



THOMSON



THOMSON TG784 - SIP

Wireless VoIP Multi-User Ethernet WAN & ADSL2+ Gateway



CLI Reference Guide R8.2

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? Command

Displays this help information

.. Command

Exits group selection.

atm Commands

atm cac config	Configure ATM connection admission control.	see page 37
atm cac list	List all CAC parameters.	see page 38
atm cac overbooking	Configure ATM overbooking parameters.	see page 39
atm debug aal5stats	Display AAL5 port specific atm statistics.	see page 40
atm debug gstats	Display ATM global statistics.	see page 41
atm debug portstats	Display port specific atm statistics.	see page 42
atm debug traceconfig	Display/Modify AAL5 debug trace configuration.	see page 43
atm flush	Flush all ATM interfaces.	see page 44
atm ifadd	Create a new ATM interface.	see page 45
atm ifattach	Attach an ATM interface.	see page 46
atm ifconfig	Modify an ATM interface.	see page 47
atm ifdelete	Delete an ATM interface.	see page 48
atm ifdetach	Detach an ATM interface.	see page 49
atm iflist	Display the ATM interfaces.	see page 50
atm oam cc list	Display CC configuration.	see page 51
atm oam cc modify	Modify CC on the connection.	see page 52
atm oam cc send	Send CC activate/deactivate to connection.	see page 53
atm oam config	Modify the ATM OAM settings.	see page 54
atm oam list	Display the ATM OAM settings.	see page 55
atm oam modify	Modify the ATM OAM data blocking mode.	see page 56
atm oam ping	Send ATM loopback cells.	see page 57
atm oam vclb add	Create a loopback connection for VC	see page 58
atm oam vclb del	Delete a loopback connection for VC	see page 59
atm oam vclb list	List all VC loopback connections	see page 60
atm phonebook add	Add a new phonebook entry.	see page 61

atm phonebook delete	Delete a phonebook entry.	see page 62
atm phonebook flush	Flush all phonebook entries.	see page 63
atm phonebook list	Display the phonebook.	see page 64
atm qosbook add	Add a new qosbook entry.	see page 65
atm qosbook config	Modify the qosbook configuration.	see page 66
atm qosbook ctadd	Add a new connection traffic descriptor.	see page 67
atm qosbook ctdelete	Delete a connection traffic descriptor.	see page 68
atm qosbook ctlist	Display all connection traffic descriptors.	see page 69
atm qosbook delete	Delete a qosbook entry.	see page 70
atm qosbook flush	Flush all qosbook entries.	see page 71
atm qosbook list	Display the qosbook.	see page 72

atm cac config

Configure ATM connection admission control.

SYNTAX:

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

where:

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

atm cac list

List all CAC parameters.

atm cac overbooking

Configure ATM overbooking parameters.

SYNTAX:

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

where:

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

atm debug aal5stats

Display AAL5 port specific atm statistics.

SYNTAX:

```
atm debug aal5stats          port = <{ds10|ds11|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 = <{ds10|ds11|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 = <number>]
                           [intf = <{atm_Internet}>]
                           [state = <{disabled|enabled}>]
```

where:

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

atm flush

Flush all ATM interfaces.

atm ifadd

Create a new ATM interface.

SYNTAX:

```
atm ifadd                               intf = <string>
```

where:

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

atm ifattach

Attach an ATM interface.

SYNTAX:

```
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 ifdelete

Delete an ATM interface.

SYNTAX:

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

where:

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

atm ifdetach

Detach an ATM interface.

SYNTAX:

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

where:

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

atm iflist

Display the ATM interfaces.

SYNTAX:

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

where:

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

atm oam cc list

Display CC configuration.

atm oam cc modify

Modify CC on the connection.

SYNTAX:

```
atm oam cc modify          port = <{ds10|ds11|atm2|atm3|aal5|atm5} or
                             number>
                             vpi = <number{0-31}>
                             [vci = <number{0-511}>]
                             [transmit = <{disabled|enabled}>]
                             [receive = <{disabled|enabled}>]
                             [auto = <{disabled|enabled}>]
                             [span = <{segment|end2end}>]
```

where:

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

atm oam cc send

Send CC activate/deactivate to connection.

SYNTAX:

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

where:

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

atm oam config

Modify the ATM OAM settings.

SYNTAX:

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

where:

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

atm oam list

Display the ATM OAM settings.

atm oam modify

Modify the ATM OAM data blocking mode.

SYNTAX:

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

where:

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

atm oam ping

Send ATM loopback cells.

SYNTAX:

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

where:

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

atm oam vclb add

Create a loopback connection for VC

SYNTAX:

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

where:

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

atm oam vclb del

Delete a loopback connection for VC

SYNTAX:

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

where:

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

atm oam vclb list

List all VC loopback connections

atm phonebook add

Add a new phonebook entry.

SYNTAX:

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

where:

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

atm phonebook delete

Delete a phonebook entry.

SYNTAX:

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

where:

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

atm phonebook flush

Flush all phonebook entries.

atm phonebook list

Display the phonebook.

atm qosbook add

Add a new qosbook entry.

SYNTAX:

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

where:

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

atm qosbook config

Modify the qosbook configuration.

SYNTAX:

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

where:

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

atm qosbook ctdadd

Add a new connection traffic descriptor.

SYNTAX:

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

where:

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

atm qosbook ctdelete

Delete a connection traffic descriptor.

SYNTAX:

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

where:

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

atm qosbook ctdlist

Display all connection traffic descriptors.

atm qosbook delete

Delete a qosbook entry.

SYNTAX:

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

where:

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

atm qosbook flush

Flush all qosbook entries.

atm qosbook list

Display the qosbook.

config Commands

config delete	Delete a user configuration file.	see page 74
config dump	Show the saved configuration file	see page 75
config flush	Flush the loaded configuration.	see page 76
config list	Show the current configuration set	see page 77
config load	Load saved or default configuration.	see page 78
config save	Store current configuration to backup file	see page 79

config delete

Delete a user configuration file.

SYNTAX:

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

where:

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

config dump

Show the saved configuration file

config flush

Flush the loaded configuration.

SYNTAX:

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

where:

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

config list

Show the current configuration set

SYNTAX:

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

where:

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

config load

Load saved or default configuration.

SYNTAX:

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

where:

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

config save

Store current configuration to backup file

SYNTAX:

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

where:

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

connection Commands

connection appconfig	Modify a CONN/NAT application helper configuration	see page 82
connection appinfo	Display CONN/NAT application specific info	see page 83
connection applist	Display the available CONN/NAT application helpers.	see page 84
connection bind	Create a CONN/NAT application helper/port binding.	see page 85
connection bindlist	Display the CONN/NAT application helper/port bindings.	see page 86
connection clean	Clean connection database by forcing timeouts.	see page 87
connection clear	Kill all connections.	see page 88
connection config	Modify global connection configuration.	see page 89
connection debug	Connection debug commands.	see page 90
connection describe	Describe the streams of a connection.	see page 91
connection flush	Flush the connection configuration.	see page 92
connection info	Display all modules with some info.	see page 93
connection list	Display the currently known connections.	see page 94
connection refresh	Invalidate all cached decisions.	see page 95
connection stats	Display connection and stream statistics.	see page 96
connection timerclear	Clear connection timeout to default.	see page 97
connection timerconfig	Modify connection timeout handling.	see page 98
connection unbind	Delete a CONN/NAT application helper/port binding.	see page 99

connection appconfig

Modify a CONN/NAT application helper configuration

SYNTAX:

```

connection appconfig          application = <{IP6TO4|PPTP|ESP|IKE|SIP|
                              JABBER|CU/SeeMe|RAUDIO(PNA)|RTSP|ILS|H245|
                              H323|IRC|GAME(UDP)|CONE(UDP)|LOOSE(UDP)|FTP}>
                              [trace = <{disabled|enabled}>]
                              [timeout = <number{0-32000}>]
                              [childqos = <{DSCP|Interactive|Management|
                              Video|VoIP-RTP|VoIP-Signal|default}>]
                              [floating = <{disabled|enabled}>]
                              [proxy = <{disabled|enabled}>]
                              [tracelevel = <number{1-4}>]
                              [SIP_ALG = <{disabled|enabled}>]
                              [RTP_predict_for_term_SIP_ALG = <{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 trace level: 1=feature errors; 2=feature traces; 3=all errors; 4=all traces.	OPTIONAL
SIP_ALG	SIP only: enable/disable traditional sip alg behaviour	OPTIONAL
RTP_predict_for_term_SIP_ALG	SIP only: enable/disable RTP connection prediction for terminated SIP	OPTIONAL

connection appinfo

Display CONN/NAT application specific info

SYNTAX:

```
connection appinfo          application = <{IP6TO4|PPTP|ESP|IKE|SIP|
                             JABBER|CU/SeeMe|RAUDIO(PNA)|RTSP|ILS|H245|
                             H323|IRC|GAME(UDP)|CONE(UDP)|LOOSE(UDP)|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|ILS|H245|
H323|IRC|GAME(UDP)|CONE(UDP)|LOOSE(UDP)|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.	REQUIRED

connection bindlist

Display the CONN/NAT application helper/port bindings.

connection clean

Clean connection database by forcing timeouts.

SYNTAX:

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

where:

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

connection clear

Kill all connections.

connection config

Modify global connection configuration.

SYNTAX:

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

where:

configchangemode	Select how config changes are handled.	OPTIONAL
probes	Enable/disable alive probes on idle connections.	OPTIONAL
udptrackmode	UDP connection tracking mode.	OPTIONAL

connection debug

Connection debug commands.

SYNTAX:

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

where:

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

connection describe

Describe the streams of a connection.

SYNTAX:

```
connection describe [id = <number{0-2048}>]
```

where:

id	The connection ID to describe.	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 [nr = <number{1-2048}>]
                [history = <{disabled|enabled}>]
```

where:

nr	The number of connections to display.	OPTIONAL
history	If enabled, show history.	OPTIONAL

connection refresh

Invalidate all cached decisions.

connection stats

Display connection and stream statistics.

connection timerclear

Clear connection timeout to default.

SYNTAX:

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

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|icmpkill|ipidle|ipkill|aiprefresh}>]  
                             [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|ILS|H245|
                           H323|IRC|GAME(UDP)|CONE(UDP)|LOOSE(UDP)|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.	REQUIRED

contentsharing Commands

contentsharing cifs config	To set CIFS service name, to define CIFS service workgroup and to	see page 102
contentsharing cifs list	To display CIFS service context.	see page 103
contentsharing ftp config	To enable/disable FTP service.	see page 104
contentsharing ftp list	To display FTP service context.	see page 105
contentsharing upnp config	To enable/disable UPnP service.	see page 106
contentsharing upnp list	To display UPnP service context.	see page 107

contentsharing cifs config

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

SYNTAX:

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

where:

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

contentsharing cifs list

To display CIFS service context.

contentsharing ftp config

To enable/disable FTP service.

SYNTAX:

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

where:

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

contentsharing ftp list

To display FTP service context.

contentsharing upnp config

To enable/disable UPnP service.

SYNTAX:

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

where:

state	Enable/disable UPnP service.	OPTIONAL
-------	------------------------------	----------

contentsharing upnp list

To display UPnP AV service context.

cwmp Commands

cwmp config	Configure the cwmpd as seen from the ACS.	see page 110
cwmp debug traceconfig	Enable or disable tracing.	see page 112
cwmp server config	Configure the cwmpd towards the ACS.	see page 113

cwmp config

Configure the cwmpd as seen from the ACS.

SYNTAX:

```

cwmp config [state = <{disabled|enabled}>]
             [mode = <{read-only|full}>]
             [periodicInform = <{disabled|enabled}>]
             [periodicInfInt = <number>]
             [sessionTimeout = <number>]
             [noIpTimeout = <number>]
             [maxEnvelopes = <number>]
             [connectionRequest = <{disabled|enabled}>]
             [connectionReqPath = <string>]
             [connectionReqUserName = <quoted string>]
             [connectionReqPsswd = <password>]
             [connectionReqAuth = <{none|basic|digest}>]
             [qos-class = <number{0-15}>]
             [bootdelayrange = <number>]
             [upgradedelay = <{disabled|enabled}>]
             [amlTermination = <{disabled|enabled}>]
             [persistentSubscription = <{disabled|
             enabled}>]

```

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
sessionTimeout	Set HTTP session-timeout in seconds.	OPTIONAL
noIpTimeout	Set time (in seconds) ip may be 0 after uploading new config file.	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
qos-class	Set the quality of service class for outgoing CWMP data.	OPTIONAL
bootdelayrange	Set the delay on boot before inform is sent.	OPTIONAL
upgradedelay	Set whether to delay upgrade if services are active.	OPTIONAL
am1Termination	Set if am 1 session termination is enabled.	OPTIONAL
persistentSubscription	The cwmp daemon has persistent subscriptions.	OPTIONAL

cwmp debug traceconfig

Enable or disable tracing.

SYNTAX:

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

where:

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

cwmp server config

Configure the cwmpd towards the ACS.

SYNTAX:

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

where:

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

debug Command

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

SYNTAX:

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

where:

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

dhcp Commands

dhcp client debug clear	Clear DHCP client statistics	see page 121
dhcp client debug stats	Print DHCP client statistics	see page 122
dhcp client debug traceconfig	Modify DHCP client trace configuration	see page 123
dhcp client flush	Delete all DHCP clients.	see page 124
dhcp client ifadd	Create a DHCP client.	see page 125
dhcp client ifattach	Activate a DHCP client.	see page 126
dhcp client ifconfig	Configure a DHCP client.	see page 127
dhcp client ifdelete	Delete a DHCP client.	see page 128
dhcp client ifdetach	De-activate a DHCP client and releases its lease.	see page 129
dhcp client iflist	List DHCP clients.	see page 130
dhcp client ifrenew	Renew a DHCP lease.	see page 131
dhcp client roptions add	Add a DHCP Option Code to the Parameter Request List.	see page 132
dhcp client roptions delete	Delete a DHCP Option Code from the Parameter Request List.	see page 133
dhcp client roptions list	List all DHCP Option Codes in the Parameter Request List.	see page 134
dhcp client roptions optionlist	List all DHCP Option Codes that can be used in the Parameter Request List.	see page 135
dhcp client txoptions add	Add an option.	see page 136
dhcp client txoptions delete	Delete an option.	see page 137
dhcp client txoptions list	List all options.	see page 138
dhcp client txoptions optionlist	Lists all DHCP Option Codes that can be used.	see page 139
dhcp relay add	Add an entry to the DHCP forward list.	see page 140
dhcp relay config	Sets the relay configuration settings.	see page 141
dhcp relay debug stats	Print DHCP relay statistics.	see page 142
dhcp relay debug traceconfig	Modify DHCP relay trace configuration	see page 143

dhcp relay delete	Delete an entry from the DHCP forward list.	see page 144
dhcp relay flush	Flushes the DHCP relay settings.	see page 145
dhcp relay ifconfig	Configure a relay interface.	see page 146
dhcp relay iflist	Show the configuration of the relay interfaces.	see page 147
dhcp relay list	List the DHCP forward list.	see page 148
dhcp relay modify	Modify an entry from the DHCP forward list.	see page 149
dhcp relay ruleadd	Add a selection rule to a DHCP forward entry	see page 150
dhcp relay ruledel	Delete a selection rule from a DHCP forward entry	see page 151
dhcp rule add	Add a rule for DHCP conditional selection	see page 152
dhcp rule debug traceconfig	Modify DHCP rule trace configuration	see page 153
dhcp rule delete	Delete a DHCP rule	see page 154
dhcp rule flush	Flush all DHCP rules	see page 155
dhcp rule list	List all DHCP rules	see page 156
dhcp server config	Print DHCP server configuration settings	see page 157
dhcp server debug clear	Clear DHCP server statistics	see page 158
dhcp server debug stats	Print DHCP server statistics	see page 159
dhcp server debug traceconfig	Modify DHCP server trace configuration	see page 160
dhcp server flush	Flush all DHCP server pool and lease entries	see page 161
dhcp server lease add	Add a DHCP server lease	see page 162
dhcp server lease delete	Delete a DHCP server lease	see page 163
dhcp server lease flush	Flush all DHCP server leases	see page 164
dhcp server lease list	List all DHCP server leases	see page 165
dhcp server option flush	Flush all DHCP server option templates and instances	see page 166
dhcp server option instadd	Add a DHCP server option instance	see page 167
dhcp server option instdelete	Delete a DHCP server option instance	see page 168

dhcp server option instlist	List all DHCP server option instances	see page 169
dhcp server option ruleadd	Add a selection rule to a DHCP server option instance	see page 170
dhcp server option ruledel	Delete a selection rule from a DHCP server option instance	see page 171
dhcp server option tmpladd	Add a DHCP server option template	see page 172
dhcp server option tmpldelete	Delete a DHCP server option template	see page 173
dhcp server option tmpllist	List all DHCP server option templates	see page 174
dhcp server policy	Print DHCP server policy settings	see page 175
dhcp server pool add	Add a DHCP server pool	see page 176
dhcp server pool config	Configure a DHCP server pool	see page 177
dhcp server pool delete	Delete a DHCP server pool	see page 179
dhcp server pool flush	Flush all DHCP server pools	see page 180
dhcp server pool list	List all DHCP server pools	see page 181
dhcp server pool optadd	Add an option instance to the DHCP server pool	see page 182
dhcp server pool optdelete	Delete an option instance from the DHCP server pool	see page 183
dhcp server pool rtadd	Add a route to the DHCP server pool	see page 184
dhcp server pool rdelete	Delete a route from the DHCP server pool	see page 185
dhcp server pool ruleadd	Add a selection rule to the DHCP server pool	see page 186
dhcp server pool ruledel	Delete a selection rule from the DHCP server pool	see page 187
dhcp spoofing add	Add a Spoofing-Association	see page 188
dhcp spoofing attach	Enable a Spoofing-Association	see page 189
dhcp spoofing config	Display/modify dhcp spoofing state	see page 190
dhcp spoofing debug traceconfig	Display/modify DHCP spoofing trace configuratin	see page 191
dhcp spoofing delete	Delete a Spoofing-Association	see page 192
dhcp spoofing detach	Disable a Spoofing-Association	see page 193
dhcp spoofing flush	Flush all the associations and the options.	see page 194

dhcp spoofing list	List the available Spoofing-Associations	see page 195
dhcp spoofing option-add	Add a DHCP Option Code to a Spoofing-Association.	see page 196
dhcp spoofing option-delete	Delete a DHCP Option Code from a Spoofing-Association.	see page 197

dhcp client debug clear

Clear DHCP client statistics

dhcp client debug stats

Print DHCP client statistics

dhcp client debug traceconfig

Modify DHCP client trace configuration

SYNTAX:

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

where:

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

dhcp client flush

Delete all DHCP clients.

dhcp client ifadd

Create a DHCP client.

SYNTAX:

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

where:

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

dhcp client ifattach

Activate a DHCP client.

SYNTAX:

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

where:

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

dhcp client ifconfig

Configure a DHCP client.

SYNTAX:

```
dhcp client ifconfig          intf = <>
                              [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|...} or number>
                              [index = <number{0-255}>]
```

where:

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

dhcp client roptions delete

Delete a DHCP Option Code from the Parameter Request List.

SYNTAX:

```
dhcp client roptions delete    intf = <>
                                option = <{subnet-mask|time-offset|default-
                                routers|time-servers|ien116-name-impress-
                                servers|resource-location-servers|host-
                                name|boot-file-size|merit-dump|domain-name|
                                swap-server|root-path|extensions-path|ip-
                                forwarding|non-local-source-routing|policy-
                                filter|max-dgram-reassembly|default-ip-ttl|
                                path-mtu-aging-timeout|path-mtu-plateau-table|
                                interface-mtu|all-subnets-local|broadcast-
                                address|perform-mask-discovery|...} or number>
```

where:

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

dhcp client roptions list

List all DHCP Option Codes in the Parameter Request List.

SYNTAX:

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

where:

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

dhcp client roptions optionlist

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

dhcp client txoptions add

Add an option.

SYNTAX:

```
dhcp client txoptions add      intf = <>
                               option = <{subnet-mask|time-offset|default-
                               routers|time-servers|ien116-name-impress-
                               servers|resource-location-servers|host-
                               name|boot-file-size|merit-dump|domain-name|
                               swap-server|root-path|extensions-path|ip-
                               forwarding|non-local-source-routing|policy-
                               filter|max-dgram-reassembly|default-ip-ttl|
                               path-mtu-aging-timeout|path-mtu-plateau-table|
                               interface-mtu|all-subnets-local|broadcast-
                               address|perform-mask-discovery|...} 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 tsoptions delete

Delete an option.

SYNTAX:

```
dhcp client tsoptions delete    intf = <>
                                option = <{subnet-mask|time-offset|default-
                                routers|time-servers|ien116-name-impress-
                                servers|resource-location-servers|host-
                                name|boot-file-size|merit-dump|domain-name|
                                swap-server|root-path|extensions-path|ip-
                                forwarding|non-local-source-routing|policy-
                                filter|max-dgram-reassembly|default-ip-ttl|
                                path-mtu-aging-timeout|path-mtu-plateau-table|
                                interface-mtu|all-subnets-local|broadcast-
                                address|perform-mask-discovery|...} or number>
                                [enterprise = <number{1--1}>]
                                [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|vci|uci}>
    option [!] = <{subnet-mask|time-offset|
    default-routers|time-servers|ien116-servers|
    impress-servers|resource-location-servers|
    host-name|boot-file-size|merit-dump|domain-
    name|swap-server|root-path|extensions-path|
    ip-forwarding|non-local-source-routing|policy-
    filter|max-dgram-reassembly|default-ip-ttl|
    path-mtu-aging-timeout|path-mtu-plateau-table|
    interface-mtu|all-subnets-local|broadcast-
    address|perform-mask-discovery|...} 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:*:*:*'>
```

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

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 = <>
```

where:

name	The name of the DHCP rule.	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>]
                           [leasetime = <number>]
                           [expirytime = <number>]
                           [gateway = <ip-address|0|none>]
                           [macaddr = <hardware-address>]
```

where:

clientid	The DHCP client identification string of the host.	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
leasetime	The time in seconds the client is allowed to use an address (tip: 0 means infinite leasetime).	OPTIONAL
expirytime	The time in seconds the DHCP server keeps the lease reserved (tip: 0 means infinite expirytime).	OPTIONAL
gateway	The IP address of the default router for this client.	OPTIONAL
macaddr	The host MAC address.	OPTIONAL

dhcp server lease delete

Delete a DHCP server lease

SYNTAX:

```
dhcp server lease delete      [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 lease flush

Flush all DHCP server leases

SYNTAX:

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

where:

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

dhcp server lease list

List all DHCP server leases

SYNTAX:

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

where:

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

dhcp server option flush

Flush all DHCP server option templates and instances

dhcp server option instadd

Add a DHCP server option instance

SYNTAX:

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

where:

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

dhcp server option instdelete

Delete a DHCP server option instance

SYNTAX:

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

where:

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

dhcp server option instlist

List all DHCP server option instances

SYNTAX:

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

where:

name	The name of the DHCP server option instance.	OPTIONAL
------	--	----------

dhcp server option ruleadd

Add a selection rule to a DHCP server option instance

SYNTAX:

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

where:

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

dhcp server option ruledelete

Delete a selection rule from a DHCP server option instance

SYNTAX:

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

where:

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

dhcp server option tmladd

Add a DHCP server option template

SYNTAX:

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

where:

name	The name of the DHCP server option template.	REQUIRED
optionid	Specify the DHCP server option code.	REQUIRED
dynamic	Enable/Disable option template as dynamic.	OPTIONAL

dhcp server option tpldelete

Delete a DHCP server option template

SYNTAX:

```
dhcp server option tpldelete 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}>]
```

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

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}>]
                             [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>]
                             [dnsmetric = <number{0-100}>]
                             [primwins = <ip-address|none>]
                             [secwins = <ip-address|none>]
                             [leasetime = <number{0-1814400}>]
                             [renewtime = <number{0-1814400}>]
                             [rebindtime = <number{0-1814400}>]
                             [unnumbered = <{disabled|enabled}>]
                             [localgw = <{disabled|enabled}>]
```

where:

name	The name of the DHCP server pool.	REQUIRED
state	Enable/Disable the DHCP server pool admin state.	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
dnsmetric	The DHCP server pool DNS route metric.	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
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

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
```

where:

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

dhcp spoofing delete

Delete a Spoofing-Association

SYNTAX:

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

where:

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

dhcp spoofing detach

Disable a Spoofing-Association

SYNTAX:

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

where:

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

dhcp spoofing flush

Flush all the associations and the options.

dhcp spoofing list

List the available Spoofing-Associations

SYNTAX:

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

where:

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

dhcp spoofing option-add

Add a DHCP Option Code to a Spoofing-Association.

