addr = <ip-address>] [name = <string>] [version = <number{1-4}>]	REQUIRED

SYNTAX:

```
service system ipdelete      [addr = <ip-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

service system list

Display services.

SYNTAX:

```
service system list      [name = <{Remote-MBus|PPTP|PPTPD|PPTPGRE|
                          SNTP|SLA_ICMP_PING|SLA_UDP_PING|RIP-Query|
                          IGMP-Proxy|DNS-S|DNS-C|DYNAMIC_DNS|dyndns|
                          statdns|custom|No-IP|DtDNS|gnudip|DHCP-
                          S|DHCP-R|MDAP|CWMP-C|CWMP-S|UPGD-C|SSDP|
                          IP_COMMANDS|ICMP_PING|SENDTO|PING_RESPONDER|
                          ICMP_TRACEROUTE|UDP_TRACEROUTE|HTTPPROBE}>]
                          [expand = <{disabled|enabled}>]
                          [dynamics = <{disabled|enabled}>]
                          [members = <{disabled|enabled}>]
```

where:

name	The name of the service.	OPTIONAL
expand	Expanded listing.	OPTIONAL
dynamics	Display dynamic sevicees.	OPTIONAL
members	Display sevice 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|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|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|
                           SLA_ICMP_PING|SLA_UDP_PING|Query|IGMP-Proxy|
                           DNS-S|DNS-C|DHCP-S|DHCP-R|MDAP|CWMP-C|CWMP-S|
                           UPGD-C|SSDP|IP_COMMANDS|PING_RESPONDER}>
                           [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|ipcsrv|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|DSCP|Interactive|
                           Management|Video|VoIP-RTP|VoIP-Signal|
                           default}>]
                           [routelabel = <{None|DSCP|Interactive|
                           Management|Video|VoIP-RTP|VoIP-Signal|
                           default}>]
                           [srcintf = <{loop|Internet|LocalNetwork}>]
                           [log = <{disabled|enabled}>]
                           [forward = <{disabled|enabled}>]
                           [natpmweight = <number{0-255}>]
```

where:

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
natpmweight	The nat portmap weight for this service.	OPTIONAL

sntp Commands

<i>sntp config</i>	<i>Modify/Display configuration</i>	see page 738
<i>sntp debug traceconfig</i>	<i>Modify SNTP client trace configuration</i>	see page 739
<i>sntp delete</i>	<i>Delete NTP server from list</i>	see page 740
<i>sntp flush</i>	<i>Flush NTP server list and SNTP client configuration</i>	see page 741
<i>sntp list</i>	<i>List the NTP servers</i>	see page 742

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}>]
                             Displays the software version. = <{disabled|
                             enabled}>
```

where:

state	Enable/Disable tracing.Command: software version	OPTIONAL
Displays the software version.	Syntax : version	REQUIRED

sntp delete

Delete NTP server from list

SYNTAX:

```
sntp delete [addr = <ip-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

software Commands

software switchover

Switches active & passive bank & reboots.

see page 744

software upgrade

*Reboots the modem to initiate the SW upgrade.
New software available on a*

see page 745

software switchover

Switches active & passive bank & reboots.

SYNTAX:

```
software switchover          proceed = <{no|yes}>
```

where:

proceed	Confirmation for resetting the modem.	REQUIRED
---------	---------------------------------------	----------

software upgrade

Reboots the modem to initiate the SW upgrade. New software available on a

SYNTAX:

```
software upgrade           [statecheck = <{}>]
                           interval = <{}>
                           timeout = <{}>
                           [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 Commands

<i>statecheck checkadd</i>	<i>Add a check object.</i>	see page 748
<i>statecheck checkdelete</i>	<i>Delete a check object.</i>	see page 749
<i>statecheck groupadd</i>	<i>Add a group object.</i>	see page 750
<i>statecheck groupdelete</i>	<i>Delete a group object.</i>	see page 751
<i>statecheck list</i>	<i>List checks.</i>	see page 752
<i>statecheck statecheckadd</i>	<i>Add a statecheck object.</i>	see page 753
<i>statecheck statecheckdelete</i>	<i>Delete a statecheck object.</i>	see page 754

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 = <tring>]
```

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 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.

