Vuoto Inquieto

…dove anche il vuoto è in fermento!

13 FEBBRAIO 2012 di GABRIELE NOTTE

Configurare (e giocare online con) il Thomson TG784 (ADSL + voip) →

Il contenuto di questa guida non è del tutto nuovo, si tratta di una grossa raccolta di informazioni frammentarie sparse per il web. L'ho scritta principalmente come promemoria per il futuro; nel frattempo condividerla col prossimo non costa nulla. Ho speso davvero parecchio tempo per settare questa maledetta scatola a dovere e spero di far risparmiare a voi tempo e mal di testa. A causa degli assurdi blocchi imposti da Tiscali e dalla stessa Thomson, sarà necessario bypassare qualche ostacolo per far funzionare correttamente il router nelle partite online. Principalmente mostrerò come muoversi via Telnet, probabilmente l'unico sistema che permette di fare modifiche **senza compromettere il voip o modificare il firmware originale**; esiste un altro modo per muoversi senza modificare il firmware (v. nota 2) ma non lo consiglio. Quanto presente in questa guida non prevede hack di dubbia natura, solo soluzioni umane applicate da umani che sanno pigiare tasti sulla tastiera. Sul serio.

Detto ciò, preciso tre cose. Anzitutto, su certi dettagli andrò veloce, un po' per pigrizia ed un po' perché si tratta di dettagli facilmente reperibili con quel che avete (google incluso). In caso di dubbi, lo spazio per lasciare commenti è utile anche per le domande, non siate timidi! Siete i benvenuti anche per segnalazioni di errori o ulteriori suggerimenti.

Faccio presente che il mio firmware di riferimento è l'**8.6.H.1**, lo stesso montato dalla scatoletta infernale propinatami da Tiscali. Recentemente sto sentendo lamentele circa nuovi firmware ben più blindati. Al momento non posso esservi d'aiuto, sarà mia premura aggiornare la guida non appena scopro qualcosa. Nel caso, ricordo che il TG784 è un modello diverso dal TG784n, quindi le credenziali di accesso root saranno probabilmente diverse. Il mio aiuto può quindi limitarsi unicamente al primo modello.

Infine, **non prendo responsabilità** per eventuali danni/fastidi/problemi. Prendete questa guida "as it is".

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1) Prerequisiti

Come prerequisito indicherei due cose: pazienza (ma va?) e un accesso funzionante a telnet. Dunque, se volete approfondire cosa sia questo telnet potete cercare maggiori info su wikipedia, a noi comuni mortali basta sapere che si tratta di una interfaccia a linea di comando (CLI) per comunicare con oggetti elettronici in remoto (pc, server, router, robocop, etc).

- 1.1) Su **Linux**: dovrebbe essere installato di default (su Ubuntu 10,10 e Debian Lenny 5.09 lo è), in caso contrario rimediate installando il pacchetto telnet. Sulle distro che utilizzano apt basta digitare nel terminale sudo apt-get install telnet e aspettare qualche secondo. Se non usate apt… immagino che non avrete bisogno di consigli.
- 1.2) Su **Windows**: ma perché usate Windows? Vabbè. Su XP è installato di default, su Vista e Seven è presente ma nascosto. Per attivarlo dovete andare su Pannello di Controllo, cliccare su Programmi e quindi cliccare su **Attivazione o disattivazione funzionalità di Windows**. Cercate nella finestra appena aperta la voce **Client Telnet**, spuntate la relativa casella e date ok. A questo punto annullate gli impegni che avete sull'agenda.

Giusto per completezza, vi faccio presente che con i contenuti di questa guida non *dovreste* far danni irreparabili. Nel peggiore dei casi si può fare un semplice reset del dispositivo per farlo tornare come nuovo, inteso come quando l'avete acceso la prima volta. Sul dorso del router è infatti presente un piccolissimo foro, basta infilarci un ago per una decina di secondi e attendere che i led si spengano. A quel punto il dispositivo è come nuovo, pertanto potrete solo navigare nel dominio di tiscali.it per comunicare le credenziali fornite da Tiscali in fase di registrazione. **Se non disponete della vostra user ID e della vostra password non procedete oltre!** Telefonate al 130 e recuperate queste informazioni preventivamente. Il router infatti non tornerà attivo finché non avrete immesso quei dati, e in caso di reset rischiereste di rimanere senza telefono e senza internet. Vero pure che telefonando al 130 **il reset possono effettuarlo gli operatori** da remoto con zero fastidio per l'utente. Questo però porta via del tempo, la scelta è vostra.

2) Imposizione indirizzo ip statico: 192.168.1.34

Dovete necessariamente imporre manualmente l'indirizzo ip del vostro pc in LAN a questo valore: **192.168.1.34**. Il firewall integrato al dispositivo è programmato per bloccarvi l'accesso telnet da qualunque indirizzo di partenza ad eccezione di quello appena riportato; l'unica porta abilitata all'accesso è **8081**. Tale regola resta attiva anche se il firewall è disabilitato, perciò almeno la prima volta dovrete adattarvi. Al punto 7) troverete come bypassare questa limitazione.

3) Credenziali root

Dovete procurarvi le credenziali per accedere al dispositivo con i pieni privilegi (in ambiente Unix/Linux si chiamano "credenziali di root"). Ci sono una infinità di guide al riguardo. Giungendo direttamente al risultato finale, se il vostro ISP è Tiscali allora dovete semplicemente segnarvi questi dati:

user: **rootte** password: **r00t_th0ms_n** (sono degli ZERO)

In realtà dovrebbe essere Tiscali stessa a fornirci questi dati, ma per motivi assurdi ci vengono consegnate solo le credenziali per un accesso limitato (l'user descritto nel manuale del router). Con i privilegi di root avrete pieno accesso alle funzionalità del dispositivo. Per accedervi avrete sostanzialmente due vie: via browser (IE, Firefox, Chrome o quel che vi pare) o via CLI (telnet). Per avere il pieno controllo del dispositivo dovete usare necessariamente la linea di comando (telnet). Col browser e le credenziali root potete fare ben poco. Consiglio comunque di darvi un'occhiata in quanto troverete nuove funzioni che prima erano gelosamente (?) celate. Ad esempio adesso sarete capaci si accedere al log del router (vedi "Thomson Gateway" – "Event logs"), strumento da controllare in caso di problemi inattesi (inutile dirlo, il log è utile solo se il router ha un orario allineato a quello del vostro orologio – cosa che adesso potete settare a vostro piacimento).

Ah, ovviamente a fine guida vi converrà modificare la password di root per ovvi motivi di sicurezza.

4) Port Forwarding

Ogni gioco ha la necessità di sbloccare determinate porte. Le trovate elencate nel manuale o nel readme. Questo discorso vale anche se il dispositivo collegato non è un PC ma una console (PS3 o X360… e quel che verrà nel futuro). Il port forwarding viene fatto su "Toolbox" – "Game & Application Sharing" – "Create a new game or application"; qui non sono necessarie le credenziali root. Il resto della procedura è intuitivo e comunque descritto nel manuale dato a corredo con il router. Se nonostante ciò avete dubbi su questo punto cercate su youtube: ci sono video a prova di idiota!

5) Problematiche di NAT Ristretto

Alcuni giochi e TUTTE le console riportano problemi di NAT con questa scatola. Ad esempio, con Crysis 2, se avete seguito la guida fino a questo punto, ad ogni partita multiplayer vi apparirà un avviso che vi informa di essere su un NAT ristretto e che pertanto vi sarà difficile raggiungere alcune partite (o altre rogne). A questo punto dovete necessariamente usare Telnet. Aprite un terminale qualunque: su Linux va bene un terminale emulato, su Windows c'è il prompt dei comandi. Quindi:

- 5.1) digitate **telnet 192.168.1.254 8081**
- 5.2) immettete nome utente e password di root reperite al punto 3)
- 5.3) digitate **:connection bind application=CONE(UDP) port=XXXX** dove XXXX sono le porte **udp** che avete aperto nel punto 4). Dovete inserire una porta alla volta, battere invio e digitare di nuovo il comando per intero con la nuova porta. Nota che alcune porte non saranno comunque accessibili (es 64100) ma ciò non è un problema. In caso di errore, ignora la porta e prova con la prossima. Quando hai finito vai avanti con la guida.
- 5.4) digitate **:saveall**, date invio, digitate **:exit** e date invio.

6) Disabilitare l'Intrusion Detection (opzionale)

Se avete seguito la guida fin qui e avete provato a giocare, noterete di avere finalmente un NAT moderato ma *potreste* subire una frequente serie di disconnessioni dai server di gioco dopo pochi minuti (o dopo un'ora se siete molto fortunati). Da un'occhiata al log, risulta che in concomitanza con queste disconnessioni vengono riportati alcuni o tutti i seguenti messaggi:

IDS dos parser : udp flood (1 of 1) : [ind. ip altro gioc.] [vostro ind. ip] UDP 64100->55137

FIREWALL replay check (1 of 1): Protocol: ICMP Src ip: [ind. ip altro gioc.] Dst ip: [vostro ind. ip] Type: Destination Unreachable Code: Communication Administratively Prohibited

FIREWALL replay check (1 of 80): Protocol: ICMP Src ip: [ind. ip altro gioc.] Dst ip:[vostro ind. ip]Type: Destination Unreachable Code: Host Unreacheable

Da qualche ricerca sul web pare che la funzione "Intrusion Detection" abbia una politica troppo severa in questo dispositivo, rilevando erroneamente come minacciose molte delle connessioni che avvengono durante le partite in rete. Sui server talvolta c'è la necessità di scansionare nuove porte libere nel caso quelle previste dal manuale siano già impegnate; se non ne trovano le informazioni arrivano in leggero ritardo generando lag. Il problema di questa famiglia di router Thomson è che il tentativo di scansionare tutte le porte libere viene visto come un tentativo di intrusione da parte di un hacker: quando ciò avviene, il dispositivo pensa di disconnetterci dal server e da tutti gli altri giocatori senza chiederci il permesso. La parte che si occupa di gestire questo fenomeno si chiama *Intrusion Detection*. Ovviamente, questa funzione non è stata inserita senza una valida ragione in quanto contribuisce (in modo insufficiente!) alla sicurezza globale della vostra privacy. Pertanto, come primo tentativo, vi consiglio di non disabilitare l'intrusion detection e provare il router così com'è adesso. Se riportate le disconnessioni sopra accennate, provate con i comandi qui esposti ricordando però di riattivare la funzione quando la smetterete di giocare al vostro titolo preferito.

Accedendo dal browser noterete che l'intrusion detection è attivo e non potremo disabilitarlo in alcun modo. Possiamo aggirare questo ulteriore ostacolo usando ancora una volta telnet. Ripetete le operazioni 4.1) e 4.2). A quel punto digitate **:ids config state=disabled**, salvate tutto come al punto 4.4) e avrete risolto i vostri problemi. Se nel futuro avrete voglia di riabilitare il servizio per ovvi motivi di sicurezza, basterà ripetere i passi e digitare **:ids config state=enabled**.

Questo dovrebbe essere tutto per quel che riguarda il gioco online con la scatoletta di Tiscali. Se ciò non bastasse ricordatevi di controllare i vari firewall/antivirus presenti sul vostro pc.

EXTRA: altre caratteristiche utili (ormai ometto i vari saveall ed exit che dovrebbero essere assimilati)

7) Abilitare l'accesso telnet da ogni pc

Come detto al punto 1) è necessario impostare un indirizzo statico per accedere via telnet. Questo perché nel router è inserita una regola per bloccare l'accesso da tutti gli altri indirizzi della rete (alias, altri pc). La regola, esposta nel file user.ini, è la seguente:

rule add chain=sink_system_service index=1 srcintf=lan srcip=!192.168.1.34 serv=telnet log=disabled state=enabled action=deny

Possiamo sbarazzarci di questo limite digitando due comandi via telnet:

- 7.1) digitare **expr add name=personal type=ip addr=192.168.1.0/24 mask=0**
- 7.2) Ci sono due comandi diversi, a seconda del tipo di firmware che il dispositivo monta.

  *Per i firmware **H** (quello mio):*
  firewall rule modify chain=sink_system_service index=1 srcintf=lan srcip=!personal serv=telnet log=disabled state=enabled action=deny
  *Per i firmware **G**:*
  firewall rule modify chain=sink_fire index=1 srcintf=lan srcip=!personal serv=telnet log=disabled state=enabled action=deny

Tutto qui; d'ora in avanti non avremo necessità di ip statici per accedere a telnet.

8) DNS personalizzati

Sui DNS si possono raccontare un oceano di cose. Detto in poche grossolane parole, sono dei server che controllano e soddisfano le nostre richieste di navigazione. In pratica, quando noi digitiamo una url (es http://www.google.it (http://www.google.it)) il nostro router invia la richiesta di collegamento a questi DNS, i quali traducono il testo immesso (www.google.it) in un indirizzo ip da raggiungere. In pratica sono come un vigile al quale chiediamo dove si trova un sito, e lui ci indirizza. Di default, il

nostro router utilizza dei DNS proprietari di Tiscali, i quali svolgono il loro lavoro in modo più che sufficiente. Il problema è che si trovano su suolo italiano, e quindi devono rispettare le leggi italiane. Pertanto, nel momento stesso in cui il governo decide per noi che è giusto censurare un sito, i DNS non indirizzeranno la nostra richiesta rendendo di fatto il sito irraggiungibile. Credo che l'esempio più famoso sia quello di *The Pirate Bay*. Se avete un minimo di istinto informatico (ma basta il semplice istinto… in quest'epoca di tv e decerebrazione di massa) dovete necessariamente usare dei DNS diversi. Io propongo i famosissimi OPENDNS. Via telnet, digitate:

- 8.1) **dns server route add dns=208.67.222.222 metric=1 intf=Internet**
- 8.2) **dns server route add dns=208.67.220.220 metric=1 intf=Internet**
- 8.3) **dns server route list**

Ovviamente, si può sempre imporre qualunque tipo di DNS (altri famosi sono ad esempio quelli di Google). Con quei comandi semplicemente fissiamo una priorità maggiore dei nostri DNS rispetto a quelli imposti da Tiscali; col comando 8.3) visualizziamo appunto tale priorità.

9) Abilitare l'NTP

L'NTP è un sistema per sincronizzare i vari orologi di rete con un server esterno, implementando sistemi che calcolano e compensano la latenza del segnale. Questa interessante funzione è di fatto disabilitata di default nel router, ma possiamo abilitarla digitando via telnet la seguente roba:

- 9.1) **sntp add name=it.pool.ntp.org version=3**
- 9.2) **sntp config poll=60 pollpresync=5**
- 9.3) **sntp config state=enabled**

Il server di sincronizzazione proposto è it.pool.ntp.org, ma se ne conoscente uno migliore potete cambiarlo nella 9.1).

10) Script per modificare l'indirizzo l'ip pubblico (es. con JDownloader)

[Si ringrazia Samuele (http://wikipille.blogspot.it/) per il contributo]

Per quei pochi a cui interessasse, ho scritto un breve script combinando Telnet e Visual Basic che permette di cambiare IP pubblico, utile a chi scarica per automatizzare le cose. Lo script è:

```
Option explicit
Dim oShell
set oShell= Wscript.CreateObject("WScript.Shell")
oShell.Run "telnet 192.168.1.254 8081"
WScript.Sleep 1000
oShell.Sendkeys "[inserire_nome_utente_(meglio_root)]~"
WScript.Sleep 1000
oShell.Sendkeys "[inserire_password]~"
WScript.Sleep 1000
oShell.Sendkeys ":ppp ifdetach intf=Internet~"
WScript.Sleep 5000
oShell.Sendkeys ":ppp ifattach intf=Internet~"
WScript.Sleep 3000
oShell.Sendkeys "exit~"
WScript.Sleep 1000
oShell.Sendkeys "exit~"
Wscript.Quit
```

Scriverlo nel blocco note e salvare tutto come .vbs

Spero che a qualcuno serva, io lo uso per la riconnessione automatica con JDownloader visto che questo router è uno dei pochi per cui non si è riusciti a creare uno script di riconnessione in nessun modo.

11) Note

Nota 1: non sono un informatico, ma so per certo che questa roba funziona sia su Windows che Linux (qui in maniera leggermente differente). Telnet comunque ha un oceano di funzionalità, per averne un assaggio è possibile digitare **menu** (senza accento) subito dopo il login. Un manuale NON aggiornato è reperibile qui: http://download.modem-help.co.uk/mfcs-A/Alcatel/Modems/TG784/ (http://download.modem-help.co.uk/mfcs-A/Alcatel/Modems/TG784/) (cerca CLI Reference). Il linguaggio è inglese e richiede una conoscenza elevata dei concetti sulle reti informatiche;

Nota 2: un altro modo per effettuare modifiche consiste nell'editare il file di configurazione. In pratica, questo apparecchio da la possibilità di salvare su un file (user.ini) la configurazione attuale delle componenti del router in oggetto, in modo da poterla ripristinare in ogni istante. Es: dopo un hard reset si perdono normalmente tutti i dati sulle password, porte forwardate etc; caricando questo file il dispositivo torna come al momento del ripristino. La cosa interessante è che in questo user.ini sono presenti anche le opzioni normalmente nascoste. L'alternativa a Telnet sta tutta qui: scarica questo file, lo modifichi, e lo ricarichi. Non lo consiglio perché a volte l'upload richiede tempo, e questo affare ha il brutto vizio di disconnettersi dal browser se non viene toccato per un po. Il risultato quindi è un dispositivo incasinato, il voip non funziona più e il dispositivo è irraggiungibile con ogni sistema (Telnet incluso). In quella circostanza non resta che effettuare un hard reset e contattare il centro assistenza per farsi riattivare i servizi eventualmente mancanti. Per quanti vogliano comunque provarci, possono scaricare il file di configurazione dal browser. Bisogna effettuare il log in con i diritti di root, andare su "Thomson Gateway" – "Configuration" e guardare in basso alla scritta "Save or Restore configuration".

Nota 3: in questa guida le impostazioni sul **UPnP** sono del tutto ininfluenti… questo router è evidentemente fallato. Che lo attiviate o meno, non vi aiuterà ad avere un NAT alto (o l'ID alto su eMule). Non ho trattato la **DMZ** perché non serve… con buona pace di tutti gli utenti informatici paranoici. Infine, non ho info sicure/attendibili su **custom firmware** che permettano di mantenere il voip. In realtà non le ho neppure cercate… Ah, dimenticavo: anche se via browser vi dice che il firewall è disattivo… **vi sta mentendo!** Provate con telnet!

Nota 4: link utili/interessanti:

Modem Help (http://download.modem-help.co.uk/mfcs-A/Alcatel/Modems/TG784/Manuals/)
Modem Help Forum (http://forums.modem-help.co.uk/viewtopic.php?p=14982#14982)
Whirpool Forum (http://forums.whirlpool.net.au/archive/827589)
Steppenwolf (http://www.steppen-wolf.eu/blog/tag/thomson-tg784/) (questo link è particolarmente interessante anche perché ricopre aspetti più elettronici, ma non sono riuscito a contattare direttamente l'autore e non ho voluto inserire nessuna informazione nella mia guida; mi limito a citare il link nel caso siate interessati)

Lista degli update:
03/07/2012 Script per modificare l'indirizzo l'ip pubblico (es. con JDownloader) – si ringrazia Samuele (http://wikipille.blogspot.it/).

Questa voce è stata pubblicata in Guide/How to con tag Electronics, How to, Informatics, Thomson TG784, Tiscali.
Aggiungi il permalink ai segnalibri.
70 commenti

70 pensieri su “Configurare (e giocare online con) il Thomson TG784 (ADSL + voip)”

Giulio scrive:
20 febbraio 2012 alle 13:01
A me telnet non accetta i comandi che hai messo nella guida, come mai?

Rispondi

Gabriele Notte scrive:
20 febbraio 2012 alle 13:38
che errore ti da?

Rispondi

Samuele scrive:
20 febbraio 2012 alle 19:57
Finalmente un posto dove si parla in maniera normale del router, senza perdere il VoIP.
Comunque la Tiscali potrebbe anche risparmiarsi certe cose.

Grazie!

P.S.: chiamala intuizione , ma nella barra di fianco c’è scritto che ti chiami Gerar** quindi l’anonimato del web va a farsi friggere. :-))

Ciao!!

Rispondi

Gabriele Notte scrive:
20 febbraio 2012 alle 20:47
Non ho intenzione di restare anonimo, Gabriele Notte è il mio “nome d’arte” col quale spero di esordire come scrittore

Rispondi

Samuele scrive:
20 febbraio 2012 alle 22:07
Guarda, ti stimo per quello che fai e che vuoi fare.
Buona Fortuna Ingegnere!!!

Samuele

Rispondi

ramojfox scrive:
29 febbraio 2012 alle 11:08
Ciao, è possibile che le credenziali siano state cambiate?
ramojfox

Rispondi

Gabriele Notte scrive:
29 febbraio 2012 alle 13:20
Le credenziali non si cambiano da sole… magari è stato un super hacker! Scherzo
Come ho scritto nelle prime righe, la guida fa riferimento al firmware 8.6.H.1 : "Recentemente sto sentendo lamentele circa nuovi firmware ben più blindati. Al momento non posso esservi d'aiuto, sarà mia premura aggiornare la guida non appena scopro qualcosa".
Con i nuovi firmware le credenziali standard sono diverse. Purtroppo Tiscali non ne vuol sapere di fornirle. Tu che firmware hai?

Rispondi

Cri scrive:
13 marzo 2012 alle 23:42
ciao
io sto smadonnando da 3 giorni su questo maledetto router…
devo raggiungere la mia webcam wireless da remoto e devo avere una maledetta regola sul firewall che mi manda in bestia…
le ho provate tutte ma non la becco
adesso sui log dopo che provo a raggiungerla sulla porta 5550 mi da questo errore

IREWALL rule : Protocol: TCP Src ip: xx.x.xxx.x Src port: 59876 Dst ip: 192.168.1.239 Dst port: 5550 Chain: forward_host_service Rule Id: 1 Action: accept

Rispondi

Gabriele Notte scrive:
27 aprile 2012 alle 17:30
Ciao! Scusa per il disastro mostruoso con cui ti rispondo, per 52 giorni sono stato isolato dal telefono/internet e non ho avuto modo di aggiornare il mio blog!
Dunque, non so ancora in cosa consista il problema ma possiamo provare a indagare.
Anzitutto, posso dire che NON è un problema di firewall poiché il log conferma con "Action: accept" (oppure ti prende in giro, chissà).
Accedi via telnet con privilegi root e digita
firewall rule list
Dai un'occhiata alla lista che ti appare, ci sarà qualcosa legata alla porta 5550. Prova a postare quella riga. Intanto provo a leggere il manuale telnet del dispositivo, sperando di trovare qualcosa…

Rispondi

gp scrive:
27 aprile 2012 alle 00:22
Grazie per il tuo lavoro.

Sono giorni che leggo posts, articoli, comandi, blog stranieri, ma non riesco a farmene una ragione. E' il triple-play peggio configurato nella storia di tutti gli ISP…

E' mai possibile che non si riesca a configurarlo come un banale modem, in modalità bridge/half-bridge/gateway (lasciando le porte VOIP funzionanti) e far fare il lavoro a qualche altro pezzo della rete (nel mio caso, la quinta gen della Apple Extreme)…

Non c'e' verso…
Se spengo il wifi, (con il root), si riaccende da solo (!!!), se gli dico di impostare ed utilizzare un indirizzo pubblico, non lo fa! Allora, resetto tutto e gli dico di rifare da server DHCP, ma non esiste, se non gli configuri l'orologio interno, non fara' mai il push dei nuovi indirizzi (dando errori strambi su inconsistenze di indirizzi).

E' allucinante. Sai come sono riuscito a scrivere questo post? Configurando a manella la rete fino alla Extreme, e poi accendendo li il DHCP (risultato, doppio DHCP, doppio NAT), se poi ci aggiungiamo il fatto che anche spegnendo il NAT, questo rimane acceso (per colpa degli switch di Tiscali, che propagano, chissà' perché il loro NAT), ho ed avrò sempre il doppio NAT acceso.

Io non gioco, ma il NAT mi e' utile per collegarmi alla rete di casa da fuori…

Scusa lo sfogo, spero solo tu possa capirmi, ora mi sento un po' meglio…

Vorrei cortesemente chiederti come faresti tu questa configurazione.

Tiscali –> Thomson (come Gateway) — ethernet –> Airport Extreme == ethernet/wifi ==> vari devices.
Mantenendo il Thomson come gateway voip e come half bridge. Lasciando il DHCP, NAT, (magari anche l'indirizzo pubblico di Tiscali), Switching e Routing, e Wifi…

Grazie per qualsiasi consiglio tu possa fornirmi…

Rispondi

Gabriele Notte scrive:
27 aprile 2012 alle 17:20
Dunque, non sono un tecnico e non sono in grado di rispondere alla tua richiesta. La guida che hai letto è una semplice raccolta di info che ho trovato per la strada, di mio c'è solo l'italiano. Se te la cavi con l'inglese ti consiglio di postare su Modem Help Forum UK (trovi il link un po più su), lì troverai certamente qualche guru del genere.
In ogni caso, da quel che leggo il tuo router ha qualche malfunzionamento. Sulla mia scatoletta, se spengo il wifi quest'ultimo resta spento, con o senza root. Prova a telefonare al centro assistenza Tiscali e chiedi loro dettagli… ovviamente senza far riferimento ai privilegi del superutente

Rispondi

Richard scrive:
9 maggio 2012 alle 14:01
Ciao, innanzitutto ringrazio per la ottima guida, che sperò mi sarà utile visti i numerosi probemi che stò avendo
Però già dall'inizio non riesco a dare al mio pc l'indirizzo 192.168.1.34 , in quanto mi dice che è proprietario del modem e non mi dà alcuna possibilità di assegnarlo.
Gentilmente, come posso fare?
Grazie

Rispondi

Gabriele Notte scrive:

9 maggio 2012 alle 16:38
Uhm… questo è curioso. So di nuovi firmware per cui questa guida non è valida. Anzitutto, via GUI riesci a ottenere i privilegi di root? (Tradotto: riesci a accedere col nome utente e la password qui postata?). Se ce la fai, siamo sicuri che il firmware è lo stesso della guida e c'è qualche speranza che io possa aiutarti.
Nel frattempo, cortesemente, puoi dirmi che sistema operativo usi (es. win seven, win xp etc)? Puoi riassumere brevemente i passi che hai eseguito? (tipo: sono andato all'icona in basso a destra etc).

Rispondi
domenico scrive:
4 giugno 2012 alle 18:09
ciao, e complimenti per l'articolo! qualche giorno fa ho fatto il deep reset e adesso non so più dove sbattere la testa e ti chiedo se mi puoi aiutare.
Non riesco più a visualizzare la pagina delle impostazioni 192.168.1.254 mi risponde con "Tempo per la connessione esaurito" tramite telenet entro tranquillamente.

Rispondi
Gabriele Notte scrive:
4 giugno 2012 alle 19:02
Dunque, se hai fatto il deep reset l'unica cosa che puoi fare è navigare nel sito tiscali.it e inserire le tue credenziali d'accesso, altrove non può connettersi per una imposizione del firmware. Se prima non metti le tue credenziali ogni tipo di accesso è impossibile.
Dopo, per connetterti via telnet, devi anche specificare la porta alla quale vuoi avere accesso che è la 8081. Quindi dovrai digitare
"telnet 192.168.1.254 8081"
Dimmi se ci sono altri prob ok?

Rispondi
domenico scrive:
4 giugno 2012 alle 20:42
ciao ti ringrazio tantissimo per la risposta,
il mio problema è che non sono più con operatore tiscali quindi navigando el sito tiscali non ho nessuna richiesta di credenziali d'accesso. Adesso sto navigando con infostrada.
che tu sappia non esiste un comando per abilitare linterfaccia web del 192.168.1.254.
con "telnet 192.168.1.254 8081" mi chiede le credenziali e entro senza problemi.

Rispondi
Gabriele Notte scrive:
4 giugno 2012 alle 21:06
Allora il problema è di firmware. Se il router lo hai preso con Tiscali sei vincolato a utilizzarlo esclusivamente con loro. Ufficialmente non puoi utilizzare il router Tiscali con altri operatori.
La soluzione esiste, dovresti installare un nuovo firmware, ma in questo non posso aiutarti dal momento che non ho mai provato (e non voglio cimentarmi nell'impresa!). So di gente che ci è riuscita ma ha perso definitivamente il voip. I vari firmware sono qui:
http://download.modem-help.co.uk/mfcs-A/Alcatel/Modems/TG784/
Se cerchi nel modem help forum troverai sicuramente guide e aiuti, ma sono in inglese.

Rispondi
domenico scrive:
4 giugno 2012 alle 21:26

ok ti ringrazio farò un tentativo con l'installazione di un firmware

Splatters scrive:
1 luglio 2012 alle 15:29
A me non mi fa accedere con le credenziali di root! mi dice che sono errate, come posso risolvere? Appena l'avevo preso la prima volta mi permetteva di accedere con root, ma ancora non funzionava il VoIP, dopo che la tiscali mi ha ripristinato il VoIP, non sono più potuto accedere con le credenziali root.

Rispondi

Gabriele Notte scrive:
2 luglio 2012 alle 11:40
Cosa significa "dopo che la tiscali mi ha ripristinato il VoIP"? Hai chiesto assistenza loro per qualche problema? Se così, probabilmente ti hanno aggiornato il firmware in remoto. Prova ad accedere con le credenziali normali (user/user) e leggi sotto la scritta Thomson Gateway la versione di firmware che stai usando. Questa guida è stata scritta per la versione 8.6.H.1. So di aggiornamenti da parte di Tiscali, ma come specificato nella guida non ho ancora idea di quali siano le nuove credenziali di root.

Rispondi

Samuele scrive:
3 luglio 2012 alle 09:52
Per quei pochi a cui interessasse, ho scritto un breve script combinando Telnet e Visual Basic che permette di cambiare IP pubblico, utile a chi scarica per automatizzare le cose. Lo script è:

```
Option explicit
Dim oShell
set oShell= Wscript.CreateObject("WScript.Shell")
oShell.Run "telnet 192.168.1.254 8081"
WScript.Sleep 1000
oShell.Sendkeys "[inserire_nome_utente_(meglio_rootT)]~"
WScript.Sleep 1000
oShell.Sendkeys "[inserire_password]~"
WScript.Sleep 1000
oShell.Sendkeys ":ppp ifdetach intf=Internet~"
WScript.Sleep 5000
oShell.Sendkeys ":ppp ifattach intf=Internet~"
WScript.Sleep 3000
oShell.Sendkeys "exit~"
WScript.Sleep 1000
oShell.Sendkeys "exit~"
Wscript.Quit
```

Scriverlo nel blocco note e salvare tutto come .vbs

Spero che a qualcuno serva, io lo uso per la riconnessione automatica con JDownloader visto che questo router è uno dei pochi per cui non si è riusciti a creare uno script di riconnessione in nessun modo.