SYNTAX:

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

where:

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

dhcp spoofing option-delete

Delete a DHCP Option Code from a Spoofing-Association.

SYNTAX:

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

where:

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

dns Commands

dns client config	Modify the DNS resolver configuration.	see page 200
dns client dnsadd	Add a DNS server.	see page 201
dns client dnsdelete	Delete a DNS server.	see page 202
dns client dnslist	List all DNS servers.	see page 203
dns client flush	Remove all DNS servers.	see page 204
dns client nslookup	DNS lookup for a domain name or an address.	see page 205
dns server config	DNS server configuration settings	see page 206
dns server debug clear	Clear the DNS server/forwarder statistics.	see page 207
dns server debug spoof clear	Clear the intercept cache table	see page 208
dns server debug spoof getaddress	Get the real ip for the given spoofed ip	see page 209
dns server debug spoof getflags	Get the error flags for the given spoofed ip	see page 210
dns server debug spoof list	List the intercept cache table.	see page 211
dns server debug spoof update	update the intercept cache table	see page 212
dns server debug stats	Print the DNS server/forwarder statistics.	see page 213
dns server flush	Flush all local DNS hosts and routes.	see page 214
dns server host add	Add a local DNS host	see page 215
dns server host delete	Delete a local DNS host	see page 216
dns server host flush	Flush all local DNS hosts	see page 217
dns server host list	List all local DNS hosts	see page 218
dns server route add	Creates a DNS forwarding entry or template	see page 219
dns server route delete	Deletes a DNS forwarding entry or template	see page 220
dns server route flush	Removes all DNS forwarding entries and templates	see page 221
dns server route list	Lists all DNS forwarding entries and templates	see page 222

dns client config

Modify the DNS resolver configuration.

SYNTAX:

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

where:

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

dns client dnsadd

Add a DNS server.

SYNTAX:

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

where:

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

dns client dnsdelete

Delete a DNS server.

SYNTAX:

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

where:

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

dns client dnslist

List all DNS servers.

dns client flush

Remove all DNS servers.

dns client nslookup

DNS lookup for a domain name or an address.

SYNTAX:

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

where:

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

dns server config

DNS server configuration settings

SYNTAX:

```
dns server config [domain = <string>]
                  [timeout = <number{0-2147483646}>]
                  [suppress = <number>]
                  [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 = <number>]
```

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

dsd Commands

dsd config	Display/modify DSD framework configuration	see page 226
dsd debug config	Display/modify DSD debug settings	see page 227
dsd debug connection list	Display internal connection pool usage	see page 228
dsd debug proxy	Display/modify HTTPPI fixed proxy settings	see page 229
dsd debug recycling	Display/modify HTTPPI recycling settings	see page 230
dsd debug stats	Display/clear DSD framework and module statistics	see page 231
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dsd urlfilter config	Display/modify url filtering configuration	see page 235
dsd urlfilter rule add	Add a rule	see page 236
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dsd webfilter cache flush	Empty internal cache	see page 241
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dsd webfilter professional category add	Add a category to a group	see page 245
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dsd webfilter professional category flush	Delete all categories and groups	see page 248
dsd webfilter professional category list	List all categories and groups	see page 249
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dsd webfilter professional config		see page 251
dsd webfilter professional level add	Add a new web filtering level	see page 252
dsd webfilter professional level delete	Delete a web filtering level	see page 253
dsd webfilter professional level flush	Delete all levels	see page 254
dsd webfilter professional level list	Display levels	see page 255
dsd webfilter professional level modify	Modify a web filtering level	see page 256
dsd webfilter professional level set	Set current web filtering level	see page 257
dsd webfilter professional rule clear	Reset level to default rule	see page 258
dsd webfilter professional rule list	List all rules	see page 259
dsd webfilter professional rule modify	Modify a rule	see page 260
dsd webfilter server add	Add a web filter server	see page 261
dsd webfilter server config	Configure web filter server	see page 262
dsd webfilter server delete	Delete a web filter server	see page 263
dsd webfilter server flush	Flush server list	see page 264
dsd webfilter server list	List all web filter servers	see page 265
dsd webfilter server modify	Modify a web filter server	see page 266
dsd webfilter standard category add	Add a category to a group	see page 267
dsd webfilter standard category create	Create a category or group	see page 268
dsd webfilter standard category delete	Delete a category or group	see page 269
dsd webfilter standard category flush	Delete all categories and groups	see page 270
dsd webfilter standard category list	List all categories and groups	see page 271
dsd webfilter standard category remove	Remove a category from a group	see page 272

dsd webfilter standard config		see page 273
dsd webfilter standard level add	Add a new web filtering level	see page 274
dsd webfilter standard level delete	Delete a web filtering level	see page 275
dsd webfilter standard level flush	Delete all levels	see page 276
dsd webfilter standard level list	Display levels	see page 277
dsd webfilter standard level modify	Modify a web filtering level	see page 278
dsd webfilter standard level set	Set current web filtering level	see page 279
dsd webfilter standard rule clear	Reset level to default rule	see page 280
dsd webfilter standard rule list	List all rules	see page 281
dsd webfilter standard rule modify	Modify a rule	see page 282

dsd config

Display/modify DSD framework configuration

SYNTAX:

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

where:

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

dsd debug config

Display/modify DSD debug settings

SYNTAX:

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

where:

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

dsd debug connection list

Display internal connection pool usage

SYNTAX:

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

where:

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

dsd debug proxy

Display/modify HTTPPI fixed proxy settings

SYNTAX:

```
dsd debug proxy [state = <{disabled|enabled}>]
                [dest = <ip-address>]
                [port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|
                bgp|biff|bootpc|bootps|chargen|data|gopher|
                h323|httpproxy|ike|ils|imap2|imap3|ingres-
                net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
                login|netbios-dgm|netbios-ns|netbios-ssn|
                netwall|netware-ip|new-rwho|nfsd|nicname|nntp|
                ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
                realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
                snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
                sunrpc|syslog|sysstat|talk|telnet|...} 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 HTTPPI 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 = <{at-echo|at-nbp|at-rtmp|at-zis|auth|
                             bgp|biff|bootpc|bootps|chargen|data|gopher|
                             h323|httpproxy|ike|ils|imap2|imap3|ingres-
                             net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
                             login|netbios-dgm|netbios-ns|netbios-ssn|
                             netwall|netware-ip|new-rwho|nfsd|nicname|nntp|
                             ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
                             realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
                             snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
                             sunrpc|syslog|sysstat|talk|telnet|...} 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 = <{at-echo|at-nbp|at-rtmp|at-zis|
auth|bgp|biff|bootpc|bootps|finger|ftp|ftp-
data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfs|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-
net|sqlserv|sunrpc|syslog|sysstat|talk|...}
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 = <{at-echo|at-nbp|at-rtmp|at-zis|auth|
                                bgp|biff|bootpc|bootps|chargen|data|gopher|
                                h323|httpproxy|ike|ils|imap2|imap3|ingres-
                                net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
                                login|netbios-dgm|netbios-ns|netbios-ssn|
                                netwall|netware-ip|new-rwho|nfsd|nicname|nntp|
                                ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
                                realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
                                snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
                                sunrpc|syslog|sysstat|talk|telnet|...} 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 = <{at-echo|at-nbp|at-rtmp|at-zis|auth|
                                bgp|biff|bootpc|bootps|chargen|data|gopher|
                                h323|httpproxy|ike|ils|imap2|imap3|ingres-
                                net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
                                login|netbios-dgm|netbios-ns|netbios-ssn|
                                netwall|netware-ip|new-rwho|nfsd|nicname|nntp|
                                ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
                                realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
                                snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
                                sunrpc|syslog|sysstat|talk|telnet|...} or
                                number>

```

where:

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

dsd webfilter standard category add

Add a category to a group

SYNTAX:

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

where:

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

dsd webfilter standard category create

Create a category or group

SYNTAX:

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

where:

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

dsd webfilter standard category delete

Delete a category or group

SYNTAX:

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

where:

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

dsd webfilter standard category flush

Delete all categories and groups

dsd webfilter standard category list

List all categories and groups

SYNTAX:

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

where:

type	OPTIONAL
------	----------

dsd webfilter standard category remove

Remove a category from a group

SYNTAX:

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

where:

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

dsd webfilter standard config

SYNTAX:

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

where:

stdmax	OPTIONAL
validcatmask	OPTIONAL

dsd webfilter standard level add

Add a new web filtering level

SYNTAX:

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

where:

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

dsd webfilter standard level delete

Delete a web filtering level

SYNTAX:

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

where:

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

dsd webfilter standard level flush

Delete all levels

dsd webfilter standard level list

Display levels

dsd webfilter standard level modify

Modify a web filtering level

SYNTAX:

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

where:

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

dsd webfilter standard level set

Set current web filtering level

SYNTAX:

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

where:

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

dsd webfilter standard rule clear

Reset level to default rule

SYNTAX:

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

where:

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

dsd webfilter standard rule list

List all rules

SYNTAX:

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

where:

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

dsd webfilter standard rule modify

Modify a rule

SYNTAX:

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

where:

level	Level name	REQUIRED
id	Server category ID	OPTIONAL
action		REQUIRED

dyndns Commands

dyndns add	Add a dynamic DNS client.	see page 284
dyndns delete	Delete a dynamic DNS client.	see page 285
dyndns flush	Delete all dynamic DNS clients.	see page 286
dyndns host add	Add a fully qualified host name	see page 287
dyndns host delete	Delete a host name	see page 288
dyndns host flush	Delete all host names	see page 289
dyndns host list	List all host names	see page 290
dyndns list	List all dynamic DNS clients.	see page 291
dyndns modify	Modify a dynamic DNS client.	see page 292
dyndns service list	List all dynamic DNS services	see page 293
dyndns service modify	Modify specific dynamic DNS service settings	see page 294

dyndns add

Add a dynamic DNS client.

SYNTAX:

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

where:

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

dyndns delete

Delete a dynamic DNS client.

SYNTAX:

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

where:

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

dyndns flush

Delete all dynamic DNS clients.

dyndns host add

Add a fully qualified host name

SYNTAX:

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

where:

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

dyndns host delete

Delete a host name

SYNTAX:

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

where:

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

dyndns host flush

Delete all host names

dyndns host list

List all host names

dyndns list

List all dynamic DNS clients.

dyndns modify

Modify a dynamic DNS client.

SYNTAX:

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

where:

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

dyndns service list

List all dynamic DNS services

dyndns service modify

Modify specific dynamic DNS service settings

SYNTAX:

```
dyndns service modify      name = <{dyndns|statdns|custom|No-IP|DtDNS|
                           gnudip}>
                           [server = <string>]
                           [port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|
                           bgp|biff|bootpc|bootps|chargen|data|gopher|
                           h323|httpproxy|ike|ils|imap2|imap3|ingres-
                           net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
                           login|netbios-dgm|netbios-ns|netbios-ssn|
                           netwall|netware-ip|new-rwho|nfsd|nicname|nntp|
                           ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
                           realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
                           snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
                           sunrpc|syslog|sysstat|talk|telnet|...} 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

env flush	Remove all non-system environment variables.	see page 296
env get	Gets an environment variable.	see page 297
env list	List all environment variables.	see page 298
env set	Sets an environment variable.	see page 299
env unset	Deletes an environment variable.	see page 300

env flush

Remove all non-system environment variables.

env get

Gets an environment variable.

SYNTAX:

```
env get var = <{_ETHERNET|_COMPANY_NAME|_COMPANY_URL|_PROD_NAME|_PROD_URL|_PROD_SERIAL_NBR|_FII|_BUILD|_BOOTLOADER_VERSION|_BUILDVARIANT|_MODEM_ACCESS_CODE|__SEC_MODEM_ACCESS_CODE|_OUI|_CUSTOVARIANT|_PHYSLAYERTYPE|_BUILDNAME|_PRL|_FIA|_BOARD_NAME|_COMPANY_ID|_COPYRIGHT|_TPVERSION|_USB_MACADDR|_LUSB_MACADDR|_PROD_ID|_PROD_FRIENDLY_NAME|_VARIANT_ID|_VARIANT_FRIENDLY_NAME|_MACADDR|_LMACADDR|_WL0_WEPKEY_SERIAL|_WL0_WPAKEY_SERIAL|_WL0_SSID_SERIAL}>
```

where:

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

env list

List all environment variables.

env set

Sets an environment variable.

SYNTAX:

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

where:

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

env unset

Deletes an environment variable.

SYNTAX:

```
env unset var = <{_ETHERNET|_COMPANY_NAME|_COMPANY_URL|
_PROD_NAME|_PROD_URL|_PROD_SERIAL_NBR|_FII|
_BUILD|_BOOTLOADER_VERSION|_BUILDVARIANT|
_MODEM_ACCESS_CODE|__SEC_MODEM_ACCESS_CODE|
_OUI|_CUSTOVARIANT|_PHYSLAYERTYPE|_BUILDNAME|
_PRL|_FIA|_BOARD_NAME|_COMPANY_ID|_COPYRIGHT|
_TPVERSION|_USB_MACADDR|_LUSB_MACADDR|
_PROD_ID|_PROD_FRIENDLY_NAME|_VARIANT_ID|
_VARIANT_FRIENDLY_NAME|_MACADDR|_LMACADDR|
_WL0_WEPKEY_SERIAL|_WL0_WPAKEY_SERIAL|
_WL0_SSID_SERIAL}>
```

where:

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

eth Commands

eth bridge add	Add a new bridge instance.	see page 306
eth bridge clear	Clear bridge statistics.	see page 307
eth bridge config	Modify/Display the bridge configuration settings.	see page 308
eth bridge delete	Delete a bridge instance.	see page 309
eth bridge dynvlan actlist	Display the active MAC entries for the dynamic VLAN membership.	see page 310
eth bridge dynvlan add	Add a dynamic VLAN membership entry.	see page 311
eth bridge dynvlan config	Modify the dynamic VLAN membership configuration.	see page 312
eth bridge dynvlan delete	Delete a dynamic VLAN membership entry.	see page 313
eth bridge dynvlan flush	Flush all dynamic VLAN membership entries.	see page 314
eth bridge dynvlan list	Display a dynamic VLAN membership entry.	see page 315
eth bridge filter add	Add a filter.	see page 316
eth bridge filter attach	Enable a filter.	see page 317
eth bridge filter config	Change filter configuration	see page 318
eth bridge filter delete	Delete a filter.	see page 319
eth bridge filter detach	Disable a filter.	see page 320
eth bridge filter forwarding	Action: set forwarding configuration.	see page 321
eth bridge filter fwdintfadd	Add Forwarding interface: filter action.	see page 322
eth bridge filter fwdintfdel	Remove Forwarding interface: filter action.	see page 323
eth bridge filter ifadd	Connect an interface with a filter.	see page 324
eth bridge filter ifdel	Remove an interface from a filter.	see page 325
eth bridge filter list	Display the bridge filters.	see page 326
eth bridge flush	Flush all bridge instances with their interfaces and properties.	see page 327
eth bridge ifadd	Add a new bridge interface.	see page 328

eth bridge ifattach	Attach a bridge interface.	see page 329
eth bridge ifconfig	Modify a bridge interface configuration.	see page 330
eth bridge ifdelete	Delete a bridge interface.	see page 332
eth bridge ifdetach	Detach a bridge interface.	see page 333
eth bridge ifflush	flush the bridge interfaces: detach/delete all interfaces.	see page 334
eth bridge iflist	Display the current bridge interfaces.	see page 335
eth bridge igmpsnooping clear	Clear snooping statistics.	see page 336
eth bridge igmpsnooping config	Configure bridge instance IGMP Snooping flags.	see page 337
eth bridge igmpsnooping ifconfig	Configure bridge interface IGMP snooping flags and mode.	see page 338
eth bridge igmpsnooping iflist	Display bridge interface IGMP status.	see page 339
eth bridge igmpsnooping list	Display bridge instance snooped groups.	see page 340
eth bridge list	Display the current bridge instances.	see page 341
eth bridge macadd	Add a static MAC address to a bridge interface.	see page 342
eth bridge macdelete	Remove a MAC address from the database.	see page 343
eth bridge maclist	Display the MAC address database.	see page 344
eth bridge rule add	Add a new constraint to the VLAN learning system.	see page 345
eth bridge rule delete	Delete a constraint from the VLAN learning system.	see page 346
eth bridge rule flush	Flush all constraints from the VLAN learning system.	see page 347
eth bridge rule list	Display all constraints from the VLAN learning system.	see page 348
eth bridge select	Select the default bridge for configuring interfaces from (if not setting)	see page 349
eth bridge unknownvlan ifadd	Add bridge interface to unknown 'VLAN'.	see page 350
eth bridge unknownvlan ifconfig	Modify bridge interface from unknown 'VLAN'.	see page 351

eth bridge unknownvlan ifdelete	Delete bridge interface from unknown 'VLAN'.	see page 352
eth bridge unknownvlan iflist	Display all interfaces of the unknown 'VLAN'.	see page 353
eth bridge vlan ifadd	Add bridge interface to virtual LAN.	see page 354
eth bridge vlan ifconfig	Modify bridge interface from virtual LAN.	see page 355
eth bridge vlan ifdelete	Delete bridge interface from virtual LAN.	see page 356
eth bridge vlan iflist	Display all virtual LAN's.	see page 357
eth bridge xtratag add	Add an extra tag mapping entry.	see page 358
eth bridge xtratag config	Configure an extra tag mapping entry.	see page 359
eth bridge xtratag delete	Delete an extra tag mapping entry.	see page 360
eth bridge xtratag flush	Flush all extra tag mapping entries.	see page 361
eth bridge xtratag list	Display all extra tag mapping entries.	see page 362
eth device ifconfig	Configure ethernet interface.	see page 363
eth device iflist	Show status of ethernet interfaces.	see page 364
eth filter operand add	Add a filter operand.	see page 365
eth filter operand config	Set the operand to a certain type (will reset content first).	see page 366
eth filter operand delete	Delete a filter operand.	see page 368
eth filter operand flush	Remove all filter operands (this will only delete the ones not in use: flush	see page 369
eth filter operand frameclassadd	Add another frameclass in the set.	see page 370
eth filter operand frameclassdelete	Delete a frameclass from the set.	see page 371
eth filter operand ipprotoadd	Add another ip protocol in the set.	see page 372
eth filter operand ipprotodelete	Delete a ip protocol from the set.	see page 373
eth filter operand list	Display the filter operands.	see page 374
eth filter operand priorityadd	Add another priority in the set.	see page 375
eth filter operand prioritydelete	Delete a ip priority from the set.	see page 376
eth filter operand reset	Reset an operand to its default initial state (removes all content, set to	see page 377
eth filter operand vidadd	Add another VID in the set.	see page 378

eth filter operand viddelete	Delete a VID from the set.	see page 379
eth filter template add	Add a filter.	see page 380
eth filter template config	Config a filter.	see page 381
eth filter template delete	Delete a filter.	see page 382
eth filter template flush	Remove all filters.	see page 383
eth filter template list	Display the filters.	see page 384
eth filter template ruleadd	Connect an operand rule with a filter.	see page 385
eth filter template ruledel	Remove an operand rule from a filter.	see page 386
eth filter template rulemodify	Modify an operand rule from a filter.	see page 387
eth filter template setpriority	Action: enable/disable priority derivation	see page 388
eth filter template setvid	Action: enable/disable VID derivation	see page 389
eth flush	Flush all ETH interfaces.	see page 390
eth ifadd	Create a new ETH interface.	see page 391
eth ifattach	Attach an ETH interface.	see page 392
eth ifconfig	Modify an ETH interface.	see page 393
eth ifdelete	Delete an ETH interface.	see page 394
eth ifdetach	Detach an ETH interface.	see page 395
eth iflist	Display the ETH interfaces.	see page 396
eth switch group flush	To set all ports to the default settings (all ports in group 0).	see page 397
eth switch group list	List all configured groups.	see page 398
eth switch group move	Move a specified port to a specified group.	see page 399
eth switch info	Display switch capabilities	see page 400
eth switch mirror capture	Define the specified port to be the Mirror Capture Port.	see page 401
eth switch mirror egress	Enable or disable the specified port to be a Transmitted Port Mirroring.	see page 402
eth switch mirror ingress	Enable or disable the specified port to be a Received Port Mirroring.	see page 403
eth switch qos config	Configure common qos parameters.	see page 404
eth switch qos ifconfig	Configure per port qos parameters.	see page 405

eth switch qos list	Display qos configuration.	see page 406
eth switch qos weights	Configure the queue weights.	see page 407
eth switch shaper config	Configure common ingress shaper parameters.	see page 408
eth switch shaper ifconfig	Configure per port shaper parameters.	see page 409
eth switch shaper iflist	Display shaper configuration per port.	see page 410
eth switch share add	Add a port to be shared.	see page 411
eth switch share delete	Delete a shared port.	see page 412
eth switch share list	Display shared ports.	see page 413
eth switch storm ifconfig	Configure per port storm control parameters.	see page 414
eth switch storm iflist	Display storm control configuration per port.	see page 415
eth vlan add	Add a new virtual LAN.	see page 416
eth vlan delete	Delete a virtual LAN.	see page 417
eth vlan flush	Flush all virtual LAN's.	see page 418
eth vlan list	Display all virtual LAN's.	see page 419

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}>]
                  [precedencemap = <string>]
```

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
precedencemap	The IP QoS precedence mapping table.	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}>
                             [remvlan = <{default}>]
```

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
remvlan	The VLAN that will be removed from the bridge interface.	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|virt|WLAN}>
```

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|virt|WLAN}>
```

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|virt|WLAN}>
```

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|virt|WLAN}>
```

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|virt|WLAN}>
                    [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}>]
                    [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	Enable/disable dynamic VLAN membership checking 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|
                    virt|WLAN}>
```

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|
                    virt|WLAN}>
```

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|virt|WLAN}>]
```

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|virt|WLAN}>]
```

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}>]
```

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

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|virt|WLAN}>
                        [portmode = <{Host|Router|Auto}>]
                        [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|virt|WLAN}>]
```

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 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|virt|WLAN}>
                  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|virt|WLAN}>
                              [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|virt|WLAN}>  
                             [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|virt|WLAN}>
```