SYNTAX:

```
statecheck list          [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

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 flush</i>	<i>Flushes syslog rules.</i>	see page 756
<i>syslog list</i>	<i>List the current syslog configuration</i>	see page 757
<i>syslog msgbuf flush</i>	<i>Flush all messages in syslog message buffer.</i>	see page 758
<i>syslog msgbuf send</i>	<i>Send messages to remote syslog server.</i>	see page 759
<i>syslog msgbuf show</i>	<i>Show messages in the syslog message buffer.</i>	see page 760
<i>syslog ruleadd</i>	<i>Add a new rule to the syslog configuration.</i>	see page 761
<i>syslog ruledel</i>	<i>Delete a rule in the syslog configuration</i>	see page 762

syslog flush

Flushes syslog rules.

syslog list

List the current syslog configuration

syslog msgbuf flush

Flush all messages in syslog message buffer.

SYNTAX:

```
syslog msgbuf flush      [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

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 = <ip-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 = <ip-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 764
<i>system debug autosave</i>	<i>Autosave debugging commands</i>	see page 765
<i>system debug cpu</i>	<i>CPU usage statistics</i>	see page 766
<i>system debug mem</i>	<i>Memory usage statistics</i>	see page 767
<i>system dst</i>	<i>Set daylight saving values</i>	see page 768
<i>system flush</i>	<i>Flush system configuration.</i>	see page 769
<i>system ra config</i>	<i>Configure remote access parameters.</i>	see page 770
<i>system ra instadd</i>	<i>Add a remote access instances.</i>	see page 771
<i>system ra instdelete</i>	<i>Delete remote access instances.</i>	see page 772
<i>system ra list</i>	<i>List remote access instances.</i>	see page 773
<i>system ra start</i>	<i>Starts temporary mode.</i>	see page 774
<i>system ra stop</i>	<i>Stops temporary mode.</i>	see page 775
<i>system reboot</i>	<i>Reboot the modem.</i>	see page 776
<i>system reset</i>	<i>Reset to (factory or ISP) defaults: user specific settings will be cleared !</i>	see page 777
<i>system timedreboot</i>	<i>Set or change editing mode timed reboot</i>	see page 778

system config

Set or change system config parameters.

SYNTAX:

```
system config [upnp = <{disabled|enabled}>]
               [tr64 = <{disabled|enabled}>]
               [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}>]
```

where:

upnp	Enable/Disable upnp discovery	OPTIONAL
tr64	Enable/Disable TR-64 discovery	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 ra config

Configure remote access parameters.

SYNTAX:

```
system ra config      name = <{}>
                      [state = <{disabled|enabled}>]
                      [secure = <{enabled|disabled}>]
                      [port = <{enabled|disabled}>]
                      [timeout = <led|disabled>]
                      [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 = <{}>
                        Display/modify tls settings = <{}>
```

where:

name	Instance nameCommand: tls acs-client config	REQUIRED
Display/modify tls settings	Syntax : config [state = <{disabled enabled}>] [auth-serv = <{disabled enabled}>] [valid-date = <{disabled enabled}>] [valid-domain = <{disabled enabled}>]	REQUIRED

SYNTAX:

```
system ra stop          [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

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 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 780
<i>tls acs-client cert delete</i>	<i>Delete a certificate</i>	see page 781
<i>tls acs-client cert list</i>	<i>List certificates</i>	see page 782
<i>tls https-server cert add</i>	<i>Add a new certificate</i>	see page 783
<i>tls https-server cert delete</i>	<i>Delete a certificate</i>	see page 784
<i>tls https-server cert list</i>	<i>List certificates</i>	see page 785
<i>tls https-server config</i>	<i>Display/modify tls settings</i>	see page 786
<i>tls remote-upgraded cert add</i>	<i>Add a new certificate</i>	see page 787
<i>tls remote-upgraded cert delete</i>	<i>Delete a certificate</i>	see page 788
<i>tls remote-upgraded cert list</i>	<i>List certificates</i>	see page 789
<i>tls remote-upgraded config</i>	<i>Display/modify tls settings</i>	see page 790
<i>tls self cert list</i>	<i>List certificates</i>	see page 791

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 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}>]
                           Display/modify upgrade settings = <{disabled|
                           enabled}>
```