P.S.: Gabriele, non sono riuscito a contattarti in quanto non hai scritto la tua mail da nessuna parte . Fammi sapere se questo script ti interessa; la mia mail è sammypillo96@gmail.com

Rispondi

Gabriele Notte scrive:

3 luglio 2012 alle 16:33
Ok, grazie mille del contributo. Non sono un fan dei servizi file hosting ma immagino sia utile. A breve aggiorno la guida citandoti come autore.

Rispondi
Samuele scrive:
3 luglio 2012 alle 16:36
Di nulla. Basta che sia a disposizione. Io, ieri, per farlo, ci ho messo tutto il giorno. Spero almeno che serva a qualcuno oltre che a me

Ciao!!!

Rispondi
Gabriele Notte scrive:
3 luglio 2012 alle 16:37
sicuro!

Rispondi
Domenico scrive:
26 luglio 2012 alle 21:01
Scusa Gabriele se torno a postare, volevo chiederti se conosci i parametri di euteliavoip o altro operatore voip. Naturalmente il mio modem è stato ripristinato con un firmware e adesso funziona tutto egregiamente sotto operatore infostrada. Lunica cosa che non riesco a convigurare sono le porte voip. Serebbe utile anche che mi indicassi una guida.
Buona serata-

Rispondi
Gabriele Notte scrive:
27 luglio 2012 alle 18:30
Uhm… i parametri che chiedi *dovrebbe* fornirli l'ISP quando fai l'attivazione del servizio voip, non è possibile acquisire un numero telefonico in maniera autonoma. Per evitare che qualcuno faccia il furbo, adesso ti rilasciano solo le credenziali del cliente, il resto dei parametri di configurazione sono blindati nel router che ti fornisce (impone) l'operatore stesso… è per questo che quando si cambia firmware il voip non funziona più.
Inoltre, in Italia non mi risulta un operatore che offre il servizio voip e la libertà di usare il dispositivo che preferisci. Il protocollo per il Voice Over IP è un protocollo pseudo real time che viene di volta in volta adattato alle infrastrutture del gestore. Es. i parametri Linkem (Wimax) saranno diversi da quelli Telecom (ADSL) o Fastweb (una sottorete – quindi niente ip pubblico). Se vuoi usare questo servizio, devi allinearti a una compagnia telefonica e restare vincolato alle loro condizioni.

Rispondi
Domenico scrive:
29 luglio 2012 alle 11:45
Ti ringrazio per la risposta, ovviamente sono già in possesso di parametri (EuteliaVoip) che sul mio telefonino android (Applicazione CsipSimple) connesso alla mia rete ADSL funziona egregiamente.
Ho provato a inserirli i miei parametri EuteliaVoip sul Thomson TG784 ma non funziona niente ne per telefonate in entrata ne in gresso. Su internet non sono riuscito a trovare una valida guida, stufo della situazione ho comprato un telefono VOIP – Gigaset A510 IP che ho collegato direttamente su una presa lan. Tutto funziona egregiamente tranne le chiamate in ingresso che sto cercando di risolvere con il supporto tecnico di Gigaset.
Ciao e di nuovo complimenti per il tuo blog.

Rispondi

Giulio Rossi scrive:
28 luglio 2012 alle 11:07
Ciao, ho letto la tua ottima guida, ma ho un dubbio: come faccio a sbloccare da telnet le porte tcp? Con il comando :connection bind application=CONE(UDP) port=XXXX ho inserito tutte le porte udp che dovevo sbloccare, ma ora mancano le tcp.
Ti faccio ancora i complimenti per la guida e ti ringrazio in anticipo per l'aiuto

Rispondi

Samuele scrive:
28 luglio 2012 alle 11:29
In teoria basta che metti:
:connection bind application=CONE(TCP) port=XXXX

Rispondi

Gabriele Notte scrive:
28 luglio 2012 alle 12:47
Piccola premessa: per sbloccare le porte basta agire via browser, il telnet lo usi solo per effettuare il NAT (Network Address Translation) del tuo ip.

Dunque, non ricordo di preciso dove è scritto, ma ricordo d'aver letto che su questa scatoletta infernale non puoi forzare le TCP in NAT. Sulla bibbia telnet fornita da Thomson c'è un esempio con relativa sintassi; tra i campi possibili c'è solo UDP. Ho caricato lo screenshot di pagina 85:

Uploaded with ImageShack.us

Rispondi

Qtka95 scrive:
9 settembre 2012 alle 07:10
grazie a tutti molto interessante !

Rispondi

primianoc scrive:
2 ottobre 2012 alle 09:46
Grazie per l'ottimo articolo, molto preciso e completo. Anche io ho un TG784, ma non riesco ad ottenere una connessione WIFI stabile ad una distanza superiore a 7 – 8 metri dal router. C'è un modo per amplificare il segnale?
Grazie ancora.
Saluti.

Rispondi

Gabriele Notte scrive:
2 ottobre 2012 alle 17:58
Risposta nerd: Se sei un dio dell'elettronica e dell'informatica puoi trasformare il router in qualunque cosa.
Risposta umana: No, non puoi far nulla, mi spiace
Risposta equa ed equilibrata: Il TG784, sul modulo wifi, vien fuori con lo standard di potenza più basso. Si tratta di un limite hardware, non ci puoi far nulla a meno di una modifica hardware, ma ciò va molto fuori la mia portata. Tutto ciò che posso consigliarti è di riposizionare l'access point.

Rispondi

primianoc scrive:

2 ottobre 2012 alle 18:21
La modifica hardware non è un grosso problema, ma prima di apportare modifiche permanenti vorrei tentare qualcosa via software.
Grazie per la risposta.

Rispondi

Ivano scrive:
30 novembre 2012 alle 19:15
Buonasera. Innanzitutto ringrazio infinitamente per il lavoro che avete fatto. Purtroppo il mio firmware è il 8.4.3.H e le credenziali di root sono errate. Mi spareste aiutare?

Rispondi

Gioogle scrive:
30 novembre 2012 alle 20:23
Sei sicuro che sia un Thomson tg784? (non tg784n)

Rispondi

Gabriele Notte scrive:
4 dicembre 2012 alle 10:44
Ciao Ivano, purtroppo non so esserti d'aiuto con quel firmware. Come ho scritto nell'introduzione della guida:
"Faccio presente che il mio firmware di riferimento è l'8.6.H.1, lo stesso montato dalla scatoletta infernale propinatami da Tiscali. Recentemente sto sentendo lamentele circa nuovi firmware ben più blindati. Al momento non posso esservi d'aiuto, sarà mia premura aggiornare la guida non appena scopro qualcosa. Nel caso, ricordo che il TG784 è un modello diverso dal TG784n, quindi le credenziali di accesso root saranno probabilmente diverse. Il mio aiuto può quindi limitarsi unicamente al primo modello."

Ogni tanto avvio nuove rierche ma fin'ora sono state infruttuose, mi spiace.

Rispondi

omar scrive:
16 dicembre 2012 alle 22:46
possiedo il router thomson tg784n.
posso utilizzare questo router con un altro provider adsl?
quali operazioni devo eseguire?
vi sarei molto grato se mi poteste aiutare in quanto ho acquistato subito il modem da tiscali, ma di fronte alla banda pessima di tiscali, voglio recedere e tornare a telecom.
aiutatemi

Rispondi

Gabriele Notte scrive:
17 dicembre 2012 alle 22:41
Dunque, se il software è brandizzato Tiscali non puoi usare il dispositivo con altro operatore. Dovresti cambiare firmware, ma tieni a mente che:
1. è un'operazione rischiosa che potrebbe compromettere il dispositivo
2. ad ora non mi risulta nessuno che sia stato capace di far funzionare il voip con firmware diverso daquello di Tiscali
Io personalmente non mi sono mai cimentato in questa operazione, se comunque vuoi provarci puoi cercare qui: http://download.modem-help.co.uk/mfcs-A/Alcatel/Modems/TG784n/

NOTA: io non possiedo un TG784n, ma un TG784; si tratta di modelli diversi, quindi non so se potrei esserti d'aiuto.

Rispondi

Pietro scrive:
14 aprile 2013 alle 10:02
complimenti per la tua preziosa guida
Sai per caso come si configura l'SNR ?
nel senso dei comandi telnet utili per modificarlo

grazie

Rispondi

Gabriele Notte scrive:
15 aprile 2013 alle 09:10
Non mi risultano comandi per modificare quel parametro. Il "rapporto segnale/rumore" è un indice della qualità della tua linea, non è modificabile con comandi telnet. Se hai problemi rivedi tutti i cablaggi che arrivano fino al router o eventualmente chiama l'assistenza.

Rispondi

nino scrive:
23 aprile 2013 alle 20:51
posseggo un tecnicolor tg784n v3 sono riuscito a configurare con tele tu il modem mi dà internet ok ma non navigo???????????

Rispondi

Gabriele Notte scrive:
24 aprile 2013 alle 22:48
Desolato, ma la mia guida fa riferimento a un modello diverso dal tuo con firmware rilasciato da Tiscali; purtroppo non posso aiutarti.

Rispondi

nino scrive:
25 aprile 2013 alle 08:09
ho avuto modo di vedere un po' in giro e ho visto che thompson e tecnicolor sono praticamente la stessa cosa…non ne sai nulla?

Rispondi

Gabriele Notte scrive:
26 aprile 2013 alle 19:04
Technicolor è stata acquisita da Thompson che adesso ne riproduce i marchi, ma ti prego di notare:
1 il TG784 e il TG784n sono 2 modelli diversi
2 il modello che utilizzo io è "brandizzato", ossia utilizza un firmware modificato dal gestore per adattarlo alla propria rete.
Davvero desolato, non mi sono mai tirato indietro a una risposta, ma davvero non posso aiutarti.

Rispondi

nino scrive:
27 aprile 2013 alle 08:39
anche il mo penso abbia un firmware fastweb anche se riesco ad entrare nella conf e in telnet…. vorrei tentare ugualmente qualcosa…tanto anche se si rompe non fà nulla…..grazie comunque…..

Simone scrive:
2 maggio 2013 alle 11:47

Ottima guida !
Il mio router è TG784n: mi aiuti a rendere visibile dall'esterno un disco fisso Lacie ?
Grazie

Rispondi

Gabriele Notte scrive:
2 maggio 2013 alle 16:03
Purtroppo non ho mai fatto una cosa simile, non saprei come aiutarti. Senza contare che, come già specificato, la mia guida si riferisce al TG784. Si, il TG784 e il TG784n sono modelli diversi

Rispondi

Angelo scrive:
23 maggio 2013 alle 09:51
Per il modello tg784n v3 per ora l'unico modo di navigare con altre compagnie è quello di modificare il file di configurazione a manina…se volete vi posso aiutare…io attualmente lo uso su linea infostrada e funziona tutto per bene…

Rispondi

nino scrive:
23 maggio 2013 alle 11:05
angelo…….se mi potessi aiutare te ne sarei molto grato……..ho scaricato il file di config. ma non sò dove mettere mani….come linea adsl uso teletu'

Rispondi

Angelo scrive:
23 maggio 2013 alle 12:18
allora nino partiamo con ordine, non è molto difficile ma se sbagliamo non funziona..per prima cosa devi rifare la configurazione dall inizio inserendo i dati corretti (li trovi qui http://supporto.teletu.it/assistenza-tecnica/configurazioni/modem-e-router-adsl/)
ovviamete anche le tue credenziali di accesso alla rete…quando hai finito salva la configurazione e scaricatela sul pc… poi vai qui (https://docs.google.com/file/d/0B7Y0fZvN7UuveV9tRG1BYUNyTzA/edit?usp=sharing) e scarica questa configurazione (questa è la mia funzionante con infostrada)…con un editor di testo aggiungi i tuoi mac address (che prelevi dal tuo file di configurazione salvato) alle voci dhcs.ini e hostmgr.ini (per facilitarti troverai scritto MACADDRESS dove devi sostituire) e ovviamente cambia anche nome utente e password di connessione alla voce ppp.ini (le prendi dal tuo file che hai salvato…purtroppo per ora si puo' fare solo cosi perchè sono cifrate)…
abbiamo finito, ricarica la nuova configurazione poi con il cavo di rete ti connetti al router (le pass di accesso sono admin e admin) e imposta il wirless come vuoi ssid password ecc ecc. il tutto è testato e funziona tutto anche la condivisione di file e stampanti…se hai bisogno fai un fischio…ciao

Rispondi

nino scrive:
24 maggio 2013 alle 13:08
Angelo se mi puoi dare un'altro aiutino per favore….non riesco a far funzionare la stampante collegata al tg784n v3

Rispondi

Angelo scrive:
23 maggio 2013 alle 18:09
nino io ti ho risposto ma il commento è in attesa di moderazione…se vuoi ci sentiamo x mail campanelliangelo @ gmail . com

Rispondi

Gabriele Notte scrive:
23 maggio 2013 alle 18:41
Non prendo responsabilità per i commenti… che tra l'altro non ho tempo di testare
ps è finito in moderazione per una scelta automatica di wordpress… probabilmente con tutti quei link ti avrà visto come ipotetico spammer

Rispondi

nino scrive:
24 maggio 2013 alle 11:21
angelo sei un genio…….non ho testato a pieno ma al momento funziona tutto……..grazie……

Rispondi

angelo scrive:
24 maggio 2013 alle 16:27
adesso non esageriamo…bastava abilitare il nat e modificare un paio di cosine cmq quel router è una bomba!!! a presto…ciao

Rispondi

nino scrive:
25 maggio 2013 alle 11:53
no posso esagerare…visto che in rete da un mese non trovavo nulla in merito……..sono riuscito a configurare la stampante….sai se funziona anche la porta wan…….

Rispondi

Angelo scrive:
25 maggio 2013 alle 16:08
per la porta wan non ti so dire….comunque se è supportata dal firmware sicuramente funziona perchè alla configurazione non è stato tolto niente…

Angelo scrive:
23 maggio 2013 alle 18:48
lo capisco Gabriele, per questo ho messo il mio indirizzo mail…tra l'altro la guida l' avevo già postata su un altro forum (che non mi sembra il caso di scrivere onde evitare spam)…

Rispondi

Angelo scrive:
23 maggio 2013 alle 18:49
P.s ma sei di Capurso??

Rispondi

Gabriele Notte scrive:
27 maggio 2013 alle 20:42
No, ma ci sei andato vicino

Rispondi

Marcus Leo Wood scrive:
26 luglio 2013 alle 12:04
Ragazzi, avete news sulle credenziali di root del 784N con firmware 8.C.D.9

Rispondi

elka44 scrive:

26 luglio 2013 alle 12:27
SU 8 L C 6, BISOGNA INSERIRE Administrator…senza passw

Rispondi

Angelo Campanelli scrive:
9 settembre 2013 alle 13:12
Ragazzi è stata rilasciata una versione firmware no brand… se a qualcuno interessa la mia mail è quella scritta qualche commento sopra…ciao

Rispondi

andrea scrive:
1 marzo 2014 alle 16:44
sei semplicemente un grande non so come ringraziarti!!!! idolooo

Rispondi

Gabriele Notte scrive:
5 marzo 2014 alle 18:16
uhm…. grazie

Rispondi

Marcello Testi scrive:
16 marzo 2014 alle 21:36
Grazie mille, sono un vecchio cliente Tiscali (con VOIP) e ultimamente il DNS funziona malissimo. Grazie alle tue dritte sono riuscito a impostare quelli che volevo io, ora a disposizione di tutti i device collegati al mio router. Molto utile!

Rispondi

Gabriele Notte scrive:
20 marzo 2014 alle 21:13
Eh, grazie mille!

Rispondi

Franzicone scrive:
18 marzo 2014 alle 12:21
Ciao, mi risolveresti un milione di problemi se mi aiutassi con il mio modem TG784n v3. Ho fastweb, e non riesco in alcun modo ad aprire delle porte che mi servono…Aiutami ti prego

Rispondi

Gabriele Notte scrive:
20 marzo 2014 alle 21:16
Come scritto in apertura la guida fa riferimento al TG784, il TG784n è un modello diverso e purtroppo non ho modo di aiutarti direttamente. Se il router te l'ha imposto fastweb puoi rivolgerti alla loro assistenza tecnica. Altrimenti, puoi provare qui

Rispondi

Segui “Vuoto Inquieto”

Telnet Commands for a Thomson / Technicolor Router

Tested on a TG587n V2 but may work on other Thomson routers

Important

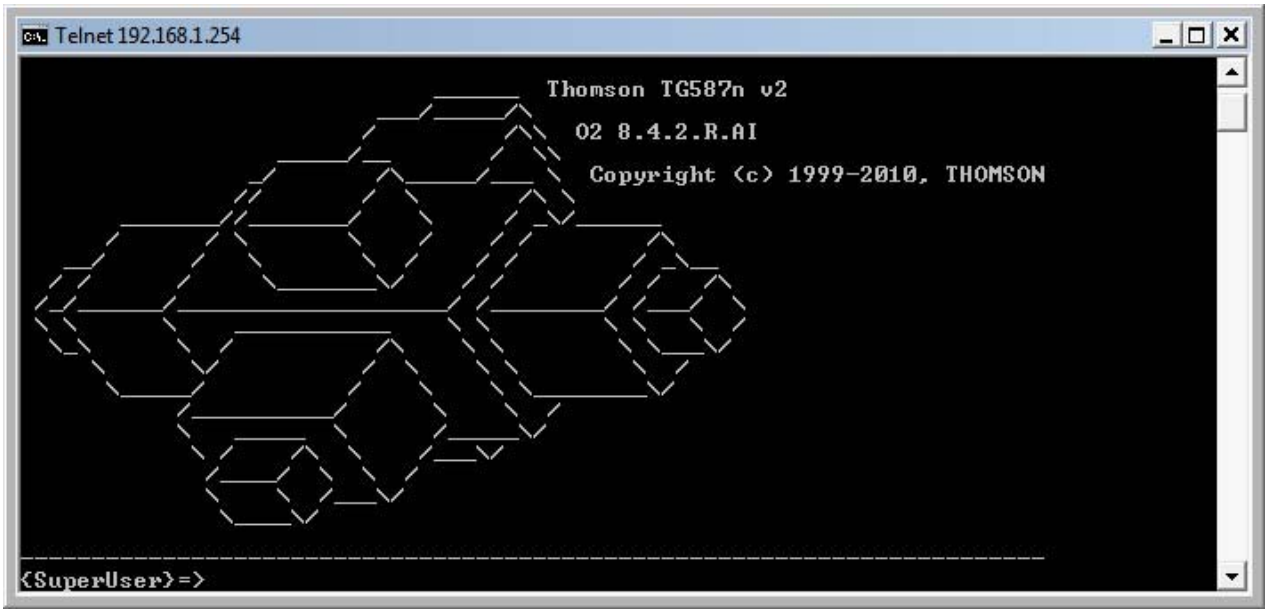
Use the routers web interface to backup the router settings before playing.
Reinstalling the backup or in the worst case resetting to factory default and reinstalling the backup should get things back to how they were.
Use these commands at your own risk.

Enable Telnet in Vista or Windows 7

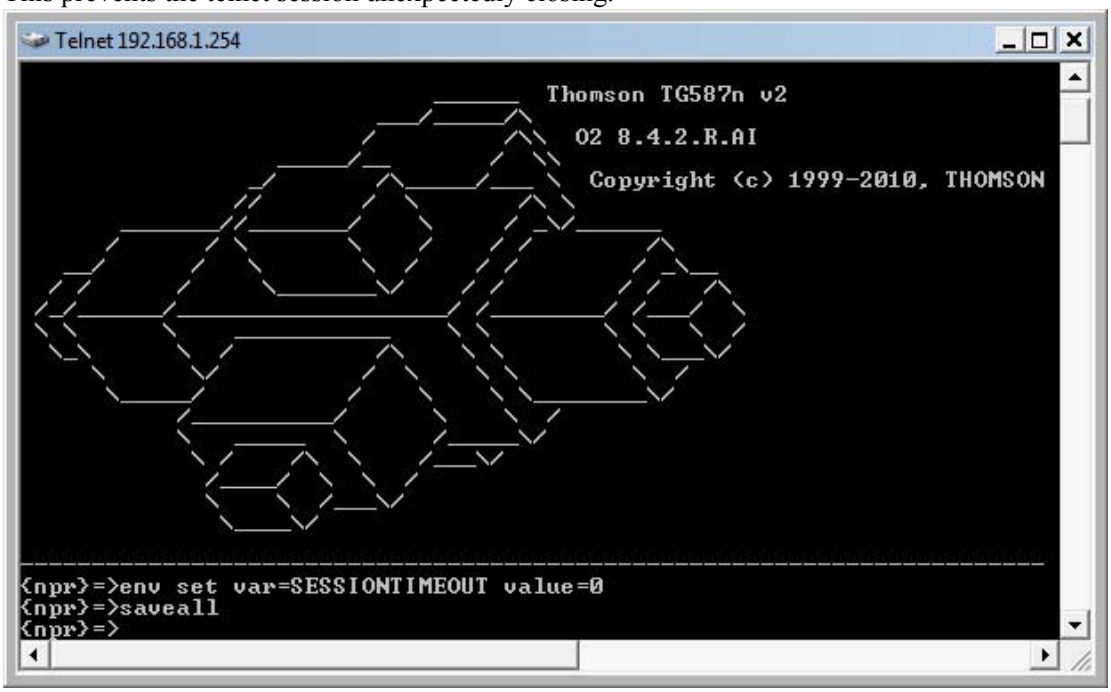
If using Vista or Windows 7, telnet is not enabled by default but it's very easy to do and you only need do this once.
Go to “Control Panel” > “Programs and Features” > click on “Turn windows Features On and Off” > place a tick in “Telnet Client” > click ok.

Start a telnet session to the router.

Click on "start" in the bottom left corner of the desk top, in the search box (vista) or run box (windows xp) type ***command*** then press enter.
A black command window should pop up, in here type ***telnet 192.168.1.254***
You will be asked for your routers username and then password, it’s the same ones used to access the routers web interface.



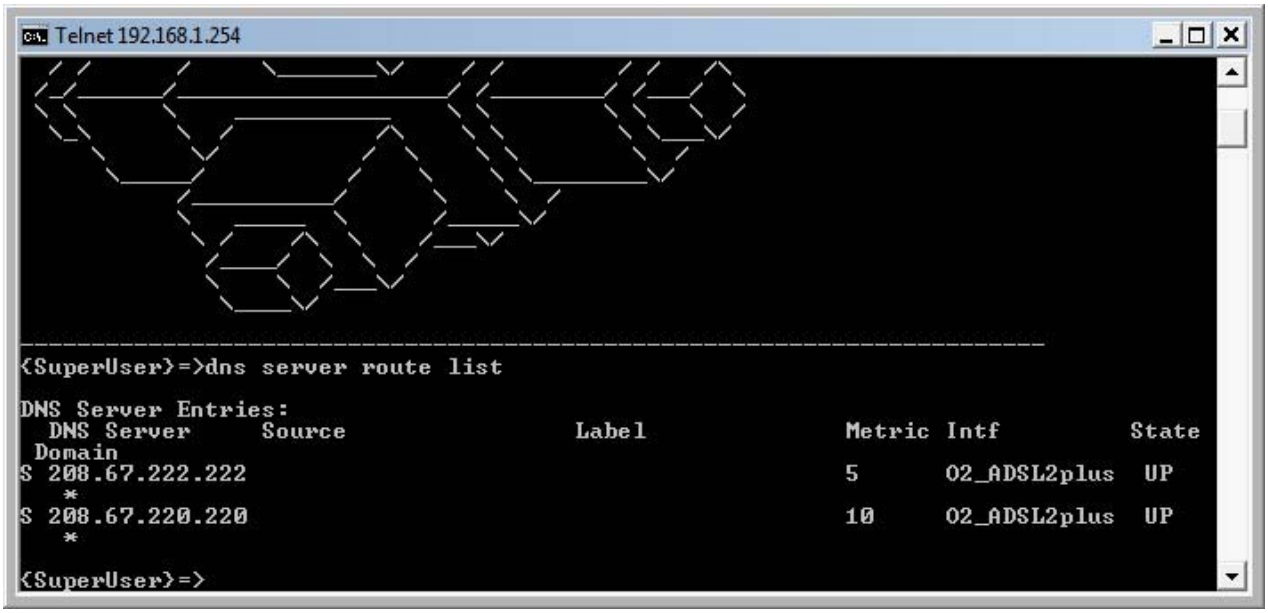
The first thing to do is disable the routers telnet timeout.
This prevents the telnet session unexpectedly closing.



Just enter the two commands as shown above to permanently disable the timeout.

Telnet example

This example displays the IP address of the DNS resolvers held in the router.
Issue the command "***dns server route list***"



Make a note of the interface shown here, it will be needed in some other commands on this page.
eg. the interface shown above is ***O2_ADSL2plus*** this may not be the same as shown by your router.

Set the router to use OpenDNS -- R8 Firmware

Command	Comments
dns server route list	List all DNS resolvers set
dns server route flush	Clear
dns server route add dns=208.67.222.222 metric=0 intf=Internet	See note (1) below regardi
dns server route add dns=208.67.220.220 metric=0 intf=Internet	See note (1) below regardi
dns server route list	List all DNS resolvers set
saveall	Make the change permane

The ISP DNS settings may creep back in over time.
A metric value of 0 has been used to give these new DNS settings priority over any ISP settings.
eg the lower the metric the higher the priority.

Undo, return to obtaining DNS resolvers via DHCP

Command	Comments
dns server route flush	Clear
dns server route list	List all DNS resolvers set
saveall	Make the change permane

May need to reboot or renew the ppp session to obtain the DNS settings.

Set the router to use OpenDNS -- New R10 Firmware

Command	Comments
dns server forward dnsset list	List all DNS resolvers set
dns server forward dnsset flush	Clear

dns server forward dnsset add set=0 dns=208.67.222.222 metric=0 intf=Internet	See note (1) below regardi
dns server forward dnsset add set=0 dns=208.67.220.220 metric=0 intf=Internet	See note (1) below regardi
dns server forward dnsset list	List all DNS resolvers set
saveall	Make the change permane

The ISP DNS settings may creep back in over time.
A metric value of 0 has been used to give these new DNS settings priority over any ISP settings.
eg the lower the metric the higher the priority.

Undo, return to obtaining DNS resolvers via DHCP

Command	Comments
dns server forward dnsset flush	Clear
dns server forward dnsset list	List all DNS resolvers set
saveall	Make the change permane

May need to reboot or renew the ppp session to obtain the DNS settings.

Update OpenDNS using Dynamic DNS

Command	Comments
dyndns service list	View existing settings -- It changing
dyndns service modify name=custom server=updates.dnsomatic.com updateinterval=10800	Change service provider to updateinterval is 3 hours. (
saveall	Make the change permane

Ensure your opendns account is set to -- enable dynamic IP update
Go to www.dnsomatic.com , sign in with your OpenDNS username / password.
While there, enable update opendns.

Go to the routers web interface Toolbox > Dynamic DNS > Configure :-
Tick "Enabled"
Interface -- Internet -- **See Note (1)**
Username -- Opendns username
Password -- Opendns password
Service -- custom
Host -- enter your opendns network label or enter the catch all -- all.dnsomatic.com
Click "Apply"

Check the routers event log to confirm "dyndns host has been updated".

Disable telnet timeout

Command	Comments
env get var=SESSIONTIMEOUT	Check existing setting.
env set var=SESSIONTIMEOUT value=0	Disable session timeout.
saveall	Make the change permane

Get router stats

Command	Comments
xdsl info expand=enabled	See Telnet Scripting for a

Force connection modulation mode to ADSL1, ADSL2 or ADSL2+ (also disable Annex M)

A useful byproduct of this command is that it causes a resync.
ie resetting the modulation to default (ie no change) can be used to force the router to perform a resync.

Command	Comments
xdsl debug multimode	Show all enabled modes.
xdsl debug multimode config=t1.413issue2+g992.1_annex_a	This forces ADSL1 (ie g9
xdsl debug multimode config=t1.413issue2+g992.3_annex_a	This forces ADSL2 (ie g9
xdsl debug multimode config=t1.413issue2+g992.5_annex_a	This forces ADSL2+ (ie g
xdsl debug multimode config=t1.413issue2+g992.1_annex_a+g992.3_annex_a+g992.3_annex_l+g992.5_annex_a	Disable Annex M on all c
xdsl debug multimode config=t1.413issue2+g992.1_annex_a+g992.3_annex_a+g992.3_annex_l+g992.3_annex_m+g992.5_annex_a+g992.5_annex_m	Default, all modes availab
saveall	Use one of the above com

Drop and Re-start ADSL (resync)

Command	Comments
xdsl config status=down	Drop ADSL connection
xdsl config status=up	Raise ADSL connection

Drop / Start PPP Session

With some ISP connections this may change your gateway it may also change your IP address.
Useful if your ISP sometimes has congested gateways.

Command	Comments
ppp ifdetach intf=Internet	Drop PPP
ppp ifattach intf=Internet	Connect PPP

DHCP Client Lease Renew

Command	Comments
dhcp client ifrenew intf=Internet	See note (1) below regard
dhcp client iflist expand=enabled	Optional -- View DHCP C

Reboot the router

Command	Comments
system reboot	

Change router password -- I've found this troublesome using the web interface.

Command	Comments
user config name=SuperUser password=mypassword	Must be an existing usern "Administrator"
user config name=Administrator password=mypassword	
saveall	Don't forget this!

Create username with "root" privileges.

Command	Comments
script add name=useroot command="user add name=me password=pass role=root"	Change "me" and "pass" f password.
script run name=useroot pars=""	Run the script.
saveall	Don't forget this!

Spoof routers WAN MAC

Command	Comments
ip iflist expand=enabled	Show routers MAC and ot
ip ifdetach intf=Internet	See note (1) below regardi
ip ifconfig intf=Internet hwaddr=00:xx:xx:xx:xx:xx	See note (1) Replace "xx"
ip ifattach intf=Internet	See note (1) below regardi
saveall	Don't forget this!

Disable CWMP -- Remote management by the ISP

Command	Comments
service system list	Show if enabled or disable
service system modify name=CWMP-S state=disabled	Disable remote assistance
service system modify name=CWMP-C state=disabled	Disable checking for firmv
saveall	Don't forget this!

Undo -- Enable CWMP -- default mode

Command	Comments
service system modify name=CWMP-S state=enabled	Return to default setting
service system modify name=CWMP-C state=enabled	Return to default setting
saveall	Don't forget this!

Enable reply to Pings from WAN

Command	Comments
service system list name=PING_RESPONDER expand=enabled	Check if "interface group' enabled)
service system ifadd name=PING_RESPONDER group=wan	Add to WAN "interface gr
saveall	Don't forget this!

Undo -- Disable reply to Pings from WAN -- Default mode

Command	Comments
service system ifdelete name=PING_RESPONDER group=wan	Remove WAN from "inter
saveall	Don't forget this!

Disable wireless n speed

Command	Comments
wireless ifconfig	Show wireless settings (o
wireless ifconfig interop=802.11b/g	Disable wireless n
saveall	Don't forget this!

Undo -- Enable all wireless speeds (TG587n only)

Command	Comments
wireless ifconfig interop=802.11b/g/n	Enable wireless b, g and n
saveall	Don't forget this!