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|virt|WLAN}>
                           [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|virt|WLAN}>
                              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|virt|WLAN}>
```

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 xtratag add

Add an extra tag mapping entry.

SYNTAX:

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

where:

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

eth bridge xtratag config

Configure an extra tag mapping entry.

SYNTAX:

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

where:

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

eth bridge xtratag delete

Delete an extra tag mapping entry.

SYNTAX:

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

where:

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

eth bridge xtratag flush

Flush all extra tag mapping entries.

eth bridge xtratag list

Display all extra tag mapping entries.

eth device ifconfig

Configure ethernet interface.

SYNTAX:

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

where:

intf	The name of a physical interface.	REQUIRED
type	The ethernet type.	OPTIONAL
state	The interface state.	OPTIONAL

eth device iflist

Show status of ethernet interfaces.

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>
                               daiclass = <{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
daiclass	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 frameclass from the set.

SYNTAX:

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

where:

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

eth filter operand ipprotoadd

Add another ip protocol in the set.

SYNTAX:

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

where:

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

eth filter operand ipprotodelete

Delete a ip protocol from the set.

SYNTAX:

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

where:

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

eth filter operand list

Display the filter operands.

SYNTAX:

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

where:

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

eth filter operand priorityadd

Add another priority in the set.

SYNTAX:

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

where:

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

eth filter operand prioritydelete

Delete a ip priority from the set.

SYNTAX:

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

where:

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

eth filter operand reset

Reset an operand to its default initial state (removes all content, set to

SYNTAX:

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

where:

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

eth filter operand vidadd

Add another VID in the set.

SYNTAX:

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

where:

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

eth filter operand viddelete

Delete a VID from the set.

SYNTAX:

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

where:

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

eth filter template add

Add a filter.

SYNTAX:

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

where:

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

eth filter template config

Config a filter.

SYNTAX:

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

where:

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

eth filter template delete

Delete a filter.

SYNTAX:

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

where:

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

eth filter template flush

Remove all filters.

eth filter template list

Display the filters.

SYNTAX:

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

where:

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

eth filter template ruleadd

Connect an operand rule with a filter.

SYNTAX:

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

where:

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

eth filter template ruledel

Remove an operand rule from a filter.

SYNTAX:

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

where:

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

eth filter template rulemodify

Modify an operand rule from a filter.

SYNTAX:

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

where:

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

eth filter template setpriority

Action: enable/disable priority derivation

SYNTAX:

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

where:

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

eth filter template setvid

Action: enable/disable VID derivation

SYNTAX:

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

where:

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

eth flush

Flush all ETH interfaces.

eth ifadd

Create a new ETH interface.

SYNTAX:

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

where:

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

eth ifattach

Attach an ETH interface.

SYNTAX:

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

where:

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

eth ifconfig

Modify an ETH interface.

SYNTAX:

```
eth ifconfig          intf = <{ethoa_8_35|eth-wan}>
                    [dest = <{bridge|ethoa_8_35|eth-wan}>]
                    [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 = <{eth-wan}>
```

where:

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

eth ifdetach

Detach an ETH interface.

SYNTAX:

```
eth ifdetach          intf = <{eth-wan}>
```

where:

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

eth iflist

Display the ETH interfaces.

SYNTAX:

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

where:

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

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{0-3}>  
                               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}>]
```

where:

state	Enable/disable QoS.	REQUIRED
nbrOfQueues	Number of queues.	OPTIONAL
realtime	Enable/disable realtime.	OPTIONAL

eth switch qos ifconfig

Configure per port qos parameters.

SYNTAX:

```
eth switch qos ifconfig      port = <number{1-4}>  
                             mode = <{none|802.1p|high|diffserv}>  
                             [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}>]
```

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

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{64000-100000000}>]
                                [burstsize = <{}>]
```

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 = <{100|200|300|400}>]
                               [burstsize = <number{2-8}>]
                               [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.

exit Command

Exits this shell.

expr Commands

expr add	Add an expression.	see page 424
expr delete	Delete an expression.	see page 427
expr flush	Flush all expressions.	see page 428
expr list	List expressions.	see page 429
expr modify	Modify an expression.	see page 430

expr add

Add an expression.

SYNTAX:

```
expr add name = <{wan|local|lan|tunnel|dmz|guest|
private|ssdp_ip|mdap_ip|icmp|igmp|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}>]
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 [!] = <{at-echo|at-nbp|at-rtmp|at-
zis|auth|bgp|biff|bootpc|bootps|finger|ftp|
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfsd|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-
net|sqlserv|sunrpc|syslog|sysstat|talk|...}or
number>]
[srcportend = <{at-echo|at-nbp|at-rtmp|at-
zis|auth|bgp|biff|bootpc|bootps|finger|ftp|
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfsd|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-
net|sqlserv|sunrpc|syslog|sysstat|talk|...}or
number>]
[dstport [!] = <{at-echo|at-nbp|at-rtmp|at-
zis|auth|bgp|biff|bootpc|bootps|finger|ftp|
```



```
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfsd|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-
net|sqlserv|sunrpc|syslog|sysstat|talk|...}or
number>]
[dstportend = <{at-echo|at-nbp|at-rtmp|at-
zis|auth|bgp|biff|bootpc|bootps|finger|ftp|
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfsd|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-
net|sqlserv|sunrpc|syslog|sysstat|talk|...}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}>]
```

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

expr delete

Delete an expression.

SYNTAX:

```
expr delete name = <{wan|local|lan|tunnel|dmz|guest|private|ssdp_ip|mdap_ip|icmp|igmp|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.

expr list

List expressions.

SYNTAX:

```
expr list [name = <{_intf_0|_intf_1|DHCP-R_if_0|wan|
local|lan|tunnel|dmz|guest|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|
private|ssdp_ip|mdap_ip|_addr_10_0_0_138|
_addr_192_168_1_254|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|
HTTPI_sv_0|SSDP_sv_0}>]
[type = <{intf|ip|serv|mac}>]
[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|icmp|igmp|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}>]
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 [!] = <{at-echo|at-nbp|at-rtmp|at-
zis|auth|bgp|biff|bootpc|bootps|finger|ftp|
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfsd|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-
net|sqlserv|sunrpc|syslog|sysstat|talk|...}or
number>]
[srcportend = <{at-echo|at-nbp|at-rtmp|at-
zis|auth|bgp|biff|bootpc|bootps|finger|ftp|
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfsd|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-
net|sqlserv|sunrpc|syslog|sysstat|talk|...}or
number>]
```

```
[dstport [!] = <{at-echo|at-nbp|at-rtmp|at-
zis|auth|bgp|biff|bootpc|bootps|finger|ftp|
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfsd|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-
net|sqlserv|sunrpc|syslog|sysstat|talk|...}or
number>]
[dstportend = <{at-echo|at-nbp|at-rtmp|at-
zis|auth|bgp|biff|bootpc|bootps|finger|ftp|
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfsd|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-
net|sqlserv|sunrpc|syslog|sysstat|talk|...}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}>]
```

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
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

firewall Commands

firewall chain add	Add a chain.	see page 434
firewall chain delete	Delete a chain.	see page 435
firewall chain flush	Flush all chains.	see page 436
firewall chain list	Display a list of chains.	see page 437
firewall clear	Clear firewall configuration.	see page 438
firewall config	Display/Modify firewall configuration.	see page 439
firewall debug clear	Clear firewall statistics.	see page 440
firewall debug stats	Display firewall statistics.	see page 441
firewall debug traceconfig	Display/Modify firewall trace configuration.	see page 442
firewall level add	Add a new security level.	see page 443
firewall level delete	Delete a security level.	see page 444
firewall level flush	Flush security level configuration.	see page 445
firewall level list	List all security levels.	see page 446
firewall level modify	Modify a security level.	see page 447
firewall level set	Set/Display active security level.	see page 448
firewall list	Display firewall configuration.	see page 449
firewall rule add	Add a rule.	see page 450
firewall rule debug clear	Clear rule statistics.	see page 452
firewall rule debug stats	Display rule statistics.	see page 453
firewall rule debug traceconfig	Display/Modify rule trace configuration.	see page 454
firewall rule delete	Delete a rule.	see page 455
firewall rule flush	Flush all rules.	see page 456
firewall rule list	Display a list of rules.	see page 457
firewall rule modify	Modify a rule.	see page 458

firewall chain add

Add a chain.

SYNTAX:

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

where:

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

firewall chain delete

Delete a chain.

SYNTAX:

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

where:

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

firewall chain flush

Flush all chains.

firewall chain list

Display a list of chains.

SYNTAX:

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

where:

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

firewall clear

Clear firewall configuration.

firewall config

Display/Modify firewall configuration.

SYNTAX:

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

where:

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

firewall debug clear

Clear firewall statistics.

firewall debug stats

Display firewall statistics.

firewall debug traceconfig

Display/Modify firewall trace configuration.

SYNTAX:

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

where:

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

firewall level add

Add a new security level.

SYNTAX:

```

firewall level add          name = <string>
                           [index = <number>]
                           [readonly = <{disabled|enabled}>]
                           [udptrackmode = <{strict|loose}>]
                           [service = <{disabled|enabled}>]
                           [proxy = <{disabled|enabled}>]
                           [text = <quoted string>]
                           [policy = <{default|drop|accept|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}>]
                           [dstintf [!] = <{wan|local|lan|tunnel|dmz|
                           guest}>]
                           [dstip [!] = <{private|ssdp_ip|mdap_ip}>]
                           [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}>]
                           [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

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

firewall rule debug clear

Clear rule statistics.

SYNTAX:

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

where:

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

firewall rule debug stats

Display rule statistics.

SYNTAX:

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

where:

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

firewall rule debug traceconfig

Display/Modify rule trace configuration.

SYNTAX:

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

where:

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

firewall rule delete

Delete a rule.

SYNTAX:

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

where:

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

firewall rule flush

Flush all rules.

SYNTAX:

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

where:

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

firewall rule list

Display a list of rules.

SYNTAX:

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

where:

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

firewall rule modify

Modify a rule.

SYNTAX:

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

where:

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

grp config	Set the grp configuration settings.	see page 462
grp flush	Flush grp interface settings and parameters.	see page 463
grp rip config	Set the RIP configuration settings.	see page 464
grp rip flush	Flush RIP interface settings and global parameters.	see page 465
grp rip ifconfig	Configure a RIP interface.	see page 466
grp rip show	Show the RIP settings and the routes in the RIP database.	see page 467
grp rtlist	Show the current routes in the grp routing table.	see page 468

grp config

Set the grp configuration settings.

SYNTAX:

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

where:

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

grp flush

Flush grp interface settings and parameters.

grp rip config

Set the RIP configuration settings.

SYNTAX:

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

where:

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

grp rip flush

Flush RIP interface settings and global parameters.

grp rip ifconfig

Configure a RIP interface.

SYNTAX:

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

where:

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

grp rip show

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

grp rtlist

Show the current routes in the grp routing table.

SYNTAX:

```
grp rtlist [dst = <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

help Command

Displays this help information

hostmgr Commands

hostmgr add	Add host device	see page 472
hostmgr clear	Remove all host devices	see page 473
hostmgr config	Configure Device Discovery daemon	see page 474
hostmgr delete	Delete host device	see page 475
hostmgr flush	Flush Device Discovery configuration (i.e. clear & to defaults)	see page 476
hostmgr list	List all host devices	see page 477

hostmgr add

Add host device

SYNTAX:

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

where:

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

hostmgr clear

Remove all host devices

hostmgr config

Configure Device Discovery daemon

SYNTAX:

```
hostmgr config [state = <{disabled|enabled}>]
               [scantime = <number{10-600}>]
               [autosave = <{disabled|enabled}>]
```

where:

state	Enable/disable Device Discovery daemon	OPTIONAL
scantime	Time between two discovery scans (sec)	OPTIONAL
autosave	Enable/disable automatic saves to flash	OPTIONAL

hostmgr delete

Delete host device

SYNTAX:

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

where:

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

hostmgr flush

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

hostmgr list

List all host devices

SYNTAX:

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

where:

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

ids Commands

ids clear	Clear IDS statistics.	see page 480
ids config	Display/Modify IDS configuration.	see page 481
ids parser list	Display ids parser configuration.	see page 482
ids parser modify	Modify ids parser configuration.	see page 483
ids pattern clear	Reset pattern tracker.	see page 484
ids pattern list	Display patterns in pattern tracker.	see page 485
ids pattern stats	Display pattern tracker statistics.	see page 486
ids signature list	Display ids signature configuration.	see page 487
ids signature modify	Modify ids signature configuration.	see page 488
ids threshold clear	Reset IDS thresholds.	see page 489
ids threshold list	Display IDS thresholds.	see page 490
ids threshold modify	Modify IDS threshold.	see page 491

ids clear

Clear IDS statistics.

ids config

Display/Modify IDS configuration.

SYNTAX:

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

where:

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

ids parser list

Display ids parser configuration.

SYNTAX:

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

where:

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

ids parser modify

Modify ids parser configuration.

SYNTAX:

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

where:

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

ids pattern clear

Reset pattern tracker.

ids pattern list

Display patterns in pattern tracker.

SYNTAX:

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

where:

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

ids pattern stats

Display pattern tracker statistics.

ids signature list

Display ids signature configuration.

SYNTAX:

```
ids signature list [signature = <fragment_sweep|zero-  
length_fragment_size|small_fragment_size|  
ip_protocol_scan|tcp_port_scan|  
tcp_syn_scan|stealth_tcp_null_scan|  
stealth_tcp_fin_scan|stealth_tcp_xmas_scan|  
stealth_tcp_full_xmas_scan|  
stealth_tcp_vecna_scan|stealth_tcp_syn-  
fin_scan|udp_port_scan|ping_sweep_scan|  
tcp_syn_flood|udp_flood|ping_flood|  
icmp_unreachable_storm|smurf_broadcast_attack|  
smurf_storm_attack|fraggle_broadcast_attack|  
fraggle_storm_attack|land_attack}>]
```

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

where:

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

ids threshold clear

Reset IDS thresholds.

ids threshold list

Display IDS thresholds.

ids threshold modify

Modify IDS threshold.

SYNTAX:

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

where:

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

igmp Commands

igmp host config	Display/Modify global IGMP configuration.	see page 494
igmp host debug clear	Clear IGMP statistics.	see page 495
igmp host debug stats	Print IGMP statistics.	see page 496
igmp host flush	Flush the IGMP settings.	see page 497
igmp host ifconfig	Configure an IGMP interface.	see page 498
igmp host iflist	Show the configuration of the IGMP interfaces.	see page 499
igmp host list	Show the IGMP groups.	see page 500
igmp proxy config	Configure the IGMP proxy.	see page 501
igmp proxy debug clear	Clear IGMP proxy statistics	see page 502
igmp proxy debug stats	Print IGMP proxy statistics	see page 503
igmp proxy debug traceconfig	Modify IGMP proxy trace configuration	see page 504
igmp proxy flush	Flush all IGMP proxy settings and learned groups	see page 505
igmp proxy grouplist	Show the learned groups on an IGMP proxy interface.	see page 506
igmp proxy ifconfig	Configure an IGMP proxy interface.	see page 507
igmp proxy iflist	Show the configuration of an IGMP proxy interface.	see page 508
igmp proxy mbslist	Show the IGMP proxy membership database (merge of all learned groups).	see page 509

igmp host config

Display/Modify global IGMP configuration.

SYNTAX:

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

where:

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

igmp host debug clear

Clear IGMP statistics.

igmp host debug stats

Print IGMP statistics.

igmp host flush

Flush the IGMP settings.

igmp host ifconfig

Configure an IGMP interface.

SYNTAX:

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

where:

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

igmp host iflist

Show the configuration of the IGMP interfaces.

SYNTAX:

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

where:

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

igmp host list

Show the IGMP groups.

SYNTAX:

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

where:

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

igmp proxy config

Configure the IGMP proxy.

SYNTAX:

```
igmp proxy config [state = <{disabled|enabled}>]
                  [qi = <number{1-86400}>]
                  [qri = <number{1-3175}>]
                  [lmqi = <number{1-3175}>]
                  [rv = <number{2-10}>]
                  [advinter = <number{4-180}>]
                  [initadvinter = <number{1-4}>]
                  [initadvcount = <number{1-10}>]
                  [requirera = <{disabled|enabled}>]
                  [localgroup = <{disabled|enabled}>]
```

where:

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

igmp proxy debug clear

Clear IGMP proxy statistics

igmp proxy debug stats

Print IGMP proxy statistics

igmp proxy debug traceconfig

Modify IGMP proxy trace configuration

SYNTAX:

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

where:

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

igmp proxy flush

Flush all IGMP proxy settings and learned groups

igmp proxy grouplist

Show the learned groups on an IGMP proxy interface.

SYNTAX:

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

where:

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

igmp proxy ifconfig

Configure an IGMP proxy interface.

SYNTAX:

```
igmp proxy ifconfig          intf = <{LocalNetwork|Internet}>
                             [state = <{inactive|downstream|upstream}>]
                             [version = <{IGMPv1|IGMPv2|IGMPv3}>]
                             [fastleave = <{disabled|enabled}>]
                             [exptrack = <{disabled|enabled}>]
                             [mrd = <{disabled|enabled}>]
```

where:

intf	The name of the IGMP proxy interface to be configured.	REQUIRED
state	The state of the IGMP proxy interface.	OPTIONAL
version	The IGMP version of the IGMP proxy interface.	OPTIONAL
fastleave	Enable/Disable the immediate deletion of a group when a leave is received.	OPTIONAL
exptrack	Enable/Disable explicit host tracking.	OPTIONAL
mrd	Enable/Disable sending multicast router advertisements (rfc 4286).	OPTIONAL

igmp proxy iflist

Show the configuration of an IGMP proxy interface.

SYNTAX:

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

where:

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

igmp proxy mbslist

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

interface Command

Display interfaces.

SYNTAX:

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

where:

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

ip Commands

ip arpadd	Add an entry to the ARP cache of a broadcast IP interface.	see page 515
ip arpdelete	Delete an ARP entry.	see page 516
ip arplist	Display the ARP cache.	see page 517
ip auto flush	Flushes autoIP interfaces.	see page 518
ip auto ifadd	Creates a new autoIP interface.	see page 519
ip auto ifattach	Select and assign a link-local address to an autoIP interface.	see page 520
ip auto ifconfig	Configures an autoIP interface.	see page 521
ip auto ifdelete	Deletes an existing autoIP interface.	see page 522
ip auto ifdetach	Release the link-local address for the given autoIP interface.	see page 523
ip auto iflist	Shows the autoIP interfaces.	see page 524
ip config	Display/Modify global IP stack configuration.	see page 525
ip debug httpprobe	Send HTTP probe to measure the round trip time taken to connect and access	see page 526
ip debug sendto	Send UDP packets.	see page 527
ip debug stats	Display statistics.	see page 528
ip debug traceconfig	Display/Modify IP stack trace configuration.	see page 529
ip flush	Flush all static IP parameters. Dynamic info (e.g. from PPP links) remains.	see page 530
ip ifadd	Create an IP interface.	see page 531
ip ifattach	Attach an IP interface.	see page 532
ip ifconfig	Modify an IP interface configuration.	see page 533
ip ifdelete	Delete an IP interface.	see page 534
ip ifdetach	Detach an IP interface.	see page 535
ip iflist	Display all IP interfaces.	see page 536
ip ifwait	Wait for a status change of an IP interface.	see page 537

ip ipadd	Assign an IP address to an IP interface.	see page 538
ip ipconfig	Modify an IP address configuration.	see page 539
ip ipdelete	Remove an IP address from an IP interface.	see page 540
ip iplist	Display all configured IP addresses.	see page 541
ip mcast flush	Flush the multicast routing table.	see page 542
ip mcast rtadd	Add a multicast route to the multicast routing table.	see page 543
ip mcast rtdelete	Delete a multicast route from the multicast routing table.	see page 544
ip mcast rtlist	Display the multicast routing table.	see page 545
ip rtadd	Add a route to the routing table.	see page 546
ip rtconfig	Modify a route of the routing table.	see page 547
ip rtdelete	Delete a route from the routing table.	see page 548
ip rtlist	Display the routing table.	see page 549

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 flush

Flushes autoIP interfaces.

ip auto ifadd

Creates a new autoIP interface.

SYNTAX:

```
ip auto ifadd                intf = <{loop|Internet|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}>]
          [ttl = <number{0-255}>]
          [fraglimit = <number{1-1024}>]
          [defragmode = <{disabled|enabled}>]
          [addrcheck = <{off|own|static|dynamic}>]
          [mssclamping = <{disabled|enabled}>]
          [natloopback = <{disabled|enabled}>]
          [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
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
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 location 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 ifadd

Create an IP interface.

SYNTAX:

```
ip ifadd                               intf = <string>  
                                       dest = <{ethoa_8_35|eth-wan}>
```

where:

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

ip ifattach

Attach an IP interface.

SYNTAX:

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

where:

intf	An IP interface name.	REQUIRED
------	-----------------------	----------

ip ifconfig

Modify an IP interface configuration.

SYNTAX:

```
ip ifconfig          intf = <{loop|Internet|LocalNetwork}>
                    [mtu = <number{68-65535}>]
                    [status = <{down|up}>]
                    [hwaddr = <hardware-address>]
                    [group = <{wan|local|lan|tunnel|dmz|guest} or
                    number>]
                    [linksensing = <{disabled|enabled}>]
                    [primary = <{disabled|enabled}>]
                    [mcastpromisc = <{disabled|enabled}>]
                    [symmetric = <{disabled|enabled}>]
```

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
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

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}>]
```

where:

expand	Expanded 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.

ip mcast flush

Flush the multicast routing table.

ip mcast rtadd

Add a multicast route to the multicast routing table.

SYNTAX:

```
ip mcast rtadd          srcintf = <{loop|Internet|LocalNetwork}>
                        [src = <ip-address>]
                        grp = <ip-address>
                        dstintf = <{loop|Internet|LocalNetwork}>
                        [ttl = <number{1-255}>]
                        [ttlincr = <{disabled|enabled}>]
```

where:

srcintf	The source IP interface.	REQUIRED
src	The source IP address.	OPTIONAL
grp	The multicast group IP address.	REQUIRED
dstintf	The destination IP interface.	REQUIRED
ttl	The time-to-live for that destination IP interface.	OPTIONAL
ttlincr	Increment TTL before packet is send.	OPTIONAL

ip mcast rtdelete

Delete a multicast route from the multicast routing table.

SYNTAX:

```
ip mcast rtdelete          srcintf = <{loop|Internet|LocalNetwork}>
                           [src = <ip-address>]
                           grp = <ip-address>
                           dstintf = <{loop|Internet|LocalNetwork}>
```

where:

srcintf	The source IP interface.	REQUIRED
src	The source IP address.	OPTIONAL
grp	The multicast group IP address.	REQUIRED
dstintf	The destination IP interface.	REQUIRED

ip mcast rtlist

Display the multicast routing table.