where:

index	Certificate index	OPTIONAL
expand	Display more informationCommand: upgrade config	OPTIONAL
Display/modify upgrade settings	Syntax : config [enable = <{no yes}>] [attempt = <{yes}> >] [trace_level = <] >] [acsContactTimeout = <>]	REQUIRED

SYNTAX:

```
tls self cert list          [enable = <{no|yes}>]
                           [attempt = <{yes}>]
                           [trace_level = <] >]
                           [acsContactTimeout = <>]
```

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

upgrade Commands

<i>upgrade debug config</i>	<i>Display debug parameters</i>	see page 794
<i>upgrade image list</i>	<i>List images</i>	see page 795
<i>upgrade image modify</i>	<i>Change image parameters</i>	see page 796
<i>upgrade lastUpgradeInfo</i>	<i>Display last upgrade information</i>	see page 797

upgrade debug config

Display debug parameters

upgrade image list

List images

SYNTAX:

```
upgrade image list [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

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 debug nonce</i>	<i>To re-generate the nonce string.</i>	see page 800
<i>upnp debug traceconfig</i>	<i>Enable or disable tracing.</i>	see page 801
<i>upnp flush</i>	<i>Flushes upnp config (i.e. to defaults)</i>	see page 802
<i>upnp list</i>	<i>List all registered devices</i>	see page 803
<i>upnp listmask</i>	<i>List all mask and security devices</i>	see page 804

upnp debug nonce

To re-generate the nonce string.

SYNTAX:

```
upnp debug nonce [type = <{upnp|tr64|wfa}>]
                  Add a user. = <{upnp|tr64|wfa}>
```

where:

type	Specify device type for nonce string	Command: user add	OPTIONAL
Add a user.	Syntax : add name = <string> password = <password> role = <> [hash2 = <string>] [crypt = <string>] [descr = <quoted string>] [defuser = <{disabled enabled}>] [defremadmin = <{disabled enabled}>] [deflocadmin = <{disabled enabled}>]		REQUIRED

SYNTAX:

```
upnp debug nonce 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

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 config</i>	<i>Modify the user.</i>	see page 806
<i>user delete</i>	<i>Delete a user.</i>	see page 807
<i>user flush</i>	<i>Flush the users.</i>	see page 808
<i>user list</i>	<i>Display the users.</i>	see page 809
<i>user rights</i>	<i>Display session rights.</i>	see page 810

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}>]
          [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.

SYNTAX:

```
user rights [state = <{disabled|enabled}>]
            [errorinterval = <enabled>]
            [errorsript = <string>]
```

where:

state	Enable/disable	OPTIONAL
errorinterval	Error interval value	OPTIONAL
errorsript	Error script name	OPTIONAL

wansensing Commands

<i>wansensing debug traceconfig</i>	<i>Tracing settings</i>	see page 812
<i>wansensing flush</i>	<i>Clean configuration</i>	see page 813
<i>wansensing list</i>	<i>Display parameters</i>	see page 814
<i>wansensing mode add</i>	<i>Add mode</i>	see page 815
<i>wansensing mode delete</i>	<i>Delete mode</i>	see page 816
<i>wansensing mode list</i>	<i>List all modes</i>	see page 817
<i>wansensing requestmode</i>	<i>Request to enter certain mode</i>	see page 818

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 = <>
                             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>
                             Add an CommonName = <string>
```

where:

name	Mode nameCommand: webserver ssl commonname add	REQUIRED
Add an CommonName	Syntax : add commonname = <string>	REQUIRED

SYNTAX:

```
wansensing mode delete      commonname = <string>
```

where:

commonname	CommonName	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

webserver ssl commonname delete

Delete an option.

see page 820

webserver ssl commonname list

List all options.

see page 821

webserver ssl commonname delete

Delete an option.

SYNTAX:

```
webserver ssl commonname      id = <string>
delete
```

where:

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

webserver ssl commonname list

List all options.

SYNTAX:

```
webserver ssl commonname list [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 Commands

<i>wireless acs config</i>	<i>ACS configuration</i>	see page 825
<i>wireless acs debug rescan</i>	<i>ACS perform automatic channel selection</i>	see page 826
<i>wireless acs debug scan</i>	<i>ACS network scan</i>	see page 827
<i>wireless acs debug scanreport</i>	<i>ACS scanresults</i>	see page 828
<i>wireless acs debug triggerdump</i>	<i>driver detailed counter stats</i>	see page 829
<i>wireless acs scanhistory</i>	<i>ACS scanhistory</i>	see page 830
<i>wireless debug stats</i>	<i>Transfer statistics</i>	see page 831
<i>wireless macacl add</i>	<i>Add an ACL MAC entry</i>	see page 832
<i>wireless macacl config</i>	<i>Access Control List configuration</i>	see page 833
<i>wireless macacl delete</i>	<i>Delete an ACL MAC entry</i>	see page 834
<i>wireless macacl flush</i>	<i>Flushes ACL entries</i>	see page 835
<i>wireless macacl list</i>	<i>Shows a list of all configured ACL entries</i>	see page 836
<i>wireless macacl modify</i>	<i>Modify an ACL entry</i>	see page 837
<i>wireless macacl register</i>	<i>Start a registration process (only for register mode)</i>	see page 838
<i>wireless mssid ifadd</i>	<i>Add an extra ssid context</i>	see page 839
<i>wireless mssid ifattach</i>	<i>Attach a ssid context</i>	see page 840
<i>wireless mssid ifconfig</i>	<i>Configure a ssid context</i>	see page 841
<i>wireless mssid ifdelete</i>	<i>Delete a ssid context</i>	see page 842
<i>wireless mssid ifdetach</i>	<i>Detach a ssid context</i>	see page 843
<i>wireless mssid iflist</i>	<i>Multiple ssid configuration</i>	see page 844
<i>wireless qos apacconfig</i>	<i>configure AP EDCA parameters</i>	see page 845
<i>wireless qos config</i>	<i>configure QoS settings</i>	see page 846
<i>wireless qos staacconfig</i>	<i>configure STA EDCA parameters</i>	see page 847
<i>wireless reset</i>	<i>Reset Wireless interface settings to defaults</i>	see page 848
<i>wireless stations list</i>	<i>List of the currently associated stations</i>	see page 849
<i>wireless wps ap_pin</i>	<i>Set/Show the AP pin value</i>	see page 850
<i>wireless wps config</i>	<i>Configure/Show the WPS settings</i>	see page 851
<i>wireless wps mode</i>	<i>Set/Show the configuration mode value</i>	see page 852

wireless wps pin

Set the ENROLLEE pin value

see page 853

wireless acs config

ACS configuration

SYNTAX:

```
wireless acs config      [state = <{disabled|enabled}>]
                        [ccathreshold = <number>]
                        [channelscantime = <number>]
                        [failiteration = <number>]
                        [maxiteration = <number>]
                        [lockoutperiod = <number>]
                        [periodicscantime = <number>]
                        [radio_id = <number{0-9999}>]
                        [scanmode = <{disabled|detect|detect+act}>]
                        [autoscanreport = <{no|yes}>]
```

where:

state	[glitchthreshold = <number>] ACS glitch threshold	OPTIONAL
ccathreshold	ACS cca threshold	OPTIONAL
channelscantime	ACS channelscantime	OPTIONAL
failiteration	ACS failiteration	OPTIONAL
maxiteration	ACS maxiteration	OPTIONAL
lockoutperiod	ACS lockout period	OPTIONAL
periodicscantime	ACS periodic scan	OPTIONAL
radio_id	radio	OPTIONAL
scanmode	ACS scan mode	OPTIONAL
autoscanreport	ACS auto scan report generation	OPTIONAL