Change wireless n speed (TG582n only)

Command	Comments
wireless radio channelwidth=20 sgi=enabled	Wireless Speed 144(n)
wireless radio channelwidth=20/40 sgi=disabled	Wireless Speed 270(n)
wireless radio channelwidth=20/40 sgi=enabled	Wireless Speed 300(n)
wireless radio channelwidth=20 sgi=disabled	Wireless Speed 130(n) **D**
saveall	Don't forget this!

When in 270(n) or 300(n) mode the router is not very good at switching off the extra channels when not needed or when it may cause interference to other wireless access points.
For this reason please use these modes responsibly.

Wireless n tweaks (TG582n only)

Commands	Comments

wireless radio cdd=enabled	enabled = reduce dead sp disabled = default
wireless radio stbc=enabled	enabled = Improve signal disabled = default http://en.wikipedia.org/w %93time_block_code
wireless radio frameaggregation=ampdu	Improve throughput by cl amsdu -- generaly most e ampdu -- (Default) Better http://en.wikipedia.org/w
saveall	Don't forget this!

Change MTU setting

Command	Comments
ip iflist	Show present setting (opt
ip ifconfig intf=Internet mtu=1458	See note (1) regarding "ir
ip ifconfig intf=LocalNetwork mtu=1458	Set MTU for LAN
saveall	Don't forget this!

Undo -- Return to default MTU of 1500

Command	Comments
ip ifconfig intf=Internet mtu=1500	See note (1) regarding "ir WAN
ip ifconfig intf=LocalNetwork mtu=1500	Set 1500 MTU for LAN
saveall	Don't forget this!

Disable ethernet port

Command	Comments
eth device ifconfig intf=ethif1 state=disabled	Disable ethernet port 1. (
saveall	Don't forget this!
eth device iflist	List state of ports (option

Undo -- Enable ethernet port

Command	Comments
eth device ifconfig intf=ethif1 state=enabled	Enable ethernet port 1. (
saveall	Don't forget this!

Wireless MAC access control -- Block a wireless connection

Command	Comments

wireless macacl add ssid_id=0 radio_id=0 hwaddr=00:xx:xx:xx:xx:xx permission=allow	Change "00:xx:xx:xx:xx PC . Only used once for each
saveall	

Use the following commands to stop or allow a wireless connection as required.

Command	Comments
wireless macacl list	Optional -- Display pres
wireless macacl modify ssid_id=0 radio_id=0 hwaddr=00:xx:xx:xx:xx:xx permission=deny	Deny connection from t
wireless macacl modify ssid_id=0 radio_id=0 hwaddr=00:xx:xx:xx:xx:xx permission=allow	Allow connection from

Undo -- Remove from Wireless MAC access control list

Command	Comments
wireless macacl list	Optional -- display MA
wireless macacl delete ssid_id=0 radio_id=0 hwaddr=00:xx:xx:xx:xx:xx	Remove MAC from list
saveall	Don't forget this.

Check which devices are connected

Command	Comments
hostmgr list	Look in the "Flags" column, "C" indicates connected

---

Enable WPS -- This is disabled by default on some models.

Command	Comments
wireless wps config state=enabled	The WPS button should now work
saveall	

Undo -- Disable WPS

Command	Comments
wireless wps config state=disabled	
saveall	

Syslog -- This log survives a reboot

Command	Comments
syslog msgbuf show	View router log in the
syslog msgbuf send dest=192.168.1.67	Send all the log to sysl
syslog msgbuf flush	Clear the log

~~ftp://ftp.3com.com/pub/utilbin/win32/3CSyslog.zip~~ Link now dead, a google search will find a suitable syslog client.	Free syslog client fron
syslog config activate=enabled	Enable continuous upd
syslog ruleadd fac=all sev=debug dest=192.168.1.67	Rule to send all the log

---

Change the LAN IP of a Connected Device -- Static DHCP

Command	Comments
dhcp server lease list	View the pool name a
dhcp server lease delete clientid=00:23:4d:xx:xx:xx	First delete the device clientid = [the MAC a
dhcp server lease add clientid=00:23:4d:xx:xx:xx pool=LAN_private addr=192.168.1.100 leasetime=0	clientid = [the MAC a pool = [the pool name addr = [the lan IP you 252] leasetime=0 [infinite l
saveall	Don't forget this.
Reboot the device to obtain the new IP address	

Disable the Factory Reset Button

Caution -- If you forget the username or password you will be locked out of the router permanently. Be very sure you know the risks before using this command.

Command
system config resetbutton=disabled
saveall

Undo -- Enable the Factory Reset Button (Default)

Command
system config resetbutton=enabled
saveall

Fix a Problem with VOIP not working

Command
connection unbind application=SIP port=5060
saveall

Undo -- Default

Command
connection bind application=SIP port=5060
saveall

Disable Intrusion Detection (IDS) May help with online game problems but reduces security.

Command
ids config state=disabled
saveall

Undo

Command
ids config state=enabled
saveall

Disable CPU Low Clock Speed -- TG587n v2 and TG582n

Make the router more responsive.

Command	Comments
pwr config	Optional - view state
pwr config cpu-lowspeed=disabled	Disable slow speed CPU
saveall	Make permanent

Undo -- default

Command	Comments
pwr config cpu-lowspeed=enabled	Enable slow speed CPU
saveall	Make permanent

Additional *pwr config* commands

Command	Comments
pwr config eco-manager=enabled / disabled	The ECO manager
pwr config cpu-microsleep=enabled / disabled	Allow the CPU to use low power instructions
pwr config cpu-lowspeed=enabled /disabled	Allows the CPU to adjust it's clock speed.
pwr config usb-controller=enabled / disabled	The USB controller
pwr config wlan-pwrcontrol=enabled / disabled	Wireless LAN power control

Note:
There are reports that having these power settings enabled can cause intermittent network and internet access problems.
Disabling all of these settings followed by a router reboot cured the problem.
Awaiting more information on this issue.

Cone-type NAT's for Teredo Tunneling

Required for Windows Meeting Space
The default for a Thomson router is symmetric-type NATs
UPnP needs to be enabled in the routers GUI.
Test with Microsoft's Internet Connectivity Evaluation Tool

Command
connection bind application=CONE(UDP) port=3544
saveall

Undo -- return to the default of symmetric-type NATs

Command
connection unbind application=CONE(UDP) port=3544
saveall

Log Web Site Visits

Command	Comments
dsd config state=enabled	Enable address based filtering.
dsd syslog config syslog=all	Select what to log
saveall	Make the change permanent.
dsd syslog list	Use this command to view the log. Alternatively use a syslog client as show in the syslog commands above.
syslog msgbuf flush	Empty the log. -- Optional

This may quickly fill the routers memory and cause unexpected issues.

Undo

Command	Comments
dsd syslog config syslog=none	
dsd config state=disabled	
saveall	

SNTP -- Change time server settings

Command	Comments
sntp list	List the time servers
sntp add name=2.uk.pool.ntp.org	Add a time server. This can be done in the routers GUI
sntp delete name=2.uk.pool.ntp.org	Delete a time server. This can be done in the routers GUI
sntp config poll=360 ***saveall***	Set poll interval to 6 hours. Default is 60 minutes.
system settime	View system time settings

Unbind the FTP ALG -- Fix access problem to a local FTP server from the internet.

Normal port forward rules are still required.

Command	Comments
connection bindlist	Optional - view the bind list
connection unbind application=FTP port=21	Unbind the FTP helper
connection bindlist	Optional - view the bind list
saveall	Make permanent

Undo

Command	Comments
connection bind application=FTP port=21	Bind the FTP helper to port 21
connection bindlist	Optional - view the bind list
saveall	Make permanent

DLNA Server (Media Sharing) Not Discovered Across LAN / WLAN. SOLVED

This issue is present in firmware 8.2.7.7 Don't know about other firmware versions.

Command	Comments
eth bridge igmpsnooping config	View present state. If state=enabled then apply the fix
eth bridge igmpsnooping config brname=bridge state=disabled	Apply fix
saveall	Make permanent

Turn Off LED Lights

Command	Comments
system qual led value=alloff	Turn all LED's off
saveall	Make permanent

Undo -- Enable LED lights

Command	Comments
system qual led value=unlock	Enable LED's
saveall	Make permanent

Correct The Decimal (.) and Digit (,) Separators

Some firmware versions confuse the decimal point with the comma.

Command	Comment
system locale	Display present settings
system locale dec_symbol=.	Assign the decimal point
system locale group_symbol=,	Assign the comma
saveall	Make permanent

No Auto Retrain

Prevent reconnecting after dropping the ADSL connection

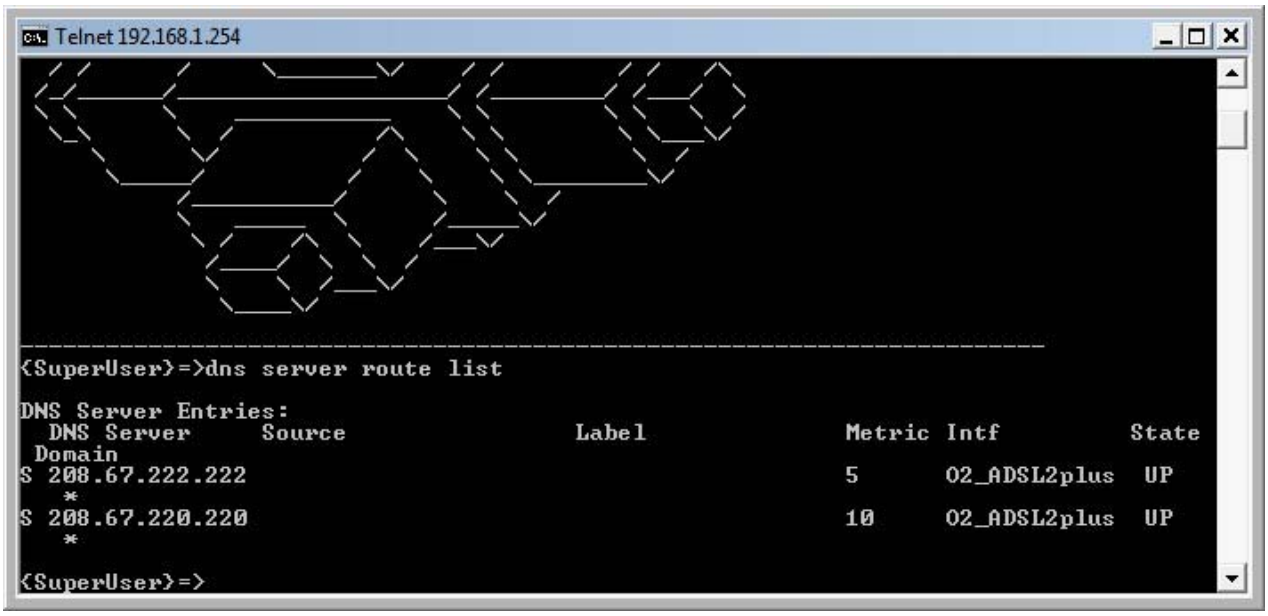
Commands	Comments
xdsl qual freeze-showtime state=enabled	Stop reconnecting
saveall	Make permanent

Undo

Commands	Comments
xdsl qual freeze-showtime state=disable	Default
saveall	Make permanent

Note (1) :

The ***"intf=Internet"*** part of the above commands may need to be changed depending on the routers firmware.
ie ***"intf=Internet"*** should be correct for standard firmware.
O2 supplied routers may need ***"intf=Internet"*** replacing with :-
For O2 supplied routers on a LLU connections replace with ***"intf=O2_ADSL2plus"*** or in some cases ***"intf=RoutedEthoA"***
For O2 supplied routers on the Access service replace with ***"intf=O2_ADSL"***
Hint - You can check which one to use for the WAN interface by looking at the results from the ***"dns server route list"*** command.
See the screen capture below, in this case it's ***"intf=O2_ADSL2plus".***



Note (2)

To close the telnet session type -- **exit** -- press "enter"

Reference

CLI Reference Guide TG857n v2 r8.4.3
This reference guide also shows all the hidden commands.
Source Produced by Alex at www.modem-help.co.uk

Thomson CLI Reference Guide TG587n
Thomson CLI Reference Guide TG585 v7
Technicolor Customer Release Note - Main Track R8.4.3 Maintenance 2

Telnet Project for Thomson / Technicolor Routers

Telnet commands for a Thomson router

Change DNS Settings on a Thomson Router -- (Two methods)

Multiple SSID

Web Access Control Schedule (TOD)

Web content filter

Telnet scripting

Enable WDS

Connect Two Thomson Routers Together

Basic DMZ on a Thomson Router

Advanced DMZ on a Thomson TG587n

Forward all ports to a specific LAN IP

IP QoS

Wake on LAN from Internet

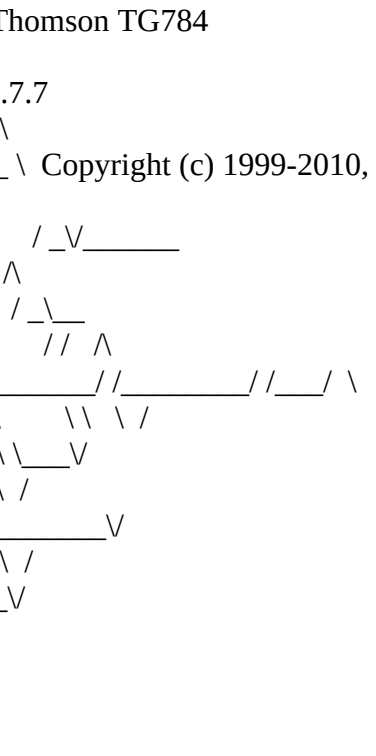
Xbox and PS3 on a Thomson router

Remote Access to a Thomson Router

Fix a problem with VPN Connections (Firmware Release 8.4.3 only)

Bridge Mode and Create a EWAN Port

Home Page



Following commands are available :

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

Following command groups are available :

contentsharing firewall printersharing service connection
cwmp dhcp dns dsd dyndns
eth atm config debug env
expr grp hostmgr ids igmp
interface ip ipqos label language
mbus memm mlp nat ppp
pptp script sntp software statecheck
system systemlog tls tod upgrade
upnp user voice wansensing wireless
xdsl

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expr grp hostmgr ids igmp
interface ip ipqos label language
mbus memm mlp nat ppp
pptp script sntp software statecheck
system systemlog tls tod upgrade
upnp user voice wansensing wireless
xdsl

adsl
Following commands are available :

info : Displays status information about modem
config : Modify/Display dsl configuration

Following command groups are available :

debug qual

adsl config
Modify/Display dsl configuration
Syntax : config [xdsltype = <{adsl|adsl2|adsl2+}>]

```
            [detect-lop = <{disabled|enabled}>]
            [syslog = <{disabled|enabled}>]

Parameters :
  [xdsltype = <{adsl|adsl2|adsl2+}>]
    alias opermode xdsltype=adsl alias opermode=multimode; xdsltype=adsl2
    alias opermode=multi_readsl2; xdsltype=adsl2+ alias opermode=
    multi_adsl2plus
  [detect-lop = <{disabled|enabled}>]
     Detect Loss Of Power
  [syslog = <{disabled|enabled}>]
     Log in syslog during showtime

  adsl debug
Following commands are available :

bitloadinginfo   : Displays # bits per tone
deltconfig       : Dual Ended Line Testing interface
deltinfo         : Dual Ended Line Test result display
modemoptioninfo  : The modem options bitmap display
multimode        : Config custom multimode
traceconfig      : Config the adsl tracelevel

  adsl debug bitloadinginfo
Displays # bits per tone
Syntax : bitloadinginfo
  adsl debug deltconfig
Dual Ended Line Testing interface
Syntax : deltconfig [state = <{disabled|enabled}>]

Parameters :
  [state = <{disabled|enabled}>]
     Enable/Disable dual ended line testing

  adsl debug deltinfo
Dual Ended Line Test result display
Syntax : deltinfo
  adsl debug modemoptioninfo
The modem options bitmap display
Syntax : modemoptioninfo
  adsl debug multimode
Config custom multimode
Syntax : multimode [config = <[+/-]flag[+/-flag...]{default t1.413issue2
                    g992.1_AnnexA g992.2 g992.3_AnnexA g992.3_AnnexL
                    g992.3_AnnexM g992.5_AnnexA g992.5_AnnexM}>]


Parameters :
  [config = <[+/-]flag[+/-flag...]{default t1.413issue2 g992.1_AnnexA g992.2
          g992.3_AnnexA g992.3_AnnexL g992.3_AnnexM g992.5_AnnexA
          g992.5_AnnexM}>]
     The custom multimode bitmap

  adsl debug traceconfig
Config the adsl tracelevel
Syntax : traceconfig level = <{0|1|2}>
```

Parameters :
  level = <{0|1|2}>
    Trace Level (0=disable tracing; 1=enable dsl manager tracing; 2=enable
   dsl driver tracing)

  adsl info
Displays status information about modem
Syntax : info [expand = <{disabled|enabled}>]

Parameters :
  [expand = <{disabled|enabled}>]
    Enable/Disable expand line info

  adsl qual
Following commands are available :

lov   : Longitudinal Balance (LOV) Test Mode -continuously sending-
lcl   : Longitudinal Balance (LCL) Test Mode -online quiet-

  adsl qual alb
Analog front end LoopBack Test Mode
Syntax : alb address = <ip-address>
         port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
              bootps|chargen|clearcase|daytime|discard|dns|domain|doom|
              echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|
              ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
              kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|
              netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
              pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|
              rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
              sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|
              ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
              xwindows} or number>

Parameters :
  address = <ip-address>
    Remote IP Address
  port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|
       clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-
       data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|
       ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-
       ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-
       srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
       snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
       telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
       whoami|xwindows} or number>
    Remote IP Port

  adsl qual lcl
Longitudinal Balance (LCL) Test Mode -online quiet-
Syntax : lcl
  adsl qual lov
Longitudinal Balance (LOV) Test Mode -continuously sending-
Syntax : lov type = <{normal|annex_l_wide|annex_l_narrow}>

Parameters :

type = <{normal|annex_l_wide|annex_l_narrow}>
Type of (LOV) Test Mode

adsl qual mib
Retreive extra adsl info Test Mode
Syntax : mib address = <ip-address>
port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
bootps|chargen|clearcase|daytime|discard|dns|domain|doom|
echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|
ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|
netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|
rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|
ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
xwindows} or number>

Parameters :
address = <ip-address>
Remote IP Address
port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|
clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-
data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|
ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-
ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-
srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>
Remote IP Port

adsl qual qln
Quiet Line Noise Test Mode
Syntax : qln address = <ip-address>
port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
bootps|chargen|clearcase|daytime|discard|dns|domain|doom|
echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|
ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|
netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|
rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|
ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
xwindows} or number>

Parameters :
address = <ip-address>
Remote IP Address
port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|
clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-
data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|
ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-
ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-

```
        srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
        snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
        telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
        whoami|xwindows} or number>
     Remote IP Port

   ar
Following command groups are available :

group

   ar group
Following command groups are available :

member

   ar group member
Following commands are available :

add             : add member
delete          : delete member
list            : members

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

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

   username = <{Administrator|su|tech|steve}>


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

Parameters :
   groupname = <{root|daemon|bin|sys|adm|tty|disk|lp|mail|news|uucp|proxy|kmem|
            dialout|fax|voice|cdrom|floppy|tape|sudo|audio|dip|postgres|www-
```

data|backup|operator|list|irc|src|gnats|shadow|utmp|video|staff|
games|users|nogroup|SuperUser|TechnicalSupport|Administrator|
LAN_Admin|PowerUser|WAN_Admin}>

username = <{Administrator|su|tech|steve}>

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

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

atm
Following commands are available :

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

Following command groups are available :

cac debug oam phonebook qosbook

atm cac
Following commands are available :

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

atm cac config
Configure ATM connection admission control.
Syntax : config port = <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>
state = <{disabled|enabled}>

Parameters :
port = <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>
The port for which CAC is configured.
state = <{disabled|enabled}>

Enable/disable CAC for an ATM port.

atm cac list
List all CAC parameters.
Syntax : list
atm cac overbooking
Configure ATM overbooking parameters.
Syntax : overbooking [rt = <number{0-1000}>] [nrt = <number{0-1000}>]

Parameters :
[rt = <number{0-1000}>]
The realtime overbooking percentage.
[nrt = <number{0-1000}>]
The non-realtime overbooking percentage.

atm debug
Following commands are available :

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

atm debug aal5stats
Display AAL5 port specific atm statistics.
Syntax : aal5stats port = <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>
vpi = <number{0-31}> [vci = <number{0-511}>]
[clear = <{disabled|enabled}>]

Parameters :
port = <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>
The port number for which statistics will be retrieved.
vpi = <number{0-31}>
The VPI number for which statistics will be retrieved.
[vci = <number{0-511}>]
The VCI number for which statistics will be retrieved.
[clear = <{disabled|enabled}>]
Clear the statistics after request.

atm debug gstats
Display ATM global statistics.
Syntax : gstats [clear = <{disabled|enabled}>]

Parameters :
[clear = <{disabled|enabled}>]
Clear the statistics after request.

atm debug portstats
Display port specific atm statistics.
Syntax : portstats port = <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>
[clear = <{disabled|enabled}>]

Parameters :
port = <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>
The port for which statistics will be retrieved.
[clear = <{disabled|enabled}>]
Clear the statistics after the request.

atm debug traceconfig
Display/Modify AAL5 debug trace configuration.
Syntax : traceconfig [len = <number>] [intf = <{}>]
[state = <{disabled|enabled}>]

Parameters :
[len = <number>]
Maximum number of AAL5 payload bytes that will be shown (0-2000, global setting).
[intf = <{}>]
The name of the ATM interface to configure.
[state = <{disabled|enabled}>]
Enable/disable AAL5 debug tracing.

atm flush
Flush all ATM interfaces.
Syntax : flush
atm ifadd
Create a new ATM interface.
Syntax : ifadd intf = <string>

Parameters :
intf = <string>
The name for the new ATM interface. If not specified, the destination will double as interface name.

atm ifattach
Attach an ATM interface.
Syntax : ifattach intf = <{}>

Parameters :
intf = <{}>
The name of the ATM interface.

atm ifconfig
Modify an ATM interface.
Syntax : ifconfig intf = <{}> [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}>]

Parameters :
intf = <{}>
The name of the ATM interface to configure.
[dest = <{}>]
The WAN destination for this ATM interface. Typically, a phonebook entry.
[qos = <{default}>]
The name of a qosbook entry defining the QoS parameters for the WAN link.
[clp = <{0|1|classification}>]
The mode used to determine the CLP bit value.
[clpthresh = <number{0-15}>]
Priority class threshold where CLP becomes 0 (for all classes >= threshold).
[encaps = <{llc|vcmux}>]
The WAN protocol encapsulation to be used on this interface.

[fcs = <{disabled|enabled|auto}>]
Whether or not to include the Ethernet FCS in the packet header (only used for llc encapsulation for mac).
[ulp = <{mac|ip|ppp}>]
The upper layer protocol.
[retry = <number{0-65535}>]
The number of times the WAN connection setup should retry before giving up.

atm ifdelete
Delete an ATM interface.
Syntax : ifdelete intf = <{}>

Parameters :
intf = <{}>
The name of the ATM interface.

atm ifdetach
Detach an ATM interface.
Syntax : ifdetach intf = <{}>

Parameters :
intf = <{}>
The name of the ATM interface.

atm iflist
Display the ATM interfaces.
Syntax : iflist [intf = <{}>]

Parameters :
[intf = <{}>]
The name of an ATM interface.

atm oam
Following commands are available :

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

Following command groups are available :

cc vclb

atm oam cc
Following commands are available :

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

atm oam cc list
Display CC configuration.
Syntax : list
atm oam cc modify
Modify CC on the connection.

Syntax : modify port = <{dsl0|dsl1|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}>]

Parameters :
port = <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>
The ATM port number.
vpi = <number{0-31}>
The Virtual Path Identifier.
[vci = <number{0-511}>]
The Virtual Channel Identifier.
[transmit = <{disabled|enabled}>]
Enable/disable transmission of CC cells.
[receive = <{disabled|enabled}>]
Enable/disable loss of continuity.
[auto = <{disabled|enabled}>]
Enable/disable remote CC activation/deactivation.
[span = <{segment|end2end}>]
End2end or segment continuity check.

atm oam cc send
Send CC activate/deactivate to connection.
Syntax : send port = <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>
vpi = <number{0-31}> [vci = <number{0-511}>]
[span = <{segment|end2end}>] [action = <{activate|deactivate}>]
[direction = <{source|sink|both}>]

Parameters :
port = <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>
The ATM port number.
vpi = <number{0-31}>
The Virtual Path Identifier.
[vci = <number{0-511}>]
The Virtual Channel Identifier.
[span = <{segment|end2end}>]
Send CC action end2end or segment.
[action = <{activate|deactivate}>]
The CC action.
[direction = <{source|sink|both}>]
Source, sink or both (default: both).

atm oam config
Modify the ATM OAM settings.
Syntax : config [clp = <number{0-1}>] [loopbackid = <string>]

Parameters :
[clp = <number{0-1}>]
The CLP bit value of the OAM cells.
[loopbackid = <string>]
The loopback id (hexadecimal string) for processing of segment loopback cells.

atm oam list
Display the ATM OAM settings.
Syntax : list

atm oam modify
Modify the ATM OAM data blocking mode.
Syntax : modify port = <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>
blocking = <{disabled|enabled}>

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

atm oam ping
Send ATM loopback cells.
Syntax : ping dest = <{}> [count = <number{1-1000000}>]
[interval = <number{100-1000000}>]

Parameters :
dest = <{}>
The destination address for the request.
[count = <number{1-1000000}>]
The number of pings to send.
[interval = <number{100-1000000}>]
The interval in milliseconds between packets.

atm oam vclb
Following commands are available :

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

atm oam vclb add
Create a loopback connection for VC
Syntax : add port = <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>
vpi = <number{0-31}> [vci = <number{0-511}>]

Parameters :
port = <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>
The ATM port number.
vpi = <number{0-31}>
The Virtual Path Identifier.
[vci = <number{0-511}>]
The Virtual Channel Identifier.

atm oam vclb del
Delete a loopback connection for VC
Syntax : del port = <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>
vpi = <number{0-31}> [vci = <number{0-511}>]

Parameters :
port = <{dsl0|dsl1|atm2|atm3|aal5|atm5} or number>
The ATM port number.
vpi = <number{0-31}>
The Virtual Path Identifier.
[vci = <number{0-511}>]
The Virtual Channel Identifier.

atm oam vclb list
List all VC loopback connections
Syntax : list
atm phonebook
Following commands are available :

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

atm phonebook add
Add a new phonebook entry.
Syntax : add name = <string>
addr = <atmchannel : PVC syntax is [port.]vpi.vci port=dsl0|dsl1|
...>

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

atm phonebook delete
Delete a phonebook entry.
Syntax : delete name = <{}>

Parameters :
name = <{}>
The name of the phonebook to delete.

atm phonebook flush
Flush all phonebook entries.
Syntax : flush
atm phonebook list
Display the phonebook.
Syntax : list
atm qosbook
Following commands are available :

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

atm qosbook add
Add a new qosbook entry.
Syntax : add name = <string> [txctd = <{default}>] [rxctd = <{default}>]

Parameters :
name = <string>
The name for the new QoS entry.