SYNTAX:

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

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

ipqos config	Modify the IP QoS configuration for a given destination of an interface.	see page 552
ipqos ef config	Modify an IP QoS EF timer configuration for an interface.	see page 553
ipqos ef list	Display the IP QoS EF timers.	see page 554
ipqos ef stats	Display the IP QoS EF timer statistics.	see page 555
ipqos list	Display the IP QoS configuration.	see page 556
ipqos queue clear	Clear the IP QoS statistics.	see page 557
ipqos queue config	Modify the IP QoS subqueue configuration.	see page 558
ipqos queue list	Display the IP QoS subqueue configuration.	see page 559
ipqos queue stats	Display the IP QoS subqueue statistics.	see page 560

ipqos config

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

SYNTAX:

```
ipqos config dest = <{atm_pvc_8_35}>
              [state = <{disabled|enabled}>]
              [discard = <{tail|early}>]
              [priority = <{wfq|strict|wrr}>]
              [realtimerate = <number{1-100}>]
              [burstsize = <number{1-64}>]
              [weight1 = <number{1-97}>]
              [weight2 = <number{1-97}>]
              [weight3 = <number{1-97}>]
              [weight4 = <number{1-97}>]
              [maxpackets = <number{0-250}>]
              [maxbytes = <number{0-128}>]
```

where:

dest	The destination of the interface. Typically, a phonebook entry.	REQUIRED
state	Enable, disable IP QoS for the interface.	OPTIONAL
discard	The packet discard strategy in case of congestion.	OPTIONAL
priority	The subqueue priority algorithm.	OPTIONAL
realtimerate	The percentage of the bandwidth.	OPTIONAL
burstsize	Burstsize in kilo bytes (KB).	OPTIONAL
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
maxpackets	The maximum number of packets in all queues.	OPTIONAL
maxbytes	The maximum size in kilo bytes (KB) in all queues.	OPTIONAL

ipqos ef config

Modify an IP QoS EF timer configuration for an interface.

SYNTAX:

```
ipqos ef config          intf = <{loop|Internet|LocalNetwork}>
                        [state = <{disabled|enabled}>]
                        [timeout = <number{100-10000}>]
                        [mtu = <number{68-65535}>]
```

where:

intf	The IP interface name.	REQUIRED
state	Enable, disable IP QoS EF timer for the interface.	OPTIONAL
timeout	The timeout in 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 queue clear

Clear the IP QoS statistics.

ipqos queue config

Modify the IP QoS subqueue configuration.

SYNTAX:

```
ipqos queue config dest = <{atm_pvc_8_35}>
                  queue = <number{0-5}>
                  [propagate = <{disabled|enabled}>]
                  [ecnmarking = <{disabled|enabled}>]
                  [ackfiltering = <{disabled|enabled}>]
                  [maxpackets = <number{0-250}>]
                  [maxbytes = <number{0-128}>]
                  [respackets = <number{0-250}>]
                  [resbytes = <number{0-128}>]
                  [hold = <number>]
                  [markprob = <number{1-1000}>]
```

where:

dest	The destination of the interface. Typically, a phonebook entry.	REQUIRED
queue	The number of the subqueue.	REQUIRED
propagate	Propagate the packets in lower priority queue iso. dropping.	OPTIONAL
ecnmarking	Enable Explicit Congestion Notification for IP packets in this subqueue.	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

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

label add	Add a label.	see page 562
label chain add	Add a chain.	see page 563
label chain delete	Delete a chain.	see page 564
label chain flush	Flush all chains.	see page 565
label chain list	Display a list of chains.	see page 566
label delete	Delete a label.	see page 567
label flush	Flush all label.	see page 568
label list	Display the labels.	see page 569
label modify	Modify a label configuration.	see page 570
label rule add	Add a rule.	see page 571
label rule debug clear	Clear rule statistics.	see page 572
label rule debug stats	Display rule statistics.	see page 573
label rule debug traceconfig	Display/Modify rule trace configuration.	see page 574
label rule delete	Delete a rule.	see page 575
label rule flush	Flush all rules.	see page 576
label rule list	Display a list of rules.	see page 577
label rule modify	Modify a rule.	see page 578

label add

Add a label.

SYNTAX:

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

where:

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

label chain add

Add a chain.

SYNTAX:

```
label chain add          chain = <string>
```

where:

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

label chain delete

Delete a chain.

SYNTAX:

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

where:

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

label chain flush

Flush all chains.

label chain list

Display a list of chains.

SYNTAX:

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

where:

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

label delete

Delete a label.

SYNTAX:

```
label delete name = <{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}>]
                        [dstip [!] = <{private|ssdp_ip|mdap_ip}>]
                        [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}>]
                        [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
log	Disable/Enable logging when this rule applies.	OPTIONAL
state	Disable/Enable this rule.	OPTIONAL
label	None, link (when clink is used) or label name.	REQUIRED

label rule debug clear

Clear rule statistics.

SYNTAX:

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

where:

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

label rule debug stats

Display rule statistics.

SYNTAX:

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

where:

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

label rule debug traceconfig

Display/Modify rule trace configuration.

SYNTAX:

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

where:

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

label rule delete

Delete a rule.

SYNTAX:

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

where:

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

label rule flush

Flush all rules.

SYNTAX:

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

where:

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

label rule list

Display a list of rules.

SYNTAX:

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

where:

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

label rule modify

Modify a rule.

SYNTAX:

```
label rule modify          chain = <chain name>
                           [index = <number>]
                           [newindex = <number>]
                           [name = <string>]
                           [clink = <chain name>]
                           [[!]srcintf] = <chain name>]
                           [[!]srcip] = <chain name>]
                           [[!]dstip] = <chain name>]
                           [[!]serv] = <chain name>]
                           [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
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 config	Select a language.	see page 580
language delete	Delete one or all language archives.	see page 581
language list	List available languages archives.	see page 582

language config

Select a language.

SYNTAX:

```
language config          [language = <string>]
                        [complete = <{yes|no}>]
```

where:

language	Language code : OSI language code (2 chars) for language (en=English)	OPTIONAL
complete	Enable translation for expert pages.	OPTIONAL

language delete

Delete one or all language archives.

SYNTAX:

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

where:

file	Filename : name of language archive to delete	OPTIONAL
all	Deletes all languages archives.	OPTIONAL

language list

List available languages archives.

mbus Commands

mbus client authenticate	Authenticate a session	see page 584
mbus client config	Modify client parameters	see page 585
mbus client exec	Execute mbus command	see page 586
mbus client register	Register cli client to mbus	see page 588
mbus client termsession	Terminate a session	see page 589
mbus client unregister	Unregister cli client from mbus	see page 590
mbus debug clearstats	Reset mbus statistics.	see page 591
mbus debug loadobjects	Load/sync object instances from plugins	see page 592
mbus debug stats	Display mbus statistics.	see page 593
mbus debug traceconfig	Modify mbus trace settings.	see page 594
mbus debug unloadobjects	Unload object instances	see page 595
mbus listcontexts	Display the context instances	see page 596
mbus listenums	Display the registered enumtypes	see page 597
mbus listobjects	Display the object instances	see page 598
mbus listsubscriptions	Display the subscription instances	see page 599
mbus listtypes	Display the registered objecttypes	see page 600
mbus pluginevent	Simulate event from plugin	see page 601
mbus unregister	Unregister a client/plugin context	see page 602

mbus client authenticate

Authenticate a session

SYNTAX:

```
mbus client authenticate      type = <{cleartext|md5|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 initiated 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|keystpath}>]
                  [id = <number>]
```

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
keystpath 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}>]
```

where:

Parameter	Description	Requirement
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

mbus client register

Register cli client to mbus

SYNTAX:

```
mbus client register [dmtree = <{igd|atomic|system}>]
                    [type = <{indexpath|keystrpath}>]
                    [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 = <number>
```

where:

id	id of session to terminate	REQUIRED
----	----------------------------	----------

mbus client unregister

Unregister cli client from mbus

mbus debug clearstats

Reset mbus statistics.

mbus debug loadobjects

Load/sync object instances from plugins

SYNTAX:

```
mbus debug loadobjects [dmtree = <{igd|atomic|system}>]
                        [path = <quoted string>]
                        [type = <{indexpath|keystpath}>]
                        [flush = <{disabled|enabled}>]
```

where:

dmtree	Select mbusd datamodel tree.	OPTIONAL
path	Fully qualified mbus path	OPTIONAL
type	Path type (default = indexpath)	OPTIONAL
flush	Flush objects before load (default=disabled)	OPTIONAL

mbus debug stats

Display mbus statistics.

mbus debug traceconfig

Modify mbus trace settings.

SYNTAX:

```
mbus debug traceconfig [level = <number{0-4}>]
```

where:

level	Select mbus trace level (0-4).	OPTIONAL
-------	--------------------------------	----------

mbus debug unloadobjects

Unload object instances

SYNTAX:

```
mbus debug unloadobjects [dmtree = <{igd|atomic|system}>]
                          [path = <quoted string>]
                          [type = <{indexpath|keystpath}>]
                          [flush = <{disabled|enabled}>]
```

where:

dmtree	Select mbusd datamodel tree.	OPTIONAL
path	Fully qualified mbus path	OPTIONAL
type	Path type	OPTIONAL
flush	Flush objects before load (default=disabled)	OPTIONAL

mbus listcontexts

Display the context instances

SYNTAX:

```
mbus listcontexts [dmtree = <{igd|atomic|system}>]  
                  [expand = <{disabled|enabled}>]
```

where:

dmtree	Select mbusd datamodel tree.	OPTIONAL
expand	Details enabled/disabled	OPTIONAL

mbus listenums

Display the registered enumtypes

SYNTAX:

```
mbus listenums [dmtree = <{igd|atomic|system}>]
                [name = <quoted string>]
                [expand = <{disabled|enabled}>]
```

where:

dmtree	Select mbusd datamodel tree.	OPTIONAL
name	Filter enumtypes by (part of) the name	OPTIONAL
expand	Details enabled/disabled	OPTIONAL

mbus listobjects

Display the object instances

SYNTAX:

```
mbus listobjects [dmtree = <{igd|atomic|system}>]
                 [path = <quoted string>]
                 [type = <{indexpath|keystpath}>]
                 [output = <{tree|list}>]
                 [showflags = <{disabled|enabled}>]
```

where:

dmtree	Select mbusd datamodel tree.	OPTIONAL
path	Fully qualified mbus path to list.	OPTIONAL
type	Path type (default = indexpath)	OPTIONAL
output	List output type	OPTIONAL
showflags	Display object flags (Clean or Dirty / Persistent or Volatile)	OPTIONAL

mbus listsubscriptions

Display the subscription instances

SYNTAX:

```
mbus listsubscriptions [dmtree = <{igd|atomic|system}>]
```

where:

dmtree	Select mbusd datamodel tree.	OPTIONAL
--------	------------------------------	----------

mbus listtypes

Display the registered objecttypes

SYNTAX:

```
mbus listtypes [dmtree = <{igd|atomic|system}>]
               [path = <quoted string>]
               [expand = <{disabled|enabled}>]
```

where:

dmtree	Select mbusd datamodel tree.	OPTIONAL
path	Fully qualified mbus path to list.	OPTIONAL
expand	Details enabled/disabled	OPTIONAL

mbus pluginevent

Simulate event from plugin

SYNTAX:

```
mbus pluginevent          ctxid = <number{0--2}>
                          type = <{addobj|delobj|updoobj}>
                          path = <quoted string>
                          [name = <quoted string>]
                          [value = <quoted string>]
                          [orivalue = <quoted string>]
```

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

mbus unregister

Unregister a client/plugin context

SYNTAX:

```
mbus unregister          id = <number>
```

where:

id	Select message-based client/plugin context id.	REQUIRED
----	--	----------

memm Commands

memm debug clearstats	Clear time statistics.	see page 604
memm debug lock stats	Display lock statistics.	see page 605
memm debug lock traceconfig	Modify lock trace settings.	see page 606
memm debug stats	Display memm time statistics.	see page 607
memm debug tag	(Un)tag memory manager objects.	see page 608
memm debug traceconfig	Modify memm trace settings.	see page 609
memm listobjects	Display objects.	see page 610
memm stats	Display memm statistics.	see page 611

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 = <string>]
```

where:

level	Select memm trace level (0-4).	OPTIONAL
name	application name filter for lock traces (empty displays all lock traces)	OPTIONAL

memm debug stats

Display memm time statistics.

SYNTAX:

```
memm debug stats [name = <quoted string>]
```

where:

name	Select typename(s) to list (supports partial typename)	OPTIONAL
------	--	----------

memm debug tag

(Un)tag memory manager objects.

SYNTAX:

```
memm debug tag [name = <quoted string>]
               [tag = <{enabled|disabled}>]
```

where:

name	Select typename(s) to list (supports partial typename)	OPTIONAL
tag	Set (or unset) the tag	OPTIONAL

memm debug traceconfig

Modify memm trace settings.

SYNTAX:

```
memm debug traceconfig [level = <number{0-4}>]
```

where:

level	Select memm trace level (0-4).	OPTIONAL
-------	--------------------------------	----------

memm listobjects

Display objects.

SYNTAX:

```
memm listobjects [name = <quoted string>]
                 [tagged = <{no|yes}>]
                 [hidedeldynstr = <{no|yes}>]
```

where:

name	Select typename(s) to list (supports partial typename)	OPTIONAL
tagged	Show only tagged (yes) or untagged (no) objects	OPTIONAL
hidedeldynstr	Hide (yes) / show (no) deleted dynstrings (default = show)	OPTIONAL

memm stats

Display memm statistics.

SYNTAX:

```
memm stats [name = <quoted string>]
```

where:

name	Select typename(s) to list (supports partial typename)	OPTIONAL
------	---	----------

menu Command

Displays menu

mlp Commands

mlp debug export	Export all scores.	see page 616
mlp debug stats	Display mlp statistics.	see page 617
mlp debug traceconfig	Modify mlp trace settings.	see page 618
mlp flush	Flush all mlp structures.	see page 619
mlp import	Import all scores.	see page 620
mlp privilege add	Add a privilege.	see page 621
mlp privilege addzone	Add a zone to a privilege.	see page 622
mlp privilege config	Modify the privilege.	see page 623
mlp privilege delete	Delete a privilege.	see page 624
mlp privilege list	Display the privileges.	see page 625
mlp privilege removezone	Remove a zone from a privilege.	see page 626
mlp role add	Add a role.	see page 627
mlp role addpriv	Add a privilege.	see page 628
mlp role config	Modify the role.	see page 629
mlp role delete	Delete a role.	see page 630
mlp role list	Display the roles.	see page 631
mlp role removepriv	Remove a privilege.	see page 632

mlp debug export

Export all scores.

mlp debug stats

Display mlp statistics.

mlp debug traceconfig

Modify mlp trace settings.

SYNTAX:

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

where:

trace	Select mlp trace level.	OPTIONAL
-------	-------------------------	----------

mlp flush

Flush all mlp structures.

mlp import

Import all scores.

SYNTAX:

```
mlp import [trace = <{disabled|enabled|full}>]
```

where:

trace	Select import trace level.	OPTIONAL
-------	----------------------------	----------

mlp privilege add

Add a privilege.

SYNTAX:

```
mlp privilege add          name = <string>
                           type = <{access|service}>
                           [descr = <quoted string>]
```

where:

name	Privilege name.	REQUIRED
type	Privilege type.	REQUIRED
descr	Privilege description.	OPTIONAL

mlp privilege addzone

Add a zone to a privilege.

SYNTAX:

```
mlp privilege addzone          name = <>
                               zone = <{Read/LAN/WAN/Local|Write/LAN/WAN/
                               Local|r_lan|r_wan|r_fs_view|r_certificates|
                               r_remote_mgnt|r_local|r_qos|w_lan|w_wan|
                               w_fs_passive|w_rtg|w_fwdg|w_nat|w_frwl_norm|
                               w_frwl_adv|w_frwl_ss|w_ipsec|w_certificates|
                               w_remote_mgnt|w_local|w_qos|SND_lan|SND_wan|
                               SND_local|AND_lan|AND_wan|AND_frwl|AND_local|
                               User_Admin|MLP_Admin|secure_ipsec_term|
                               secure_BR|CLI|CGI|FTP|MDAP|secure_reset|
                               GUI_advanced|mbus|unsecure_connection|
                               Sensitive_file|...}>
```

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|unsecure_connection|
Sensitve_file|...}>
```

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|SP3|
SP4|SP5|SP6|SP7|SP8|SP9}>
```

where:

name	Role name.	REQUIRED
access	Access privilege to add.	REQUIRED
service	Privilege name to add.	REQUIRED

mlp role config

Modify the role.

SYNTAX:

```
mlp role config          name = <>
                        [parent = <>]
                        [descr = <quoted string>]
```

where:

name	Role name.	REQUIRED
parent	Parent role name.	OPTIONAL
descr	Role description.	OPTIONAL

mlp role delete

Delete a role.

SYNTAX:

```
mlp role delete name = <>
```

where:

name	Role name.	REQUIRED
------	------------	----------

mlp role list

Display the roles.

SYNTAX:

```
mlp role list [name = <>]
              [verbose = <{minimal|medium|all}>]
```

where:

name	Role name.	OPTIONAL
verbose	Limit the output list.	OPTIONAL

mlp role removepriv

Remove a privilege.

SYNTAX:

```
mlp role removepriv          name = <>
                              access = <>
                              [service = <>]
```

where:

name	Role name.	REQUIRED
access	Access privilege to delete.	REQUIRED
service	Privilege name to delete.	OPTIONAL

nat Commands

nat config	Modify global NAT configuration.	see page 634
nat flush	Flush current NAT configuration.	see page 635
nat ifconfig	Modify address translation on an IP interface.	see page 636
nat iflist	Display all interfaces.	see page 637
nat mapadd	Add an address mapping to a nat enabled interface.	see page 638
nat mapdelete	Delete an address mapping from a nat enabled interface.	see page 639
nat maplist	Display address mappings.	see page 640
nat tmpladd	Add an address mapping template.	see page 641
nat tmpldelete	Delete an address mapping template.	see page 643
nat tmplinst	Instantiate address mapping templates for a given dynamic address.	see page 644
nat tmplist	Display address mapping templates.	see page 645

nat config

Modify global NAT configuration.

SYNTAX:

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

where:

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

nat flush

Flush current NAT configuration.

nat ifconfig

Modify address translation on an IP interface.

SYNTAX:

```
nat ifconfig          intf = <{loop|Internet|LocalNetwork}>  
                    translation = <{disabled|enabled|transparent}>
```

where:

intf	The IP interface name.	REQUIRED
translation	Disabled, enabled or transparent address translation.	REQUIRED

nat iflist

Display all interfaces.

nat mapadd

Add an address mapping to a nat enabled interface.

SYNTAX:

```

nat mapadd                               intf = <{loop|Internet|LocalNetwork}>
                                           [type = <{napt|nat}>]
                                           [outside_addr = <ip-range>]
                                           [inside_addr = <ip-range>]
                                           [access_list = <ip-range>]
                                           [foreign_addr = <ip-range>]
                                           [protocol = <{ah|egp|esp|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}>]

```

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

nat mapdelete

Delete an address mapping from a nat enabled interface.

SYNTAX:

```
nat mapdelete          intf = <{loop|Internet|LocalNetwork}>  
                      index = <number>
```

where:

intf	The IP interface name.	REQUIRED
index	The map index as listed by ':nat maplist'.	REQUIRED

nat maplist

Display address mappings.

SYNTAX:

```
nat maplist [intf = <{loop|Internet|LocalNetwork}>]
            [expand = <{disabled|enabled}>]
```

where:

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

nat tmladd

Add an address mapping template.

SYNTAX:

```

nat tmladd [intf = <{loop|Internet|LocalNetwork}>]
           [group = <{wan|local|lan|tunnel|dmz|guest} or
           number>]
           [timeout = <number{0-65535}>]
           [type = <{napt|nat}>]
           outside_addr = <ip-range>
           [inside_addr = <ip-range>]
           [access_list = <ip-range>]
           [foreign_addr = <ip-range>]
           [protocol = <{ah|egp|esp|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}>]
    
```

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
--------	---	----------

nat tmpldelete

Delete an address mapping template.

SYNTAX:

```
nat tmpldelete          index = <number>
```

where:

index	The template index as listed by ':nat tmplist'.	REQUIRED
-------	---	----------

nat tmlinst

Instantiate address mapping templates for a given dynamic address.