wireless acs debug rescan

ACS perform automatic channel selection

SYNTAX:

```
wireless acs debug rescan      [radio_id = <number{0-9999}>]
```

where:

radio_id	radio	OPTIONAL
----------	-------	----------

wireless acs debug scan

ACS netowrk scan

SYNTAX:

```
wireless acs debug scan          [radio_id = <number{0-9999}>]
```

where:

radio_id	radio	OPTIONAL
----------	-------	----------

wireless acs debug scanreport

ACS scanresults

SYNTAX:

```
wireless acs debug scanreport    [radio_id = <number{0-9999}>]
```

where:

radio_id	radio	OPTIONAL
----------	-------	----------

wireless acs debug triggerdump

driver detailed counter stats

SYNTAX:

```
wireless acs debug triggerdump [radio_id = <number{0-9999}>]
```

where:

radio_id	radio	OPTIONAL
----------	-------	----------

wireless acs scanhistory

ACS scanhistory

SYNTAX:

```
wireless acs scanhistory      [radio_id = <number{0-9999}>]
```

where:

radio_id	radio	OPTIONAL
----------	-------	----------

wireless debug stats

Transfer statistics

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}>]
                             [WEPkey = <quoted string>]
                             [WPAPSKkey = <quoted string>]
                             [WPAPSKversion = <{WPA|WPA2|WPA+WPA2}>]
                             [radio_id = <number{0-9999}>]
```

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
radio_id	radio	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 reset

Reset Wireless interface settings to defaults

SYNTAX:

```
wireless reset          proceed = <{disabled|enabled}>
```

where:

proceed	Confirmation required	REQUIRED
---------	-----------------------	----------

wireless stations list

List of the currently associated stations

SYNTAX:

```
wireless stations list      [ssid_id = <number{0-9999}>]  
                           [radio_id = <number{0-9999}>]
```

where:

ssid_id	Selected BSS	OPTIONAL
radio_id	radio	OPTIONAL

wireless wps ap_pin

Set/Show the AP pin value

SYNTAX:

```
wireless wps ap_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	pin number	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}>]
```

where:

ssid_id	ssid id	OPTIONAL
radio_id	radio	OPTIONAL
state	WPS state	OPTIONAL

wireless wps mode

Set/Show the configuration mode value

SYNTAX:

```
wireless wps mode          [ssid_id = <number{0-9999}>]
                           [radio_id = <number{0-9999}>]
                           [state = <{unconfigured|configured}>]
                           Displays status information about modem =
                           <{unconfigured|configured}>
```

where:

ssid_id	ssid id	OPTIONAL
radio_id	radio	OPTIONAL
state	configuration modeCommand: xdsl info	OPTIONAL
Displays status information about modem	Syntax : info [expand = <{disabled enabled}>] [g.997.1 = <{disabled enabled}>] [counter_period_filter = <{current 15_minutes 24_hours}>] [counters_reset = <{no yes}>]	REQUIRED

SYNTAX:

```
wireless wps mode          [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

wireless wps pin

Set the ENROLLEE pin value

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	pin number	OPTIONAL

xdsl Commands

<i>xdsl config</i>	<i>Modify/Display dsl configuration</i>	see page 856
<i>xdsl debug bitloadinginfo</i>	<i>Displays # bits per tone</i>	see page 857
<i>xdsl debug deltcnfig</i>	<i>Dual Ended Line Testing interface</i>	see page 858
<i>xdsl debug deltinfo</i>	<i>Dual Ended Line Test result display</i>	see page 859
<i>xdsl debug modemoptioninfo</i>	<i>The modem options bitmap display</i>	see page 860
<i>xdsl debug multimode</i>	<i>Config custom multimode</i>	see page 861
<i>xdsl debug tracecnfig</i>	<i>Config the adsl tracelevel</i>	see page 862
<i>xdsl version</i>	<i>Display xdsl version information.</i>	see page 863

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 deltininfo

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	REQUIRED
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xdsl version

Display xsdl version information.