[txctd = <{default}>]
The name of the CTD for transmit (upstream) direction.
[rxctd = <{default}>]
The name of the CTD for receive (downstream) direction.

atm qosbook config
Modify the qosbook configuration.
Syntax : config [format = <{bytes|cells}>]

Parameters :
[format = <{bytes|cells}>]
The input, output format of the qosbook.

atm qosbook ctdadd
Add a new connection traffic descriptor.
Syntax : ctdadd name = <string>
conformance = <{UBR|CBR|VBR|UBR.1|UBR.2|UBR.mdcr|CBR.1|VBR.1|
VBR.2|VBR.3|VBR.c|VBR.nt|VBR.t|GFR.1|GFR.2}>
[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}>]

Parameters :
name = <string>
The name for the new CTD entry.
conformance = <{UBR|CBR|VBR|UBR.1|UBR.2|UBR.mdcr|CBR.1|VBR.1|VBR.2|VBR.3|
VBR.c|VBR.nt|VBR.t|GFR.1|GFR.2}>
The ATM service conformance definition.
[peakrate = <number{0-27786}>]
The peak rate (in kilobits per second). Use '0' to indicate linerate for
UBR.
[sustrate = <number{0-27786}>]
The sustainable rate (in kilobits per second). (VBR only)
[maxburst = <number{48-12240}>]
The maximum burst size (in bytes). (VBR or GFR)
[minrate = <number{0-27786}>]
The minimum rate (in kilobits per second). (UBR.m or GFR)
[maxframe = <number{0-255}>]
The maximum frame size (in bytes). (GFR only)
[celldelay = <number>]
Cell delay variation in tenths of microseconds.
[realtime = <{enabled|disabled}>]
Enable/disable realtime traffic (VBR only).
[framediscard = <{enabled|disabled}>]
Enable/disable frame discard.

atm qosbook ctddelete
Delete a connection traffic descriptor.
Syntax : ctddelete name = <{default}> [force = <{disabled|enabled}>]

Parameters :
name = <{default}>
The name of the CTD entry to delete.
[force = <{disabled|enabled}>]
Force delete even when the entry is still in use.

atm qosbook ctdlist
Display all connection traffic descriptors.
Syntax : ctdlist
atm qosbook delete
Delete a qosbook entry.
Syntax : delete name = <{default}> [force = <{disabled|enabled}>]

Parameters :
name = <{default}>
The name of the qosbook entry to delete.
[force = <{disabled|enabled}>]
Force delete even when the entry is still in use.

atm qosbook flush
Flush all qosbook entries.
Syntax : flush
atm qosbook list
Display the qosbook.
Syntax : list
config
Following commands are available :

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

config delete
Delete a user configuration file.
Syntax : delete [filename = <user configuration filename>]

Parameters :
[filename = <user configuration filename>]
configuration file to erase

config dump
Show the saved configuration file
Syntax : dump
config flush
Flush the loaded configuration.
Syntax : flush [flush_ip = <{enabled|disabled}>]

Parameters :
[flush_ip = <{enabled|disabled}>]
Flush IP settings or not.

config list
Show the current configuration set
Syntax : list [templates = <{disabled|enabled}>]

Parameters :
[templates = <{disabled|enabled}>]
list template files

config load
Load saved or default configuration.
Syntax : load [load_ip = <{enabled|disabled}>]
[defaults <{disabled|enabled}>] [flush = <{enabled|disabled}>]
[echo = <{disabled|enabled}>] [filename = <string>]

Parameters :
[load_ip = <{enabled|disabled}>]
Load IP settings or not.
[defaults <{disabled|enabled}>]
Load default instead of saved configuration.
[flush = <{enabled|disabled}>]
Flush current configuration before loading new one.
[echo = <{disabled|enabled}>]
Echo each command string when loaded.
[filename = <string>]
Configuration filename.

config save
Store current configuration to backup file
Syntax : save filename = <user configuration filename>

Parameters :
filename = <user configuration filename>
Filename for backupfile of current configuration

connection
Following commands are available :

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

connection appconfig
Modify a CONN/NAT application helper configuration
Syntax : appconfig application = <{IP6TO4|PPTP|ESP|IKE|SIP|JABBER|CU/SeeMe|
RAUDIO(PNA)|RTSP|ILS|H245|H323|IRC|DHCP|
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}>]

Parameters :
  application = <{IP6TO4|PPTP|ESP|IKE|SIP|JABBER|CU/SeeMe|RAUDIO(PNA)|RTSP|
          ILS|H245|H323|IRC|DHCP|GAME(UDP)|CONE(UDP)|LOOSE(UDP)|FTP}>
    The name of a CONN/NAT application helper as listed by ':connection
    applist'.
  [trace = <{disabled|enabled}>]
    Enable/disable CONN/NAT application helper traces.
  [timeout = <number{0-32000}>]
    The maximum timeout in seconds to keep predicted child connections
    around.
  [childqos = <{DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|
          default}>]
    Used QOS label for the predicted child connections.
  [floating = <{disabled|enabled}>]
    Enable/disabled floating port for IKE helper.
  [proxy = <{disabled|enabled}>]
    Enable/disable FTP proxy support.
  [tracelevel = <number{1-4}>]
    SIP trace level: 1=feature errors; 2=feature traces; 3=all errors; 4=all
    traces.
  [SIP_ALG = <{disabled|enabled}>]
    SIP only: enable/disable traditional sip alg behaviour
  [RTP_predict_for_term_SIP_ALG = <{disabled|enabled}>]
    SIP only: enable/disable RTP connection prediction for terminated SIP

  connection appinfo
Display CONN/NAT application specific info
Syntax : appinfo application = <{IP6TO4|PPTP|ESP|IKE|SIP|JABBER|CU/SeeMe|
                    RAUDIO(PNA)|RTSP|ILS|H245|H323|IRC|DHCP|
                    GAME(UDP)|CONE(UDP)|LOOSE(UDP)|FTP}>


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

  connection applist
Display the available CONN/NAT application helpers.
Syntax : applist
  connection bind
Create a CONN/NAT application helper/port binding.
Syntax : bind application = <{IP6TO4|PPTP|ESP|IKE|SIP|JABBER|CU/SeeMe|
                    RAUDIO(PNA)|RTSP|ILS|H245|H323|IRC|DHCP|GAME(UDP)|
                    CONE(UDP)|LOOSE(UDP)|FTP}>
           port = <port-range>

Parameters :
  application = <{IP6TO4|PPTP|ESP|IKE|SIP|JABBER|CU/SeeMe|RAUDIO(PNA)|RTSP|
          ILS|H245|H323|IRC|DHCP|GAME(UDP)|CONE(UDP)|LOOSE(UDP)|FTP}>
```

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

port = <port-range>

The port number or range this application handler should work on.

connection bindlist

Display the CONN/NAT application helper/port bindings.

Syntax : bindlist

connection clean

Clean connection database by forcing timeouts.

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

Parameters :

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

Scrubbing level.

connection clear

Kill all connections.

Syntax : clear

connection config

Modify global connection configuration.

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

Parameters :

[configchangemode = <{immediate|delayed}>]

Select how config changes are handled.

[probes = <{disabled|enabled}>]

Enable/disable alive probes on idle connections.

[udptrackmode = <{strict|loose}>]

UDP connection tracking mode.

connection debug

Connection debug commands.

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

Parameters :

[trace = <{disabled|enabled}>]

Enable/disable traces.

connection describe

Describe the streams of a connection.

Syntax : describe [id = <number{0-2048}>]

Parameters :

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

The connection ID to describe.

connection flush

Flush the connection configuration.

Syntax : flush

connection info

Display all modules with some info.

Syntax : info

connection list

Display the currently known connections.

Syntax : list [nr = <number{1-2048}>] [history = <{disabled|enabled}>]

Parameters :
[nr = <number{1-2048}>]
The number of connections to display.
[history = <{disabled|enabled}>]
If enabled, show history.

connection refresh
Invalidate all cached decisions.
Syntax : refresh
connection stats
Display connection and stream statistics.
Syntax : stats
connection timerclear
Clear connection timeout to default.
Syntax : timerclear [timer = <{tcpidle|tcpneg|tcpkill|udpidle|udpkill|icmpkill|
ipidle|ipkill}>]

Parameters :
[timer = <{tcpidle|tcpneg|tcpkill|udpidle|udpkill|icmpkill|ipidle|ipkill}>]

The name of the connection idle timer.

connection timerconfig
Modify connection timeout handling.
Syntax : timerconfig [timer = <{tcpidle|tcpneg|tcpkill|udpidle|udpkill|
icmpkill|ipidle|ipkill}>]
[value = <number{0-86400}>]

Parameters :
[timer = <{tcpidle|tcpneg|tcpkill|udpidle|udpkill|icmpkill|ipidle|ipkill}>]

The name of the connection idle timer.
[value = <number{0-86400}>]
The timer expire value in seconds.

connection unbind
Delete a CONN/NAT application helper/port binding.
Syntax : unbind application = <{IP6TO4|PPTP|ESP|IKE|SIP|JABBER|CU/SeeMe|
RAUDIO(PNA)|RTSP|ILS|H245|H323|IRC|DHCP|
GAME(UDP)|CONE(UDP)|LOOSE(UDP)|FTP}>
port = <port-range>

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

contentsharing
Following command groups are available :

cifs ftp upnp

contentsharing cifs
Following commands are available :

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

contentsharing cifs config
To set CIFS service name, to define CIFS service workgroup and to enable/disable CIFS service.
Syntax : config [state = <{enabled|disabled}>] [workgroup = <quoted string>] [name = <quoted string>] [comment = <quoted string>]

Parameters :
[state = <{enabled|disabled}>]
Enabled/disabled FTP service.
[workgroup = <quoted string>]
CIFS workgroup definition.
[name = <quoted string>]
CIFS service name.
[comment = <quoted string>]
CIFS service description.

contentsharing cifs list
To display CIFS service context.
Syntax : list
contentsharing ftp
Following commands are available :

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

contentsharing ftp config
To enable/disable FTP service.
Syntax : config [state = <{enabled|disabled}>]

Parameters :
[state = <{enabled|disabled}>]
Enabled/disabled FTP service.

contentsharing ftp list
To display FTP service context.
Syntax : list
contentsharing upnp
Following commands are available :

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

contentsharing upnp config
To enable/disable UPnPAV service.
Syntax : config [state = <{enabled|disabled}>]

Parameters :
[state = <{enabled|disabled}>]
Enable/disable UPnPAV service.

contentsharing upnp list
To display UPnPAV service context.
Syntax : list
cwmp
Following commands are available :

config : Configure the cwmpd as seen from the ACS.

Following command groups are available :

debug notification server

cwmp cmd
TR69 Methods.
Syntax : cmd

Parameters :

cwmp config
Configure the cwmpd as seen from the ACS.
Syntax : config [state = <{disabled|enabled}>] [mode = <{read-only|full}>]
[periodicInform = <{disabled|enabled}>]
[periodicInfInt = <number{0-16777215}>]
[sessionTimeout = <number{0-65535}>]
[noIpTimeout = <number{0-65535}>]
[maxEnvelopes = <number{1-2}>]
[connectionRequest = <{disabled|enabled}>]
[connectionReqPath = <string>]
[connectionReqUserName = <quoted string>]
[connectionReqPsswd = <password>]
[connectionReqAuth = <{none|basic|digest}>]
[qos-class = <number{0-15}>] [bootdelayrange = <number>]
[upgradedelay = <{disabled|enabled}>]
[am1Termination = <{disabled|enabled}>]
[persistentSubscription = <{disabled|enabled}>]
[showPasswords = <{disabled|enabled}>]

Parameters :
[state = <{disabled|enabled}>]
The state of the cwmp daemon.
[mode = <{read-only|full}>]
Set the operation mode of the cwmp daemon.
[periodicInform = <{disabled|enabled}>]
Set periodicInform flag of the cwmp daemon.
[periodicInfInt = <number{0-16777215}>]
Set the interval between two periodicInform messages in seconds.
[sessionTimeout = <number{0-65535}>]
Set HTTP session-timeout in seconds.
[noIpTimeout = <number{0-65535}>]
Set time (in seconds) ip may be 0 after uploading new config file.
[maxEnvelopes = <number{1-2}>]
Set the maximum number of SOAP envelopes send within one http-message.
[connectionRequest = <{disabled|enabled}>]
Set connection request flag of the cwmp daemon.
[connectionReqPath = <string>]
Set the path where the cwmp daemon can be reached.
[connectionReqUserName = <quoted string>]

Set the username the ACS must use to log in.
[connectionReqPsswd = <password>]
Set the password the ACS must use to log in.
[connectionReqAuth = <{none|basic|digest}>]
Set the authentication type of modem CWMP server for asynchronous connects.
[qos-class = <number{0-15}>]
Set the quality of service class for outgoing CWMP data.
[bootdelayrange = <number>]
Set the delay on boot before inform is sent.
[upgradedelay = <{disabled|enabled}>]
Set whether to delay upgrade if services are active.
[am1Termination = <{disabled|enabled}>]
Set if am 1 session termination is enabled.
[persistentSubscription = <{disabled|enabled}>]
The cwmp daemon has persistent subscriptions.
[showPasswords = <{disabled|enabled}>]
Show all passwords in IGD as plaintext. When 0 then will be emptie stringed as the standard requests.

cwmp debug
Following commands are available :

traceconfig : Enable or disable tracing.

cwmp debug traceconfig
Enable or disable tracing.
Syntax : traceconfig [level = <number>]

Parameters :
[level = <number>]
Set the tracelevel (0-2)

cwmp notification

cwmp notification notifiedparameter
a notified parameter waiting to be send
Syntax : notifiedparameter [name = <quoted string>]

Parameters :
[name = <quoted string>]
Set the notification path

cwmp notification rule
a rule which defines a notification
Syntax : rule [notification = <{off|passive|active|forced|inform}>]
[name = <quoted string>] [keystring = <number>]

Parameters :
[notification = <{off|passive|active|forced|inform}>]
Set the type of notification
[name = <quoted string>]
Set the notification path
[keystring = <number>]
The keystring_id of the notification rule

cwmp runtimevar

Runtime variable modifications.
Syntax : runtimevar

Parameters :

  cwmp server
Following commands are available :

config : Configure the cwmpd towards the ACS.

  cwmp server config
Configure the cwmpd towards the ACS.
Syntax : config [url = <string>] [username = <string>]
         [password = <password>]

Parameters :
  [url = <string>]
    Set the HTTP URL used to contact the ACS server.
  [username = <string>]
    Set the username for ACS Digest Authentication.
  [password = <password>]
    Set the password for ACS Digest Authentication.

  debug
Following commands are available :

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

  debug dmesg
Show the Linux kernel messages. For qualifies personnel only.
Syntax : dmesg
  debug exec
Execute a 'Trace & Debug' command. For qualified personnel only.
Syntax : exec cmd = <quoted string>

Parameters :
  cmd = <quoted string>
    Quoted 'Trace & Debug' command string

  dhcp
Following command groups are available :

client relay rule server spoofing

  dhcp client
Following commands are available :

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

Following command groups are available :

debug rqoptions txoptions

dhcp client debug
Following commands are available :

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

dhcp client debug clear
Clear DHCP client statistics
Syntax : clear
dhcp client debug stats
Print DHCP client statistics
Syntax : stats
dhcp client debug traceconfig
Modify DHCP client trace configuration
Syntax : traceconfig [state = <{disabled|enabled}>]

Parameters :
[state = <{disabled|enabled}>]
Enable/Disable tracing.

dhcp client flush
Delete all DHCP clients.
Syntax : flush
dhcp client ifadd
Create a DHCP client.
Syntax : ifadd intf = <{LocalNetwork}>

Parameters :
intf = <{LocalNetwork}>
The name of the interface on which a DHCP Client is defined.

dhcp client ifattach
Activate a DHCP client.
Syntax : ifattach intf = <>

Parameters :
intf = <>
The name of the interface on which a DHCP Client is defined.

dhcp client ifconfig
Configure a DHCP client.
Syntax : 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}>]

Parameters :
intf = <>
The name of the dynamic interface to be configured.

[label = <{None|DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|
default}>]
Label for default gateway and static routes.
[metric = <number{0-255}>]
Route metric for default gateway and static routes.
[dnsmetric = <number{0-100}>]
DNS route metric.
[broadcast = <{disabled|enabled}>]
Operate client in unicast/broadcast mode.
[serverroute = <{disabled|enabled}>]
Insert a route for the DHCP server IP
[followlabel = <{disabled|enabled}>]
If enabled the DHCP client's unicast traffic will follow the route label
specified. If disabled DHCP unicast traffic will follow standard routes

dhcp client ifdelete
Delete a DHCP client.
Syntax : ifdelete intf = <{Internet}>

Parameters :
intf = <{Internet}>
The name of the interface on which a DHCP Client is defined.

dhcp client ifdetach
De-activate a DHCP client and releases its lease.
Syntax : ifdetach intf = <{Internet}>

Parameters :
intf = <{Internet}>
The name of the interface on which a DHCP Client is defined.

dhcp client iflist
List DHCP clients.
Syntax : iflist [intf = <{Internet}>] [expand = <{disabled|enabled}>]

Parameters :
[intf = <{Internet}>]
The name of the interface on which a DHCP Client is defined.
[expand = <{disabled|enabled}>]
Expand enabled/disabled.

dhcp client ifrenew
Renew a DHCP lease.
Syntax : ifrenew intf = <{Internet}>

Parameters :
intf = <{Internet}>
The name of the interface on which a DHCP Client is defined.

dhcp client rqoptions
Following commands are available :

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

dhcp client rqoptions add
Add a DHCP Option Code to the Parameter Request List.
Syntax : add intf = <>
option = <{subnet-mask|time-offset|default-routers|time-servers|
ien116-name-servers|domain-name-servers|log-servers|
cookie-servers|lpr-servers|impress-servers|resource-
location-servers|host-name|boot-file-size|merit-dump|
domain-name|swap-server|root-path|extensions-path|ip-
forwarding|non-local-source-routing|policy-filter|max-
dgram-reassembly|default-ip-ttl|path-mtu-aging-timeout|
path-mtu-plateau-table|interface-mtu|all-subnets-local|
broadcast-address|perform-mask-discovery|mask-supplier|
router-discovery|router-solicitation-address|classfull-
static-routes|trailer-encapsulation|arp-cache-timeout|
ieee802-3-encapsulation|default-tcp-ttl|tcp-keepalive-
interval|tcp-keepalive-garbage|nis-domain|nis-servers|
ntp-servers|vendor-specific_info|...} or number>
[index = <number{0-255}>]

Parameters :
intf = <>
The name of the interface on which a DHCP Client is defined.
option = <{subnet-mask|time-offset|default-routers|time-servers|ien116-name-
servers|domain-name-servers|log-servers|cookie-servers|lpr-servers|
impress-servers|resource-location-servers|host-name|boot-file-size|
merit-dump|domain-name|swap-server|root-path|extensions-path|ip-
forwarding|non-local-source-routing|policy-filter|max-dgram-
reassembly|default-ip-ttl|path-mtu-aging-timeout|path-mtu-plateau-
table|interface-mtu|all-subnets-local|broadcast-address|perform-
mask-discovery|mask-supplier|router-discovery|router-solicitation-
address|classfull-static-routes|trailer-encapsulation|arp-cache-
timeout|ieee802-3-encapsulation|default-tcp-ttl|tcp-keepalive-
interval|tcp-keepalive-garbage|nis-domain|nis-servers|ntp-servers|
vendor-specific_info|...} or number>
The name or number of the option.
[index = <number{0-255}>]
The index of the option.

dhcp client rqoptions delete
Delete a DHCP Option Code from the Parameter Request List.
Syntax : delete intf = <>
option = <{subnet-mask|time-offset|default-routers|time-
servers|ien116-name-servers|domain-name-servers|log-
servers|cookie-servers|lpr-servers|impress-servers|
resource-location-servers|host-name|boot-file-size|
merit-dump|domain-name|swap-server|root-path|
extensions-path|ip-forwarding|non-local-source-
routing|policy-filter|max-dgram-reassembly|default-ip-
ttl|path-mtu-aging-timeout|path-mtu-plateau-table|
interface-mtu|all-subnets-local|broadcast-address|
perform-mask-discovery|mask-supplier|router-discovery|
router-solicitation-address|classfull-static-routes|
trailer-encapsulation|arp-cache-timeout|ieee802-3-
encapsulation|default-tcp-ttl|tcp-keepalive-interval|
tcp-keepalive-garbage|nis-domain|nis-servers|ntp-
servers|vendor-specific_info|...} or number>

Parameters :
  intf = <>
    The name of the interface on which a DHCP Client is defined.
  option = <{subnet-mask|time-offset|default-routers|time-servers|ien116-name-
        servers|domain-name-servers|log-servers|cookie-servers|lpr-servers|
        impress-servers|resource-location-servers|host-name|boot-file-size|
        merit-dump|domain-name|swap-server|root-path|extensions-path|ip-
        forwarding|non-local-source-routing|policy-filter|max-dgram-
        reassembly|default-ip-ttl|path-mtu-aging-timeout|path-mtu-plateau-
        table|interface-mtu|all-subnets-local|broadcast-address|perform-
        mask-discovery|mask-supplier|router-discovery|router-solicitation-
        address|classfull-static-routes|trailer-encapsulation|arp-cache-
        timeout|ieee802-3-encapsulation|default-tcp-ttl|tcp-keepalive-
        interval|tcp-keepalive-garbage|nis-domain|nis-servers|ntp-servers|
        vendor-specific_info|...} or number>
    The name or number of the option.

  dhcp client rqoptions list
List all DHCP Option Codes in the Parameter Request List.
Syntax : list [intf = <{Internet}>]

Parameters :
  [intf = <{Internet}>]
    The name of the interface on which a DHCP Client is defined.

  dhcp client rqoptions optionlist
List all DHCP Option Codes that can be used in the Parameter Request List.
Syntax : optionlist
  dhcp client txoptions
Following commands are available :

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

  dhcp client txoptions add
Add an option.
Syntax : add intf = <>
        option = <{subnet-mask|time-offset|default-routers|time-servers|
              ien116-name-servers|domain-name-servers|log-servers|
              cookie-servers|lpr-servers|impress-servers|resource-
              location-servers|host-name|boot-file-size|merit-dump|
              domain-name|swap-server|root-path|extensions-path|ip-
              forwarding|non-local-source-routing|policy-filter|max-
              dgram-reassembly|default-ip-ttl|path-mtu-aging-timeout|
              path-mtu-plateau-table|interface-mtu|all-subnets-local|
              broadcast-address|perform-mask-discovery|mask-supplier|
              router-discovery|router-solicitation-address|classfull-
              static-routes|trailer-encapsulation|arp-cache-timeout|
              ieee802-3-encapsulation|default-tcp-ttl|tcp-keepalive-
              interval|tcp-keepalive-garbage|nis-domain|nis-servers|
              ntp-servers|netbios-name-servers|...} or number>
        [enterprise = <number{1-2147483647}>]
        [suboption = <number{1-254}>]
        value = <Value : (type)value; type being 8-bit, 16-bit, 32-bit,
              addr, ascii, byte_array, clientid, env

```
>
        [index = <number{0-255}>]

Parameters :
  intf = <>
    The name of the interface on which a DHCP Client is defined.
  option = <{subnet-mask|time-offset|default-routers|time-servers|ien116-name-
        servers|domain-name-servers|log-servers|cookie-servers|lpr-servers|
        impress-servers|resource-location-servers|host-name|boot-file-size|
        merit-dump|domain-name|swap-server|root-path|extensions-path|ip-
        forwarding|non-local-source-routing|policy-filter|max-dgram-
        reassembly|default-ip-ttl|path-mtu-aging-timeout|path-mtu-plateau-
        table|interface-mtu|all-subnets-local|broadcast-address|perform-
        mask-discovery|mask-supplier|router-discovery|router-solicitation-
        address|classfull-static-routes|trailer-encapsulation|arp-cache-
        timeout|ieee802-3-encapsulation|default-tcp-ttl|tcp-keepalive-
        interval|tcp-keepalive-garbage|nis-domain|nis-servers|ntp-servers|
        netbios-name-servers|...} or number>
    The name or number of the option.
  [enterprise = <number{1-2147483647}>]
    The enterprise number (see http://www.iana.org/assignments/enterprise-
    numbers)
  [suboption = <number{1-254}>]
    The suboption number
  value = <Value : (type)value; type being 8-bit, 16-bit, 32-bit, addr,
       ascii, byte_array, clientid, env
>
    The value of the option.
  [index = <number{0-255}>]
    The index of the (sub)option/enterprise number in the Option List.

  dhcp client txoptions delete
Delete an option.
Syntax : delete intf = <>
           option = <{subnet-mask|time-offset|default-routers|time-
                servers|ien116-name-servers|domain-name-servers|log-
                servers|cookie-servers|lpr-servers|impress-servers|
                resource-location-servers|host-name|boot-file-size|
                merit-dump|domain-name|swap-server|root-path|
                extensions-path|ip-forwarding|non-local-source-
                routing|policy-filter|max-dgram-reassembly|default-ip-
                ttl|path-mtu-aging-timeout|path-mtu-plateau-table|
                interface-mtu|all-subnets-local|broadcast-address|
                perform-mask-discovery|mask-supplier|router-discovery|
                router-solicitation-address|classfull-static-routes|
                trailer-encapsulation|arp-cache-timeout|ieee802-3-
                encapsulation|default-tcp-ttl|tcp-keepalive-interval|
                tcp-keepalive-garbage|nis-domain|nis-servers|ntp-
                servers|netbios-name-servers|...} or number>
           [enterprise = <number{1-2147483647}>]
           [suboption = <number{1-254}>]

Parameters :
  intf = <>
    The name of the interface on which a DHCP Client is defined.
  option = <{subnet-mask|time-offset|default-routers|time-servers|ien116-name-
        servers|domain-name-servers|log-servers|cookie-servers|lpr-servers|
```

impress-servers|resource-location-servers|host-name|boot-file-size|
merit-dump|domain-name|swap-server|root-path|extensions-path|ip-
forwarding|non-local-source-routing|policy-filter|max-dgram-
reassembly|default-ip-ttl|path-mtu-aging-timeout|path-mtu-plateau-
table|interface-mtu|all-subnets-local|broadcast-address|perform-
mask-discovery|mask-supplier|router-discovery|router-solicitation-
address|classfull-static-routes|trailer-encapsulation|arp-cache-
timeout|ieee802-3-encapsulation|default-tcp-ttl|tcp-keepalive-
interval|tcp-keepalive-garbage|nis-domain|nis-servers|ntp-servers|
netbios-name-servers|...} or number>
The name or number of the option.
[enterprise = <number{1-2147483647}>]
The enterprise number (see http://www.iana.org/assignments/enterprise-
numbers)
[suboption = <number{1-254}>]
The suboption number

dhcp client txoptions list
List all options.
Syntax : list [intf = <{Internet}>] [expand = <{disabled|enabled}>]

Parameters :
[intf = <{Internet}>]
The name of the interface on which a DHCP Client is defined.
[expand = <{disabled|enabled}>]
Expand enabled/disabled.

dhcp client txoptions optionlist
Lists all DHCP Option Codes that can be used.
Syntax : optionlist
dhcp relay
Following commands are available :

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

Following command groups are available :

debug

dhcp relay add
Add an entry to the DHCP forward list.
Syntax : add name = <string>

Parameters :
name = <string>
The forward entry name.

dhcp relay config

Sets the relay configuration settings.
Syntax : config [agentinfo = <{disabled|enabled}>]
[agentmismatch = <{disabled|enabled}>]

Parameters :
[agentinfo = <{disabled|enabled}>]
Set the relay agent info status (RFC3046).
[agentmismatch = <{disabled|enabled}>]
Forward/Drop DHCP reply packet when a relay agent info mismatch is detected (RFC3046).

dhcp relay debug
Following commands are available :

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

dhcp relay debug stats
Print DHCP relay statistics.
Syntax : stats
dhcp relay debug traceconfig
Modify DHCP relay trace configuration
Syntax : traceconfig [state = <{disabled|enabled}>]

Parameters :
[state = <{disabled|enabled}>]
Enable/Disable tracing.

dhcp relay delete
Delete an entry from the DHCP forward list.
Syntax : delete name = <{LocalNetwork_to_127.0.0.1}>

Parameters :
name = <{LocalNetwork_to_127.0.0.1}>
The forward entry name.

dhcp relay flush
Flushes the DHCP relay settings.
Syntax : flush
dhcp relay ifconfig
Configure a relay interface.
Syntax : ifconfig intf = <{Internet|LocalNetwork}>
[relay = <{disabled|enabled}>] [maxhops = <number{0-16}>]
[remoteid = <password>] [trusted = <{disabled|enabled}>]

Parameters :
intf = <{Internet|LocalNetwork}>
The name of the relay interface to configure.
[relay = <{disabled|enabled}>]
Set the relay status.
[maxhops = <number{0-16}>]
Set the maximum number of hops allowed in the DHCP packet.
[remoteid = <password>]
Set the remote id as specified in RFC3046.
[trusted = <{disabled|enabled}>]
Drop/Forward DHCP request packet when a relay agent info option is present and the giaddr field is 0 (RFC3046).

dhcp relay iflist
Show the configuration of the relay interfaces.
Syntax : iflist [intf = <{Internet|LocalNetwork}>]

Parameters :
[intf = <{Internet|LocalNetwork}>]
The name of the relay interface.

dhcp relay list
List the DHCP forward list.
Syntax : list [name = <{LocalNetwork_to_127.0.0.1}>]

Parameters :
[name = <{LocalNetwork_to_127.0.0.1}>]
The forward entry name.

dhcp relay modify
Modify an entry from the DHCP forward list.
Syntax : modify name = <{LocalNetwork_to_127.0.0.1}> [addr = <ip-address>]
[intf = <{None|Internet|LocalNetwork}>]
[giaddr = <ip-address>] [script = <>]

Parameters :
name = <{LocalNetwork_to_127.0.0.1}>
The forward entry name.
[addr = <ip-address>]
The DHCP server IP address.
[intf = <{None|Internet|LocalNetwork}>]
The name of the relay interface, 'None' to indicate no interface is
specified.
[giaddr = <ip-address>]
The giaddr field to be used in relayed DHCP packets.
[script = <>]
Script to be run when the forward entry is hit.

dhcp relay ruleadd
Add a selection rule to a DHCP forward entry
Syntax : ruleadd name = <{LocalNetwork_to_127.0.0.1}> [key = <{or|and}>]
rulename = <>

Parameters :
name = <{LocalNetwork_to_127.0.0.1}>
The name of the forward entry.
[key = <{or|and}>]
The logical key of the selection rule.
rulename = <>
The name of the DHCP selection rule.

dhcp relay ruledelete
Delete a selection rule from a DHCP forward entry
Syntax : ruledelete name = <{LocalNetwork_to_127.0.0.1}> rulename = <>

Parameters :
name = <{LocalNetwork_to_127.0.0.1}>
The name of the forward entry.
rulename = <>

The name of the DHCP selection rule.

dhcp rule
Following commands are available :

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

Following command groups are available :

debug

dhcp rule add
Add a rule for DHCP conditional selection
Syntax : add name = <string> type = <{option|mac|root}>
option [!]= <{subnet-mask|time-offset|default-routers|time-servers|ien116-name-servers|domain-name-servers|log-servers|cookie-servers|lpr-servers|impress-servers|resource-location-servers|host-name|boot-file-size|merit-dump|domain-name|swap-server|root-path|extensions-path|ip-forwarding|non-local-source-routing|policy-filter|max-dgram-reassembly|default-ip-ttl|path-mtu-aging-timeout|path-mtu-plateau-table|interface-mtu|all-subnets-local|broadcast-address|perform-mask-discovery|mask-supplier|router-discovery|router-solicitation-address|classfull-static-routes|trailer-encapsulation|arp-cache-timeout|ieee802-3-encapsulation|default-tcp-ttl|tcp-keepalive-interval|tcp-keepalive-garbage|nis-domain|nis-servers|ntp-servers|vendor-specific_info|...} or number>
[enterprise = <number{1-2147483647}>]
[suboption = <number{1-254}>]
[value = <Value : (type)value; type being addr, ascii, byte_array, clientid, env
>]
[match = <{exactly|as_substring}>]
mac [!]= <hardware-address with wildcard ex: '00:9f:aa:*:*:*'>
[key = <{or|and}>] subrule = <>

Parameters :
name = <string>
The name of the DHCP rule.
type = <{option|mac|root}>
Specify the DHCP rule type.
option [!]= <{subnet-mask|time-offset|default-routers|time-servers|ien116-name-servers|domain-name-servers|log-servers|cookie-servers|lpr-servers|impress-servers|resource-location-servers|host-name|boot-file-size|merit-dump|domain-name|swap-server|root-path|extensions-path|ip-forwarding|non-local-source-routing|policy-filter|max-dgram-reassembly|default-ip-ttl|path-mtu-aging-timeout|path-mtu-plateau-table|interface-mtu|all-subnets-local|broadcast-address|perform-mask-discovery|mask-supplier|router-discovery|router-solicitation-address|classfull-static-routes|trailer-encapsulation|arp-cache-timeout|ieee802-3-encapsulation|default-tcp-ttl|tcp-keepalive-interval|tcp-keepalive-garbage|

```
            nis-domain|nis-servers|ntp-servers|vendor-specific_info|...} or
            number>
      The name or number of the option.
    [enterprise = <number{1-2147483647}>]
      The enterprise number (see http://www.iana.org/assignments/enterprise-
      numbers)
    [suboption = <number{1-254}>]
      The suboption number
    [value = <Value : (type)value; type being addr, ascii, byte_array,
          clientid, env
>]
      The value of the option.
    [match = <{exactly|as_substring}>]
      The option value matching.
    mac [!]= <hardware-address with wildcard ex: '00:9f:aa:*:*:*'>
      The mac address.
    [key = <{or|and}>]
      The logical key of the subrule.
    subrule = <>
      The name of the DHCP subrule.

    dhcp rule debug
  Following commands are available :

  traceconfig      : Modify DHCP rule trace configuration

    dhcp rule debug traceconfig
  Modify DHCP rule trace configuration
  Syntax : traceconfig [state = <{disabled|enabled}>]

  Parameters :
    [state = <{disabled|enabled}>]
      Enable/Disable tracing.

    dhcp rule delete
  Delete a DHCP rule
  Syntax : delete name = <> subrule = <>

  Parameters :
    name = <>
      The name of the DHCP rule.
    subrule = <>
      The name of the DHCP subrule.

    dhcp rule flush
  Flush all DHCP rules
  Syntax : flush
    dhcp rule list
  List all DHCP rules
  Syntax : list
    dhcp server
  Following commands are available :

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

Following command groups are available :

debug lease option pool

dhcp server config
Print DHCP server configuration settings
Syntax : config [state = <{disabled|enabled}>]

Parameters :
[state = <{disabled|enabled}>]
Enable/Disable the DHCP server.

dhcp server debug
Following commands are available :

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

dhcp server debug clear
Clear DHCP server statistics
Syntax : clear
dhcp server debug stats
Print DHCP server statistics
Syntax : stats
dhcp server debug traceconfig
Modify DHCP server trace configuration
Syntax : traceconfig [state = <{disabled|enabled}>]

Parameters :
[state = <{disabled|enabled}>]
Enable/Disable tracing.

dhcp server flush
Flush all DHCP server pool and lease entries
Syntax : flush
dhcp server lease
Following commands are available :

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

dhcp server lease add
Add a DHCP server lease
Syntax : add clientid = <clientid> pool = <{LAN_private}>
[addr = <ip-address>] [offset = <number>] [leasetime = <number>]
[expirytime = <number>] [gateway = <ip-address|0|none>]
[macaddr = <hardware-address>]
[allocation = <{automatic|manual}>]

Parameters :
clientid = <clientid>
The DHCP client identification string.
pool = <{LAN_private}>
The name of the DHCP server pool.