SYNTAX:

```
nat tmlinst          intf = <{loop|Internet|LocalNetwork}>
                    addr_index = <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
--------	-------------------	----------

ping Command

Send ICMP ECHO_REQUEST packets.

SYNTAX:

```
ping proto = <{ip|atm}>
      addr = <ip-address>
      dest = <{atm_pvc_8_35}>
      [count = <number{0-1000000}>]
      [size = <number{28-20028}>]
      [interval(ms) = <number{100-1000000}>]
      [DF-bit = <{disabled|enabled}>]
      [srcaddr = <ip-address>]
```

where:

proto	The interface type to be used.	REQUIRED
addr	The destination IP address.	REQUIRED
dest	The destination address for the request.	REQUIRED
count	The number of pings to send (0 is continuous ping).	OPTIONAL
size	The size of the ping datagram(s).	OPTIONAL
interval(ms)	The interval in milliseconds between packets.	OPTIONAL
DF-bit	Set the Don't Fragment bit (or leave unset) in the IP header of ping	OPTIONAL
srcaddr	The IP source address to use.	OPTIONAL

ppp Commands

ppp flush	Flush all PPP interfaces.	see page 650
ppp ifadd	Create a new PPP interface.	see page 651
ppp ifattach	Attach a PPP interface.	see page 652
ppp ifconfig	Modify a PPP interface.	see page 653
ppp ifdelete	Delete a PPP interface.	see page 656
ppp ifdetach	Detach a PPP interface.	see page 657
ppp iflist	Display the PPP interfaces.	see page 658
ppp ifscan	Scan a PPP interface for available interfaces.	see page 659
ppp relay flush	Remove all ethernet interfaces from the PPP relay agent list and terminate all	see page 660
ppp relay ifadd	Add an ethernet interface to the PPP relay list.	see page 661
ppp relay ifconfig	Modify an ethernet interface from the PPP relay agent list.	see page 662
ppp relay ifdelete	Delete an ethernet interface from the PPP relay agent list.	see page 663
ppp relay iflist	Display all ethernet interfaces added to the PPP relay agent list.	see page 664
ppp relay sesslist	Display all active PPP relay sessions.	see page 665
ppp rtadd	Add a route to the routing table when PPP link comes up.	see page 666
ppp rtdelete	Delete the route for a PPP link.	see page 667

ppp flush

Flush all PPP interfaces.

ppp ifadd

Create a new PPP interface.

SYNTAX:

```
ppp ifadd                               intf = <string>
```

where:

intf	The name for the new PPP interface. If not specified, the destination will double as interface name.	REQUIRED
------	--	----------

ppp ifattach

Attach a PPP interface.

SYNTAX:

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

where:

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

ppp ifconfig

Modify a PPP interface.

SYNTAX:

```
ppp ifconfig          intf = <{Internet}>
                    [dest = <{RELAY|eth-wan}>]
                    [emptyauth = <{disabled|enabled}>]
                    [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}>]
                    [pcomp = <{disabled|enabled}>]
                    [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}>]
                    [echo = <{disabled|enabled}>]
                    [echotolerance = <number{1-100}>]
                    [mru = <number{293-8192}>]
                    [laddr = <ip-address>]
                    [raddr = <ip-address>]
                    [netmask = <ip-mask(dotted or cidr)>]
                    [format = <{cidr|dotted|none}>]
                    [savepwd = <{disabled|enabled}>]
                    [demanddial = <{disabled|enabled}>]
                    [doddelay = <number{0-3600}>]
                    [primdns = <ip-address>]
                    [secdns = <ip-address>]
                    [dnsmetric = <number{0-100}>]
                    [idletime = <number{0-100000}>]
                    [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
emptyauth	Enable the possibility to authenticate with empty username/password.	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
pcomp	Try to negotiate PPP protocol compression (LCP PCOMP).	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
echo	Send LCP echo requests at regular intervals.	OPTIONAL
echotolerance	Number of failed LCP echo requests needed to trigger a link failure.	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
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{0-36000}>]
```

where:

intf	The name of the PPP interface to scan.	REQUIRED
time	The time to scan for services (in seconds).	OPTIONAL

ppp relay flush

Remove all ethernet interfaces from the PPP relay agent list and terminate all

ppp relay ifadd

Add an ethernet interface to the PPP relay list.

SYNTAX:

```
ppp relay ifadd          intf = <{eth-wan}>
```

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

pptp flush	Flushes the PPTP configuration.	see page 670
pptp ifadd	Adds a PPTP profile (backwards compatible with previous release, use profiles	see page 671
pptp list	Shows PPTP configuration.	see page 672
pptp profadd	Defines a new PPTP profile.	see page 673
pptp profdelete	Deletes a PPTP profile.	see page 674
pptp proflist	Lists PPTP profiles.	see page 675

pptp flush

Flushes the PPTP configuration.

pptp ifadd

Adds a PPTP profile (backwards compatible with previous release, use profiles

SYNTAX:

```
pptp ifadd dest = <string>
           [rate = <number{10-10000}>]
           [encaps = <{vcmux|nlpid}>]
           [ac = <{never|always|keep}>]
```

where:

dest	The WAN destination for this PPTP tunnel. Typically a phonebook name.	REQUIRED
rate	Transmit speed in kbits/s for the WAN link.	OPTIONAL
encaps	The WAN protocol encapsulation.	OPTIONAL
ac	Enable/disable sending address and control field (0xFF03) on the WAN link.	OPTIONAL

pptp list

Shows PPTP configuration.

pptp profadd

Defines a new PPTP profile.

SYNTAX:

```
pptp profadd          name = <string>
                      [qos = <{default}>]
                      [encaps = <{vcmux|nlpid}>]
                      [ac = <{never|always|keep}>]
```

where:

name	The name for the new PPTP profile.	REQUIRED
qos	The name of the qosbook entry, containing the settings for this profile.	OPTIONAL
encaps	The WAN protocol encapsulation to be used with this profile.	OPTIONAL
ac	Enable/disable sending address and control field (0xFF03) on the WAN link.	OPTIONAL

pptp profdelete

Deletes a PPTP profile.

SYNTAX:

```
pptp profdelete          name = <>
```

where:

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

pptp proflist

Lists PPTP profiles.

printersharing Commands

printersharing LPD config	To enable/disable LPD service.	see page 678
printersharing LPD list	To display LPD service context.	see page 679
printersharing LPD queue add	Add an option.	see page 680
printersharing LPD queue delete	Delete an option.	see page 681
printersharing LPD queue list	List all options.	see page 682
printersharing RAW config	To enable/disable Raw service.	see page 683
printersharing RAW list	To display LPD service context.	see page 684

printersharing LPD config

To enable/disable LPD service.

SYNTAX:

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

where:

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

printersharing LPD list

To display LPD service context.

printersharing LPD queue add

Add an option.

SYNTAX:

```
printersharing LPD queue add    name = <string>
                                [type = <{Feed|Raw}>]
                                [default = <{no|yes}>]
```

where:

name	LPD queue name.	REQUIRED
type	Queue Type	OPTIONAL
default	Set default queue	OPTIONAL

printersharing LPD queue delete

Delete an option.

SYNTAX:

```
printersharing LPD queue      name = <string>
delete
```

where:

name	LPD queue name.	REQUIRED
------	-----------------	----------

printersharing LPD queue list

List all options.

printersharing RAW config

To enable/disable Raw service.

SYNTAX:

```
printersharing RAW config [state = <{disabled|enabled}>]  
[port = <number>]
```

where:

state	Enabled/disabled Raw printer service.	OPTIONAL
port	The raw printserver port number	OPTIONAL

printersharing RAW list

To display LPD service context.

saveall Command

Saves current configuration.

script Commands

script add	Add line to script.	see page 688
script delete	Delete complete script or line from script.	see page 689
script flush	Flush scripts.	see page 690
script list	List script.	see page 691
script run	Run script.	see page 692

script add

Add line to script.

SYNTAX:

```
script add          name = <string>
                   [index = <number>]
                   command = <quoted string>
```

where:

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

script delete

Delete complete script or line from script.

SYNTAX:

```
script delete name = <{autopvc_add_qos|autopvc_delete_qos|
autopvc_add_bridge|autopvc_delete_pppoerelay|
autopvc_add_ipoa|autopvc_delete_ipoa|
autopvc_add_ethoa|autopvc_delete_ethoa|
autopvc_add_pppoa|autopvc_delete_pppoa|
autopvc_add_pppoe|autopvc_delete_pppoe|
autopvc_change_qos|wlbrintfadd|wlbrintfdel}>
[index = <number>]
```

where:

name	Name of script.	REQUIRED
index	Line number.	OPTIONAL

script flush

Flush scripts.

script list

List script.

SYNTAX:

```
script list [name = <{autopvc_add_qos|autopvc_delete_qos|
autopvc_add_bridge|autopvc_delete_pppoerelay|
autopvc_add_ipoa|autopvc_delete_ipoa|
autopvc_add_ethoa|autopvc_delete_ethoa|
autopvc_add_pppoa|autopvc_delete_pppoa|
autopvc_add_pppoe|autopvc_delete_pppoe|
autopvc_change_qos|wlbrintfadd|wlbrintfdel}>]
```

where:

name	Name of script.	OPTIONAL
------	-----------------	----------

script run

Run script.

SYNTAX:

```
script run name = <{autopvc_add_qos|autopvc_delete_qos|
autopvc_add_bridge|autopvc_delete_pppoerelay|
autopvc_add_ipoa|autopvc_delete_ipoa|
autopvc_add_ethoa|autopvc_delete_ethoa|
autopvc_add_pppoa|autopvc_delete_pppoa|
autopvc_add_pppoe|autopvc_delete_pppoe|
autopvc_change_qos|wlbrintfadd|wlbrintfdel}>
pars = <quoted string>
```

where:

name	Name of script.	REQUIRED
pars	Parameters separated with comma e.q. a,b,c .	REQUIRED

service Commands

service host add	Add a service.	see page 694
service host assign	Assign a service to a host.	see page 695
service host category add	Create/define service category.	see page 696
service host category delete	Delete a service category.	see page 697
service host category list	List the available service categories.	see page 698
service host category rename	Rename a service category.	see page 699
service host delete	Delete a service.	see page 700
service host disable	Disable a service.	see page 701
service host flush	Flush all services.	see page 702
service host list	Display list of services.	see page 703
service host rule add	Create/define service portmap.	see page 704
service host rule delete	Delete a service portmap.	see page 705
service host stats	Service statistics.	see page 706
service host triggerlist	List all triggers.	see page 707
service system ifadd	Add an interface to the access list.	see page 708
service system ifdelete	Delete an interface from the access list.	see page 709
service system ipadd	Add an ip address (range) to the access list.	see page 710
service system ipdelete	Delete an ip address (range) from the access list.	see page 711
service system list	Display services.	see page 712
service system mapadd	Add a port map for a service.	see page 713
service system mapdelete	Delete a port map for a service.	see page 714
service system modify	Modify a service.	see page 715

service host add

Add a service.

SYNTAX:

```
service host add          name = <quoted string>
                          [mode = <{server|client|custom}>]
                          [category = <>]
```

where:

name	The name of the service.	REQUIRED
mode	server, client or custom service ?	OPTIONAL
category	The category to which the service belongs.	OPTIONAL

service host assign

Assign a service to a host.

SYNTAX:

```
service host assign          name = <{AIM Talk|BearShare|BitTorrent|
                             Checkpoint FW1 VPN|Counter Strike|Server
                             (World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail
                             Server (SMTP)|Microsoft Remote Desktop|MSN
                             Game Zone|MSN Game Zone (DX)|NNTPServer|PPTP
                             Server|Secure Shell Server (SSH)|Steam Games|
                             TelnetServer|VNC|Xbox Live}>
                             [host = <ip-address>]
                             [log = <{disabled|enabled}>]
```

where:

name	The name of the service.	REQUIRED
host	The IP address of the host.	OPTIONAL
log	Enable/disable logging.	OPTIONAL

service host category add

Create/define service category.

SYNTAX:

```
service host category add      name = <string>
```

where:

name	The name of the category.	REQUIRED
------	---------------------------	----------

service host category delete

Delete a service category.

SYNTAX:

```
service host category delete name = <>
```

where:

name	The name of the category.	REQUIRED
------	---------------------------	----------

service host category list

List the available service categories.

service host category rename

Rename a service category.

SYNTAX:

```
service host category rename    name = <>
                                new_name = <string>
```

where:

name	The name of the existing category.	REQUIRED
new_name	The new name of the category.	REQUIRED

service host delete

Delete a service.

SYNTAX:

```
service host delete name = <{AIM Talk|BearShare|BitTorrent|
Checkpoint FW1 VPN|Counter Strike|Server
(World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail
Server (SMTP)|Microsoft Remote Desktop|MSN
Game Zone|MSN Game Zone (DX)|NNTPServer|PPTP
Server|Secure Shell Server (SSH)|Steam Games|
TelnetServer|VNC|Xbox Live}>
```

where:

name	The name of the service.	REQUIRED
------	--------------------------	----------

service host disable

Disable a service.

SYNTAX:

```
service host disable [name = <{AIM Talk|BearShare|BitTorrent|
Checkpoint FW1 VPN|Counter Strike|Server
(World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail
Server (SMTP)|Microsoft Remote Desktop|MSN
Game Zone|MSN Game Zone (DX)|NNTPServer|PPTP
Server|Secure Shell Server (SSH)|Steam Games|
TelnetServer|VNC|Xbox Live}>]
```

where:

name	The name of the service.	OPTIONAL
------	--------------------------	----------

service host flush

Flush all services.

service host list

Display list of services.

SYNTAX:

```
service host list [name = <{AIM Talk|BearShare|BitTorrent|
Checkpoint FW1 VPN|Counter Strike|Server
(World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail
Server (SMTP)|Microsoft Remote Desktop|MSN
Game Zone|MSN Game Zone (DX)|NNTPServer|PPTP
Server|Secure Shell Server (SSH)|Steam Games|
TelnetServer|VNC|Xbox Live}>]
```

where:

name	The name of the service.	OPTIONAL
------	--------------------------	----------

service host rule add

Create/define service portmap.

SYNTAX:

```

service host rule add      name = <{AIM Talk|BearShare|BitTorrent|
                          Checkpoint FW1 VPN|Counter Strike|Server
                          (World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail
                          Server (SMTP)|Microsoft Remote Desktop|MSN
                          Game Zone|MSN Game Zone (DX)|NNTPServer|PPTP
                          Server|Secure Shell Server (SSH)|Steam Games|
                          TelnetServer|VNC|Xbox Live}>
                          [protocol = <{any|tcp|udp}>]
                          [baseport = <{at-echo|at-nbp|at-rtmp|at-zis|
                          auth|bgp|biff|bootpc|bootps|finger|ftp|ftp-
                          data|gopher|h323|httpproxy|ike|ils|imap2|
                          imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
                          kerberos|ldap|login|netbios-dgm|netbios-ns|
                          netbios-ssn|netwall|netware-ip|new-rwho|nfsd|
                          nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
                          printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
                          smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-
                          net|sqlserv|sunrpc|syslog|sysstat|talk|...}
                          ornumber>]
                          portrange = <port-range>
                          [triggerport = <{at-echo|at-nbp|at-rtmp|at-
                          zis|auth|bgp|biff|bootpc|bootps|finger|ftp|
                          ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
                          imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
                          kerberos|ldap|login|netbios-dgm|netbios-ns|
                          netbios-ssn|netwall|netware-ip|new-rwho|nfsd|
                          nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
                          printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
                          smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
                          sqlserv|sunrpc|syslog|sysstat|talk|...} or
                          number>]
                          [triggerprotocol = <{any|tcp|udp}>]

```

where:

Parameter	Description	Requirement
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

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 = <{at-echo|at-nbp|at-rtmp|at-zis|
                             auth|bgp|biff|bootpc|bootps|finger|ftp|ftp-
                             data|gopher|h323|httpproxy|ike|ils|imap2|
                             imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
                             kerberos|ldap|login|netbios-dgm|netbios-ns|
                             netbios-ssn|netwall|netware-ip|new-rwho|nfsd|
                             nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
                             printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
                             smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-
                             net|sqlserv|sunrpc|syslog|sysstat|talk|...}
                             ornumber>]
                             portrange = <port-range>
                             [triggerport = <{at-echo|at-nbp|at-rtmp|at-
                             zis|auth|bgp|biff|bootpc|bootps|finger|ftp|
                             ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
                             imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
                             kerberos|ldap|login|netbios-dgm|netbios-ns|
                             netbios-ssn|netwall|netware-ip|new-rwho|nfsd|
                             nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
                             printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
                             smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
                             sqlserv|sunrpc|syslog|sysstat|talk|...} or
                             number>]
                             [triggerprotocol = <{any|tcp|udp}>]

```

where:

Parameter	Description	Requirement
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

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|FTP|TELNET|RIP-Query|  
                               DNS-S|SSDP|MDAP|PING_RESPONDER}>  
                              group = <{wan|local|lan|tunnel|dmz|guest} or  
                                       number>
```

where:

name	The name of the service for this access list.	REQUIRED
group	The interface group for this access list.	REQUIRED

service system ifdelete

Delete an interface from the access list.

SYNTAX:

```
service system ifdelete      name = <{PPTP|HTTP|HTTPS|FTP|TELNET|RIP-Query|  
                             DNS-S|SSDP|MDAP|PING_RESPONDER}>  
                             group = <{wan|local|lan|tunnel|dmz|guest} or  
                             number>
```

where:

name	The name of the service for this access list.	REQUIRED
group	The interface group for this access list.	REQUIRED

service system ipadd

Add an ip address (range) to the access list.

SYNTAX:

```
service system ipadd          name = <{PPTP|HTTP|HTTPS|FTP|TELNET|RIP-Query|  
                               DNS-S|SSDP|MDAP|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|FTP|TELNET|RIP-Query|  
                             DNS-S|SSDP|MDAP|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 list

Display services.

SYNTAX:

```
service system list [name = <{PPTP|PPTPD|PPTPGRE|SNTP|
SLA_ICMP_PING|SLA_UDP_PING|HTTP|HTTPS|
DYNAMIC_DNS|dyndns|statdns|custom|No-IP|DtDNS|
gnudip|DHCP-S|DHCP-R|SSDP|MDAP|CWMP-C|CWMP-S|
VOIP_SIP|VOIP_SIP_UDP|VOIP_SIP_TCP|RAS|SRAS|
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 services.	OPTIONAL
members	Display service group members.	OPTIONAL

service system mapadd

Add a port map for a service.

SYNTAX:

```
service system mapadd          name = <{PPTP|HTTP|HTTPS|HTTP|FTP|TELNET|DNS-
                                S|SSDP|MDAP}>
                                intf = <{loop|Internet|LocalNetwork}>
                                port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|
                                bgp|biff|bootpc|bootps|chargen|data|gopher|
                                h323|httpproxy|ike|ils|imap2|imap3|ingres-
                                net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
                                login|netbios-dgm|netbios-ns|netbios-ssn|
                                netwall|netware-ip|new-rwho|nfs|nicname|nntp|
                                ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
                                realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
                                snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
                                sunrpc|syslog|sysstat|talk|telnet|...} 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|HTTP|FTP|TELNET|DNS-
                               S|SSDP|MDAP}>
                               intf = <{loop|Internet|LocalNetwork}>
                               port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|
                               bgp|biff|bootpc|bootps|chargen|data|gopher|
                               h323|httpproxy|ike|ils|imap2|imap3|ingres-
                               net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
                               login|netbios-dgm|netbios-ns|netbios-ssn|
                               netwall|netware-ip|new-rwho|nfs|nicname|nntp|
                               ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
                               realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
                               snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
                               sunrpc|syslog|sysstat|talk|telnet|...} 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 = <{PPTP|PPTPD|PPTPGRE|SNTP|
                               SLA_ICMP_PING|SLA_UDP_PING|HTTP|HTTPs|
                               DHCP-R|SSDP|MDAP|CWMP-C|CWMP-S|VOIP_SIP|
                               VOIP_SIP_UDP|VOIP_SIP_TCP|RAS|SRAS|
                               IP_COMMANDS|PING_RESPONDER}>
                               [state = <{disabled|enabled}>]
                               [port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|
                               bgp|biff|bootpc|bootps|chargen|data|gopher|
                               h323|httpproxy|ike|ils|imap2|imap3|ingres-
                               net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
                               login|netbios-dgm|netbios-ns|netbios-ssn|
                               netwall|netware-ip|new-rwho|nfsd|nicname|nntp|
                               ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
                               realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
                               snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
                               sunrpc|syslog|sysstat|talk|telnet|...} or
                               number>]
                               [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
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

sntp add	Add NTP server	see page 718
sntp config	Modify/Display configuration	see page 719
sntp debug traceconfig	Modify SNTP client trace configuration	see page 720
sntp delete	Delete NTP server from list	see page 721
sntp flush	Flush NTP server list and SNTP client configuration	see page 722
sntp list	List the NTP servers	see page 723

sntp add

Add NTP server

SYNTAX:

```
sntp add [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

sntp config

Modify/Display configuration

SYNTAX:

```
sntp config [state = <{enabled|disabled}>]
            [poll = <number{1-10080}>]
            [pollpresync = <number{1-60}>]
```

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

sntp debug traceconfig

Modify SNTP client trace configuration

SYNTAX:

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

where:

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

sntp delete

Delete NTP server from list

SYNTAX:

```
sntp delete [addr = <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 download	Download parameters.	see page 726
software upgrade	Reboots the modem to initiate the SW upgrade. New software available on a	see page 727
software version	Displays the software version.	see page 728

software download

Download parameters.

SYNTAX:

```
software download          filetype = <{firmware|configuration}>
                           url = <string>
                           [username = <string>]
                           [password = <string>]
                           filesize = <string>
                           [targetfilename = <string>]
```

where:

filetype	The type of the file to be downloaded.	REQUIRED
url	Set the HTTP URL where the file is to be found including remote filename.	REQUIRED
username	Set the name to be used to authenticate to the download server.	OPTIONAL
password	Set the password the be used to authenticate to the download server.	OPTIONAL
filesize	Set the size of the file to be downloaded.	REQUIRED
targetfilename	Set the filename used to save the file on the modem.	OPTIONAL

software upgrade

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

software version

Displays the software version.

statecheck Commands

statecheck checkadd	Add a check object.	see page 730
statecheck checkdelete	Delete a check object.	see page 731
statecheck config	Configure checkd parameters.	see page 732
statecheck groupadd	Add a group object.	see page 733
statecheck groupdelete	Delete a group object.	see page 734

statecheck checkadd

Add a check object.

SYNTAX:

```
statecheck checkadd      group = <string>
                          name = <string>
                          object = <string>
                          paramname = <string>
                          paramtype = <{string|uint|bool}>
                          matchtype = <{equal|differ|statdelta}>
                          match = <string>
```

where:

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
matchtype	The match type.	REQUIRED
match	The match value.	REQUIRED

statecheck checkdelete

Delete a check object.

SYNTAX:

```
statecheck checkdelete      group = <string>
                             name = <string>
```

where:

group	The name of the group.	REQUIRED
name	The name of the check.	REQUIRED

statecheck config

Configure checkd parameters.

SYNTAX:

```
statecheck config          interval = <number>
                           timeout = <number>
                           [groupop = <{and|or}>]
                           [dmtree = <{igd|atomic}>]
```

where:

interval	The interval between checks.	REQUIRED
timeout	Timeout after wich checking stops.	REQUIRED
groupop	Group operator type.	OPTIONAL
dmtree	Client type.	OPTIONAL

statecheck groupadd

Add a group object.

SYNTAX:

```
statecheck groupadd      name = <string>  
                        [checkop = <{and|or}>]
```

where:

name	The name of the group.	REQUIRED
checkop	Check operator type.	OPTIONAL

statecheck groupdelete

Delete a group object.

SYNTAX:

```
statecheck groupdelete      name = <string>
```

where:

name	The name of the group.	REQUIRED
------	------------------------	----------

system Commands

system config	Set or change system config parameters.	see page 736
system debug autosave	Autosave debugging commands	see page 737
system dst	Set daylight saving values	see page 738
system flush	Flush system configuration.	see page 740
system locale	Set/Get regional settings.	see page 741
system ra config	Configure Remote assistance params.	see page 742
system reboot	Reboot the modem.	see page 743
system reset	Reset to (factory or ISP) defaults: user specific settings will be cleared !	see page 744
system settime	Set/Get date, time, timezone, daylight savings time, uptime.	see page 745
system timedreboot	Set or change editing mode timed reboot	see page 746

system config

Set or change system config parameters.

SYNTAX:

```
system config [upnp = <{disabled|enabled}>]
               [tr64 = <{disabled|enabled}>]
               [mdap = <{disabled|enabled}>]
               [led = <{green|red|orange|flash|off}>]
               [resetbutton = <{disabled|enabled}>]
               [digestauth = <{disabled|enabled}>]
               [defaultconnection = <{loop|Internet|
LocalNetwork}>]
               [autosave = <{enabled|disabled}>]
               [autosavedelay = <number{0-600}>]
```

where:

upnp	Enable/Disable upnp discovery	OPTIONAL
tr64	Enable/Disable TR-64 discovery	OPTIONAL
mdap	Enable/Disable mdap discovery	OPTIONAL
led	Set system LED color	OPTIONAL
resetbutton	Enable/Disable reset-to-factory-defaults pushbutton	OPTIONAL
digestauth	Enable/Disable HTTP digest authentication	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

system debug autosave

Autosave debugging commands

SYNTAX:

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

where:

trace	Enable/Disable autosave traces	OPTIONAL
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system dst

Set daylight saving values

SYNTAX:

```
system dst [status = <{Disable|Enable}>]
           [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:

status	Set daylight saving status	OPTIONAL
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 locale

Set/Get regional settings.

SYNTAX:

```
system locale [dec_symbol = <{,|.}>]
               [group_symbol = <{.,}>]
               [date_separator = <{/|-|.}>]
               [date_format = <{iso|ddmmyyyy|ddmmyy|mmdyyy|
               mddy}>]
               [time_format = <{iso|hmmss}>]
               [datetime_format = <{iso|date+time|time
               +date}>]
               [duration_format = <{dhmmss|hmmss}>]
```

where:

dec_symbol	Set decimal symbol	OPTIONAL
group_symbol	Set digit grouping symbol	OPTIONAL
date_separator	Set date separator	OPTIONAL
date_format	Set date format	OPTIONAL
time_format	Set time format	OPTIONAL
datetime_format	Set date-time format	OPTIONAL
duration_format	Set duration format	OPTIONAL

system ra config

Configure Remote assistance params.

SYNTAX:

```
system ra config [secure = <{disabled|enabled}>]
                 [port = <number>]
                 [timeout = <number>]
```

where:

secure	Enable/Disable https.	OPTIONAL
port	Set destination port.	OPTIONAL
timeout	Set connection timeout in minutes.	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 settime

Set/Get date, time, timezone, daylight savings time, uptime.

SYNTAX:

```
system settime [date = <dd/mm/yyyy>]
                [time = <hh:mm:ss>]
                [timezone = <( + or -)hh:mm>]
                [daylightsaving = <{disabled|enabled}>]
                [geotimezonename = <quoted string>]
                [rtc = <{disabled|enabled}>]
```

where:

date	Set the system date	OPTIONAL
time	Set the system time	OPTIONAL
timezone	Set the system timezone(-12:00...+13:00)	OPTIONAL
daylightsaving	Enable/Disable daylight saving	OPTIONAL
geotimezonename	Set the geographical timezone by name	OPTIONAL
rtc	Enable/Disable the real time clock	OPTIONAL

system timedreboot

Set or change editing mode timed reboot

SYNTAX:

```
system timedreboot [state = <{disabled|enabled}>]
                   [time = <number{0-983040}>]
                   [date = <string>]
```

where:

state	Enable/Disable timed reboot	OPTIONAL
time	Change default countdown time (Min).	OPTIONAL
date	Set date/time to reboot (DD/MM/YYYY/HH:MM).	OPTIONAL

systemlog Commands

systemlog flush	Flush all messages in syslog message buffer.	see page 748
systemlog send	Send messages to remote syslog server.	see page 749
systemlog show	Show messages in the syslog message buffer.	see page 750

systemlog flush

Flush all messages in syslog message buffer.

systemlog send

Send messages to remote syslog server.

SYNTAX:

```
systemlog 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

systemlog show

Show messages in the syslog message buffer.

SYNTAX:

```
systemlog 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

tls Commands

tls acs-client cert add	Add a new certificate	see page 752
tls acs-client cert delete	Delete a certificate	see page 753
tls acs-client cert list	List certificates	see page 754
tls acs-client config	Display/modify tls settings	see page 755
tls https-server cert add	Add a new certificate	see page 756
tls https-server cert delete	Delete a certificate	see page 757
tls https-server cert list	List certificates	see page 758
tls https-server config	Display/modify tls settings	see page 759
tls self cert list	List certificates	see page 760

tls acs-client cert add

Add a new certificate

SYNTAX:

```
tls acs-client cert add filename = <string>
```

where:

filename	name of the certificate file	REQUIRED
----------	------------------------------	----------

tls acs-client cert delete

Delete a certificate

SYNTAX:

```
tls acs-client cert delete      index = <number>
```

where:

index	Certificate index	REQUIRED
-------	-------------------	----------

tls acs-client cert list

List certificates

SYNTAX:

```
tls acs-client cert list      [index = <number>]  
                             [expand = <{disabled|enabled}>]
```

where:

index	Certificate index	OPTIONAL
expand	Display more information	OPTIONAL

tls acs-client config

Display/modify tls settings

SYNTAX:

```
tls acs-client config [state = <{disabled|enabled}>]
                    [auth-serv = <{disabled|enabled}>]
                    [valid-date = <{disabled|enabled}>]
                    [valid-domain = <{disabled|enabled}>]
```

where:

state	SSL/TLS client for ACS state	OPTIONAL
auth-serv	Request server authentication	OPTIONAL
valid-date	Check certificate validity date	OPTIONAL
valid-domain	Check certificate domain	OPTIONAL

tls https-server cert add

Add a new certificate

SYNTAX:

```
tls https-server cert add filename = <string>
```

where:

filename	name of the certificate file	REQUIRED
----------	------------------------------	----------

tls https-server cert delete

Delete a certificate

SYNTAX:

```
tls https-server cert delete    index = <number>
```

where:

index	Certificate index	REQUIRED
-------	-------------------	----------

tls https-server cert list

List certificates

SYNTAX:

```
tls https-server cert list      [index = <number>]  
                               [expand = <{disabled|enabled}>]
```

where:

index	Certificate index	OPTIONAL
expand	Display more information	OPTIONAL

tls https-server config

Display/modify tls settings

SYNTAX:

```
tls https-server config      [state = <{disabled|enabled}>]
                             [auth-client = <{disabled|enabled}>]
                             [valid-date = <{disabled|enabled}>]
```

where:

state	SSL/TLS server for HTTPS state	OPTIONAL
auth-client	Request client authentication	OPTIONAL
valid-date	Check certificate validity date	OPTIONAL

tls self cert list

List certificates

SYNTAX:

```
tls self cert list          [index = <number>]
                           [expand = <{disabled|enabled}>]
```

where:

index	Certificate index	OPTIONAL
expand	Display more information	OPTIONAL

tod Commands

tod action add	Add an action object.	see page 762
tod action delete	Delete an action object.	see page 763
tod action list	List actions.	see page 764
tod action paramadd	Add a setvalue parameter.	see page 765
tod action paramdelete	Delete a setvalue parameter.	see page 766
tod action setvaladd	Add a setvalue object.	see page 767
tod action setvaldelete	Delete a setvalue object.	see page 768
tod config	Configure tod parameters.	see page 769
tod list	List config.	see page 770
tod schedule add	Add a schedule object.	see page 771
tod schedule dayadd	Add a day object.	see page 772
tod schedule daydelete	Delete a day object.	see page 773
tod schedule delete	Delete a schedule object.	see page 774
tod schedule list	List schedules.	see page 775
tod schedule modify	Modify schedule parameters.	see page 776
tod schedule timeadd	Add a timerange object.	see page 777
tod schedule timedelete	Delete a timerange object.	see page 778

tod action add

Add an action object.

SYNTAX:

```
tod action add [id = <number>]
```

where:

id	The id of the action.	OPTIONAL
----	-----------------------	----------

tod action delete

Delete an action object.

SYNTAX:

```
tod action delete          actionid = <number>
```

where:

actionid	The id of the action.	REQUIRED
----------	-----------------------	----------

tod action list

List actions.

tod action paramadd

Add a setvalue parameter.

SYNTAX:

```
tod action paramadd          actionid = <number>
                             setvalueid = <number>
                             [id = <number>]
                             [object = <string>]
                             [param = <string>]
                             [value = <string>]
```

where:

actionid	The id of the action.	REQUIRED
setvalueid	The id of the setvalue action.	REQUIRED
id	The id of the setvalue param.	OPTIONAL
object	Mbus object path.	OPTIONAL
param	Mbus parameter name.	OPTIONAL
value	Parameter value.	OPTIONAL

tod action paramdelete

Delete a setvalue parameter.

SYNTAX:

```
tod action paramdelete      actionid = <number>
                             setvalueid = <number>
                             paramid = <number>
```

where:

actionid	The id of the action.	REQUIRED
setvalueid	The id of the setvalue action.	REQUIRED
paramid	The id of the setvalue param.	REQUIRED

tod action setvaladd

Add a setvalue object.

SYNTAX:

```
tod action setvaladd      actionid = <number>
                          [id = <number>]
                          [on = <{active|inactive}>]
```

where:

actionid	The id of the action.	REQUIRED
id	The id of the setvalue action.	OPTIONAL
on	Active/inactive.	OPTIONAL

tod action setvaldelete

Delete a setvalue object.

SYNTAX:

```
tod action setvaldelete      actionid = <number>
                             setvalueid = <number>
```

where:

actionid	The id of the action.	REQUIRED
setvalueid	The id of the setvalue action.	REQUIRED

tod config

Configure tod parameters.

SYNTAX:

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

where:

acchain	firewall chain name	OPTIONAL
state	enable/disable ToD	OPTIONAL

tod list

List config.

tod schedule add

Add a schedule object.

SYNTAX:

```
tod schedule add [id = <number>]
                  type = <{none|accesscontrol|action}>
```

where:

id	The id of the schedule.	OPTIONAL
type	The schedule type.	REQUIRED

tod schedule dayadd

Add a day object.

SYNTAX:

```
tod schedule dayadd          scheduleid = <number>
                             [id = <number>]
                             weekday = <{mo|tu|we|th|fr|sa|su}>
```

where:

scheduleid	The id of the schedule.	REQUIRED
id	The id of the day.	OPTIONAL
weekday	The day of the week..	REQUIRED

tod schedule daydelete

Delete a day object.

SYNTAX:

```
tod schedule daydelete      scheduleid = <number>
                             dayid = <number>
```

where:

scheduleid	The id of the schedule.	REQUIRED
dayid	The id of the day.	REQUIRED

tod schedule delete

Delete a schedule object.

SYNTAX:

```
tod schedule delete          scheduleid = <number>
```

where:

scheduleid	The id of the schedule.	REQUIRED
------------	-------------------------	----------

tod schedule list

List schedules.

tod schedule modify

Modify schedule parameters.

SYNTAX:

```

tod schedule modify          [expiretime = <string>]
                             [nrofminutes = <number>]
                             [count = <number>]
                             scheduleid = <number>
                             [mode = <{timerange|timeout}>]
                             [reference = <string>]
                             [name = <string>]
                             [action = <string>]
                             [state = <{enabled|disabled}>]

```

where:

expiretime	The absolute expire time.	OPTIONAL
nrofminutes	The number of minutes.	OPTIONAL
count	The timer count (0=periodical)	OPTIONAL
scheduleid	The id of the schedule.	REQUIRED
mode	The mode.	OPTIONAL
reference	Access control reference.	OPTIONAL
name	Friendly name.	OPTIONAL
action	Action.	OPTIONAL
state	Enable/disable	OPTIONAL

tod schedule timeadd

Add a timerange object.

SYNTAX:

```

tod schedule timeadd      scheduleid = <number>
                          dayid = <number>
                          [id = <number>]
                          starthour = <number>
                          startminute = <number>
                          endhour = <number>
                          endminute = <number>
                          [action = <string>]
    
```

where:

scheduleid	The id of the schedule.	REQUIRED
dayid	The id of the day.	REQUIRED
id	The id of the timerange.	OPTIONAL
starthour	The start hour of the range.	REQUIRED
startminute	The start minute of the range.	REQUIRED
endhour	The end hour of the range.	REQUIRED
endminute	The end minute of the range.	REQUIRED
action	Action.	OPTIONAL

tod schedule timedelete

Delete a timerange object.

SYNTAX:

```
tod schedule timedelete      scheduleid = <number>
                             dayid = <number>
                             timeid = <number>
```

where:

scheduleid	The id of the schedule.	REQUIRED
dayid	The id of the day.	REQUIRED
timeid	The id of the timerange.	REQUIRED

traceroute Command

Send ICMP/UDP packets to trace the ip path.

SYNTAX:

```
traceroute          addr = <ip-address>
                   [count = <number{1-10}>]
                   [size = <number{1-20000}>]
                   [interval = <number{1000-60000}>]
                   [maxhops = <number{1-255}>]
                   [dstport = <number{1-65535}>]
                   [maxfail = <number{0-255}>]
                   [type = <{icmp|udp}>]
                   [utime = <{disabled|enabled}>]
```

where:

addr	The destination IP address.	REQUIRED
count	The number of times to reissue a traceroute request with the same time to live.	OPTIONAL
size	The size of the packet payload.	OPTIONAL
interval	The interval in milliseconds between packets.	OPTIONAL
maxhops	The upper limit on the number of routers through which a packet can pass.	OPTIONAL
dstport	The UDP destination port number to send to.	OPTIONAL
maxfail	The max number of consecutive timeouts allowed before terminating a traceroute request.	OPTIONAL
type	The type of traceroute packet(s).	OPTIONAL
utime	Display time in useconds.	OPTIONAL

upnp Commands

upnp config	Config upnp parameter(s)	see page 782
upnp flush	Flushes upnp config (i.e. to defaults)	see page 783
upnp list	List all registered devices	see page 784

upnp config

Config upnp parameter(s)

SYNTAX:

```
upnp config [maxage = <number{60-999999}>]
             [writemode = <{full|natonly|readonly}>]
             [safenat = <{disabled|enabled}>]
             [preferredaddresses = <string>]
```

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

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
---------	-----------------------------	----------

user Commands

user add	Add a user.	see page 786
user config	Modify the user.	see page 787
user delete	Delete a user.	see page 788
user flush	Flush the users.	see page 789
user list	Display the users.	see page 790
user rights	Display session rights.	see page 791

user add

Add a user.

SYNTAX:

```

user add          name = <string>
                  password = <password>
                  role = <>
                  [hash2 = <string>]
                  [crypt = <string>]
                  [lm = <password>]
                  [ntlm = <password>]
                  [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
lm	The cifs lm password.	OPTIONAL
ntlm	The cifs ntlm password.	OPTIONAL
descr	User description.	OPTIONAL
defuser	Set this user as the default user.	OPTIONAL
defremadmin	Set this user as the default remote administrator.	OPTIONAL
deflocadmin	Set this user as the default local administrator.	OPTIONAL

user config

Modify the user.

SYNTAX:

```
user config          name = <{Administrator|tech}>
                    [password = <password>]
                    [role = <>]
                    [descr = <quoted string>]
                    [defuser = <{disabled|enabled}>]
                    [defremadmin = <{disabled|enabled}>]
                    [deflocadmin = <{disabled|enabled}>]
```

where:

name	User name.	REQUIRED
password	User password.	OPTIONAL
role	Role name.	OPTIONAL
descr	User description.	OPTIONAL
defuser	Set this user as the default user.	OPTIONAL
defremadmin	Set this user as the default remote administrator.	OPTIONAL
deflocadmin	Set this user as the default local administrator.	OPTIONAL

user delete

Delete a user.

SYNTAX:

```
user delete name = <{Administrator|tech}>
```

where:

name	User name.	REQUIRED
------	------------	----------

user flush

Flush the users.

user list

Display the users.

SYNTAX:

```
user list [name = <{Administrator|tech}>]
          [channel = <{ftp|telnet|http|mdap|serial}>]
          [origin = <{lan|wan|local}>]
          [secure = <{disabled|enabled}>]
```

where:

name	User name.	OPTIONAL
channel	The selected channel.	OPTIONAL
origin	The selected origin.	OPTIONAL
secure	The selected security level.	OPTIONAL

user rights

Display session rights.

voice Commands

voice cac config	Configure call admission control	see page 797
voice cac list	Show the call admission control	see page 798
voice codec config	Configure a CODEC capability	see page 799
voice codec dynamic config	Configure a dynamic CODEC capability	see page 800
voice codec dynamic list	Show the dynamic CODEC capability configuration	see page 801
voice codec list	Show the CODEC capability configuration	see page 802
voice config	Configure the general parameters	see page 803
voice country config	Configure country	see page 805
voice country countrylist	List available countries	see page 806
voice country list	Show the selected country	see page 807
voice debug exec	Execute a 'Trace & Debug' command. For qualified personnel only.	see page 808
voice decthandset config	Configure the parameters for DECT handset update	see page 809
voice decthandset list	Show configuration for DECT handset update	see page 810
voice dectport config	Configure the DECT port parameters	see page 811
voice dectport list	Show the DECT port configuration	see page 812
voice dialplan add	Add an entry in the dialplan	see page 813
voice dialplan delete	Delete an entry in the dialplan	see page 814
voice dialplan flush	Delete all user-entered dialplan entries	see page 815
voice dialplan list	Display the complete dialplan	see page 816
voice dialplan modify	Modify an entry in the dialplan	see page 817
voice dns config	Configure DNS	see page 819
voice dns list	Show the DNS configuration	see page 820
voice fax config	Configure the fax parameters	see page 821
voice fax list	Show the fax configuration	see page 822

voice fxoport config	Configure the FXO port parameters	see page 823
voice fxoport list	Show the FXO port configuration	see page 824
voice fxsport config	Configure the FXS port parameters	see page 825
voice fxsport list	Show the FXS port configuration	see page 826
voice list	Display the general parameters	see page 827
voice numbtransl config	Configure number translation	see page 828
voice numbtransl list	Show the number translation	see page 829
voice pb add	Add phonebook entry in the phonebook	see page 830
voice profile add	Add profile	see page 831
voice profile delete	Delete profile	see page 832
voice profile flush	Flush all profiles	see page 833
voice profile list	Show all profiles	see page 834
voice profile modify	Modify profile	see page 835
voice qos config	Configure the QOS parameters	see page 836
voice qos list	Show the QOS configuration	see page 837
voice ringing descrtable add	Add a ringing description	see page 838
voice ringing descrtable delete	Delete a ringing description	see page 839
voice ringing descrtable flush	Flush all ringing descriptions	see page 840
voice ringing descrtable list	Show all ringing descriptions	see page 841
voice ringing descrtable modify	Modify ring description	see page 842
voice ringing descrtable set	Set a specific profile for future ringing modifications (current value = all)	see page 843
voice ringing eventtable flush	Flush all ringing events	see page 844
voice ringing eventtable list	Show all ringing events	see page 845
voice ringing eventtable modify	Modify a ringing event	see page 846
voice ringing eventtable set	Set a specific profile for future ringing modifications (current value = all)	see page 847
voice ringing patterntable add	Add a ringing pattern	see page 848
voice ringing patterntable delete	Delete a ringing pattern	see page 849
voice ringing patterntable flush	Flush all ringing patterns	see page 850

voice ringing patterntable list	Show all ringing patterns	see page 851
voice ringing patterntable modify	Modify a ringing pattern	see page 852
voice ringing patterntable set	Set a specific profile for future ringing modifications (current value = all)	see page 853
voice services activate	Activate a supplementary service	see page 854
voice services assign	Assign a servicecode to a supplementary service in standard mode	see page 855
voice services assign_pxsc	Assign a servicecode to a supplementary service in non_standard mode	see page 856
voice services config	General supplementary service configuration	see page 857
voice services deactivate	Deactivate a supplementary service	see page 858
voice services flush	Flush all supplementary services	see page 859
voice services list	Show the supplementary service configuration	see page 860
voice services provision	Provision a supplementary service	see page 861
voice services servicelist	Show the supplementary service configuration	see page 862
voice services soc config	General switching order configuration	see page 863
voice services soc list	Show the switching order configuration	see page 864
voice services soc modify	Configure switching order codes	see page 865
voice services soc soclist	Show the switching order codes	see page 866
voice services withdraw	Withdraw a supplementary service	see page 867
voice sip config	Configure the SIP general parameters	see page 868
voice sip list	Display the SIP general parameters	see page 872
voice sip responsemap add	Add a SIP response	see page 873
voice sip responsemap delete	Delete a SIP response	see page 874
voice sip responsemap flush	Flush all SIP responses	see page 875
voice sip responsemap list	Show all SIP responses	see page 876
voice sip responsemap modify	Modify a SIP response	see page 877
voice state	show VOIP service states	see page 878

voice stats list	Show voice statistics	see page 879
voice stats reset	Reset voice statistics	see page 880
voice tone descrtable add	Add tone description	see page 881
voice tone descrtable delete	Delete tone description	see page 882
voice tone descrtable flush	Flush all tone descriptions	see page 883
voice tone descrtable list	Show all tone descriptions	see page 884
voice tone descrtable modify	Modify tone description	see page 885
voice tone eventtable flush	Flush all tone events	see page 886
voice tone eventtable list	Show all tone events	see page 887
voice tone eventtable modify	Modify tone event	see page 888
voice tone patterntable add	Add tone pattern	see page 889
voice tone patterntable delete	Delete tone pattern	see page 890
voice tone patterntable flush	Flush all tone patterns	see page 891
voice tone patterntable list	Show all tone patterns	see page 892
voice tone patterntable modify	Modify tone pattern	see page 893

voice cac config

Configure call admission control

SYNTAX:

```
voice cac config [max#portsperprofile = <{one|all}>]
```

where:

max#portsperprofile	The maximum number of ports that can be used with a common profile	OPTIONAL
---------------------	--	----------

voice cac list

Show the call admission control

voice codec config

Configure a CODEC capability

SYNTAX:

```
voice codec config          type = <{g711u|g711a|g722|g723_1|g726_16 |  
                             g726_24|g726_32|g726_40|g729}>  
                             [ptime = <{10|30|20}>]  
                             [ptime_g723 = <{30}>]  
                             [vad = <{disabled|enabled}>]  
                             [priority = <number{1-10}>]  
                             [status = <{disabled|enabled}>]
```

where:

parameter	description	required
type	The codec type	REQUIRED
ptime	The packet time	OPTIONAL
ptime_g723	The packet time	OPTIONAL
vad	Enable or disable Voice Activity Detection	OPTIONAL
priority	The codec capability priority	OPTIONAL
status	Enable or disable this capability	OPTIONAL

voice codec dynamic config

Configure a dynamic CODEC capability

SYNTAX:

```
voice codec dynamic config      type = <{rfc2833|g723_1|g726_16|g726_24|  
                                g726_32|g726_40}>  
                                payloadtype = <number{96-128}>
```

where:

type	The codec type	REQUIRED
payloadtype	The payload type	REQUIRED

voice codec dynamic list

Show the dynamic CODEC capability configuration

voice codec list

Show the CODEC capability configuration

voice config

Configure the general parameters

SYNTAX:

```
voice config [autofxo = <{disabled|enabled}>]
              [digitrelay = <{auto|inband|rfc2833|
              signalling}>]
              [click2dial_ports = <{FXS1|FXS2|DECT1|DECT2|
              DECT3|DECT4|DECT5|all}>]
              [rtp_portrange = <string>]
              [sign_internal = <{external|internal}>]
              [static_intf = <{disabled|enabled}>]
              [intf = <{loop|Internet|LocalNetwork}>]
              [secondintf = <{loop|Internet|LocalNetwork}>]
              [endofnumber = <{#|*|none}>]
              [countrycode = <number>]
              [delayedisconnect = <{enabled|disabled}>]
              [delayedisconnecttimer = <number>]
              [ringmuteduration = <number>]
              [feature-mngt = <{internal|external}>]
              [nocallsetupmsg = <{never|unav-numb}>]
              [syslogscope = <{none|only-stats|only-dm-
              events|only-msgs|all}>]
```

where:

autofxo	Automatically make FXO calls when not registered	OPTIONAL
digitrelay	Set the digit relay mode	OPTIONAL
click2dial_ports	Set the click to dial port	OPTIONAL
rtp_portrange	The RTP port range <[startport]-[endport]>	OPTIONAL
sign_internal	Signalling for local calls is kept local or external	OPTIONAL
static_intf	Use a static (configured) interface to look for the IP address or not	OPTIONAL
intf	The name of a IP interface to be used for VOIP traffic.	OPTIONAL
secondintf	The name of a backup IP interface to be used for VOIP traffic.	OPTIONAL
endofnumber	The end of number character for dialled number starting with a cipher	OPTIONAL
countrycode	Local countrycode	OPTIONAL
delayedisconnect	Enable or disable the delayed disconnect feature	OPTIONAL

delayedisconnecttimer	Delayed disconnect timer (seconds)	OPTIONAL
ringmuteduration	Early media mute duration (in ms)	OPTIONAL
feature-mngt	Feature management internal or external	OPTIONAL
nocallsetupmsg	Send call setup message	OPTIONAL
syslogscope	Syslog Scope	OPTIONAL

voice country config

Configure country

SYNTAX:

```
voice country config          country = <{etsi|australia|belgium|canada|
                               chile|denmark|france1|france3|portugal1|
                               portugal2|uk}>
```

where:

country	Load this country's specific settings into the DSP	REQUIRED
---------	--	----------

voice country countrylist

List available countries

voice country list

Show the selected country

voice debug exec

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

SYNTAX:

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

where:

cmd	The debug command (or help)	REQUIRED
-----	-----------------------------	----------

voice decthandset config

Configure the parameters for DECT handset update

SYNTAX:

```
voice decthandset config      [username = <string>]
                               [password = <password>]
                               [machine = <string>]
                               [port = <number>]
                               [directory = <string>]
                               [state = <{disabled|enabled}>]
```

where:

username	UPDATE_USERNAME	OPTIONAL
password	UPDATE_PASSWORD	OPTIONAL
machine	UPDATE_USERNAME	OPTIONAL
port	UPDATE_PORT	OPTIONAL
directory	UPDATE_USERNAME	OPTIONAL
state	UPDATE_STATE	OPTIONAL

voice decthandset list

Show configuration for DECT handset update

voice dectport config

Configure the DECT port parameters

SYNTAX:

```
voice dectport config      [pin = <string>]
                           [substimeout = <number{0-600}>]
                           [clearsubs = <{no|yes}>]
                           [reinsert-window-trigger-pairing =
                           <number{0-600}>]
```

where:

pin	DECT pin code	OPTIONAL
substimeout	DECT subscription timeout in seconds (0 is unlimited)	OPTIONAL
clearsubs	Clear DECT subscriptions	OPTIONAL
reinsert-window-trigger-pairing	Timeout in seconds to start automatic pairing(0 is disabled)	OPTIONAL

voice dectport list

Show the DECT port configuration

voice dialplan add

Add an entry in the dialplan

SYNTAX:

```
voice dialplan add
    prefix = <string>
    defaultport = <{FXS1|FXS2|DECT1|DECT2|DECT3|
DECT4|DECT5|FXO|VoIP|NA}>
    fallbackport = <{FXS1|FXS2|DECT1|DECT2|DECT3|
DECT4|DECT5|FXO|VoIP|NA}>
    priority = <{NA|Low|High}>
    fallback = <{disabled|enabled}>
    minimumdigits = <number{1-31}>
    maximumdigits = <number{1-31}>
    posofmodify = <number{0-31}>
    remnumdigits = <number{0-31}>
    [insert = <string>]
    rescan = <{no|yes}>
    data = <{no|yes}>
    action = <{none|ROUTE_excl_eon|
ROUTE_incl_eon}>
```

where:

prefix	The prefix, identifies this entry	REQUIRED
defaultport	The default outgoing port	REQUIRED
fallbackport	The fallback outgoing port	REQUIRED
priority	The priority of the entry	REQUIRED
fallback	The fallback mechanism status of this entry	REQUIRED
minimumdigits	The minimum number of digits	REQUIRED
maximumdigits	The maximum number of digits	REQUIRED
posofmodify	Startposition at which a number of digits must be removed	REQUIRED
remnumdigits	The number of digits that need to be removed from the complete number	REQUIRED
insert	String which must be inserted at PosOfModify after removing RemNumDigits	OPTIONAL
rescan	Rescanning of the number needed or not	REQUIRED
data	This entry is used for data calls or not	REQUIRED
action	Action parameter	REQUIRED

voice dialplan delete

Delete an entry in the dialplan

SYNTAX:

```
voice dialplan delete          prefix = <string>
```

where:

prefix	The prefix, identifies this entry	REQUIRED
--------	-----------------------------------	----------

voice dialplan flush

Delete all user-entered dialplan entries

voice dialplan list

Display the complete dialplan

voice dialplan modify

Modify an entry in the dialplan

SYNTAX:

```
voice dialplan modify      prefix = <string>
                          newprefix = <string>
                          defaultport = <{FXS1|FXS2|DECT1|DECT2|DECT3|
DECT4|DECT5|FXO|VoIP|NA}>
                          fallbackport = <{FXS1|FXS2|DECT1|DECT2|DECT3|
DECT4|DECT5|FXO|VoIP|NA}>
                          priority = <{NA|Low|High}>
                          fallback = <{disabled|enabled}>
                          minimumdigits = <number{1-31}>
                          maximumdigits = <number{1-31}>
                          posofmodify = <number{0-31}>
                          remnumdigits = <number{0-31}>
                          [insert = <string>]
                          rescan = <{no|yes}>
                          data = <{no|yes}>
                          action = <{none|ROUTE_excl_eon|
ROUTE_incl_eon}>
```

where:

prefix	The prefix, identifies this entry	REQUIRED
newprefix	The prefix, identifies this entry	REQUIRED
defaultport	The default outgoing port	REQUIRED
fallbackport	The fallback outgoing port	REQUIRED
priority	The priority of the entry	REQUIRED
fallback	The fallback mechanism status of this entry	REQUIRED
minimumdigits	The minimum number of digits	REQUIRED
maximumdigits	The maximum number of digits	REQUIRED
posofmodify	Startposition at which a number of digits must be removed	REQUIRED
remnumdigits	The number of digits that need to be removed from the complete number	REQUIRED
insert	String which must be inserted at PosOfModify after removing RemNumDigits	OPTIONAL
rescan	Rescanning of the number needed or not	REQUIRED
data	This entry is used for data calls or not	REQUIRED

action	Action parameter	REQUIRED
--------	------------------	----------

voice dns config

Configure DNS

SYNTAX:

```
voice dns config [startentry = <{first|random}>]
                 [maxentries = <number{1-24}>]
```

where:

startentry	Entry to start with in the registration procedure	OPTIONAL
maxentries	Maximum nbr of used entries in a DNS response	OPTIONAL

voice dns list

Show the DNS configuration

voice fax config

Configure the fax parameters

SYNTAX:

```
voice fax config [detect_timeout = <number{0-120}>]
                 [early-detect-faxmodem = <{enabled|disabled}>]
                 [transport = <{inband_auto|inband_reneg|t38}>]
                 [udptl_redun = <number{0-3}>]
```

where:

detect_timeout	The time-out in seconds used to detect FAX(0 is no time-out)	OPTIONAL
early-detect-faxmodem	Detect fax or modem early	OPTIONAL
transport	The type of fax transport	OPTIONAL
udptl_redun	The number of secondary IFP packets	OPTIONAL

voice fax list

Show the fax configuration

voice fxoport config

Configure the FXO port parameters

SYNTAX:

```
voice fxoport config [fxodisconnect = <number{500-5000}>]
                    [incfxodest = <{FXS|FXS1|FXS2|DECT|all|none}>]
```

where:

fxodisconnect	The FXO disconnect timer (in ms)	OPTIONAL
incfxodest	Select destination for incoming FXO calls	OPTIONAL

voice fxoport list

Show the FXO port configuration

voice fxsport config

Configure the FXS port parameters

SYNTAX:

```
voice fxsport config          [interdigit = <number{10-30000}>]  
                             [interdigitOpen = <number{10-30000}>]
```

where:

interdigit	The interdigit timer (in ms)	OPTIONAL
interdigitOpen	The closed number interdigit timer (in ms)	OPTIONAL

voice fxsport list

Show the FXS port configuration

voice list

Display the general parameters

voice numbtransl config

Configure number translation

SYNTAX:

```
voice numbtransl config [Globalnumbpostprocess = <{disabled|enabled}>]
```

where:

Globalnumbpostprocess	Enables or disables the number postprocessing	OPTIONAL
-----------------------	---	----------

voice numbtransl list

Show the number translation

voice pb add

Add phonebook entry in the phonebook

SYNTAX:

```
voice pb add                               Lastname = <quoted string>
                                           Firstname = <quoted string>
                                           [Business = <quoted string>]
                                           [Home = <quoted string>]
                                           [Mobile = <quoted string>]
                                           [Other = <quoted string>]
                                           [E-mail = <quoted string>]
```

where:

Lastname	The lastname	REQUIRED
Firstname	The firstname	REQUIRED
Business	The business number	OPTIONAL
Home	The home number	OPTIONAL
Mobile	The mobile number	OPTIONAL
Other	Any other number	OPTIONAL
E-mail	E-mail address	OPTIONAL

voice profile add

Add profile

SYNTAX:

```
voice profile add          SIP_URI = <string>
                          [username = <string>]
                          [password = <password>]
                          [displayname = <quoted string>]
                          voiceport = <{FXS1|FXS2|DECT1|DECT2|DECT3|
                          DECT4|DECT5|COMMON|DECT}>
                          [abbr = <string>]
                          [enable = <{disabled|enabled}>]
```

where:

SIP_URI	The SIP URI related to this voice port	REQUIRED
username	The authentication username related to this voice port	OPTIONAL
password	The authentication password related to this voice port	OPTIONAL
displayname	An alias name for the SIP_URI	OPTIONAL
voiceport	The analogue line number	REQUIRED
abbr	An abbreviated number that will be mapped to the SIP_URI	OPTIONAL
enable	Enable or disable this profile	OPTIONAL

voice profile delete

Delete profile

SYNTAX:

```
voice profile delete          SIP_URI = <string>
```

where:

SIP_URI	The SIP URI related to this voice port	REQUIRED
---------	--	----------

voice profile flush

Flush all profiles

voice profile list

Show all profiles

voice profile modify

Modify profile

SYNTAX:

```
voice profile modify      Index = <{ }>
                          [SIP_URI = <string>]
                          [username = <string>]
                          [password = <password>]
                          [displayname = <quoted string>]
                          [voiceport = <{ FXS1 | FXS2 | DECT1 | DECT2 | DECT3 |
DECT4 | DECT5 | COMMON | DECT }>]
                          [abbr = <string>]
                          [enable = <{ disabled | enabled }>]
```

where:

Index	The index of the profile you wish to modify	REQUIRED
SIP_URI	The SIP URI related to this voice port	OPTIONAL
username	The authentication username related to this voice port	OPTIONAL
password	The authentication password related to this voice port	OPTIONAL
displayname	An alias name for the SIP_URI	OPTIONAL
voiceport	The analogue line number	OPTIONAL
abbr	An abbreviated number that will be mapped to the SIP_URI	OPTIONAL
enable	Enable or disable this profile	OPTIONAL

voice qos config

Configure the QOS parameters

SYNTAX:

```
voice qos config          type = <{Signaling|Realtime}>
                          qosfield = <{DSCP|precedence}>
                          dscp = <{ef|af11|af12|af13|af21|af22|af23|
                          af31|af32|af33|af41|af42|af43|cs0|cs1|cs2|cs3|
                          cs4|cs5|cs6|cs7} or number>
                          precedence = <{routine|priority|immediate|
                          flash|flash-override|CRITIC-ECP|internetwork-
                          control|network-control} or number>
```

where:

type	The type of traffic that needs qos	REQUIRED
qosfield	The QOS field to be used	REQUIRED
dscp	The DSCP value	REQUIRED
precedence	The precedence value	REQUIRED

voice qos list

Show the QOS configuration

voice ringing descrtable add

Add a ringing description

SYNTAX:

```
voice ringing descrtable add    ringid = <number>
                                status = <{disabled|enabled}>
                                ringname = <quoted string>
                                [patternentryid = <number>]
                                maxduration = <number>
                                [alertinfo = <quoted string>]
```

where:

ringid	Ring ID	REQUIRED
status	Enable or disable this ringing	REQUIRED
ringname	Name of the ringing	REQUIRED
patternentryid	Entry ID in pattern table	OPTIONAL
maxduration	Max. duration	REQUIRED
alertinfo	Exact content of the linked Alert-Info header	OPTIONAL

voice ringing descrtable delete

Delete a ringing description

SYNTAX:

```
voice ringing descrtable      ringid = <number>  
delete
```

where:

ringid	Ring ID	REQUIRED
--------	---------	----------

voice ringing descrtable flush

Flush all ringing descriptions

voice ringing descrtable list

Show all ringing descriptions

SYNTAX:

```
voice ringing descrtable list profile = <string>
```

where:

profile	Profile on which future ringing operations must be done	REQUIRED
---------	---	----------

voice ringing descrtable modify

Modify ring description

SYNTAX:

```
voice ringing descrtable      ringid = <number>
modify                        [status = <{disabled|enabled}>]
                              [ringname = <quoted string>]
                              [patternentryid = <number>]
                              [maxduration = <number>]
                              [alertinfo = <quoted string>]
```

where:

ringid	Ring ID	REQUIRED
status	Enable or disable this ringing	OPTIONAL
ringname	Name of the ringing	OPTIONAL
patternentryid	Entry ID in pattern table	OPTIONAL
maxduration	Max. duration	OPTIONAL
alertinfo	Exact content of the linked Alert-Info header	OPTIONAL

voice ringing descrtable set

Set a specific profile for future ringing modifications (current value = all)

SYNTAX:

```
voice ringing descrtable set    profile = <string>
```

where:

profile	Profile on which future ringing operations must be done	REQUIRED
---------	---	----------

voice ringing eventtable flush

Flush all ringing events

voice ringing eventtable list

Show all ringing events

SYNTAX:

```
voice ringing eventtable list profile = <string>
```

where:

profile	Profile on which future ringing operations must be done	REQUIRED
---------	---	----------

voice ringing eventtable modify

Modify a ringing event

SYNTAX:

```
voice ringing eventtable      eventid = <number>  
modify                        ringid = <number>
```

where:

eventid	Event ID	REQUIRED
ringid	Ring ID	REQUIRED

voice ringing eventtable set

Set a specific profile for future ringing modifications (current value = all)

SYNTAX:

```
voice ringing eventtable set    profile = <string>
```

where:

profile	Profile on which future ringing operations must be done	REQUIRED
---------	---	----------

voice ringing patterntable add

Add a ringing pattern

SYNTAX:

```
voice ringing patterntable add id = <number>
ringing = <{off|on}>
duration = <number>
[nextentry = <number>]
```

where:

id	ID of the ring pattern	REQUIRED
ringing	Enable or disable this ring	REQUIRED
duration	Duration (ms)	REQUIRED
nextentry	Next pattern entry	OPTIONAL

voice ringing patterntable delete

Delete a ringing pattern

SYNTAX:

```
voice ringing patterntable      id = <number>  
delete
```

where:

id	ID of the ring pattern	REQUIRED
----	------------------------	----------

voice ringing pattertable flush

Flush all ringing patterns

voice ringing pattertable list

Show all ringing patterns

SYNTAX:

```
voice ringing pattertable    profile = <string>  
list
```

where:

profile	Profile on which future ringing operations must be done	REQUIRED
---------	---	----------

voice ringing patterntable modify

Modify a ringing pattern

SYNTAX:

```
voice ringing patterntable      id = <number>
modify                          [ringing = <{off|on}>]
                                [duration = <number>]
                                [nextentry = <number>]
```

where:

id	ID of the ring pattern	REQUIRED
ringing	Enable or disable this ring	OPTIONAL
duration	Duration (ms)	OPTIONAL
nextentry	Next pattern entry	OPTIONAL

voice ringing patterntable set

Set a specific profile for future ringing modifications (current value = all)

SYNTAX:

```
voice ringing patterntable set profile = <string>
```

where:

profile	Profile on which future ringing operations must be done	REQUIRED
---------	---	----------

voice services activate

Activate a supplementary service

SYNTAX:

```
voice services activate      type = <{transfer|hold|waiting|mwi|clip|clir|  
acr|3pty|forcedFXO|cfu|cfnr|cfbs}>
```

where:

type	The supplementary service type	REQUIRED
------	--------------------------------	----------

voice services assign

Assign a servicecode to a supplementary service in standard mode

SYNTAX:

```
voice services assign          type = <{transfer|hold|waiting|mwi|clip|clir|  
                               acr|3pty|forcedFXO|cfu|cfnr|cfbs|callreturn|  
                               ccbs}>  
                               servicecode = <string>
```

where:

type	The supplementary service type	REQUIRED
servicecode	The service activation code	REQUIRED

voice services assign_pxsc

Assign a servicecode to a supplementary service in non_standard mode

SYNTAX:

```
voice services assign_pxsc      type = <{transfer|hold|waiting|mwi|clip|clir|
                                acr|3pty|forcedFXO|cfu|cfnr|cfbs|callreturn|
                                ccbs|clironcall|waitingoncall}>
                                action = <{activate|deactivate|interrogate}>
                                action_oncall = <{activate|deactivate}>
                                action_cf = <{activate|deactivate|register|
                                activate_and_register|interrogate}>
                                action_act = <{activate}>
                                servicecode = <string>
```

where:

type	The supplementary service type	REQUIRED
action	The supplementary service action	REQUIRED
action_oncall	The supplementary service action	REQUIRED
action_cf	The supplementary service action	REQUIRED
action_act	The supplementary service action	REQUIRED
servicecode	The service code	REQUIRED

voice services config

General supplementary service configuration

SYNTAX:

```
voice services config [mwi_phone = <{immediate|deferred|both}>]
                    [mwi_network = <{sollicited|unsollicited}>]
                    [prefix_servcode = <{standard|nonstandard}>]
                    [servcode_cmd = <{standard|nonstandard}>]
                    [cfu_dest = <string>]
                    [cfnr_timer = <number{0-600}>]
                    [cfnr_dest = <string>]
                    [cfbs_dest = <string>]
                    [hfhf_feature = <{disabled|enabled}>]
                    [cw_reject_persistence = <{disabled|enabled}>]
                    [cw_timer = <number{0-120}>]
                    [cw_reject_scope = <{specific|common}>]
```

where:

mwi_phone	The way the phone reacts on a message waiting indication	OPTIONAL
mwi_network	The way the network protocol implements the message waiting indication service	OPTIONAL
prefix_servcode	The way the service codes are assigned	OPTIONAL
servcode_cmd	The way the service code command is used	OPTIONAL
cfu_dest	The destination for the CFU service	OPTIONAL
cfnr_timer	The CFNR timer value	OPTIONAL
cfnr_dest	The destination for the CFNR service	OPTIONAL
cfbs_dest	The destination for the CFBS service	OPTIONAL
hfhf_feature	Enable/disable hfhf_feature	OPTIONAL
cw_reject_persistence	Enable/disable cw_reject_persistence	OPTIONAL
cw_timer	The CW timer value	OPTIONAL
cw_reject_scope	The scope of the rejection when the huntgroup is involved	OPTIONAL

voice services deactivate

Deactivate a supplementary service

SYNTAX:

```
voice services deactivate      type = <{transfer|hold|waiting|mwi|clip|clir|  
                                acr|3pty|forcedFXO|cfu|cfnr|cfbs}>
```

where:

type	The supplementary service type	REQUIRED
------	--------------------------------	----------

voice services flush

Flush all supplementary services

voice services list

Show the supplementary service configuration

voice services provision

Provision a supplementary service

SYNTAX:

```
voice services provision          type = <{transfer|hold|waiting|mwi|clip|clir|  
acr|3pty|forcedFXO|cfu|cfnr|cfbs|callreturn|  
ccbs}>
```

where:

type	The supplementary service type	REQUIRED
------	--------------------------------	----------

voice services servicelist

Show the supplementary service configuration

voice services soc config

General switching order configuration

SYNTAX:

```
voice services soc config [Registerrecalltimer = <number{0-60}>]
```

where:

Registerrecalltimer	The Register recall timer value in seconds	OPTIONAL
---------------------	--	----------

voice services soc list

Show the switching order configuration

voice services soc modify

Configure switching order codes

SYNTAX:

```
voice services soc modify      function = <{HoldActiveCallAndEnableCallSetup|  
                               NoActiveCallRetrieveHeld}>  
                               SOC = <{HF|HF1|HF2|HF*TO|HF*TOorHF2}>
```

where:

function	Switching function	REQUIRED
SOC	Switching order code	REQUIRED

voice services soc soclist

Show the switching order codes

voice services withdraw

Withdraw a supplementary service

SYNTAX:

```
voice services withdraw          type = <{transfer|hold|waiting|mwi|clip|clir|  
                                acr|3pty|forcedFXO|cfu|cfnr|cfbs|callreturn|  
                                ccbs}>
```

where:

type	The supplementary service type	REQUIRED
------	--------------------------------	----------

voice sip config

Configure the SIP general parameters

SYNTAX:

```
voice sip config
[useragentdomain = <string>]
[primproxyaddr = <string>]
[secproxyaddr = <string>]
[proxyport = <{at-echo|at-nbp|at-rtmp|at-zis|
auth|bgp|biff|bootpc|bootps|finger|ftp|ftp-
data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfs|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-
net|sqlserv|sunrpc|syslog|sysstat|talk|...}
or number>]
[secproxyport = <{at-echo|at-nbp|at-rtmp|at-
zis|auth|bgp|biff|bootpc|bootps|finger|ftp|
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfs|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|sysstat|talk|...} or
number>]
[primregaddr = <string>]
[secregaddr = <string>]
[regport = <{at-echo|at-nbp|at-rtmp|at-zis|
auth|bgp|biff|bootpc|bootps|finger|ftp|ftp-
data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfs|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-
net|sqlserv|sunrpc|syslog|sysstat|talk|...}
or number>]
[regexpire = <number{60-65535}>]
[regexpire_Tbefore = <number{1-60}>]
[notifier_addr = <string>]
[notifier_port = <{at-echo|at-nbp|at-rtmp|at-
zis|auth|bgp|biff|bootpc|echo|exec|finger|
ftp|ftp-data|gopher|h323|httpproxy|ike|ils|
imap2|imap3|ingres-net|ipcserver|ipx|irc-o|
irc-u|kerberos|ldap|login|netbios-dgm|netbios-
```

```

ns|netbios-ssn|netwall|netware-ip|new-rwho|
nfdns|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|
pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|
sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-
net|sqlserv|sunrpc|syslog|sysstat|talk|...} or
number>]
[subscribe_expire = <number{60-65535}>]
[CWreply = <{182|180}>]
[transport = <{UDP|TCP}>]
[rtpmapstaticPT = <{disabled|enabled}>]
[reinvite_stop_audio = <{disabled|enabled}>]
[PRACK = <{disabled|enabled}>]
[clirformat = <{standard|nonstandard}>]
[DTMF*#inINFO = <{*#|1011}>]
[clip_consider_displayname = <{no|yes}>]
[sdp_ptime = <{10|20|30|notsent}>]
[replace# = <{enabled|disabled}>]
[symmetriccodec = <{enabled|disabled}>]
[reinvite_at_cgfax_detect = <{enabled|
disabled}>]
[SIPURI_port = <{enabled|disabled}>]
[rport = <{enabled|disabled}>]
[SDP_username = <string>]
[ringtoneat183 = <{disabled|enabled}>]
[t38portincrement = <number{0-65535}>]
[ping = <number{0-86400}>]
[min-se = <number{0-604800}>]
[session-expires = <number{0-604800}>]
[expires = <number{0-3600}>]
[register-backoff-timer = <number{0-86400}>]
[stickyoutbproxy = <{disabled|enabled}>]
[privacy = <{ignore|strict|loose}>]
[SDP_username_per_UA = <{disabled|enabled}>]
[stop_register_on_403 = <{disabled|enabled}>]
[transport_in_contact = <{disabled|enabled}>]