[addr = <ip-address>]
The IP address for this client.
[offset = <number>]
The IP address offset in the pool preserved for this client.
[leasetime = <number>]
The time in seconds the client is allowed to use an address (tip: 0 means infinite leasetime).
[expirytime = <number>]
The time in seconds the DHCP server keeps the lease reserved (tip: 0 means infinite expirytime).
[gateway = <ip-address|0|none>]
The IP address of the default router for this client.
[macaddr = <hardware-address>]
The host MAC address.
[allocation = <{automatic|manual}>]
Define the client IP address allocation method (tip : automatic means the lease can be recycled).

dhcp server lease delete
Delete a DHCP server lease
Syntax : delete [clientid = <clientid>] [index = <number>]

Parameters :
[clientid = <clientid>]
The DHCP client identification string.
[index = <number>]
The DHCP server lease table index.

dhcp server lease flush
Flush all DHCP server leases
Syntax : flush [pool = <{LAN_private}>]

Parameters :
[pool = <{LAN_private}>]
The name of the DHCP server pool. Only the leases belonging to this pool will be deleted.

dhcp server lease list
List all DHCP server leases
Syntax : list [clientid = <clientid>] [index = <number>]
[expand = <{disabled|enabled}>]

Parameters :
[clientid = <clientid>]
The DHCP client identification string.
[index = <number>]
The DHCP server lease table index.
[expand = <{disabled|enabled}>]
Expand enabled/disabled.

dhcp server option
Following commands are available :

tmpladd : Add a DHCP server option template
tmpldelete : Delete a DHCP server option template
tmpllist : List all DHCP server option templates
instadd : Add a DHCP server option instance

```
instdelete      : Delete a DHCP server option instance
instlist        : List all DHCP server option instances
ruleadd         : Add a selection rule to a DHCP server option instance
ruledelete      : Delete a selection rule from a DHCP server option instance
flush           : Flush all DHCP server option templates and instances

  dhcp server option flush
Flush all DHCP server option templates and instances
Syntax : flush
  dhcp server option instadd
Add a DHCP server option instance
Syntax : instadd name = <string> tmplname = <>
             [policy = <{requested|always|rules}>]
             [dynamic = <{disabled|enabled}>] [maxuse = <number{1-255}>]
             [enterprise = <number{1-2147483647}>]
             [suboption = <number{1-254}>]
             value = <Value : (type)value; type being 8-bit, 16-bit, 32-
                   bit, addr, ascii, byte_array, env
>


  Parameters :
    name = <string>
      The name of the DHCP server option instance.
    tmplname = <>
      The name of the DHCP server option template.
    [policy = <{requested|always|rules}>]
      The transmit policy type for the DHCP server option instance.
    [dynamic = <{disabled|enabled}>]
      Enable/Disable option instance as dynamic.
    [maxuse = <number{1-255}>]
      Maximum number of times an option instance can be used in DHCP pools
    [enterprise = <number{1-2147483647}>]
      The enterprise number (see http://www.iana.org/assignments/enterprise-
      numbers)
    [suboption = <number{1-254}>]
      The suboption number
    value = <Value : (type)value; type being 8-bit, 16-bit, 32-bit, addr,
          ascii, byte_array, env
>
      The value of the DHCP server option instance.

  dhcp server option instdelete
Delete a DHCP server option instance
Syntax : instdelete name = <> [enterprise = <number{1--1}>]
               [suboption = <number{1-254}>]

  Parameters :
    name = <>
      The name of the DHCP server option instance.
    [enterprise = <number{1--1}>]
      The enterprise number (see http://www.iana.org/assignments/enterprise-
      numbers)
    [suboption = <number{1-254}>]
      The suboption number

  dhcp server option instlist
```

List all DHCP server option instances
Syntax : instlist [name = <>]

Parameters :
[name = <>]
The name of the DHCP server option instance.

dhcp server option ruleadd
Add a selection rule to a DHCP server option instance
Syntax : ruleadd name = <> [key = <{or|and}>] rulename = <>

Parameters :
name = <>
The name of the DHCP server option instance.
[key = <{or|and}>]
The logical key of the selection rule.
rulename = <>
The name of the DHCP selection rule.

dhcp server option ruledelete
Delete a selection rule from a DHCP server option instance
Syntax : ruledelete name = <> rulename = <>

Parameters :
name = <>
The name of the DHCP server option instance.
rulename = <>
The name of the DHCP selection rule.

dhcp server option tmpladd
Add a DHCP server option template
Syntax : tmpladd name = <string> optionid = <number{1-254}>
[dynamic = <{disabled|enabled}>]

Parameters :
name = <string>
The name of the DHCP server option template.
optionid = <number{1-254}>
Specify the DHCP server option code.
[dynamic = <{disabled|enabled}>]
Enable/Disable option template as dynamic.

dhcp server option tmpldelete
Delete a DHCP server option template
Syntax : tmpldelete name = <>

Parameters :
name = <>
The name of the DHCP server option template.

dhcp server option tmpllist
List all DHCP server option templates
Syntax : tmpllist
dhcp server policy
Print DHCP server policy settings
Syntax : policy [verifyfirst = <{disabled|enabled}>]
[trustclient = <{disabled|enabled}>]

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

Parameters :
  [verifyfirst = <{disabled|enabled}>]
    Enable/Disable IP address conflict network probing before handing out an
    address to a client.
  [trustclient = <{disabled|enabled}>]
    Whether or not the IP address suggested by a DHCP client should be taken
    into account.
  [rtbehaviour = <{traditional|standard|msft}>]
    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
  [ackinform = <{disabled|enabled}>]
    Enable/Disable DHCP inform acknowledgement for an unknown lease

  dhcp server pool
Following commands are available :

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

  dhcp server pool add
Add a DHCP server pool
Syntax : add name = <string> [index = <number>]

Parameters :
  name = <string>
    The name of the DHCP server pool.
  [index = <number>]
    The number of the pool before which you want the new pool to be added.

  dhcp server pool config
Configure a DHCP server pool
Syntax : config name = <{LAN_private}> [state = <{disabled|enabled}>]
            [allocation = <{dynamic|automatic}>]
            [intf = <{LocalNetwork|Internet}>] [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}>]
[localdns = <{disabled|enabled}>]

Parameters :
name = <{LAN_private}>
The name of the DHCP server pool.
[state = <{disabled|enabled}>]
Enable/Disable the DHCP server pool admin state.
[allocation = <{dynamic|automatic}>]
Define the DHCP Server's pool allocation method (tip : automatic means the IP address becomes reserved for the lease).
[intf = <{LocalNetwork|Internet}>]
The interface for which the pool is allowed to lease IP addresses.
[index = <number>]
The number of the pool before which you want the new pool to be added.
[poolstart = <ip-address>]
The DHCP server pool start IP address.
[poolend = <ip-address>]
The DHCP server pool end IP address.
[netmask = <ip-mask(dotted or cidr)>]
The DHCP server pool netmask.
[gateway = <ip-address|0|none>]
The IP address of the default router for DHCP clients.
[server = <ip-address|none>]
The IP address of the DHCP server for DHCP clients.
[primdns = <ip-address|none>]
The IP address of the primary DNS server for DHCP clients.
[secdns = <ip-address|none>]
The IP address of the secondary DNS server for DHCP clients.
[dnsmetric = <number{0-100}>]
The DHCP server pool DNS route metric.
[primwins = <ip-address|none>]
The IP address of the primary WINS server for DHCP clients.
[secwins = <ip-address|none>]
The IP address of the secondary WINS server for DHCP clients.
[leasetime = <number{0-1814400}>]
The time in seconds a client is allowed to use an address (tip: 0 means infinite lease).
[renewtime = <number{0-1814400}>]
The time in seconds before a client switches to renewing.
[rebindtime = <number{0-1814400}>]
The time in seconds before a client switches to rebinding.
[unnumbered = <{disabled|enabled}>]
Assign an IP address from this pool to the DHCP server or not (ppp pools only).
[localgw = <{disabled|enabled}>]
Proxy for a virtual default gateway residing in same subnet of DHCP client instead of the remote peer address.
[localdns = <{disabled|enabled}>]
Enable/Disable the transmission of the local DNS server in the DNS server option.

dhcp server pool delete
Delete a DHCP server pool
Syntax : delete name = <{LAN_private}>

Parameters :
  name = <{LAN_private}>
    The name of the DHCP server pool.

  dhcp server pool flush
Flush all DHCP server pools
Syntax : flush
  dhcp server pool list
List all DHCP server pools
Syntax : list [name = <{LAN_private}>]

Parameters :
  [name = <{LAN_private}>]
    The name of the DHCP server pool.

  dhcp server pool optadd
Add an option instance to the DHCP server pool
Syntax : optadd name = <{LAN_private}> instname = <>

Parameters :
  name = <{LAN_private}>
    The name of the DHCP server pool.
  instname = <>
    The name of the DHCP server option instance.

  dhcp server pool optdelete
Delete an option instance from the DHCP server pool
Syntax : optdelete name = <{LAN_private}> instname = <>

Parameters :
  name = <{LAN_private}>
    The name of the DHCP server pool.
  instname = <>
    The name of the DHCP server option instance.

  dhcp server pool rtadd
Add a route to the DHCP server pool
Syntax : rtadd name = <{LAN_private}> dst = <ip-address>
          [dstmsk = <ip-mask(dotted or cidr)>]
          [gateway = <ip-address|0>]

Parameters :
  name = <{LAN_private}>
    The name of the DHCP server pool.
  dst = <ip-address>
    The IP destination address of the route for DHCP clients.
  [dstmsk = <ip-mask(dotted or cidr)>]
    The destination IP address mask.
  [gateway = <ip-address|0>]
    The IP address of the next hop. Must be directly connected to the DHCP
    client

  dhcp server pool rtdelete
Delete a route from the DHCP server pool
Syntax : rtdelete name = <{LAN_private}> dst = <ip-address>
            [dstmsk = <ip-mask(dotted or cidr)>]
            [gateway = <ip-address|0>]

Parameters :
  name = <{LAN_private}>
    The name of the DHCP server pool.
  dst = <ip-address>
    The IP destination address of the route for DHCP clients.
  [dstmsk = <ip-mask(dotted or cidr)>]
    The destination IP address mask.
  [gateway = <ip-address|0>]
    The IP address of the next hop. Must be directly connected to the DHCP
    client

  dhcp server pool ruleadd
Add a selection rule to the DHCP server pool
Syntax : ruleadd name = <{LAN_private}> [key = <{or|and}>] rulename = <>

Parameters :
  name = <{LAN_private}>
    The name of the DHCP server pool.
  [key = <{or|and}>]
    The logical key of the selection rule.
  rulename = <>
    The name of the DHCP selection rule.

  dhcp server pool ruledelete
Delete a selection rule from the DHCP server pool
Syntax : ruledelete name = <{LAN_private}> rulename = <>

Parameters :
  name = <{LAN_private}>
    The name of the DHCP server pool.
  rulename = <>
    The name of the DHCP selection rule.

  dhcp spoofing
Following commands are available :

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

Following command groups are available :

debug

  dhcp spoofing add
Add a Spoofing-Association
Syntax : add name = <string> pool_name = <{LAN_private}>
         ifname = <{Internet}>

Parameters :
  name = <string>

The name of the Association.
pool_name = <{LAN_private}>
The name of the pool to be associated.
ifname = <{Internet}>
The name of the interface on which a DHCP Client is defined.

dhcp spoofing attach
Enable a Spoofing-Association
Syntax : attach name = <{|||}>

Parameters :
name = <{|||}>
The name of the Association.

dhcp spoofing config
Display/modify dhcp spoofing state
Syntax : config [state = <{enabled|disabled}>]

Parameters :
[state = <{enabled|disabled}>]
Enable/Disable spoofing.

dhcp spoofing debug
Following commands are available :

traceconfig : Display/modify DHCP spoofing trace configuratin

dhcp spoofing debug traceconfig
Display/modify DHCP spoofing trace configuratin
Syntax : traceconfig [state = <{disabled|enabled}>]

Parameters :
[state = <{disabled|enabled}>]
Enable/Disable tracing.

dhcp spoofing delete
Delete a Spoofing-Association
Syntax : delete name = <{|||}>

Parameters :
name = <{|||}>
The name of the Association.

dhcp spoofing detach
Disable a Spoofing-Association
Syntax : detach name = <{|||}>

Parameters :
name = <{|||}>
The name of the Association.

dhcp spoofing flush
Flush all the associations and the options.
Syntax : flush
dhcp spoofing list
List the available Spoofing-Associations
Syntax : list [name = <{|||}>]

Parameters :
  [name = <{|||}>]
    The name of the Association.

  dhcp spoofing option-add
Add a DHCP Option Code to a Spoofing-Association.
Syntax : option-add name = <{|||}> option = <number>

Parameters :
  name = <{|||}>
    The name of the Association.
  option = <number>
    The option id.

  dhcp spoofing option-delete
Delete a DHCP Option Code from a Spoofing-Association.
Syntax : option-delete name = <{|||}> option = <number>

Parameters :
  name = <{|||}>
    The name of the Association.
  option = <number>
    The option id.

  diag
Following commands are available :

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

  diag config
Configure diagnostics settings
Syntax : config [pingtimeout = <number>] [pingpacketsize = <number>]

Parameters :
  [pingtimeout = <number>]
    pingtimeout (in msec.)
  [pingpacketsize = <number>]
    ping packet size (in bytes incl.icmp header)

  diag flush
Flush all hidden interfaces and ifconfigurations
Syntax : flush
  diag ifconfig
Configure pingoption and/or ip-address for connection
Syntax : ifconfig ifname = <string> [ping = <{yes|no}>]
                  [ipaddress = <ip-address>]

Parameters :
  ifname = <string>
    interfacename
  [ping = <{yes|no}>]
    pingoption

[ipaddress = <ip-address>]
ping ipaddress

diag ifhide
Specify interfaces to hide
Syntax : ifhide ifname = <string>

Parameters :
[ifname = <string>]
interfacename

diag iflist
List (dynamically generated at webpage load) of all interfaces to be diagnosed (debug command)
Syntax : iflist
dns
Following command groups are available :

client server

dns client
Following commands are available :

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

dns client config
Modify the DNS resolver configuration.
Syntax : config [timeout = <number{1-900}>] [retry = <number{0-10}>]
[state = <{disabled|enabled}>]
[search = <{disabled|enabled}>] [list = <string>]
[trace = <{disabled|enabled}>]

Parameters :
[timeout = <number{1-900}>]
The query timeout in seconds.
[retry = <number{0-10}>]
The number of query retries before giving up.
[state = <{disabled|enabled}>]
Enable/disable the DNS client.
[search = <{disabled|enabled}>]
Use the searchlist to construct fully qualified domain names.
[list = <string>]
Slash separated list of domain name suffixes.
[trace = <{disabled|enabled}>]
Enable or disable verbose logging.

dns client dnsadd
Add a DNS server.
Syntax : dnsadd addr = <string> [port = <number>]

Parameters :
addr = <string>

The DNS server IP address.
[port = <number>]
The DNS server port number.

dns client dnsdelete
Delete a DNS server.
Syntax : dnsdelete index = <number{1-99}>

Parameters :
index = <number{1-99}>
The index number (shown by the 'list' command) of the server to delete.

dns client dnslist
List all DNS servers.
Syntax : dnslist
dns client flush
Remove all DNS servers.
Syntax : flush
dns client nslookup
DNS lookup for a domain name or an address.
Syntax : nslookup host = <string>

Parameters :
host = <string>
The DNS domain name string to query.

dns server
Following commands are available :

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

Following command groups are available :

debug host route

dns server config
DNS server configuration settings
Syntax : config [domain = <string>] [timeout = <number{0-120}>]
[suppress = <number{0-400}>] [state = <{disabled|enabled}>]
[trace = <{disabled|enabled}>]
[syslog = <{disabled|enabled}>]
[WANDownSpoofing = <{disabled|enabled}>]
[WDSpoofedIP = <ip-address>]

Parameters :
[domain = <string>]
The DNS server domain name.
[timeout = <number{0-120}>]
The forwarded DNS query timeout.
[suppress = <number{0-400}>]
Suppress not more than specified amount of remote DNS server errors.
[state = <{disabled|enabled}>]
Enable/disable the local DNS server/forwarder.
[trace = <{disabled|enabled}>]
Enable/disable verbose console logging.
[syslog = <{disabled|enabled}>]

Enable/disable SYSLOG for DNS events.
[WANDownSpoofing = <{disabled|enabled}>]
Enable/disable DNS spoofing when no applicable forwarding route present.
[WDSpoofedIP = <ip-address>]
IP address used for spoofing when WANDownSpoofing enabled.

dns server debug
Following commands are available :

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

Following command groups are available :

spoof

dns server debug clear
Clear the DNS server/forwarder statistics.
Syntax : clear
dns server debug spoof
Following commands are available :

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

dns server debug spoof clear
Clear the intercept cache table
Syntax : clear
dns server debug spoof getaddress
Get the real ip for the given spoofed ip
Syntax : getaddress addr = <ip-address>

Parameters :
addr = <ip-address>
The spoofed ip to look up.

dns server debug spoof getflags
Get the error flags for the given spoofed ip
Syntax : getflags addr = <ip-address>

Parameters :
addr = <ip-address>
The spoofed ip to look up.

dns server debug spoof list
List the intercept cache table.
Syntax : list
dns server debug spoof update
update the intercept cache table
Syntax : update
dns server debug stats
Print the DNS server/forwarder statistics.
Syntax : stats
dns server flush

Flush all local DNS hosts and routes.
Syntax : flush
  dns server host
Following commands are available :

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

  dns server host add
Add a local DNS host
Syntax : add name = <string> [addr = <ip-address>] [ttl = <number>]

Parameters :
  name = <string>
    The name of an IP host to add.
  [addr = <ip-address>]
    The IP address of the host.
  [ttl = <number>]
    The lifetime of the host.

  dns server host delete
Delete a local DNS host
Syntax : delete name = <string>

Parameters :
  name = <string>
    The name of an IP host to delete.

  dns server host flush
Flush all local DNS hosts
Syntax : flush
  dns server host list
List all local DNS hosts
Syntax : list
  dns server route
Following commands are available :

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

  dns server route add
Creates a DNS forwarding entry or template
Syntax : add dns = <ip-address> [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|LocalNetwork|Internet}>]

Parameters :
  dns = <ip-address>
    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.
[src = <ip-address>]
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.
[srcmask = <ip-mask(dotted or cidr)>]
The IP address mask for the source prefix.
[domain = <string>]
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
[metric = <number{0-100}>]
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.
[label = <{None|DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|default}>]
The label associated with the DNS entry or DNS Template.
[intf = <{loop|LocalNetwork|Internet}>]
The interface associated with the DNS entry or DNS Template.

dns server route delete
Deletes a DNS forwarding entry or template
Syntax : delete dns = <ip-address> [domain = <string>] [intf = <{loop|LocalNetwork|Internet}>]

Parameters :
dns = <ip-address>
The IP address of a DNS server.
[domain = <string>]
The DNS domain string.
[intf = <{loop|LocalNetwork|Internet}>]
The interface associated with the DNS entry or DNS Template.

dns server route flush
Removes all DNS forwarding entries and templates
Syntax : flush
dns server route list
Lists all DNS forwarding entries and templates
Syntax : list
dsd
Following commands are available :

config : Display/modify DSD framework configuration

Following command groups are available :

debug intercept syslog urlfilter webfilter

dsd config
Display/modify DSD framework configuration
Syntax : config [state = <{disabled|enabled|automatic}>]

Parameters :
[state = <{disabled|enabled|automatic}>]
DSD framework operation mode

```
  dsd debug
Following commands are available :

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

Following command groups are available :

connection

  dsd debug config
Display/modify DSD debug settings
Syntax : config [turbomode = <{disabled|enabled}>]

Parameters :
  [turbomode = <{disabled|enabled}>]
    Enable/disable turbomode

  dsd debug connection
Following commands are available :

list            : Display internal connection pool usage

  dsd debug connection list
Display internal connection pool usage
Syntax : list [expand = <{disabled|enabled}>]

Parameters :
  [expand = <{disabled|enabled}>]
    Expanded listing.

  dsd debug proxy
Display/modify HTTPI fixed proxy settings
Syntax : proxy [state = <{disabled|enabled}>] [dest = <ip-address>]
           [port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
                 bootps|chargen|clearcase|daytime|discard|dns|domain|
                 doom|echo|exec|finger|ftp|ftp-data|gopher|h323|
                 httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|
                 irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|
                 netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|
                 nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
                 realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|
                 sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
                 telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|
                 who|www-http|whoami|xwindows} or number>]


Parameters :
  [state = <{disabled|enabled}>]
    Enable/disable fixed proxy redirecting
  [dest = <ip-address>]
    Destination IP where requests will be forwarded to
  [port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|
        clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-
        data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|
```

ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|xwindows} or number>]
Port used for connecting to the proxy IP

dsd debug recycling
Display/modify HTTPI recycling settings
Syntax : recycling [state = <{disabled|enabled}>] [interval = <number>]
[httpidle = <number>] [otheridle = <number>]

Parameters :
[state = <{disabled|enabled}>]
Enable/disable stream recycling
[interval = <number>]
Time between successive activity checks
[httpidle = <number>]
Minimal idle count for recycling (filtered) http streams
[otheridle = <number>]
Minimal idle count for recycling other streams

dsd debug stats
Display/clear DSD framework and module statistics
Syntax : stats [name = <{intercept|urlfilter|recycling|syslog|all}>]
[clear = <{no|yes}>]

Parameters :
[name = <{intercept|urlfilter|recycling|syslog|all}>]
Specify the name of a module
[clear = <{no|yes}>]
Clear the specified statistics

dsd intercept
Following commands are available :

config : Display/modify HTTP Intercept configuration

dsd intercept config
Display/modify HTTP Intercept configuration
Syntax : config [WDSpoofedIP = <ip-address>] [servertimeout = <number>]
[connecterrorurl = <string>] [categoryerrorurl = <string>]
[monitorinterceptur l = <string>]
[unauthorizedrequrl = <string>]
[imageredirect = <{disabled|enabled}>]
[imageredirecturl = <string>]
[alwaysuseip = <{disabled|enabled}>]

Parameters :
[WDSpoofedIP = <ip-address>]
IP address indicating unavailable WAN connection.
[servertimeout = <number>]
Server timeout for redirect action
[connecterrorurl = <string>]
Destination url when connection to server failed
[categoryerrorurl = <string>]

Destination url when connection to category server failed
[monitorintercepturl = <string>]
Destination url when request is intercepted by monitor thread
[unauthorizedrequrl = <string>]
Destination url when requested url is blocked by some rule or setting
[imageredirect = <{disabled|enabled}>]
Enable/disable substituting blocked images
[imageredirecturl = <string>]
URL of image used when substituting blocked images
[alwaysuseip = <{disabled|enabled}>]
Always use ip address when redirecting to a local page

dsd syslog
Following commands are available :

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

dsd syslog config
Display/modify HTTPI logging configuration
Syntax : config [syslog = <{none|unauthorized|errors|intercepted|all}>]

Parameters :
[syslog = <{none|unauthorized|errors|intercepted|all}>]
Define which type of events to log

dsd syslog list
Display HTTPI log file
Syntax : list
dsd urlfilter
Following commands are available :

config : Display/modify url filtering configuration

Following command groups are available :

rule

dsd urlfilter config
Display/modify url filtering configuration
Syntax : config [state = <{disabled|enabled}>]
[blockproxy = <{disabled|enabled}>]
[blockipaddress = <{disabled|enabled}>]
[blockobscuredip = <{disabled|enabled}>]
[defaultaction = <{block|accept}>]

Parameters :
[state = <{disabled|enabled}>]
Enable/disable url filtering
[blockproxy = <{disabled|enabled}>]
Block HTTP requests via a proxy server
[blockipaddress = <{disabled|enabled}>]
Block HTTP requests if host name is IP address
[blockobscuredip = <{disabled|enabled}>]
Block HTTP requests if host name is believed to be an IP address
[defaultaction = <{block|accept}>]
Action to perform when no filter applicable.

dsd urlfilter rule
Following commands are available :

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

dsd urlfilter rule add
Add a rule
Syntax : add url = <string> action = <{block|accept|redirect}>
redirect = <string>

Parameters :
url = <string>
Definition of the url filter
action = <{block|accept|redirect}>
Action to perform when url matches url
redirect = <string>
Redirection url

dsd urlfilter rule delete
Remove a rule
Syntax : delete index = <number> [url = <string>]

Parameters :
index = <number>
Insertion position in the list
[url = <string>]
Definition of the url filter

dsd urlfilter rule flush
Remove all current rules
Syntax : flush
dsd urlfilter rule list
Display a list of current rules
Syntax : list
dsd urlfilter rule modify
Modify an existing rule
Syntax : modify index = <number> [newurl = <string>]
action = <{block|accept|redirect}> redirect = <string>

Parameters :
index = <number>
Insertion position in the list
[newurl = <string>]
Definition of the new url filter
action = <{block|accept|redirect}>
Action to perform when url matches url
redirect = <string>
Redirection url

dsd webfilter
Following commands are available :

config : Configure web filter
list : Display web filter license state

Following command groups are available :

cache professional server standard

dsd webfilter cache
Following commands are available :

stats : Display cache statistics
flush : Empty internal cache

dsd webfilter cache flush
Empty internal cache
Syntax : flush
dsd webfilter cache stats
Display cache statistics
Syntax : stats [expand = <{disabled|enabled}>]

Parameters :
[expand = <{disabled|enabled}>]
More detailed statistics.