```

where:

useragentdomain	User Agent domain	OPTIONAL
primproxyaddr	Primary outbound proxy address or FQDN	OPTIONAL
secproxyaddr	Secondary outbound proxy address or FQDN	OPTIONAL
proxyport	Primary outbound proxy port	OPTIONAL
secproxyport	Secondary outbound proxy port	OPTIONAL
primregaddr	Primary registrar address or domain	OPTIONAL
secregaddr	Secondary registrar address or domain	OPTIONAL
regport	Registrar port	OPTIONAL
regexpire	The registration expire time	OPTIONAL

regexpire_Tbefore	Time to send new registration request before registration expires	OPTIONAL
notifier_addr	Notifier address or FQDN used for MWI	OPTIONAL
notifier_port	Notifier port used for MWI	OPTIONAL
subscribe_expire	The subscription expire time	OPTIONAL
CWreply	The reply to be sent for a waiting call (180/182)	OPTIONAL
transport	The transport type	OPTIONAL
rtpmapstaticPT	Enable or disable adding RTP map i.c.o. static PT	OPTIONAL
reinvite_stop_audio	Explicitly stop audio stream in the SDP when sending a re-invite	OPTIONAL
PRACK	Enable or disable Provisional ACK on provisional responses	OPTIONAL
clirformat	The clir format	OPTIONAL
DTMF*#inINFO	Format used for */# in INFO method	OPTIONAL
clip_consider_displayname	Consider the displayname for CLIP or not	OPTIONAL
sdp_ptime	The packet time used in the SDP message	OPTIONAL
replace#	Enable or disable the # in INVITE to be replaced by %23	OPTIONAL
symmetriccodec	Enable or disable symmetric codecs	OPTIONAL
reinvite_at_cgfax_detect	Send re_invite when calling fax is detected	OPTIONAL
SIPURI_port	Enable or disable the SIPURI port	OPTIONAL
rport	Enable or disable the parameter rport	OPTIONAL
SDP_username	SDP user name	OPTIONAL
ringtoneat183	Enable or disable local ringing when 183 SESSION PROGRESS is received	OPTIONAL
t38portincrement	Offset of T38 port number vs RTP port number.	OPTIONAL
ping	Time between two keepalive ping requests.	OPTIONAL
min-se	The minimum session expires timer.	OPTIONAL
session-expires	The session expires timer.	OPTIONAL
expires	The INVITE expires timer.	OPTIONAL
register-backoff-timer	Fixed backoff timer in registration procedure	OPTIONAL
stickyoutbproxy	Outband proxy lock over transactions	OPTIONAL

privacy	The privacy type can be ignore, strict or loose.	OPTIONAL
SDP_username_per_UA	SDP user name per ua	OPTIONAL
stop_register_on_403	Stop register on 403	OPTIONAL
transport_in_contact	Transporttype in contact header	OPTIONAL

voice sip list

Display the SIP general parameters

voice sip responsemap add

Add a SIP response

SYNTAX:

```
voice sip responsemap add      responsecode = <string>
                               tone = <{dial|none|remotecallhold|callhold|
                               remotecallwaiting|callwaiting|specialdial|
                               stutterdial}>
                               [textmessage = <quoted string>]
```

where:

responsecode	SIP Response Code	REQUIRED
tone	Tone to be played	REQUIRED
textmessage	Text message to display	OPTIONAL

voice sip responsemap delete

Delete a SIP response

SYNTAX:

```
voice sip responsemap delete    responsecode = <{1xx|180|181|182|183|2xx|3xx|  
                                4xx|486|5xx|6xx}>
```

where:

responsecode	SIP Response Code	REQUIRED
--------------	-------------------	----------

voice sip responsemap flush

Flush all SIP responses

voice sip responsemap list

Show all SIP responses

voice sip responsemap modify

Modify a SIP response

SYNTAX:

```
voice sip responsemap modify responsecode = <{1xx|180|181|182|183|2xx|3xx|4xx|486|5xx|6xx}>
                             [tone = <{dial|none|remotecallhold|callhold|remotecallwaiting|callwaiting|specialdial|stutterdial}>]
                             [textmessage = <quoted string>]
```

where:

responsecode	SIP Response Code	REQUIRED
tone	Tone to be played	OPTIONAL
textmessage	Text message to display	OPTIONAL

voice state

show VOIP service states

voice stats list

Show voice statistics

SYNTAX:

```
voice stats list          voiceport = <{FXS1|FXS2|DECT1|DECT2|DECT3|  
                          DECT4|DECT5|all}>  
                          type = <{detailed|generic|all}>
```

where:

voiceport	The voice port used to get/reset the statistics	REQUIRED
type	Type of statistics to be listed/reset	REQUIRED

voice stats reset

Reset voice statistics

SYNTAX:

```
voice stats reset          voiceport = <{FXS1|FXS2|DECT1|DECT2|DECT3|  
                           DECT4|DECT5|all}>  
                           type = <{detailed|generic|all}>
```

where:

voiceport	The voice port used to get/reset the statistics	REQUIRED
type	Type of statistics to be listed/reset	REQUIRED

voice tone descrtable add

Add tone description

SYNTAX:

```
voice tone descrtable add      tone = <string>
                               status = <{disabled|enabled}>
                               delay = <number>
                               [patternentryid = <number>]
                               [file = <string>]
                               [filerepeat = <number>]
                               text = <quoted string>
                               [maxduration = <number>]
                               [nexttone = <string>]
                               repeatafter = <number>
```

where:

tone	Name of the tone	REQUIRED
status	Enable or disable this tone	REQUIRED
delay	Delay (in ms)	REQUIRED
patternentryid	Entry ID in pattern table	OPTIONAL
file	Audio file name	OPTIONAL
filerepeat	File repetitions	OPTIONAL
text	Text to display on the phone	REQUIRED
maxduration	Max. duration	OPTIONAL
nexttone	Name of the tone	OPTIONAL
repeatafter	Time after which the tone must be repeated (in ms)	REQUIRED

voice tone descrtable delete

Delete tone description

SYNTAX:

```
voice tone descrtable delete    tone = <{}>
```

where:

tone	Name of the tone	REQUIRED
------	------------------	----------

voice tone descrtable flush

Flush all tone descriptions

voice tone descrtable list

Show all tone descriptions

voice tone descrtable modify

Modify tone description

SYNTAX:

```
voice tone descrtable modify    tone = <{dial|none|remotecallhold|callhold|
                                remotecallwaiting|callwaiting|specialdial|
                                stutterdial}>
                                [status = <{disabled|enabled}>]
                                [delay = <number>]
                                [patternentryid = <number>]
                                [file = <string>]
                                [filerepeat = <number>]
                                [text = <string>]
                                [maxduration = <number>]
                                [nexttone = <string>]
                                [repeatafter = <number>]
```

where:

tone	Name of the tone	REQUIRED
status	Enable or disable this tone	OPTIONAL
delay	Delay (in ms)	OPTIONAL
patternentryid	Entry ID in pattern table	OPTIONAL
file	Audio file name	OPTIONAL
filerepeat	File repetitions	OPTIONAL
text	Text to display on the phone	OPTIONAL
maxduration	Max. duration	OPTIONAL
nexttone	Name of the tone	OPTIONAL
repeatafter	Time after which the tone must be repeated (in ms)	OPTIONAL

voice tone eventtable flush

Flush all tone events

voice tone eventtable list

Show all tone events

voice tone eventtable modify

Modify tone event

SYNTAX:

```
voice tone eventtable modify    eventid = <{1|2|3|4|5|6|7|8|9|10|11|12|13|14|
                                15|16|17|18|19|20|101|102|103|406|407|408|501|
                                502|503|999}>
                                tone = <{dial|none|remotecallhold|callhold|
                                remotecallwaiting|callwaiting|specialdial|
                                stutterdial}>
```

where:

eventid	Event ID	REQUIRED
tone	Tone to play for this event	REQUIRED

voice tone patterntable add

Add tone pattern

SYNTAX:

```
voice tone patterntable add      id = <number>
                                tone = <{off|on}>
                                [freq1 = <number>]
                                [power1 = <number>]
                                [freq2 = <number>]
                                [power2 = <number>]
                                [freq3 = <number>]
                                [power3 = <number>]
                                [freq4 = <number>]
                                [power4 = <number>]
                                [duration = <number>]
                                [nextentry = <number>]
                                [maxloops = <number>]
                                [nextentryafterloops = <number>]
```

where:

Parameter	Description	Requirement
id	ID of the tone pattern	REQUIRED
tone	Enable or disable this tone	REQUIRED
freq1	Frequency 1	OPTIONAL
power1	Power 1	OPTIONAL
freq2	Frequency 2	OPTIONAL
power2	Power 2	OPTIONAL
freq3	Frequency 3	OPTIONAL
power3	Power 3	OPTIONAL
freq4	Frequency 4	OPTIONAL
power4	Power 4	OPTIONAL
duration	Duration (ms)	OPTIONAL
nextentry	Next pattern entry	OPTIONAL
maxloops	Max loops	OPTIONAL
nextentryafterloops	Next entry after loops	OPTIONAL

voice tone patterntable delete

Delete tone pattern

SYNTAX:

```
voice tone patterntable delete id = <{1|2|11|12|13|14|21|22|31|32|41|42|51|
61|62|63|81|82|83|84|91|92|101|102|103|104|
111|112|121|131|132|141|142|151}>
[endentryid = <{1|2|11|12|13|14|21|22|31|32|
41|42|51|61|62|63|81|82|83|84|91|92|101|102|
103|104|111|112|121|131|132|141|142|151}>]
```

where:

id	ID of the tone pattern	REQUIRED
endentryid	ID of the tone pattern	OPTIONAL

voice tone patterntable flush

Flush all tone patterns

voice tone patterntable list

Show all tone patterns

voice tone patterntable modify

Modify tone pattern

SYNTAX:

```
voice tone patterntable modify id = <{1|2|11|12|13|14|21|22|31|32|41|42|51|
61|62|63|81|82|83|84|91|92|101|102|103|104|
111|112|121|131|132|141|142|151}>
[tone = <{off|on}>]
[freq1 = <number>]
[power1 = <number>]
[freq2 = <number>]
[power2 = <number>]
[freq3 = <number>]
[power3 = <number>]
[freq4 = <number>]
[power4 = <number>]
[duration = <number>]
[nextentry = <number>]
[maxloops = <number>]
[nextentryafterloops = <number>]
```

where:

Parameter	Description	Requirement
id	ID of the tone pattern	REQUIRED
tone	Enable or disable this tone	OPTIONAL
freq1	Frequency 1	OPTIONAL
power1	Power 1	OPTIONAL
freq2	Frequency 2	OPTIONAL
power2	Power 2	OPTIONAL
freq3	Frequency 3	OPTIONAL
power3	Power 3	OPTIONAL
freq4	Frequency 4	OPTIONAL
power4	Power 4	OPTIONAL
duration	Duration (ms)	OPTIONAL
nextentry	Next pattern entry	OPTIONAL
maxloops	Max loops	OPTIONAL
nextentryafterloops	Next entry after loops	OPTIONAL

wireless Commands

wireless debug stats	Transfer statistics	see page 897
wireless ifconfig	Configures wireless settings.	see page 898
wireless macacl add	Add an ACL MAC entry	see page 899
wireless macacl config	Access Control List configuration	see page 900
wireless macacl delete	Delete an ACL MAC entry	see page 901
wireless macacl flush	Flushes ACL entries	see page 902
wireless macacl list	Shows a list of all configured ACL entries	see page 903
wireless macacl modify	Modify an ACL entry	see page 904
wireless macacl register	Start a registration process (only for register mode)	see page 905
wireless mssid ifadd	Add an extra ssid context	see page 906
wireless mssid ifattach	Attach a ssid context	see page 907
wireless mssid ifconfig	Configure a ssid context	see page 908
wireless mssid ifdelete	Delete a ssid context	see page 909
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wireless multiuni add	add a multicast to unicast mapping	see page 912
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wireless multiuni scanresults	display detected multicast mac addresses	see page 916
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wireless stations list	List of the currently associated stations	see page 924
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wireless wps mode	Set/Show the configuration mode value	see page 933
wireless wps pin	Set/Show the WPS pin value	see page 934

wireless debug stats

Transfer statistics

wireless ifconfig

Configures wireless settings.

SYNTAX:

```
wireless ifconfig [state = <{enabled|disabled}>]
                  [channel = <{auto|1|2|3|4|5|6|7|8|9|10|11|12|13}>]
                  [ssid = <quoted string>]
                  [any = <{enabled|disabled}>]
                  [interop = <{802.11b|802.11b(legacy)/g|802.11b/g|802.11g}>]
                  [frameburst = <{disabled|enabled}>]
```

where:

state	Interface operational status of wireless access point	OPTIONAL
channel	Communication channel number	OPTIONAL
ssid	SSID	OPTIONAL
any	Make SSID public	OPTIONAL
interop	Interoperability mode	OPTIONAL
frameburst	Framebursting	OPTIONAL

wireless macacl add

Add an ACL MAC entry

SYNTAX:

```
wireless macacl add          [ssid_id = <number{0-4}>]  
                             hwaddr = <hardware-address>  
                             permission = <{allow|deny}>  
                             [name = <quoted string>]
```

where:

ssid_id	ssid id	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{0-4}>]
                             [control = <{lock|unlock|register}>]
                             [regtime = <number{15-3600}>]
```

where:

ssid_id	ssid id	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{0-4}>  
                                hwaddr = <hardware-address>
```

where:

ssid_id	ssid id	REQUIRED
hwaddr	hardware address of the ACL entry	REQUIRED

wireless macacl flush

Flushes ACL entries

SYNTAX:

```
wireless macacl flush      [ssid_id = <number{0-4}>]  
                          proceed = <{disabled|enabled}>
```

where:

ssid_id	ssid id	OPTIONAL
proceed	Confirmation required	REQUIRED

wireless macacl list

Shows a list of all configured ACL entries

SYNTAX:

```
wireless macacl list [ssid_id = <number{0-4}>]
```

where:

ssid_id	ssid id	OPTIONAL
---------	---------	----------

wireless macacl modify

Modify an ACL entry

SYNTAX:

```
wireless macacl modify      ssid_id = <number{0-4}>
                             hwaddr = <hardware-address>
                             [permission = <{allow|deny}>]
                             [name = <quoted string>]
```

where:

ssid_id	ssid id	REQUIRED
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          proceed = <{disabled|enabled}>
```

where:

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

wireless mssid ifadd

Add an extra ssid context

SYNTAX:

```
wireless mssid ifadd          ssid = <string>
```

where:

ssid	ssid	REQUIRED
------	------	----------

wireless mssid ifattach

Attach a ssid context

SYNTAX:

```
wireless mssid ifattach          ssid_id = <number{1-4}>
```

where:

ssid_id	ssid	REQUIRED
---------	------	----------

wireless mssid ifconfig

Configure a ssid context

SYNTAX:

```
wireless mssid ifconfig      ssid_id = <number{0-4}>
                             [ssid = <string>]
                             [apisolation = <{disabled|enabled}>]
                             [any = <{disabled|enabled}>]
                             [secmode = <{disable|wep|wpa-psk}>]
                             [WEPkey = <quoted string>]
                             [WPAPSKkey = <quoted string>]
                             [WPAPSKversion = <{WPA|WPA2|WPA+WPA2}>]
                             [addscript = <quoted string>]
                             [delscript = <quoted string>]
                             [trace = <{disabled|enabled}>]
```

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
addscript	creation data interfaces	OPTIONAL
delscript	remove data interfaces	OPTIONAL
trace	security tracing	OPTIONAL

wireless mssid ifdelete

Delete a ssid context

SYNTAX:

```
wireless mssid ifdelete          ssid_id = <number{1-4}>
```

where:

ssid_id	ssid	REQUIRED
---------	------	----------

wireless mssid ifdetach

Detach a ssid context

SYNTAX:

```
wireless mssid ifdetach          ssid_id = <number{1-4}>
```

where:

ssid_id	ssid	REQUIRED
---------	------	----------

wireless mssid iflist

Multiple ssid configuration

SYNTAX:

```
wireless mssid iflist [ssid_id = <number{0-4}>]
```

where:

ssid_id	ssid	OPTIONAL
---------	------	----------

wireless multiuni add

add a multicast to unicast mapping

SYNTAX:

```
wireless multiuni add          multicast = <hardware-address>  
                               unicast = <hardware-address>
```

where:

multicast	Multicast MAC	REQUIRED
unicast	Unicast MAC	REQUIRED

wireless multiuni delete

delete all multicast mappings

SYNTAX:

```
wireless multiuni delete          multicast = <hardware-address>
```

where:

multicast	Multicast MAC	REQUIRED
-----------	---------------	----------

wireless multiuni flush

flush all multicast to unicast mappings

wireless multiuni list

show configured multicast to unicast mappings

wireless multiuni scanresults

display detected multicast mac addresses

SYNTAX:

```
wireless multiuni scanresults [rescan = <{no|yes}>]
```

where:

rescan	rescan for new multicast addresses	OPTIONAL
--------	------------------------------------	----------

wireless qos apacconfig

configure AP EDCA parameters

SYNTAX:

```
wireless qos apacconfig      [class = <{AC_BE|AC_BK|AC_VI|AC_VO}>]
                             [cwmmax = <{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>]
```

where:

class	AC class	OPTIONAL
cwmmax	CWmax configuration	OPTIONAL
cwmin	CWmin configuration	OPTIONAL
aifsn	Aifsn configuration	OPTIONAL
txop	txoplimit [us] configuration	OPTIONAL

wireless qos config

configure QoS settings

SYNTAX:

```
wireless qos config [mode = <{disabled|wmm}>]
```

where:

mode	WMM active	OPTIONAL
------	------------	----------

wireless qos staaconfig

configure STA EDCA parameters

SYNTAX:

```
wireless qos staaconfig [class = <{AC_BE|AC_BK|AC_VI|AC_VO}>]
                        [cwmmax = <{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>]
```

where:

class	AC class	OPTIONAL
cwmmax	CWmax configuration	OPTIONAL
cwmin	CWmin configuration	OPTIONAL
aifsn	Aifsn configuration	OPTIONAL
txop	txoplimit [us] configuration	OPTIONAL

wireless reset

Reset Wireless interface settings to defaults

SYNTAX:

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

where:

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

wireless secmode config

Configure/Show the security mode.

SYNTAX:

```
wireless secmode config [mode = <{disable|wep|wpa-psk}>]
```

where:

mode	security mode	OPTIONAL
------	---------------	----------

wireless secmode wep

Configure WEP settings.

SYNTAX:

```
wireless secmode wep [encryptionkey = <quoted string>]
```

where:

encryptionkey	WEP key: expected format 5 or 13 ASCII characters, or 10 or 26 HEX digits.	OPTIONAL
---------------	--	----------

wireless secmode wpa-psk

Configure WPA-PSK settings.

SYNTAX:

```
wireless secmode wpa-psk      [presharedkey = <quoted string>]
                               [version = <{WPA|WPA2|WPA+WPA2}>]
```

where:

presharedkey	WPA-PSK key: expected format 8 to 63 ASCII characters or 64 HEX digits.	OPTIONAL
version	wpa version	OPTIONAL

wireless stations list

List of the currently associated stations

SYNTAX:

```
wireless stations list [hwaddr = <hardware-address>]  
                        [ssid_id = <number{0-4}>]
```

where:

hwaddr	The MAC address of station	OPTIONAL
ssid_id	Selected BSS	OPTIONAL

wireless wds add

add WDS station

SYNTAX:

```
wireless wds add                bssid = <hardware-address>  
                                [name = <quoted string>]
```

where:

bssid	The WDS bssid	REQUIRED
name	A user specified reference name	OPTIONAL

wireless wds config

WDS configuration parameters

SYNTAX:

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

where:

state	WDS functionality	OPTIONAL
-------	-------------------	----------

wireless wds delete

delete WDS station

SYNTAX:

```
wireless wds delete          bssid = <hardware-address>
```

where:

bssid	The WDS bssid	REQUIRED
-------	---------------	----------

wireless wds flush

Flush all wds stations

wireless wds list

list WDS stations

wireless wds scanresults

scan all networks

SYNTAX:

```
wireless wds scanresults [rescan = <{disabled|enabled}>]
```

where:

rescan	perform a new scan	OPTIONAL
--------	--------------------	----------

wireless wps config

Configure/Show the WPS settings

SYNTAX:

```
wireless wps config [ssid_id = <number{0-4}>]
                    [state = <{disabled|enabled}>]
                    [apip = <ip-address>]
                    [regip = <ip-address>]
```

where:

ssid_id	ssid id	OPTIONAL
state	WPS state	OPTIONAL
apip	AP ip	OPTIONAL
regip	Registrar ip	OPTIONAL

wireless wps dump

Dump WPS settings

wireless wps mode

Set/Show the configuration mode value

SYNTAX:

```
wireless wps mode [ssid_id = <number{0-4}>]
                  [value = <number>]
```

where:

ssid_id	ssid id	OPTIONAL
value	configuration mode	OPTIONAL

wireless wps pin

Set/Show the WPS pin value

SYNTAX:

```
wireless wps pin [ssid_id = <number{0-4}>]  
                  [value = <number>]
```

where:

ssid_id	ssid id	OPTIONAL
value	pin number	OPTIONAL

xdsl Commands

xdsl config	Modify/Display dsl configuration	see page 936
xdsl debug bitloadinginfo	Displays # bits per tone	see page 937
xdsl debug deltconfig	Dual Ended Line Testing interface	see page 938
xdsl debug deltinfo	Dual Ended Line Test result display	see page 939
xdsl debug modemoptioninfo	The modem options bitmap display	see page 940
xdsl debug multimode	Config custom multimode	see page 941
xdsl debug traceconfig	Config the adsl tracelevel	see page 942
xdsl info	Displays status information about modem	see page 943
xdsl maxspeed	Set ATM Default Maximum Speed.	see page 944
xdsl version	Display xdsl version information.	see page 945

xdsl config

Modify/Display dsl configuration

SYNTAX:

```
xdsl config [adslmultimode = <{adsl|adsl2|adsl2plus}>]
            [detect-lop = <{disabled|enabled}>]
            [syslog = <{disabled|enabled}>]
```

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

xdsl debug bitloadinginfo

Displays # bits per tone

xdsl debug deltconfig

Dual Ended Line Testing interface

SYNTAX:

```
xdsl debug deltconfig [state = <{disabled|enabled}>]
```

where:

state	Enable/Disable dual ended line testing	OPTIONAL
-------	--	----------

xdsl debug delinfo

Dual Ended Line Test result display

xdsl debug modemoptioninfo

The modem options bitmap display

xdsl debug multimode

Config custom multimode

SYNTAX:

```
xdsl debug multimode [config = <[+/-]flag[+/-flag...]{default  
t1.413issue2 g992.1_annex_a g992.2  
g992.5_annex_m}>]
```

where:

config	The custom multimode bitmap	OPTIONAL
--------	-----------------------------	----------

xdsl debug traceconfig

Config the adsl tracelevel

SYNTAX:

```
xdsl debug traceconfig          level = <{0|1|2|3|4}>
```

where:

level	Trace Level (0=disable tracing; 1=enable dsl manager tracing; 2=enable dsl driver tracing)	REQUIRED
-------	--	----------

xdsl info

Displays status information about modem

SYNTAX:

```
xdsl info [expand = <{disabled|enabled}>]
          [g.997.1 = <{disabled|enabled}>]
          [counter_period_filter = <{current|15_minutes|
          24_hours}>]
          [counters_reset = <{no|yes}>]
```

where:

expand	Condensed / Expanded listing link information	OPTIONAL
g.997.1	Condensed / Expanded listing link information	OPTIONAL
counter_period_filter	Specify the statistics period	OPTIONAL
counters_reset	Reset all counters	OPTIONAL

xdsl maxspeed

Set ATM Default Maximum Speed.

SYNTAX:

```
xdsl maxspeed [tx = <number>]
               [rx = <number>]
```

where:

tx	A predefined Maximum ADSL Speed in Upstream direction	OPTIONAL
rx	A predefined Maximum ADSL Speed in Downstream direction	OPTIONAL

xdsI version

Display xdsI version information.

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