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

Parameters :
[state = <{enabled|disabled}>]
Enable or disable the web filter
[serverunreachable = <{block-all|accept-all}>]
Block or allow requests when the categorization server is unreachable
[uncategorized = <{block|accept}>]
Block or allow requests for which no category is available
[license = <{none|trial|standard|professional}>]

[ticket = <string>]

[sessionkey = <string>]

dsd webfilter list
Display web filter license state
Syntax : list
dsd webfilter professional
Following commands are available :

config :

Following command groups are available :

category level rule

dsd webfilter professional category
Following commands are available :

create : Create a category or group
add : Add a category to a group
remove : Remove a category from a group
delete : Delete a category or group
list : List all categories and groups
flush : Delete all categories and groups

dsd webfilter professional category add
Add a category to a group
Syntax : add destid = <number> srcid = <number>

Parameters :
destid = <number>
Destination category or group
srcid = <number>
Category ID to add

dsd webfilter professional category create
Create a category or group
Syntax : create id = <number> name = <quoted string>
type = <{category|group}>

Parameters :
id = <number>
Unique local ID for the category/group
name = <quoted string>
Friendly name
type = <{category|group}>

dsd webfilter professional category delete
Delete a category or group
Syntax : delete id = <number>

Parameters :
id = <number>
Unique local ID for the category/group

dsd webfilter professional category flush
Delete all categories and groups
Syntax : flush
dsd webfilter professional category list
List all categories and groups
Syntax : list [type = <{category|group}>]

Parameters :
[type = <{category|group}>]

dsd webfilter professional category remove
Remove a category from a group
Syntax : remove destid = <number> srcid = <number>

Parameters :

destid = <number>
Destination category or group
srcid = <number>
Category ID to add

dsd webfilter professional config

Syntax : config [listversion = <string>] [validcatmask = <string>]

Parameters :
[listversion = <string>]

[validcatmask = <string>]

dsd webfilter professional level
Following commands are available :

set : Set current web filtering level
add : Add a new web filtering level
modify : Modify a web filtering level
delete : Delete a web filtering level
list : Display levels
flush : Delete all levels

dsd webfilter professional level add
Add a new web filtering level
Syntax : add index = <number> name = <string> [text = <quoted string>]
[otherurls = <{block|accept}>]

Parameters :
index = <number>
Level index (-1 for next available)
name = <string>
Content category level name
[text = <quoted string>]
Friendly description
[otherurls = <{block|accept}>]
Block or allow requests that do not belong to a specific category

dsd webfilter professional level delete
Delete a web filtering level
Syntax : delete index = <number> name = <string> [text = <quoted string>]
[otherurls = <{block|accept}>]

Parameters :
index = <number>
Level index (-1 for next available)
name = <string>
Content category level name
[text = <quoted string>]
Friendly description
[otherurls = <{block|accept}>]
Block or allow requests that do not belong to a specific category

dsd webfilter professional level flush
Delete all levels

Syntax : flush
  dsd webfilter professional level list
Display levels
Syntax : list
  dsd webfilter professional level modify
Modify a web filtering level
Syntax : modify index = <number> name = <string> [text = <quoted string>]
          [otherurls = <{block|accept}>]

Parameters :
  index = <number>
    Level index (-1 for next available)
  name = <string>
    Content category level name
  [text = <quoted string>]
    Friendly description
  [otherurls = <{block|accept}>]
    Block or allow requests that do not belong to a specific category

  dsd webfilter professional level set
Set current web filtering level
Syntax : set name = <string>

Parameters :
  name = <string>
    Name of the current category level

  dsd webfilter professional rule
Following commands are available :

modify   : Modify a rule
list   : List all rules
clear   : Reset level to default rule

  dsd webfilter professional rule clear
Reset level to default rule
Syntax : clear level = <string>

Parameters :
  level = <string>
    Level name

  dsd webfilter professional rule list
List all rules
Syntax : list [level = <string>]

Parameters :
  [level = <string>]
    Level name

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

Parameters :
  level = <string>
    Level name

[id = <number>]
Server category ID
action = <{block|accept}>

dsd webfilter server
Following commands are available :

config : Configure web filter server
add : Add a web filter server
modify : Modify a web filter server
delete : Delete a web filter server
list : List all web filter servers
flush : Flush server list

dsd webfilter server add
Add a web filter server
Syntax : add [index = <number>] address = <ip-address>
port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
bootps|chargen|clearcase|daytime|discard|dns|domain|doom|
echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|
ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|
netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|
rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|
ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
xwindows} or number>

Parameters :
[index = <number>]
Server index
address = <ip-address>
Server IP address
port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|
clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-
data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|
ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-
ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-
srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>
Server port

dsd webfilter server config
Configure web filter server
Syntax : 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|chargen|clearcase|daytime|discard|
dns|domain|doom|echo|exec|finger|ftp|ftp-data|
gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-

net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|
netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|
rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-
rlogin|who|www-http|whoami|xwindows} or number>]

Parameters :
[listversion = <string>]

[retries = <number>]
Number of server contact retries
[servertimeout = <number>]
Cobion server timeout in seconds
[timeoutmultiplier = <number>]
Timeout for reporting server error to client (timeout * multiplier)
[renewfrequency = <number>]
Frequency (in hours) to check license and list versions
[useproxy = <{disabled|enabled}>]
Enable or disable the use of a proxy server
[proxyserver = <ip-address>]
Proxy server to be used
[proxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|
nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
Proxy server port to be used

dsd webfilter server delete
Delete a web filter server
Syntax : delete index = <number> address = <ip-address>
port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
bootps|chargen|clearcase|daytime|discard|dns|domain|
doom|echo|exec|finger|ftp|ftp-data|gopher|h323|
httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|
irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|
nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|
sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|
who|www-http|whoami|xwindows} or number>

Parameters :
index = <number>
Server index
address = <ip-address>

Server IP address
port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|
clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-
data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|
ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-
ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-
srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>
Server port

dsd webfilter server flush
Flush server list
Syntax : flush
dsd webfilter server list
List all web filter servers
Syntax : list
dsd webfilter server modify
Modify a web filter server
Syntax : modify index = <number> address = <ip-address>
port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
bootps|chargen|clearcase|daytime|discard|dns|domain|
doom|echo|exec|finger|ftp|ftp-data|gopher|h323|
httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|
irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|
nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|
sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|
who|www-http|whoami|xwindows} or number>

Parameters :
index = <number>
Server index
address = <ip-address>
Server IP address
port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|
clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-
data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|
ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-
ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-
srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>
Server port

dsd webfilter standard
Following commands are available :

config :

Following command groups are available :

category level rule

dsd webfilter standard category
Following commands are available :

create : Create a category or group
add : Add a category to a group
remove : Remove a category from a group
delete : Delete a category or group
list : List all categories and groups
flush : Delete all categories and groups

dsd webfilter standard category add
Add a category to a group
Syntax : add destid = <number> srcid = <number>

Parameters :
destid = <number>
Destination category or group
srcid = <number>
Category ID to add

dsd webfilter standard category create
Create a category or group
Syntax : create id = <number> name = <quoted string>
type = <{category|group}>

Parameters :
id = <number>
Unique local ID for the category/group
name = <quoted string>
Friendly name
type = <{category|group}>

dsd webfilter standard category delete
Delete a category or group
Syntax : delete id = <number>

Parameters :
id = <number>
Unique local ID for the category/group

dsd webfilter standard category flush
Delete all categories and groups
Syntax : flush
dsd webfilter standard category list
List all categories and groups
Syntax : list [type = <{category|group}>]

Parameters :
[type = <{category|group}>]

dsd webfilter standard category remove
Remove a category from a group
Syntax : remove destid = <number> srcid = <number>

Parameters :
  destid = <number>
    Destination category or group
  srcid = <number>
    Category ID to add

  dsd webfilter standard config

Syntax : config [stdmax = <number>] [validcatmask = <string>]

Parameters :
  [stdmax = <number>]

  [validcatmask = <string>]

  dsd webfilter standard level
Following commands are available :

set : Set current web filtering level
add : Add a new web filtering level
modify : Modify a web filtering level
delete : Delete a web filtering level
list : Display levels
flush : Delete all levels

  dsd webfilter standard level add
Add a new web filtering level
Syntax : add index = <number> name = <string> [text = <quoted string>]
        [otherurls = <{block|accept}>]

Parameters :
  index = <number>
    Level index (-1 for next available)
  name = <string>
    Content category level name
  [text = <quoted string>]
    Friendly description
  [otherurls = <{block|accept}>]
    Block or allow requests that do not belong to a specific category

  dsd webfilter standard level delete
Delete a web filtering level
Syntax : delete index = <number> name = <string> [text = <quoted string>]
          [otherurls = <{block|accept}>]

Parameters :
  index = <number>
    Level index (-1 for next available)
  name = <string>
    Content category level name
  [text = <quoted string>]
    Friendly description
  [otherurls = <{block|accept}>]
    Block or allow requests that do not belong to a specific category

  dsd webfilter standard level flush

Delete all levels
Syntax : flush
  dsd webfilter standard level list
Display levels
Syntax : list
  dsd webfilter standard level modify
Modify a web filtering level
Syntax : modify index = <number> name = <string> [text = <quoted string>]
          [otherurls = <{block|accept}>]

Parameters :
  index = <number>
    Level index (-1 for next available)
  name = <string>
    Content category level name
  [text = <quoted string>]
    Friendly description
  [otherurls = <{block|accept}>]
    Block or allow requests that do not belong to a specific category

  dsd webfilter standard level set
Set current web filtering level
Syntax : set name = <string>

Parameters :
  name = <string>
    Name of the current category level

  dsd webfilter standard rule
Following commands are available :

modify   : Modify a rule
list   : List all rules
clear   : Reset level to default rule

  dsd webfilter standard rule clear
Reset level to default rule
Syntax : clear level = <string>

Parameters :
  level = <string>
    Level name

  dsd webfilter standard rule list
List all rules
Syntax : list [level = <string>]

Parameters :
  [level = <string>]
    Level name

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

Parameters :
  level = <string>

Level name
[id = <number>]
Server category ID
action = <{block|accept}>

dyndns
Following commands are available :

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

Following command groups are available :

host service

dyndns add
Add a dynamic DNS client.
Syntax : add name = <string>

Parameters :
name = <string>
The dynamic DNS client name.

dyndns delete
Delete a dynamic DNS client.
Syntax : delete name = <{dyndns_0}>

Parameters :
name = <{dyndns_0}>
The dynamic DNS client name.

dyndns flush
Delete all dynamic DNS clients.
Syntax : flush
dyndns host
Following commands are available :

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

dyndns host add
Add a fully qualified host name
Syntax : add group = <{dyndns_0}> name = <string>

Parameters :
group = <{dyndns_0}>
The dynamic DNS host group.
name = <string>
The name of an IP host to add.

dyndns host delete

Delete a host name
Syntax : delete name = <{boltonlancs.homedns.org}>

Parameters :
  name = <{boltonlancs.homedns.org}>
    The name of an IP host to delete.

  dyndns host flush
Delete all host names
Syntax : flush
  dyndns host list
List all host names
Syntax : list
  dyndns list
List all dynamic DNS clients.
Syntax : list
  dyndns modify
Modify a dynamic DNS client.
Syntax : modify name = <{dyndns_0}> [intf = <{}>] [user = <string>]
          [password = <password>] [group = <{dyndns_0}>]
          [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}>]

Parameters :
  name = <{dyndns_0}>
    The dynamic DNS client name.
  [intf = <{}>]
    The dynamic DNS client interface.
  [user = <string>]
    The username for dynamic DNS authentication.
  [password = <password>]
    The password for dynamic DNS authentication.
  [group = <{dyndns_0}>]
    The dynamic DNS host group.
  [mx = <string>]
    The mail exchanger.
  [backmx = <{disabled|enabled}>]
    Set up the mail exchanger as a backup MX.
  [wildcard = <{disabled|enabled}>]
    Allow use of hostname wildcards.
  [offline = <{disabled|enabled}>]
    Set the host to offline mode.
  [service = <{dyndns|statdns|custom|No-IP|DtDNS|gnudip}>]
    The dynamic DNS service.
  [status = <{disabled|enabled}>]
    Enable/Disable the dynamic DNS client.
  [trace = <{disabled|enabled}>]
    Enable/Disable the verbose console logging for the dynamic DNS client.

  dyndns service
Following commands are available :

modify   : Modify specific dynamic DNS service settings

list : List all dynamic DNS services

dyndns service list
List all dynamic DNS services
Syntax : list
dyndns service modify
Modify specific dynamic DNS service settings
Syntax : modify name = <{dyndns|statdns|custom|No-IP|DtDNS|gnudip}>
[server = <string>]
[port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
bootps|chargen|clearcase|daytime|discard|dns|domain|
doom|echo|exec|finger|ftp|ftp-data|gopher|h323|
httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|
irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|
nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|
sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-
rlogin|who|www-http|whoami|xwindows} or number>]
[request = <string>] [updateinterval = <number{0-2097120}>]
[retryinterval = <number{0-600}>] [max_retry = <number{1-5}>]

Parameters :
name = <{dyndns|statdns|custom|No-IP|DtDNS|gnudip}>
The dynamic DNS service.
[server = <string>]
The dynamic DNS server hostname.
[port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|
clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-
data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|
ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-
ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-
srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|
talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|
www-http|whoami|xwindows} or number>]
The dynamic DNS server port.
[request = <string>]
The dynamic DNS request string.
[updateinterval = <number{0-2097120}>]
Number of seconds before a dynamic update is sent to the dynamic DNS
server (The value 0 means disabled).
[retryinterval = <number{0-600}>]
Number of seconds between retries if communication with the dynamic DNS
server fails (The value 0 means disabled).
[max_retry = <number{1-5}>]
The maximum number of retries if communication with the dynamic DNS
server fails.

env
Following commands are available :

set : Sets an environment variable.
get : Gets an environment variable.
unset : Deletes an environment variable.
list : List all environment variables.

flush : Remove all non-system environment variables.

env def
Define an environment variable
Syntax : def var = <string>
type = <{string|passw|integer|combo|list|radioset|bool|ipaddr|
ipmask|passwcheck|label|hex|grp}>
[grp = <string>] [desc = <translated string>]
[help = <translated string>] [alias = <translated string>]
[req <{no|yes}>] [default = <quoted string>]
[data = <quoted string>] [dalias = <translated string>]
[min = <number>] [max = <number>] [calc = <quoted string>]
[linkvar = <string>]

Parameters :
var = <string>
Variable name : name of variable or group
type = <{string|passw|integer|combo|list|radioset|bool|ipaddr|ipmask|
passwcheck|label|hex|grp}>
type of the variable
[grp = <string>]
Group name in case variable is defined
[desc = <translated string>]
Description text, help text
[help = <translated string>]
Addtional help text (only for group description
[alias = <translated string>]
user friendly name for field or group
[req <{no|yes}>]
parameter without value: to indicate a required field
[default = <quoted string>]
a default value field for variable
[data = <quoted string>]
list of values, used in configuration file
[dalias = <translated string>]
user friendly names for data values
[min = <number>]
minumum value in case type is integer
[max = <number>]
maximum value in case type is integer
[calc = <quoted string>]
host wizard related stuff, ignored here
[linkvar = <string>]
to which variable this variable is linked to (only for passwcheck)

env flush
Remove all non-system environment variables.
Syntax : flush
env get
Gets an environment variable.
Syntax : get var = <{_SW_FLAG|_ETHERNET|_COMPANY_NAME|_COMPANY_URL|_PROD_NAME|
_PROD_URL|_PROD_DESCRIPTION|_PROD_NUMBER|
_WL1_SSID_PREFIX_CUSTOM|_WL2_SSID_PREFIX_CUSTOM|
_WL3_SSID_PREFIX_CUSTOM|_SSID_SERIAL_PREFIX|
_BOARD_SERIAL_NBR|_PROD_SERIAL_NBR|_FII|_BUILD|
_BOOTLOADER_VERSION|_BUILDVARIANT|_MODEM_ACCESS_CODE|
_SSID_WL_ACCCODE_POSTFIX|__SEC_MODEM_ACCESS_CODE|_OUI|

_CUSTOVARIANT|_PHYSLAYERTYPE|_BUILDNAME|_PRL|_FIA|
_BOARD_NAME|_COMPANY_ID|_COPYRIGHT|_TPVERSION|_PROD_ID|
_PROD_FRIENDLY_NAME|_VARIANT_ID|_VARIANT_FRIENDLY_NAME|
_MACADDR|_LMACADDR|_WL0_WEPKEY_SERIAL|_WL0_WPAKEY_SERIAL|
_WL0_SSID_SERIAL|_WL0_SSID_PREFIX|_WL0_BASE52_SERIAL|
_WL0_PIN_SERIAL|_WL0_UUID_E_SERIAL|_WL0_UUID_R_SERIAL|
_WL1_WEPKEY_SERIAL|_WL1_WPAKEY_SERIAL|_WL1_SSID_SERIAL|
_WL1_BASE52_SERIAL|_WL_VERSION}>

Parameters :
var = <{_SW_FLAG|_ETHERNET|_COMPANY_NAME|_COMPANY_URL|_PROD_NAME|_PROD_URL|
_PROD_DESCRIPTION|_PROD_NUMBER|_WL1_SSID_PREFIX_CUSTOM|
_WL2_SSID_PREFIX_CUSTOM|_WL3_SSID_PREFIX_CUSTOM|_SSID_SERIAL_PREFIX|
_BOARD_SERIAL_NBR|_PROD_SERIAL_NBR|_FII|_BUILD|_BOOTLOADER_VERSION|
_BUILDVARIANT|_MODEM_ACCESS_CODE|_SSID_WL_ACCCODE_POSTFIX|
__SEC_MODEM_ACCESS_CODE|_OUI|_CUSTOVARIANT|_PHYSLAYERTYPE|_BUILDNAME|
_PRL|_FIA|_BOARD_NAME|_COMPANY_ID|_COPYRIGHT|_TPVERSION|_PROD_ID|
_PROD_FRIENDLY_NAME|_VARIANT_ID|_VARIANT_FRIENDLY_NAME|_MACADDR|
_LMACADDR|_WL0_WEPKEY_SERIAL|_WL0_WPAKEY_SERIAL|_WL0_SSID_SERIAL|
_WL0_SSID_PREFIX|_WL0_BASE52_SERIAL|_WL0_PIN_SERIAL|
_WL0_UUID_E_SERIAL|_WL0_UUID_R_SERIAL|_WL1_WEPKEY_SERIAL|
_WL1_WPAKEY_SERIAL|_WL1_SSID_SERIAL|_WL1_BASE52_SERIAL|_WL_VERSION}>
The name of the variable.

env hash
Transfer variable by hash algrithm.
Syntax : hash src = <string> dest = <string>
crypto = <{MD2|MD5|SHA1|SHA256|SHA512}> len = <number{0-128}>

Parameters :
src = <string>
The values of the source
dest = <string>
The name of the destinate variable.
crypto = <{MD2|MD5|SHA1|SHA256|SHA512}>
The selection of encryption.
len = <number{0-128}>
The length to get.

env list
List all environment variables.
Syntax : list
env set
Sets an environment variable.
Syntax : set var = <string> value = <translated string>

Parameters :
var = <string>
The name of the variable.
value = <translated string>
A translated quoted string defining the variable value.

env unset
Deletes an environment variable.
Syntax : unset var = <{_SW_FLAG|_ETHERNET|_COMPANY_NAME|_COMPANY_URL|
_PROD_NAME|_PROD_URL|_PROD_DESCRIPTION|_PROD_NUMBER|

_WL1_SSID_PREFIX_CUSTOM|_WL2_SSID_PREFIX_CUSTOM|
_WL3_SSID_PREFIX_CUSTOM|_SSID_SERIAL_PREFIX|
_BOARD_SERIAL_NBR|_PROD_SERIAL_NBR|_FII|_BUILD|
_BOOTLOADER_VERSION|_BUILDVARIANT|_MODEM_ACCESS_CODE|
_SSID_WL_ACCCODE_POSTFIX|__SEC_MODEM_ACCESS_CODE|_OUI|
_CUSTOVARIANT|_PHYSLAYERTYPE|_BUILDNAME|_PRL|_FIA|
_BOARD_NAME|_COMPANY_ID|_COPYRIGHT|_TPVERSION|_PROD_ID|
_PROD_FRIENDLY_NAME|_VARIANT_ID|_VARIANT_FRIENDLY_NAME|
_MACADDR|_LMACADDR|_WL0_WEPKEY_SERIAL|_WL0_WPAKEY_SERIAL|
_WL0_SSID_SERIAL|_WL0_SSID_PREFIX|_WL0_BASE52_SERIAL|
_WL0_PIN_SERIAL|_WL0_UUID_E_SERIAL|_WL0_UUID_R_SERIAL|
_WL1_WEPKEY_SERIAL|_WL1_WPAKEY_SERIAL|_WL1_SSID_SERIAL|
_WL1_BASE52_SERIAL|_WL_VERSION}>

Parameters :
var = <{_SW_FLAG|_ETHERNET|_COMPANY_NAME|_COMPANY_URL|_PROD_NAME|_PROD_URL|
_PROD_DESCRIPTION|_PROD_NUMBER|_WL1_SSID_PREFIX_CUSTOM|
_WL2_SSID_PREFIX_CUSTOM|_WL3_SSID_PREFIX_CUSTOM|_SSID_SERIAL_PREFIX|
_BOARD_SERIAL_NBR|_PROD_SERIAL_NBR|_FII|_BUILD|_BOOTLOADER_VERSION|
_BUILDVARIANT|_MODEM_ACCESS_CODE|_SSID_WL_ACCCODE_POSTFIX|
__SEC_MODEM_ACCESS_CODE|_OUI|_CUSTOVARIANT|_PHYSLAYERTYPE|_BUILDNAME|
_PRL|_FIA|_BOARD_NAME|_COMPANY_ID|_COPYRIGHT|_TPVERSION|_PROD_ID|
_PROD_FRIENDLY_NAME|_VARIANT_ID|_VARIANT_FRIENDLY_NAME|_MACADDR|
_LMACADDR|_WL0_WEPKEY_SERIAL|_WL0_WPAKEY_SERIAL|_WL0_SSID_SERIAL|
_WL0_SSID_PREFIX|_WL0_BASE52_SERIAL|_WL0_PIN_SERIAL|
_WL0_UUID_E_SERIAL|_WL0_UUID_R_SERIAL|_WL1_WEPKEY_SERIAL|
_WL1_WPAKEY_SERIAL|_WL1_SSID_SERIAL|_WL1_BASE52_SERIAL|_WL_VERSION}>
The name of the variable.

eth
Following commands are available :

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

Following command groups are available :

device filter bridge switch vlan

eth bridge
Following commands are available :

config : Modify/Display the bridge configuration settings.
list : Display the current bridge instances.
add : Add a new bridge instance.
delete : Delete a bridge instance.
select : Select the default bridge for configuring interfaces from
(if not setting bridge name, for legacy purposes).
ifadd : Add a new bridge interface.
ifdelete : Delete a bridge interface.
ifattach : Attach a bridge interface.

ifdetach : Detach a bridge interface.
ifconfig : Modify a bridge interface configuration.
ifflush : flush the bridge interfaces: detach/delete all interfaces.
iflist : Display the current bridge interfaces.
macadd : Add a static MAC address to a bridge interface.
maclist : Display the MAC address database.
macdelete : Remove a MAC address from the database.
clear : Clear bridge statistics.
flush : Flush all bridge instances with their interfaces and properties.

Following command groups are available :

dynvlan filter igmpsnooping rule unknownvlan vlan xtratag

eth bridge add
Add a new bridge instance.
Syntax : add brname = <string>

Parameters :
brname = <string>
The name of the new bridge instance.

eth bridge clear
Clear bridge statistics.
Syntax : clear [brname = <{bridge}>]

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.

eth bridge config
Modify/Display the bridge configuration settings.
Syntax : config [brname = <{bridge}>] [age = <number{10-1000000}>]
[filter = <{none|no_WAN_broadcast}>]
[vlan = <{disabled|enabled}>] [precedencemap = <string>]

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.
[age = <number{10-1000000}>]
The lifetime (in seconds) of a dynamically learned MAC address.
[filter = <{none|no_WAN_broadcast}>]
The bridge filter to be applied for all WAN bridge interfaces.
[vlan = <{disabled|enabled}>]
Enable/disable the use of the VLAN id of the received VLAN packets.
[precedencemap = <string>]
The IP QoS precedence mapping table.

eth bridge delete
Delete a bridge instance.
Syntax : delete brname = <{bridge}>

Parameters :
brname = <{bridge}>
The name of a bridge instance.

eth bridge dyngroup
Following commands are available :

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

eth bridge dyngroup add
Add a dynamic group membership entry.
Syntax : add [id = <number{0-100000}>] hwaddr = <masked-hardware-address>
group = <{default}> [rgroup = <{default}>]

Parameters :
[id = <number{0-100000}>]

hwaddr = <masked-hardware-address>

group = <{default}>
The group for the dynamic group membership entry.
[rgroup = <{default}>]
The group that is to be removed from the port.

eth bridge dyngroup config
Modify the dynamic group membership configuration.
Syntax : config [timeout = <number{0-100000}>]

Parameters :
[timeout = <number{0-100000}>]
Timeout in seconds for the dynamic entries.

eth bridge dynvlan
Following commands are available :

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

eth bridge dynvlan actlist
Display the active MAC entries for the dynamic VLAN membership.
Syntax : actlist
eth bridge dynvlan add
Add a dynamic VLAN membership entry.
Syntax : add [id = <number{0-100000}>] hwaddr = <masked-hardware-address>
vlan = <{default}> [remvlan = <{default}>]

Parameters :
[id = <number{0-100000}>]
The id of the dynamic VLAN membership entry.
hwaddr = <masked-hardware-address>
The (masked) ethernet MAC address of the dynamic VLAN membership entry.
vlan = <{default}>
The VLAN for the dynamic VLAN membership entry.
[remvlan = <{default}>]

The VLAN that will be removed from the bridge interface.

eth bridge dynvlan config
Modify the dynamic VLAN membership configuration.
Syntax : config [timeout = <number{0-100000}>]

Parameters :
[timeout = <number{0-100000}>]
Timeout in seconds for the dynamic entries.

eth bridge dynvlan delete
Delete a dynamic VLAN membership entry.
Syntax : delete id = <number{0-100000}>

Parameters :
id = <number{0-100000}>

eth bridge dynvlan flush
Flush all dynamic VLAN membership entries.
Syntax : flush
eth bridge dynvlan list
Display a dynamic VLAN membership entry.
Syntax : list
eth bridge filter
Following commands are available :

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

eth bridge filter add
Add a filter.
Syntax : add brname = <{bridge}> name = <string> [filter = <{}>]

Parameters :
brname = <{bridge}>
The name of an bridge.
name = <string>
The name of the filter.
[filter = <{}>]
Ethernet filter to used

eth bridge filter attach
Enable a filter.
Syntax : attach brname = <{bridge}> name = <{}>

Parameters :
brname = <{bridge}>

The name of an bridge.
name = <{}>
The name of the filter to configure.

eth bridge filter config
Change filter configuration
Syntax : config brname = <{bridge}> name = <{}> [filter = <{}>]

Parameters :
brname = <{bridge}>
The name of an bridge.
name = <{}>
The name of the filter to configure.
[filter = <{}>]
Ethernet filter to used

eth bridge filter delete
Delete a filter.
Syntax : delete brname = <{bridge}> name = <{}>

Parameters :
brname = <{bridge}>
The name of an bridge.
name = <{}>
The name of the filter to configure.

eth bridge filter detach
Disable a filter.
Syntax : detach brname = <{bridge}> name = <{}>

Parameters :
brname = <{bridge}>
The name of an bridge.
name = <{}>
The name of the filter to configure.

eth bridge filter forwarding
Action: set forwarding configuration.
Syntax : forwarding brname = <{bridge}> name = <{}>
mode = <{ToFwdIntfsOnly|AlsoToFwdIntfs|NotToFwdIntfs|
Drop}>

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

eth bridge filter fwdintfadd
Add Forwarding interface: filter action.
Syntax : fwdintfadd brname = <{bridge}> name = <{}>
intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|
WLAN}>

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

  eth bridge filter fwdintfdel
Remove Forwarding interface: filter action.
Syntax : fwdintfdel brname = <{bridge}> name = <{}>
                intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|
                    WLAN}>

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

  eth bridge filter ifadd
Connect an interface with a filter.
Syntax : ifadd brname = <{bridge}> name = <{}>
            intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>

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

  eth bridge filter ifdel
Remove an interface from a filter.
Syntax : ifdel brname = <{bridge}> name = <{}>
            intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>

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

  eth bridge filter list
Display the bridge filters.
Syntax : list brname = <{bridge}> [name = <{}>]
           [expand = <{disabled|enabled}>]

Parameters :
  brname = <{bridge}>
    The name of an bridge.

[name = <{}>]
The name of an filter.
[expand = <{disabled|enabled}>]
Expanded listing.

eth bridge flush
Flush all bridge instances with their interfaces and properties.
Syntax : flush [brname = <{bridge}>]

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.

eth bridge group
Following commands are available :

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

eth bridge group add
Add a new bridge group.
Syntax : add [brname = <{bridge}>] [name = <string>] id = <number{2-4094}>

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.
[name = <string>]
The new group name. If left blank, a default name will be used.
id = <number{2-4094}>
The bridge group id.

eth bridge group move
Move a bridge interface to a specified bridge group.
Syntax : move [brname = <{bridge}>]
intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>
name = <BC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}> >

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

eth bridge ifadd
Add a new bridge interface.
Syntax : ifadd [brname = <{bridge}>] intf = <string>

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.
intf = <string>
The new bridge interface name.

eth bridge ifattach
Attach a bridge interface.

Syntax : ifattach [brname = <{bridge}>] intf = <{}>

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.
intf = <{}>
The name of the bridge interface.

eth bridge ifconfig
Modify a bridge interface configuration.
Syntax : 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}>]
[xtratagging = <{none|c-vlan|s-vlan}>]

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.
intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>
The name of the bridge interface to configure.
[dest = <{}>]
The destination for this interface. Typically an ATM or a physical interface name.
[portstate = <{disabled|learning|forwarding}>]
The bridge portstate for this interface.
[retry = <number{0-65535}>]
The number of WAN connection setup retries before giving up.
[priotag = <{disabled|enabled}>]
Enable/Disable priority tagging.
[vlan = <{default}>]
The default VLAN.
[prioconfig = <{disabled|overwrite|increase}>]
The priority configuration for this interface.
[ipprec = <{disabled|precedence|dscp}>]
The IP precedence for this interface.
[priority = <number{0-7}>]
The default priority for untagged ingress packets.
[regenprio = <string>]
The priority regeneration table for tagged ingress packets.
[ingressfiltering = <{disabled|enabled}>]
Enable/disable discard of tagged ingress packets if the interface is not part of the VLAN.

[acceptvlanonly = <{disabled|enabled}>]
Enable/disable receipt of tagged ingress packets.
[mcastfilter = <{disabled|enabled}>]
Enable/disable discard of multicast packets for this interface.
[dynvlan = <{disabled|enabled}>]
Enable/disable dynamic VLAN membership checking for this interface.
[wan = <{disabled|enabled}>]
Enable/disable WAN for this interface.
[igmpsnooping = <{disabled|enabled}>]
Enable/disable IGMP snooping for this interface.
[priotransparent = <{disabled|enabled}>]
Enable/disable priority preservation for this interface.
[bpdufiltering = <{disabled|enabled}>]
Enable/disable BPDU filtering for this interface.
[xtratagging = <{none|c-vlan|s-vlan}>]
The 'extra tagging mode' for this interface (none, c-vlan or s-vlan).

eth bridge ifdelete
Delete a bridge interface.
Syntax : ifdelete [brname = <{bridge}>]
intf = <{ethport1|ethport2|ethport3|ethport4|virt|WLAN}>

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.
intf = <{ethport1|ethport2|ethport3|ethport4|virt|WLAN}>
The name of the bridge interface.

eth bridge ifdetach
Detach a bridge interface.
Syntax : ifdetach [brname = <{bridge}>]
intf = <{ethport1|ethport2|ethport3|ethport4|virt|WLAN}>

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.
intf = <{ethport1|ethport2|ethport3|ethport4|virt|WLAN}>
The name of the bridge interface.

eth bridge ifflush
flush the bridge interfaces: detach/delete all interfaces.
Syntax : ifflush [brname = <{bridge}>]

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.

eth bridge iflist
Display the current bridge interfaces.
Syntax : iflist [brname = <{bridge}>]
[intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>]

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.

[intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>]
The name of a bridge interface.

eth bridge igmpsnooping
Following commands are available :

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

eth bridge igmpsnooping clear
Clear snooping statistics.
Syntax : clear [brname = <{bridge}>]
[intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>]

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

eth bridge igmpsnooping config
Configure bridge instance IGMP Snooping flags.
Syntax : config [brname = <{bridge}>] [state = <{disabled|enabled}>]
[floodrp = <{disabled|enabled}>]
[floodmcast = <{disabled|enabled}>]

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.
[state = <{disabled|enabled}>]
Enable/Disable the IGMP Snooping.
[floodrp = <{disabled|enabled}>]
Enable/Disable flooding reports to all ports.
[floodmcast = <{disabled|enabled}>]
Enable/Disable flooding unregistered multicasts.

eth bridge igmpsnooping ifconfig
Configure bridge interface IGMP snooping flags and mode.
Syntax : ifconfig [brname = <{bridge}>]
intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>

[portmode = <{Host|Router|Auto}>]
[fastleave = <{disabled|enabled}>]
[exptrack = <{disabled|enabled}>]
[mrdp = <{disabled|enabled}>] [rgmp = <{disabled|enabled}>]

Parameters :
[brname = <{bridge}>]
The bridge instance currently to be configured.
intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>
The bridge interface currently to be configured.
[portmode = <{Host|Router|Auto}>]
Mode of the bridge port.

[fastleave = <{disabled|enabled}>]
Enable/Disable Fast Immediate Leave.
[exptrack = <{disabled|enabled}>]
Enable/Disable Explicit Host Tracking.
[mrdp = <{disabled|enabled}>]
Enable/Disable MRDP support.
[rgmp = <{disabled|enabled}>]
Enable/Disable RGMP support.

eth bridge igmpsnooping iflist
Display bridge interface IGMP status.
Syntax : iflist [brname = <{bridge}>]
[intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>]

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

eth bridge igmpsnooping list
Display bridge instance snooped groups.
Syntax : list [brname = <{bridge}>]

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.

eth bridge list
Display the current bridge instances.
Syntax : list [brname = <{bridge}>]

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.

eth bridge macadd
Add a static MAC address to a bridge interface.
Syntax : macadd [brname = <{bridge}>]
intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>
hwaddr = <hardware-address> [vlan = <{default}>]

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.
intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>
The name of the bridge interface.
hwaddr = <hardware-address>
The ethernet MAC address of the new entry.
[vlan = <{default}>]
The VLAN.

eth bridge macdelete
Remove a MAC address from the database.
Syntax : macdelete [brname = <{bridge}>] hwaddr = <hardware-address>

[vlan = <{default}>]

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.
hwaddr = <hardware-address>
The ethernet MAC address of the entry.
[vlan = <{default}>]
The VLAN.

eth bridge maclist
Display the MAC address database.
Syntax : maclist [brname = <{bridge}>]

Parameters :
[brname = <{bridge}>]
The name of a bridge instance.

eth bridge rule
Following commands are available :

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

eth bridge rule add
Add a new constraint to the VLAN learning system.
Syntax : add type = <{shared|independant}> vlan = <{default}>
[vlan2 = <{default}>] [isi = <number{0-32}>]

Parameters :
type = <{shared|independant}>
Type of constraint.
vlan = <{default}>
The VLAN where the constraint belongs to.
[vlan2 = <{default}>]
The second VLAN for a shared constraint.
[isi = <number{0-32}>]
The indenpendent set id for an independent constraint.

eth bridge rule delete
Delete a constraint from the VLAN learning system.
Syntax : delete index = <number{0-32}>

Parameters :
index = <number{0-32}>
Index of the constraint.

eth bridge rule flush
Flush all constraints from the VLAN learning system.
Syntax : flush
eth bridge rule list
Display all constraints from the VLAN learning system.
Syntax : list
eth bridge select
Select the default bridge for configuring interfaces from (if not setting

bridge name, for legacy purposes).
Syntax : select brname = <{bridge}>

Parameters :
  brname = <{bridge}>
    The name of a bridge instance.

  eth bridge unknownvlan
Following commands are available :

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

  eth bridge unknownvlan ifadd
Add bridge interface to unknown 'VLAN'.
Syntax : ifadd [brname = <{bridge}>]
           intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>
           [untagged = <{disabled|enabled}>]

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

  eth bridge unknownvlan ifconfig
Modify bridge interface from unknown 'VLAN'.
Syntax : ifconfig [brname = <{bridge}>]
             intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>

             [untagged = <{disabled|enabled}>]

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

  eth bridge unknownvlan ifdelete
Delete bridge interface from unknown 'VLAN'.
Syntax : ifdelete [brname = <{bridge}>]
             intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>

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

eth bridge unknownvlan iflist
Display all interfaces of the unknown 'VLAN'.
Syntax : iflist
eth bridge vlan
Following commands are available :

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

eth bridge vlan ifadd
Add bridge interface to virtual LAN.
Syntax : ifadd name = <{default}>
intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>
[untagged = <{disabled|enabled}>]

Parameters :
name = <{default}>
The VLAN name.
intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>
The name of the bridge interface to add to the VLAN.
[untagged = <{disabled|enabled}>]
Enable/disable interface as untagged for this VLAN.

eth bridge vlan ifconfig
Modify bridge interface from virtual LAN.
Syntax : ifconfig name = <{default}>
intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>

untagged = <{disabled|enabled}>

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

eth bridge vlan ifdelete
Delete bridge interface from virtual LAN.
Syntax : ifdelete name = <{default}>
intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>

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

eth bridge vlan iflist
Display all vitual LAN's.
Syntax : iflist
eth bridge xtratag

Following commands are available :

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

eth bridge xtratag add
Add an extra tag mapping entry.
Syntax : add [brname = <{bridge}>]
intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>
innervid = <{[1-4094]|all|}>
outervid = <{[1-4094]|notag|transparent|}>

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

eth bridge xtratag config
Configure an extra tag mapping entry.
Syntax : config [brname = <{bridge}>]
intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>
innervid = <{[1-4094]|all|}>
outervid = <{[1-4094]|notag|transparent|}>

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

eth bridge xtratag delete
Delete an extra tag mapping entry.
Syntax : delete [brname = <{bridge}>]
intf = <{OBC|ethport1|ethport2|ethport3|ethport4|virt|WLAN}>
innervid = <{[1-4094]|all|}>

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

```
   innervid = <{[1-4094]|all|}>
     The inner VLAN id [all,1-4094] (all = all inner vid will be translated to
     the outer vid).

   eth bridge xtratag flush
Flush all extra tag mapping entries.
Syntax : flush
   eth bridge xtratag list
Display all extra tag mapping entries.
Syntax : list
   eth device
Following commands are available :

ifconfig        : Configure ethernet interface.
iflist          : Show status of ethernet interfaces.

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

Parameters :
   intf = <{ethif1|ethif2|ethif3|ethif4|ethif5|wlif1|ethif6}>
     The name of a physical interface.
   [type = <{auto|10BaseTHD|10BaseTFD|100BaseTHD|100BaseTFD} or number>]
     The ethernet type.
   [state = <{enabled|disabled}>]
     The interface state.

   eth device iflist
Show status of ethernet interfaces.
Syntax : iflist
   eth filter
Following command groups are available :

operand         template

   eth filter operand
Following commands are available :

add             : Add a filter operand.
config          : Set the operand to a certain type (will reset content
                  first).
delete          : Delete a filter operand.
reset           : Reset an operand to its default initial state (removes all
                  content, set to undefined type).
list            : Display the filter operands.
vidadd          : Add another VID in the set.
viddelete       : Delete a VID from the set.
frameclassadd   : Add another frameclass in the set.
frameclassdelete : Delete a frameclasse from the set.
ipprotoadd      : Add another ip protocol in the set.
ipprotodelete   : Delete a ip protocol from the set.
priorityadd     : Add another priority in the set.
prioritydelete  : Delete a ip priority from the set.
```

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

eth filter operand add
Add a filter operand.
Syntax : add operand = <string>

Parameters :
operand = <string>
The name of the new operand operand.

eth filter operand config
Set the operand to a certain type (will reset content first).
Syntax : config operand = <{}>
type = <{CheckDAClass|CheckFrameClass|CheckVLANPriority|
CheckVID|CheckIPProto|CheckSize|Match|Modify|
CheckCheckSum|UpdateCheckSum}>
operator = <{Equal|Less|LessEqual|InSet}>
protocollevel = <{EthernetFrame|Protocol|EthernetPayload|
ULPHeader|ULPPayload}>
length = <number> mask = <string> value = <string>
daclass = <{Unicast|Multicast|Broadcast}>
[frameclass = <{Eth2|SNAPEType|SNAP8021H|SNAPOther|LLCNLPID|
LLCOther}>]
[ipprotocol = <number{0-254}>]
action = <{Delete|Insert|Modify}> offset = <number>
[priority = <number{0-7}>] size = <number>
[vid = <number{1-4095}>] protocol = <{IP|UpperLayer}>

Parameters :
operand = <{}>
The name of an operand.
type = <{CheckDAClass|CheckFrameClass|CheckVLANPriority|CheckVID|
CheckIPProto|CheckSize|Match|Modify|CheckCheckSum|UpdateCheckSum}>
The type to set.
operator = <{Equal|Less|LessEqual|InSet}>
The compare operator.
protocollevel = <{EthernetFrame|Protocol|EthernetPayload|ULPHeader|
ULPPayload}>
The protocol level from where to start offset/size calculations.
length = <number>
The length of the compare value/mask combination in bytes..
mask = <string>
The mask to be used on the value.
value = <string>
The value.
daclass = <{Unicast|Multicast|Broadcast}>
The destination address class.
[frameclass = <{Eth2|SNAPEType|SNAP8021H|SNAPOther|LLCNLPID|LLCOther}>]
The Ethernet frame class to filter on.
[ipprotocol = <number{0-254}>]
The IP protocol to filter on.
action = <{Delete|Insert|Modify}>
The action to undertake with matching filter..
offset = <number>
At which offset from protocol level in bytes the Match/Modify action
should start (in bytes).

[priority = <number{0-7}>]
The VLAN priority to filter on.
size = <number>
The size of the frame at this protocol level.
[vid = <number{1-4095}>]
The VID to filter on.
protocol = <{IP|UpperLayer}>
The protocol level of the checksum.

eth filter operand delete
Delete a filter operand.
Syntax : delete operand = <{}>

Parameters :
operand = <{}>
The name of the operand to delete.

eth filter operand flush
Remove all filter operands (this will only delete the ones not in use: flush filters first).
Syntax : flush
eth filter operand frameclassadd
Add another frameclass in the set.
Syntax : frameclassadd operand = <{}>
frameclass = <{Eth2|SNAPEType|SNAP8021H|SNAPOther|
LLCNLPID|LLCOther}>

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

eth filter operand frameclassdelete
Delete a frameclasse from the set.
Syntax : frameclassdelete operand = <{}>
frameclass = <{Eth2|SNAPEType|SNAP8021H|SNAPOther|
LLCNLPID|LLCOther}>

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

eth filter operand ipprotoadd
Add another ip protocol in the set.
Syntax : ipprotoadd operand = <{}> ipprotocol = <number{0-255}>

Parameters :
operand = <{}>
The name of an operand.
ipprotocol = <number{0-255}>
The IP protocol to add.

eth filter operand ipprotodelete
Delete a ip protocol from the set.
Syntax : ipprotodelete operand = <{}> ipprotocol = <{}>

Parameters :
operand = <{}>
The name of an operand.
ipprotocol = <{}>
The IP protocol to remove.

eth filter operand list
Display the filter operands.
Syntax : list [operand = <{}>] [expand = <{disabled|enabled}>]

Parameters :
[operand = <{}>]
The name of an operand.
[expand = <{disabled|enabled}>]
Expanded listing.

eth filter operand priorityadd
Add another priority in the set.
Syntax : priorityadd operand = <{}> priority = <number{0-7}>

Parameters :
operand = <{}>
The name of an operand.
priority = <number{0-7}>
The vlan priority to add.

eth filter operand prioritydelete
Delete a ip priority from the set.
Syntax : prioritydelete operand = <{}> priority = <{}>

Parameters :
operand = <{}>
The name of an operand.
priority = <{}>
The vlan priority to remove.

eth filter operand reset
Reset an operand to its default initial state (removes all content, set to undefined type).
Syntax : reset operand = <{}>

Parameters :
operand = <{}>
The name of an operand.

eth filter operand vidadd
Add another VID in the set.
Syntax : vidadd operand = <{}> vid = <number{1-4095}>

Parameters :
operand = <{}>
The name of an operand.
vid = <number{1-4095}>

The VID to add.

eth filter operand viddelete
Delete a VID from the set.
Syntax : viddelete operand = <{}> vid = <{}>

Parameters :
operand = <{}>
The name of an operand.
vid = <{}>
The VID to remove.

eth filter template
Following commands are available :

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

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

Parameters :
filter = <string>
The name of the filter.
[location = <{Ingress|Egress|VID|Priority}>]
The filter location.
[level = <number{0-65535}>]
The filter level (lower level is processed first = priority)
[tracing = <{disabled|enabled}>]
Enable/disabled tracing of packets
[mark = <{disabled|enabled}>]
Enable/disabled marking of packets

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

Parameters :
filter = <{}>
The name of an filter.
[location = <{Ingress|Egress|VID|Priority}>]
The filter location.
[level = <number{0-65535}>]
The filter level (lower level is processed first = priority)

[tracing = <{disabled|enabled}>]
Enable/disabled tracing of packets
[mark = <{disabled|enabled}>]
Enable/disabled marking of packets

eth filter template delete
Delete a filter.
Syntax : delete filter = <{}>

Parameters :
filter = <{}>
The name of an filter.

eth filter template flush
Remove all filters.
Syntax : flush
eth filter template list
Display the filters.
Syntax : list [filter = <{}>] [expand = <{disabled|enabled}>]

Parameters :
[filter = <{}>]
The name of an filter.
[expand = <{disabled|enabled}>]
Expanded listing.

eth filter template ruleadd
Connect an operand rule with a filter.
Syntax : ruleadd filter = <{}> operand = <{}> [negate = <{disabled|enabled}>]
[order = <number{-100-100}>] [operator = <{Ignore|AND|OR}>]

Parameters :
filter = <{}>
The name of an filter.
operand = <{}>
The name of the operand to connect with.
[negate = <{disabled|enabled}>]
negate or not the operand outcome.
[order = <number{-100-100}>]
The operand order in thes filter (lower order is processed first =
priority)
[operator = <{Ignore|AND|OR}>]
Operand operator.

eth filter template ruledel
Remove an operand rule from a filter.
Syntax : ruledel filter = <{}> ruleid = <{}>

Parameters :
filter = <{}>
The name of an filter.
ruleid = <{}>
The name of the operand to remove.

eth filter template rulemodify
Modify an operand rule from a filter.
Syntax : rulemodify filter = <{}> ruleid = <{}> [operand = <{}>]

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

Parameters :
filter = <{}>
The name of an filter.
ruleid = <{}>
The name of the operand to remove.
[operand = <{}>]
The name of the operand to connect with.
[negate = <{disabled|enabled}>]
negate or not the operand outcome.
[order = <number{-100-100}>]
The operand order in thes filter (lower order is processed first = priority)
[operator = <{Ignore|AND|OR}>]
Operand operator.

eth filter template setpriority
Action: enable/disable priority derivation
Syntax : setpriority filter = <{}> [state = <{disabled|enabled}>]
priority = <number{0-15}>

Parameters :
filter = <{}>
The name of an filter.
[state = <{disabled|enabled}>]
Enable/disabled priority derivation for this filters
priority = <number{0-15}>
The priority to set in the derivation.

eth filter template setvid
Action: enable/disable VID derivation
Syntax : setvid filter = <{}> [state = <{disabled|enabled}>]
vid = <number{1-4095}>

Parameters :
filter = <{}>
The name of an filter.
[state = <{disabled|enabled}>]
Enable/disabled VID derivation for this filters
vid = <number{1-4095}>
The VID to set in the derivation.

eth flush
Flush all ETH interfaces.
Syntax : flush
eth ifadd
Create a new ETH interface.
Syntax : ifadd intf = <string>

Parameters :
intf = <string>
The name for the new ETH interface.

eth ifattach

Attach an ETH interface.
Syntax : ifattach intf = <{}>

Parameters :
  intf = <{}>
    The name of the ETH interface.

  eth ifconfig
Modify an ETH interface.
Syntax : ifconfig intf = <{eth_wan}> [dest = <{bridge|eth_wan}>]
            [retry = <number{0-65535}>] [wan = <{disabled|enabled}>]
            [priotag = <{disabled|enabled}>] [vlan = <{default}>]

Parameters :
  intf = <{eth_wan}>
    The name of the ETH interface to configure.
  [dest = <{bridge|eth_wan}>]
    The destination interface for this ETH interface.
  [retry = <number{0-65535}>]
    The number of times the ETH connection setup should retry before giving
    up.
  [wan = <{disabled|enabled}>]
    Enable/Disable WAN for this ETH interface.
  [priotag = <{disabled|enabled}>]
    Enable/Disable VLAN priority tagging.
  [vlan = <{default}>]
    The VLAN for this ETH interface.

  eth ifdelete
Delete an ETH interface.
Syntax : ifdelete intf = <{}>

Parameters :
  intf = <{}>
    The name of the ETH interface.

  eth ifdetach
Detach an ETH interface.
Syntax : ifdetach intf = <{}>

Parameters :
  intf = <{}>
    The name of the ETH interface.

  eth iflist
Display the ETH interfaces.
Syntax : iflist [intf = <{eth_wan}>]

Parameters :
  [intf = <{eth_wan}>]
    The name of an ETH interface.

  eth switch
Following commands are available :

info   : Display switch capabilities

Following command groups are available :

group mirror qos shaper share
storm

eth switch group
Following commands are available :

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

eth switch group flush
To set all ports to the default settings (all ports in group 0).
Syntax : flush
eth switch group list
List all configured groups.
Syntax : list
eth switch group move
Move a specified port to a specified group.
Syntax : move group = <number{0-3}> port = <number{1-4}>

Parameters :
group = <number{0-3}>
The group id.
port = <number{1-4}>
The port.

eth switch info
Display switch capabilities
Syntax : info
eth switch mirror
Following commands are available :

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

eth switch mirror capture
Define the specified port to be the Mirror Capture Port.
Syntax : capture port = <number{1-4}>

Parameters :
port = <number{1-4}>
The port.

eth switch mirror egress
Enable or disable the specified port to be a Transmitted Port Mirroring.
Syntax : egress port = <number{1-4}> [state = <{enabled|disabled}>]

Parameters :
port = <number{1-4}>
The port.
[state = <{enabled|disabled}>]

Enable/disable state.

eth switch mirror ingress
Enable or disable the specified port to be a Received Port Mirroring.
Syntax : ingress port = <number{1-4}> [state = <{enabled|disabled}>]

Parameters :
port = <number{1-4}>
The port.
[state = <{enabled|disabled}>]
Enable/disable state.

eth switch qos
Following commands are available :

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

eth switch qos config
Configure common qos parameters.
Syntax : config state = <{enabled|disabled}> [nbrOfQueues = <number{0-4}>]
[realtime = <{enabled|disabled}>]

Parameters :
state = <{enabled|disabled}>
Enable/disable QoS.
[nbrOfQueues = <number{0-4}>]
Number of queues.
[realtime = <{enabled|disabled}>]
Enable/disable realtime.

eth switch qos ifconfig
Configure per port qos parameters.
Syntax : ifconfig port = <number{1-4}> mode = <{none|802.1p|high|diffserv}>
[flowcontrol = <{disabled|enabled}>]

Parameters :
port = <number{1-4}>
The port.
mode = <{none|802.1p|high|diffserv}>
Classifier.
[flowcontrol = <{disabled|enabled}>]
Enable/disable flow-control.

eth switch qos list
Display qos configuration.
Syntax : list
eth switch qos weights
Configure the queue weights.
Syntax : weights queue0 = <number{0-100}> queue1 = <number{0-100}>
queue2 = <number{0-100}> queue3 = <number{0-100}>

Parameters :
queue0 = <number{0-100}>
Weight of queue 0 in WFQ (in %).

queue1 = <number{0-100}>
Weight of queue 1 in WFQ (in %).
queue2 = <number{0-100}>
Weight of queue 2 in WFQ (in %).
queue3 = <number{0-100}>
Weight of queue 3 in WFQ (in %).

eth switch shaper
Following commands are available :

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

eth switch shaper config
Configure common ingress shaper parameters.
Syntax : config shaper = <number{0--1}> [unicast = <{enabled|disabled}>]
[multicast = <{enabled|disabled}>]
[broadcast = <{enabled|disabled}>]
[control = <{enabled|disabled}>]
[unknown = <{enabled|disabled}>]
[discard = <{enabled|disabled}>]

Parameters :
shaper = <number{0--1}>
The shaper instance.
[unicast = <{enabled|disabled}>]
Shape unicast traffic.
[multicast = <{enabled|disabled}>]
Shape multicast traffic.
[broadcast = <{enabled|disabled}>]
Shape broadcast traffic.
[control = <{enabled|disabled}>]
Shape MAC control traffic.
[unknown = <{enabled|disabled}>]
Shape traffic with unknown destination address.
[discard = <{enabled|disabled}>]
Discard frame at overflow (else attempt for flow control).

eth switch shaper ifconfig
Configure per port shaper parameters.
Syntax : ifconfig port = <number{1-4}> ingress = <{enabled|disabled}>
shaper = <number{0--1}> [state = <{enabled|disabled}>]
[speed = <number{64000-100000000}>] [burstsize = <{}>]

Parameters :
port = <number{1-4}>
The port.
ingress = <{enabled|disabled}>
Ingress port = enabled; egress port = disabled.
shaper = <number{0--1}>
The shaper instance.
[state = <{enabled|disabled}>]
Enable/disable shaping.
[speed = <number{64000-100000000}>]
Speed in bits/sec.
[burstsize = <{}>]

Burst size in KBytes.

eth switch shaper iflist
Display shaper configuration per port.
Syntax : iflist
eth switch share
Following commands are available :

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

eth switch share add
Add a port to be shared.
Syntax : add port = <number{1-4}> shared = <number{1-4}>

Parameters :
port = <number{1-4}>
The port.
shared = <number{1-4}>
The shared port.

eth switch share delete
Delete a shared port.
Syntax : delete port = <number{1-4}> shared = <number{1-4}>

Parameters :
port = <number{1-4}>
The port.
shared = <number{1-4}>
The shared port.

eth switch share list
Display shared ports.
Syntax : list
eth switch storm
Following commands are available :

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

eth switch storm ifconfig
Configure per port storm control parameters.
Syntax : ifconfig port = <number{1-4}> [state = <{enabled|disabled}>]
[rate = <{100|200|300|400}>] [burstsize = <number{2-8}>]
[broadcast = <{enabled|disabled}>]
[multicast = <{enabled|disabled}>]
[unknown = <{enabled|disabled}>]

Parameters :
port = <number{1-4}>
The port.
[state = <{enabled|disabled}>]
Enable/disable storm control.
[rate = <{100|200|300|400}>]
Rate in 10ths of percent.
[burstsize = <number{2-8}>]

Burst size in KBytes.
[broadcast = <{enabled|disabled}>]
Storm control for broadcast traffic.
[multicast = <{enabled|disabled}>]
Storm control for multicast traffic.
[unknown = <{enabled|disabled}>]
Storm control for traffic with unknown destination address.

eth switch storm iflist
Display storm control configuration per port.
Syntax : iflist
eth vlan
Following commands are available :

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

Following command groups are available :

priomap

eth vlan add
Add a new virtual LAN.
Syntax : add name = <string> vid = <number{2-4094}>
[addrule = <{disabled|enabled}>]

Parameters :
name = <string>
The new VLAN name.
vid = <number{2-4094}>
The new VLAN id.
[addrule = <{disabled|enabled}>]
Add the default bridge constraint.

eth vlan delete
Delete a virtual LAN.
Syntax : delete name = <{default}>

Parameters :
name = <{default}>
The VLAN name.

eth vlan flush
Flush all virtual LAN's.
Syntax : flush
eth vlan list
Display all virtual LAN's.
Syntax : list
eth vlan priomap
Following commands are available :

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

eth vlan priomap config

Change a VLAN/DE to/from VBUF priority mapping.
Syntax : config entry = <{prio_0_7_2vlan|prio_8_15_2vlan|prio_0_7_2de|
prio_8_15_2de|vlan2prio_de_0|vlan2prio_de_1}>
priomap = <string>

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

eth vlan priomap list
Display the VLAN/DE to/from VBUF priority mappings.
Syntax : list
expr
Following commands are available :

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

expr add
Add an expression.
Syntax : add name = <{wan|local|lan|tunnel|dmz|guest|private|ssdp_ip|mdap_ip|
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|VoIP-Inc-SIP-UDP|VoIP-Inc-SIP-TCP|VoIP-
Inc-RTP}>
[type = <{intf|ip|serv|mac}>] mac [!]= <hardware-address>
addr [!]= <ip-range> [mask [<ip-mask(dotted or cidr)>]
[intf [!]= <{loop|LocalNetwork|Internet}>]
[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|chargen|clearcase|daytime|discard|dns|
domain|doom|echo|exec|finger|ftp|ftp-data|gopher|
h323|httpproxy|ike|ils|imap2|imap3|ingres-net|
ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-
ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|
pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|
sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|
tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]

[srcportend = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|discard|dns|
domain|doom|echo|exec|finger|ftp|ftp-data|gopher|
h323|httpproxy|ike|ils|imap2|imap3|ingres-net|
ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-
ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|
pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|
sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|
tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
[dstport [!]= <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|discard|dns|
domain|doom|echo|exec|finger|ftp|ftp-data|gopher|
h323|httpproxy|ike|ils|imap2|imap3|ingres-net|
ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-
ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|
pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|
sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|
tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
[dstportend = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|discard|dns|
domain|doom|echo|exec|finger|ftp|ftp-data|gopher|
h323|httpproxy|ike|ils|imap2|imap3|ingres-net|
ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-
ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|
pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|
sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|
tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
[icmptype [!]= <{echo-reply|destination-unreachable|source-quench|
redirect|echo-request|router-advertisement|router-
solicitation|time-exceeded|parameter-problems|
timestamp-request|timestamp-reply|information-
request|information-reply|address-mask-request|
address-mask-reply} or number>]
[icmpcode [!]= <number{0-15}>] [icmpcodeend = <number{0-15}>]

Parameters :
name = <{wan|local|lan|tunnel|dmz|guest|private|ssdp_ip|mdap_ip|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|VoIP-Inc-SIP-UDP|VoIP-
Inc-SIP-TCP|VoIP-Inc-RTP}>
The name of an expression to add.
[type = <{intf|ip|serv|mac}>]
The type of an expression.
mac [!]= <hardware-address>
The MAC address.
addr [!]= <ip-range>
The IP address or range.

[mask [<ip-mask(dotted or cidr)>]
  The IP mask (ignored if an IP range is provided).
[intf [!]= <{loop|LocalNetwork|Internet}>]
  The IP interface name.
[intfgroup [!]= <{wan|local|lan|tunnel|dmz|guest} or number>]
  The IP interface group.
[tos [!]= <number{0-255}>]
  The Type Of Service specification in the IP packet.
[precedence [!]= <{routine|priority|immediate|flash|flash-override|CRITIC-
        ECP|internetwork-control|network-control} or number>]
  The precedence in the IP packet (part of tos).
[dscp [!]= <{ef|af11|af12|af13|af21|af22|af23|af31|af32|af33|af41|af42|af43|
      cs0|cs1|cs2|cs3|cs4|cs5|cs6|cs7} or number>]
  The diffserv code point in the IP packet (part of tos).
[proto [!]= <{icmp|igmp|ipinip|tcp|udp|ah|esp|ipcomp} or number>]
  The IP protocol (name or number) in the IP packet.
[srcport [!]= <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
        chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
        finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
        ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
        netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-
        rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
        qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|
        sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|
        time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
        whoami|xwindows} or number>]
  The TCP/UDP source port number or range begin.
[srcportend = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
        chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
        finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
        ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
        netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-
        rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
        qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|
        sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|
        time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
        whoami|xwindows} or number>]
  The source TCP/UDP source port range end. (inclusive)
[dstport [!]= <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
        chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
        finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
        ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
        netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-
        rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
        qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|
        sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|
        time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
        whoami|xwindows} or number>]
  The TCP/UDP destination port number or range begin.
[dstportend = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
        chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
        finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
        ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
        netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-
        rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
        qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|
        sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|

time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
The TCP/UDP destination port range end.
[icmptype [!]= <{echo-reply|destination-unreachable|source-quench|redirect|
echo-request|router-advertisement|router-solicitation|time-
exceeded|parameter-problems|timestamp-request|timestamp-
reply|information-request|information-reply|address-mask-
request|address-mask-reply} or number>]
The ICMP type (name or number) of the packet.
[icmpcode [!]= <number{0-15}>]
The ICMP code or range begin.
[icmpcodeend = <number{0-15}>]
The ICMP code range end. (inclusive)

expr delete
Delete an expression.
Syntax : delete name = <{wan|local|lan|tunnel|dmz|guest|private|ssdp_ip|
mdap_ip|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|VoIP-Inc-SIP-UDP|VoIP-
Inc-SIP-TCP|VoIP-Inc-RTP}>
[index = <number>]

Parameters :
name = <{wan|local|lan|tunnel|dmz|guest|private|ssdp_ip|mdap_ip|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|VoIP-Inc-SIP-UDP|VoIP-
Inc-SIP-TCP|VoIP-Inc-RTP}>
The name of an expression to delete.
[index = <number>]
The index of a subexpression.

expr flush
Flush all expressions.
Syntax : flush
expr list
List expressions.
Syntax : list [name = <{_intf_0|_intf_1|_intf_2|DHCP-R_if_0|wan|local|lan|
tunnel|dmz|guest|DNS-S_if_0|MDAP_if_0|SSDP_if_0|
PPTPD_if_0|PPTPGRE_if_0|HTTP_if_0|HTTPs_if_0|FTP_if_0|
TELNET_if_0|DHCP-S_if_0|PING_RESPONDER_if_0|
SRCIF_IP_Intf_Internet|_addr_127_0_0_1|_addr_10_0_0_138|
_addr_192_168_1_254|private|ssdp_ip|mdap_ip|
_addr_81_105_145_241|map_6_443-443:C0A801C8|map_6_25-
25:C0A801C8|map_17_25-25:C0A801C8|map_6_9090-
9090:C0A801C8|map_6_4040-4040:C0A801C8|
DSTIP_192_168_1_70|DSTIP_192_168_1_68|DSTIP_192_168_1_74|
DSTIP_192_168_1_77|DSTIP_192_168_1_73|DSTIP_192_168_1_79|
DSTIP_192_168_1_66|DSTIP_192_168_1_75|DSTIP_192_168_1_65|
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}>]
[type = <{intf|ip|serv|mac}>] [format = <{pretty|cli}>]

Parameters :

```
  [name = <{_intf_0|_intf_1|_intf_2|DHCP-R_if_0|wan|local|lan|tunnel|dmz|
        guest|DNS-S_if_0|MDAP_if_0|SSDP_if_0|PPTPD_if_0|PPTPGRE_if_0|
        HTTP_if_0|HTTPs_if_0|FTP_if_0|TELNET_if_0|DHCP-S_if_0|
        PING_RESPONDER_if_0|SRCIF_IP_Intf_Internet|_addr_127_0_0_1|
        _addr_10_0_0_138|_addr_192_168_1_254|private|ssdp_ip|mdap_ip|
        _addr_81_105_145_241|map_6_443-443:C0A801C8|map_6_25-25:C0A801C8|
        map_17_25-25:C0A801C8|map_6_9090-9090:C0A801C8|map_6_4040-
        4040:C0A801C8|DSTIP_192_168_1_70|DSTIP_192_168_1_68|
        DSTIP_192_168_1_74|DSTIP_192_168_1_77|DSTIP_192_168_1_73|
        DSTIP_192_168_1_79|DSTIP_192_168_1_66|DSTIP_192_168_1_75|
        DSTIP_192_168_1_65|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}>]
    The name of an expression to list.
  [type = <{intf|ip|serv|mac}>]
    The type of an expression.
  [format = <{pretty|cli}>]
    The format of the expression list.

  expr modify
Modify an expression.
Syntax : modify name = <{wan|local|lan|tunnel|dmz|guest|private|ssdp_ip|
                mdap_ip|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|VoIP-Inc-SIP-UDP|VoIP-
                Inc-SIP-TCP|VoIP-Inc-RTP}>
           [type = <{intf|ip|serv|mac}>] index = <number>
           mac [!]= <hardware-address> addr [!]= <ip-range>
           [mask [ <ip-mask(dotted or cidr)>]
           [intf [!]= <{loop|LocalNetwork|Internet}>]
           [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|chargen|clearcase|daytime|discard|
                     dns|domain|doom|echo|exec|finger|ftp|ftp-data|
                     gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-
                     net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
                     login|netbios-dgm|netbios-ns|netbios-ssn|netwall|
                     netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
                     pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|
                     rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
                     sql*net|sql-net|sqlserv|sunrpc|syslog|systat|
                     talk|telnet|time|timed|tftp|ulistserv|utime|uucp|
                     uucp-rlogin|who|www-http|whoami|xwindows} or
                     number>]
           [srcportend = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
                     bootpc|bootps|chargen|clearcase|daytime|discard|
                     dns|domain|doom|echo|exec|finger|ftp|ftp-data|
```

gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-
net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
login|netbios-dgm|netbios-ns|netbios-ssn|netwall|
netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|
rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|
talk|telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or
number>]
[dstport [!]= <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|discard|
dns|domain|doom|echo|exec|finger|ftp|ftp-data|
gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-
net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
login|netbios-dgm|netbios-ns|netbios-ssn|netwall|
netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|
rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|
talk|telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or
number>]
[dstportend = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|discard|
dns|domain|doom|echo|exec|finger|ftp|ftp-data|
gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-
net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
login|netbios-dgm|netbios-ns|netbios-ssn|netwall|
netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|
rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|
talk|telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or
number>]
[icmptype [!]= <{echo-reply|destination-unreachable|source-
quench|redirect|echo-request|router-
advertisement|router-solicitation|time-exceeded|
parameter-problems|timestamp-request|timestamp-
reply|information-request|information-reply|
address-mask-request|address-mask-reply} or
number>]
[icmpcode [!]= <number{0-15}>] [icmpcodeend = <number{0-15}>]

Parameters :
name = <{wan|local|lan|tunnel|dmz|guest|private|ssdp_ip|mdap_ip|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|VoIP-Inc-SIP-UDP|VoIP-
Inc-SIP-TCP|VoIP-Inc-RTP}>
The name of an expression to modify.
[type = <{intf|ip|serv|mac}>]
The type of an expression.
index = <number>
The index of a subexpression.
mac [!]= <hardware-address>

The MAC address.
addr [!]= <ip-range>
The IP address or range.
[mask [<ip-mask(dotted or cidr)>]
The IP mask (ignored if an IP range is provided).
[intf [!]= <{loop|LocalNetwork|Internet}>]
The IP interface name.
[intfgroup [!]= <{wan|local|lan|tunnel|dmz|guest} or number>]
The IP interface group.
[tos [!]= <number{0-255}>]
The Type Of Service specification in the IP packet.
[precedence [!]= <{routine|priority|immediate|flash|flash-override|CRITIC-
ECP|internetwork-control|network-control} or number>]
The precedence in the IP packet (part of tos).
[dscp [!]= <{ef|af11|af12|af13|af21|af22|af23|af31|af32|af33|af41|af42|af43|
cs0|cs1|cs2|cs3|cs4|cs5|cs6|cs7} or number>]
The diffserv code point in the IP packet (part of tos).
[proto [!]= <{icmp|igmp|ipinip|tcp|udp|ah|esp|ipcomp} or number>]
The IP protocol (name or number) in the IP packet.
[srcport [!]= <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-
rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|
sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|
time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
The TCP/UDP source port number or range begin.
[srcportend = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-
rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|
sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|
time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
The source TCP/UDP source port range end. (inclusive)
[dstport [!]= <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-
rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|
sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|
time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
The TCP/UDP destination port number or range begin.
[dstportend = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-

rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|
qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|
sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|
time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
The TCP/UDP destination port range end.
[icmptype [!]= <{echo-reply|destination-unreachable|source-quench|redirect|
echo-request|router-advertisement|router-solicitation|time-
exceeded|parameter-problems|timestamp-request|timestamp-
reply|information-request|information-reply|address-mask-
request|address-mask-reply} or number>]
The ICMP type (name or number) of the packet.
[icmpcode [!]= <number{0-15}>]
The ICMP code or range begin.
[icmpcodeend = <number{0-15}>]
The ICMP code range end. (inclusive)

firewall
Following commands are available :

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

Following command groups are available :

chain debug level rule

firewall chain
Following commands are available :

add : Add a chain.
delete : Delete a chain.
list : Display a list of chains.
flush : Flush all chains.

firewall chain add
Add a chain.
Syntax : add chain = <string>

Parameters :
chain = <string>
The name of the chain to add.

firewall chain delete
Delete a chain.
Syntax : delete chain = <chain name>

Parameters :
chain = <chain name>
The name of the chain to delete.

firewall chain flush
Flush all chains.
Syntax : flush
firewall chain list
Display a list of chains.

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

Parameters :
[format = <{pretty|cli}>]
The format of the chain list.

firewall chain modify
Modify a chain.
Syntax : modify chain = <chain name>

Parameters :
chain = <chain name>
The name of the chain to modify.

firewall clear
Clear firewall configuration.
Syntax : clear
firewall config
Display/Modify firewall configuration.
Syntax : 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}>]

Parameters :
[state = <{disabled|enabled}>]
Disable/Enable the firewall.
[keep = <{disabled|enabled}>]
Disable/Enable keeping existing connections when firewall rules change.
[tcpchecks = <{none|fast|exact}>]
Select level of TCP checks.
[udpchecks = <{disabled|enabled}>]
Disable/Enable UDP checks.
[icmpchecks = <{disabled|enabled}>]
Disable/Enable ICMP checks.
[logdefault = <{disabled|enabled}>]
Disable/Enable logging of default firewall rule.
[logthreshold = <{disabled|enabled}>]
Disable/Enable log thresholding.
[tcpwindow = <number{0-1073725440}>]
Modify the tcpwindow for fast TCP checks

firewall debug
Following commands are available :

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

firewall debug clear
Clear firewall statistics.
Syntax : clear
firewall debug stats
Display firewall statistics.

Syntax : stats
  firewall debug traceconfig
Display/Modify firewall trace configuration.
Syntax : traceconfig [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>]

Parameters :
  [tcpchecks = <{disabled|enabled}>]
    Disable/Enable tcpchecks traces.
  [udpchecks = <{disabled|enabled}>]
    Disable/Enable udpchecks traces.
  [icmpchecks = <{disabled|enabled}>]
    Disable/Enable icmpchecks traces.
  [sink = <{none|all|accept|deny|drop|reset} or number>]
    The action the firewall traces for sink traffic.
  [forward = <{none|all|accept|deny|drop|reset} or number>]
    The action the firewall traces for forward traffic.
  [source = <{none|all|accept|deny|drop|reset} or number>]
    The action the firewall traces for source traffic.

  firewall level
Following commands are available :

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

  firewall level add
Add a new security level.
Syntax : add name = <string> [index = <number>]
          [readonly = <{disabled|enabled}>]
          [udptrackmode = <{strict|loose}>]
          [service = <{disabled|enabled}>] [proxy = <{disabled|enabled}>]
          [text = <quoted string>]
          [policy = <{default|drop|accept|strict|loose}>]

Parameters :
  name = <string>
    The name of the security level to add.
  [index = <number>]
    The index of the security level.
  [readonly = <{disabled|enabled}>]
    Select whether the security level is readonly.
  [udptrackmode = <{strict|loose}>]
    Select UDP connection tracking mode.
  [service = <{disabled|enabled}>]
    Enable/Disable host service definitions for this security level.
  [proxy = <{disabled|enabled}>]

Enable/Disable proxy system services for this security level.
[text = <quoted string>]
The description of this security level.
[policy = <{default|drop|accept|strict|loose}>]
Select default policy of this security level.

firewall level delete
Delete a security level.
Syntax : delete name = <security level name>

Parameters :
name = <security level name>
The name of the security level to delete.

firewall level flush
Flush security level configuration.
Syntax : flush
firewall level list
List all security levels.
Syntax : list [format = <{pretty|cli}>]

Parameters :
[format = <{pretty|cli}>]
The format of the security level list.

firewall level modify
Modify a security level.
Syntax : 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}>]

Parameters :
name = <security level name>
The name of the security level to modify.
[index = <number>]
The index of this security level.
[readonly = <{disabled|enabled}>]
Select whether the security level is readonly.
[udptrackmode = <{strict|loose}>]
Select UDP connection tracking mode.
[service = <{disabled|enabled}>]
Enable/Disable service definitions for this security level.
[proxy = <{disabled|enabled}>]
Enable/Disable proxy system services for this security level.
[text = <quoted string>]
The description of this security level.
[policy = <{default|drop|accept|strict|loose}>]
Select default policy of this security level.

firewall level set
Set/Display active security level.
Syntax : set [name = <security level name>]

Parameters :

[name = <security level name>]
The name of the security level to set active.

firewall list
Display firewall configuration.
Syntax : list [format = <{pretty|cli}>]

Parameters :
[format = <{pretty|cli}>]
The format of the firewall list.

firewall rule
Following commands are available :

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

Following command groups are available :

debug

firewall rule add
Add a rule.
Syntax : add 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|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|VoIP-Inc-SIP-UDP|VoIP-
Inc-SIP-TCP|VoIP-Inc-RTP}>]
[log = <{disabled|enabled}>] [state = <{disabled|enabled}>]
action = <{accept|deny|drop|reset|count|link}>

Parameters :
chain = <chain name>
The name of the chain which contains the rule.
[index = <number>]
The index of the rule in the chain.
[name = <string>]
The name of the new rule.
[clink = <chain name>]
The name of the chain to be parsed when this rule applies.
[srcintf [!]= <{wan|local|lan|tunnel|dmz|guest}>]
The name of the source interface expression.
[srcip [!]= <{private|ssdp_ip|mdap_ip}>]
The name of the source ip expression.
[dstintf [!]= <{wan|local|lan|tunnel|dmz|guest}>]
The name of the destination interface expression.
[dstip [!]= <{private|ssdp_ip|mdap_ip}>]
The name of the destination ip expression.

[serv [!]= <{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|VoIP-Inc-SIP-UDP|VoIP-Inc-SIP-TCP|VoIP-Inc-RTP}>]
The name of the service expression.
[log = <{disabled|enabled}>]
Disable/Enable logging when this rule applies.
[state = <{disabled|enabled}>]
Disable/Enable this rule.
action = <{accept|deny|drop|reset|count|link}>
The action to be taken when this rule applies ('link' when clink is
used).

firewall rule debug
Following commands are available :

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

firewall rule debug clear
Clear rule statistics.
Syntax : clear [chain = <chain name>] [index = <number>]

Parameters :
[chain = <chain name>]
The name of the chain.
[index = <number>]
The index of the rule in the chain.

firewall rule debug stats
Display rule statistics.
Syntax : stats [chain = <chain name>] [index = <number>]

Parameters :
[chain = <chain name>]
The name of the chain.
[index = <number>]
The index of the rule in the chain.

firewall rule debug traceconfig
Display/Modify rule trace configuration.
Syntax : traceconfig [state = <{disabled|enabled}>]

Parameters :
[state = <{disabled|enabled}>]
Disable/Enable rule traces.

firewall rule delete
Delete a rule.
Syntax : delete chain = <chain name> index = <number>

Parameters :
chain = <chain name>
The name of the chain in which to delete the rule.
index = <number>
The number of the rule in the chain.

firewall rule flush
Flush all rules.
Syntax : flush [chain = <chain name>]

Parameters :
[chain = <chain name>]
The name of the chain to flush.

firewall rule list
Display a list of rules.
Syntax : list [chain = <chain name>] [format = <{pretty|cli}>]

Parameters :
[chain = <chain name>]
The name of the chain to list the rules of.
[format = <{pretty|cli}>]
The format of the rule list.

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

Parameters :
chain = <chain name>
The name of the chain which contains the rule.
[index = <number>]
The index of the rule in the chain.
[newindex = <number>]
The new index of the rule in the chain.
[name = <string>]
The name of the new rule.
[clink = <chain name>]
The name of the chain to be parsed when this rule applies.
[[!]srcintf]
The name of the source interface expression.
[[!]srcip]
The name of the source ip expression.
[[!]dstintf]
The name of the destination interface expression.
[[!]dstip]
The name of the destination ip expression.
[[!]serv]
The name of the service expression.
[log = <{disabled|enabled}>]
Disable/Enable logging when this rule applies.
[state = <{disabled|enabled}>]
Disable/Enable this rule.
[action = <{accept|deny|drop|reset|count|link}>]
The action to be taken when this rule applies ('link' when clink is
used).

grp

Following commands are available :

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

Following command groups are available :

rip

grp config
Set the grp configuration settings.
Syntax : config [cdistance = <number{0-255}>] [kdistance = <number{0-255}>]
[rdistance = <number{0-255}>] [trace = <{disabled|enabled}>]

Parameters :
[cdistance = <number{0-255}>]
Set the distance of the connected route type. Default distance is 0.
[kdistance = <number{0-255}>]
Set the distance of the kernel route type. Default distance is 1.
[rdistance = <number{0-255}>]
Set the distance of the RIP route type. Default distance is 120.
[trace = <{disabled|enabled}>]
Enable/Disable tracing.

grp flush
Flush grp interface settings and parameters.
Syntax : flush
grp rip
Following commands are available :

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

grp rip config
Set the RIP configuration settings.
Syntax : config state = <{disabled|enabled}>
[version = <{rip_unspec|rip_v1|rip_v2}>]
[updatetime = <number{1-3600}>]

Parameters :
state = <{disabled|enabled}>
Enable/Disable the RIP daemon.
[version = <{rip_unspec|rip_v1|rip_v2}>]
Set the RIP version.
[updatetime = <number{1-3600}>]
Set the routing table update timer value. Default is 30 seconds.

grp rip flush
Flush RIP interface settings and global parameters.
Syntax : flush
grp rip ifconfig
Configure a RIP interface.
Syntax : ifconfig intf = <{Internet|LocalNetwork}>
[rip = <{disabled|enabled}>]

[rxversion = <{rip_unspec|rip_v1|rip_v2|rip_v1-2}>]
[authmode = <{none|cleartext}>] [authstr = <password>]
[splithorizon = <{disabled|enabled}>]

Parameters :
intf = <{Internet|LocalNetwork}>
The name of the RIP interface to configure.
[rip = <{disabled|enabled}>]
Enable/Disable the RIP status.
[rxversion = <{rip_unspec|rip_v1|rip_v2|rip_v1-2}>]
Set the RIP receive version.
[authmode = <{none|cleartext}>]
Set the RIP authentication mode.
[authstr = <password>]
Set the RIP authentication password.
[splithorizon = <{disabled|enabled}>]
Enable/Disable the split horizon status.

grp rip show
Show the RIP settings and the routes in the RIP database.
Syntax : show
grp rtlist
Show the current routes in the grp routing table.
Syntax : rtlist [dst = <ip-address>] [dstmsk = <ip-mask(dotted or cidr)>]

Parameters :
[dst = <ip-address>]
The destination IP address using this route. Supports ip/mask notation.
[dstmsk = <ip-mask(dotted or cidr)>]
The destination IP address mask.

hostmgr
Following commands are available :

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

hostmgr add
Add host device
Syntax : 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>]

Parameters :
mac_addr = <hardware-address>
Host MAC address
[host_type = <{Generic|Desktop|Laptop|STB|PDA|GS|Phone|GSM|Printer|

```
            MassStorage|None}>]
    Host type
  [host_name = <string>]
    Host name
  [user_friendly_name = <quoted string>]
    Host user friendly name
  [dns_name = <string>]
    Host DNS name
  [type = <{Unknown|L2-FXS|L2-USB|L2-BT|L3-IP|L7-UPNP|L2-PPPOERELAY|L2-
        WLAN}>]
    Host connection type
  [interface = <string>]
    Host Ethernet interface XREF
  [ip_intf = <string>]
    Host IP interface XREF

  hostmgr clear
Remove all host devices
Syntax : clear
  hostmgr config
Configure Device Discovery deamon
Syntax : config [state = <{disabled|enabled}>] [scantime = <number{10-600}>]
            [autosave = <{disabled|enabled}>]
            [trace = <{disabled|enabled}>]

Parameters :
  [state = <{disabled|enabled}>]
    Enable/disable Device Discovery deamon
  [scantime = <number{10-600}>]
    Time between two discovery scans (sec)
  [autosave = <{disabled|enabled}>]
    Enable/disable automatic saves to flash
  [trace = <{disabled|enabled}>]
    Enable/disable Device Discovery traces

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

Parameters :
  mac_addr = <hardware-address>
    Host MAC address
  [type = <{Unknown|L2-FXS|L2-USB|L2-BT|L3-IP|L7-UPNP|L2-PPPOERELAY|L2-
        WLAN}>]
    Host connection type
  [index = <number>]
    Host index

  hostmgr flush
Flush Device Discovery configuration (i.e. clear & to defaults)
Syntax : flush
  hostmgr list
List all host devices
Syntax : list [expand = <{disabled|enabled}>]
```

Parameters :
  [expand = <{disabled|enabled}>]
    Expanded listing.

  ids
Following commands are available :

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

Following command groups are available :

parser   pattern   signature   threshold

  ids clear
Clear IDS statistics.
Syntax : clear
  ids config
Display/Modify IDS configuration.
Syntax : config [state = <{disabled|enabled}>] [trace = <{disabled|enabled}>]

Parameters :
  [state = <{disabled|enabled}>]
    Enable/Disable ids checks.
  [trace = <{disabled|enabled}>]
    Enable/Disable ids traces.

  ids conntrack
Following commands are available :

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

  ids conntrack clear
Reset connection tracker.
Syntax : clear
  ids conntrack list
Display connections in connection tracker.
Syntax : list [size = <{10|100|full} or number>]

Parameters :
  [size = <{10|100|full} or number>]
    Modify the size of connection tracker list.

  ids conntrack stats
Display connection tracker statistics.
Syntax : stats
  ids parser
Following commands are available :

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

  ids parser list
Display ids parser configuration.
Syntax : list [parser = <parser>]

Parameters :
  [parser = <parser>]
    The name of the parser.

  ids parser modify
Modify ids parser configuration.
Syntax : modify [parser = <parser>] state = <{disabled|enabled}>

Parameters :
  [parser = <parser>]
    The name of the parser.
  state = <{disabled|enabled}>
    The state of the parser.

  ids pattern
Following commands are available :

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

  ids pattern clear
Reset pattern tracker.
Syntax : clear
  ids pattern list
Display patterns in pattern tracker.
Syntax : list [size = <{10|100|full} or number>]

Parameters :
  [size = <{10|100|full} or number>]
    Modify the size of pattern tracker list.

  ids pattern stats
Display pattern tracker statistics.
Syntax : stats
  ids signature
Following commands are available :

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

  ids signature list
Display ids signature configuration.
Syntax : list [signature = <fragment_sweep|zero-length_fragment_size|
                small_fragment_size|fragment_size_overrun|
                fragment_overlap|fragment_out-of-order|
                ip_protocol_scan|tcp_port_scan|tcp_syn_scan|
                stealth_tcp_null_scan|stealth_tcp_fin_scan|
                stealth_tcp_xmas_scan|stealth_tcp_full_xmas_scan|
                stealth_tcp_vecna_scan|stealth_tcp_syn-fin_scan|
                udp_port_scan|ping_sweep_scan|tcp_syn_flood|
                udp_flood|ping_flood|icmp_unreachable_storm|
                smurf_broadcast_attack|smurf_storm_attack|
                fraggle_broadcast_attack|fraggle_storm_attack|
                land_attack|spoofed_packet|tcp_null_port|
                tcp_data_on_syn_segment|tcp_invalid_urgent_offset|
                udp_null_port|icmp_type_unknown|icmp_code_unknown|

ip_zero_payload|tcp_rate_limiting|udp_rate_limiting|
icmp_rate_limiting|ip_rate_limiting|
dhcp_rate_limiting}>]

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

ids signature modify
Modify ids signature configuration.
Syntax : modify [signature = <fragment_sweep|zero-length_fragment_size|
small_fragment_size|fragment_size_overrun|
fragment_overlap|fragment_out-of-order|
ip_protocol_scan|tcp_port_scan|tcp_syn_scan|
stealth_tcp_null_scan|stealth_tcp_fin_scan|
stealth_tcp_xmas_scan|stealth_tcp_full_xmas_scan|
stealth_tcp_vecna_scan|stealth_tcp_syn-fin_scan|
udp_port_scan|ping_sweep_scan|tcp_syn_flood|
udp_flood|ping_flood|icmp_unreachable_storm|
smurf_broadcast_attack|smurf_storm_attack|
fraggle_broadcast_attack|fraggle_storm_attack|
land_attack|spoofed_packet|tcp_null_port|
tcp_data_on_syn_segment|tcp_invalid_urgent_offset|
udp_null_port|icmp_type_unknown|icmp_code_unknown|
ip_zero_payload|tcp_rate_limiting|
udp_rate_limiting|icmp_rate_limiting|
ip_rate_limiting|dhcp_rate_limiting}>]
state = <{disabled|enabled}>

Parameters :
[signature = <fragment_sweep|zero-length_fragment_size|small_fragment_size|
fragment_size_overrun|fragment_overlap|fragment_out-of-order|
ip_protocol_scan|tcp_port_scan|tcp_syn_scan|
stealth_tcp_null_scan|stealth_tcp_fin_scan|
stealth_tcp_xmas_scan|stealth_tcp_full_xmas_scan|
stealth_tcp_vecna_scan|stealth_tcp_syn-fin_scan|udp_port_scan|
ping_sweep_scan|tcp_syn_flood|udp_flood|ping_flood|
icmp_unreachable_storm|smurf_broadcast_attack|
smurf_storm_attack|fraggle_broadcast_attack|
fraggle_storm_attack|land_attack|spoofed_packet|tcp_null_port|
tcp_data_on_syn_segment|tcp_invalid_urgent_offset|
udp_null_port|icmp_type_unknown|icmp_code_unknown|
ip_zero_payload|tcp_rate_limiting|udp_rate_limiting|

icmp_rate_limiting|ip_rate_limiting|dhcp_rate_limiting}>]
The name of the signature.
state = <{disabled|enabled}>
The state of the sign.

ids threshold
Following commands are available :

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

ids threshold clear
Reset IDS thresholds.
Syntax : clear
ids threshold list
Display IDS thresholds.
Syntax : list
ids threshold modify
Modify IDS threshold.
Syntax : modify index = <number> [window = <number>] [limit = <number>]
[scaling = <{disabled|enabled}>]

Parameters :
index = <number>
The index of the threshold.
[window = <number>]
The time window of the threshold.
[limit = <number>]
The limit of the threshold.
[scaling = <{disabled|enabled}>]
Scaling of the threshold window.

igmp
Following command groups are available :

host proxy

igmp host
Following commands are available :

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

Following command groups are available :

debug

igmp host config
Display/Modify global IGMP configuration.
Syntax : config [requirera = <{disabled|enabled}>]

Parameters :
[requirera = <{disabled|enabled}>]

Enable/Disable the router alert IP option check.

igmp host debug
Following commands are available :

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

igmp host debug clear
Clear IGMP statistics.
Syntax : clear
igmp host debug stats
Print IGMP statistics.
Syntax : stats
igmp host flush
Flush the IGMP settings.
Syntax : flush
igmp host ifconfig
Configure an IGMP interface.
Syntax : ifconfig intf = <{loop|LocalNetwork|Internet}>
version = <{none|IGMPv1|IGMPv2|IGMPv3}>

Parameters :
intf = <{loop|LocalNetwork|Internet}>
The IP interface name.
version = <{none|IGMPv1|IGMPv2|IGMPv3}>
The IGMP version of the IP interface.

igmp host iflist
Show the configuration of the IGMP interfaces.
Syntax : iflist [expand = <{disabled|enabled}>]

Parameters :
[expand = <{disabled|enabled}>]
Expanded listing.

igmp host list
Show the IGMP groups.
Syntax : list [intf = <{loop|LocalNetwork|Internet}>]
[expand = <{disabled|enabled}>]

Parameters :
[intf = <{loop|LocalNetwork|Internet}>]
The IP interface name.
[expand = <{disabled|enabled}>]
Expanded listing.

igmp proxy
Following commands are available :

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

Following command groups are available :

debug

igmp proxy config
Configure the IGMP proxy.
Syntax : config [state = <{disabled|enabled}>] [qi = <number{1-86400}>]
[qri = <number{1-3175}>] [lmqi = <number{1-3175}>]
[rv = <number{2-7}>] [advinter = <number{4-180}>]
[initadvinter = <number{1-4}>]
[initadvcount = <number{1-10}>]
[requirera = <{disabled|enabled}>]
[localgroup = <{disabled|enabled}>]

Parameters :
[state = <{disabled|enabled}>]
Enable/Disable the IGMP proxy.
[qi = <number{1-86400}>]
The interval in seconds between general queries sent by the querier.
[qri = <number{1-3175}>]
The maximum response time in seconds for an IGMP client in reply to general queries.
[lmqi = <number{1-3175}>]
The maximum response time in seconds for an IGMP client in reply to group specific queries.
[rv = <number{2-7}>]
The robustness variable allows tuning for expected IGMP packet loss.
[advinter = <number{4-180}>]
The interval in seconds for unsolicited MRD advertisements (see rfc4286).
[initadvinter = <number{1-4}>]
The interval in seconds for initial unsolicited MRD advertisements (see rfc4286).
[initadvcount = <number{1-10}>]
The maximum number of initial unsolicited MRD advertisements (see rfc4286).
[requirera = <{disabled|enabled}>]
Enable/Disable the router alert IP option check.
[localgroup = <{disabled|enabled}>]
Enable/Disable the processing of a local multicast group in an IGMP packet.

igmp proxy debug
Following commands are available :

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

igmp proxy debug clear
Clear IGMP proxy statistics
Syntax : clear
igmp proxy debug stats
Print IGMP proxy statistics
Syntax : stats
igmp proxy debug traceconfig
Modify IGMP proxy trace configuration
Syntax : traceconfig [state = <{disabled|enabled}>]

Parameters :
  [state = <{disabled|enabled}>]
    Enable/Disable tracing.

  igmp proxy flush
Flush all IGMP proxy settings and learned groups
Syntax : flush
  igmp proxy grouplist
Show the learned groups on an IGMP proxy interface.
Syntax : grouplist [intf = <{LocalNetwork}>] [expand = <{disabled|enabled}>]

Parameters :
  [intf = <{LocalNetwork}>]
    The name of the IGMP proxy interface to be listed.
  [expand = <{disabled|enabled}>]
    Expanded listing.

  igmp proxy ifconfig
Configure an IGMP proxy interface.
Syntax : ifconfig intf = <{Internet|LocalNetwork}>
                [state = <{inactive|downstream|upstream}>]
                [version = <{IGMPv1|IGMPv2|IGMPv3}>]
                [fastleave = <{disabled|enabled}>]
                [exptrack = <{disabled|enabled}>]
                [mrd = <{disabled|enabled}>]

Parameters :
  intf = <{Internet|LocalNetwork}>
    The name of the IGMP proxy interface to be configured.
  [state = <{inactive|downstream|upstream}>]
    The state of the IGMP proxy interface.
  [version = <{IGMPv1|IGMPv2|IGMPv3}>]
    The IGMP version of the IGMP proxy interface.
  [fastleave = <{disabled|enabled}>]
    Enable/Disable the immediate deletion of a group when a leave is
    received.
  [exptrack = <{disabled|enabled}>]
    Enable/Disable explicit host tracking.
  [mrd = <{disabled|enabled}>]
    Enable/Disable sending multicast router advertisements (rfc 4286).

  igmp proxy iflist
Show the configuration of an IGMP proxy interface.
Syntax : iflist [expand = <{disabled|enabled}>]

Parameters :
  [expand = <{disabled|enabled}>]
    Expanded listing.

  igmp proxy mbslist
Show the IGMP proxy membership database (merge of all learned groups).
Syntax : mbslist
  interface
Following commands are available :

list   : Display interfaces.

```
  interface list
Display interfaces.
Syntax : list [expand = <{disabled|enabled}>]
         [reverse = <{disabled|enabled}>]

Parameters :
  [expand = <{disabled|enabled}>]
    Expanded listing.
  [reverse = <{disabled|enabled}>]
    Reverse listing (lower layer iso. upper layer).

  ip
Following commands are available :

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

Following command groups are available :

auto           debug          mcast

  ip arpadd
Add an entry to the ARP cache of a broadcast IP interface.
Syntax : arpadd intf = <{LocalNetwork|Internet}> ip = <ip-range>
         [hwaddr = <hardware-address>]

Parameters :
  intf = <{LocalNetwork|Internet}>
    The IP interface name.
  ip = <ip-range>
    The IP address [range] of the entry to add.
  [hwaddr = <hardware-address>]
    The hardware address (e.g. Ethernet MAC address) of the entry to add.

  ip arpdelete
Delete an ARP entry.
Syntax : arpdelete intf = <{LocalNetwork|Internet}> ip = <ip-range>
         [hwaddr = <hardware-address>]
```

Parameters :
  intf = <{LocalNetwork|Internet}>
    The IP interface name.
  ip = <ip-range>
    The IP address [range] of the entry to delete.
  [hwaddr = <hardware-address>]
    The hardware address (e.g. Ethernet MAC address) of the entry to delete.

  ip arplist
Display the ARP cache.
Syntax : arplist
  ip auto
Following commands are available :

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

  ip auto flush
Flushes autoIP interfaces.
Syntax : flush
  ip auto ifadd
Creates a new autoIP interface.
Syntax : ifadd intf = <{loop|LocalNetwork|Internet}> [addr = <ip-address>]

Parameters :
  intf = <{loop|LocalNetwork|Internet}>
    The name of the IP interface for which a link-local address has to be allocated.
  [addr = <ip-address>]
    The preferred link-local IP address.

  ip auto ifattach
Select and assign a link-local address to an autoIP interface.
Syntax : ifattach intf = <>

Parameters :
  intf = <>
    The name of the autoIP interface.

  ip auto ifconfig
Configures an autoIP interface.
Syntax : 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}>]

Parameters :
  intf = <>
    The name of the autoIP interface to configure.

[addr = <ip-address>]
The preferred link-local IP address.
[poolstart = <ip-address>]
The start IP address of the link-local address pool.
[poolend = <ip-address>]
The end IP address of the link-local address pool.
[netmask = <ip-mask(dotted or cidr)>]
The netmask of the link-local IP address pool.
[claim = <number{0-65535}>]
The number of link-local address selection retries before giving up.
[defence = <number{0-65535}>]
The number of times the link-local address is defended before releasing the address.
[probe = <number{0-65535}>]
The number of ARP probes to be sent before accepting a link-local address.
[interval = <number{1-65535}>]
The time interval between two ARP probe transmissions.

ip auto ifdelete
Deletes an existing autoIP interface.
Syntax : ifdelete intf = <>

Parameters :
intf = <>
The name of the autoIP interface.

ip auto ifdetach
Release the link-local address for the given autoIP interface.
Syntax : ifdetach intf = <>

Parameters :
intf = <>
The name of the autoIP interface.

ip auto iflist
Shows the autoIP interfaces.
Syntax : iflist [intf = <>]

Parameters :
[intf = <>]
The name of a autoIP interface.

ip config
Display/Modify global IP stack configuration.
Syntax : 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}>]

Parameters :
  [forwarding = <{disabled|enabled}>]
    Disable/Enable IP routing functionality.
  [redirects = <{disabled|enabled}>]
    Disable/Enable sending of ICMP redirect messages.
  [checkoptions = <{disabled|enabled|transparent}>]
    Disallow/Allow packets with IP options.
  [netbroadcasts = <{disabled|enabled}>]
    Disallow/Allow net directed broadcasts.
  [ttl = <number{0-255}>]
    Set the default time-to-live for locally generated IP packets.
  [fraglimit = <number{1-1024}>]
    Set the maximum number of IP fragments waiting for completion. (Avoids
    buffer depletion).
  [defragmode = <{disabled|enabled}>]
    Disallow/Allow defragmenting IP fragments.
  [addrcheck = <{off|own|static|dynamic}>]
    Sets the level of ip address checks.
  [mssclamping = <{disabled|enabled}>]
    Disable/Enable mss clamping for low mtu interfaces.
  [natloopback = <{disabled|enabled}>]
    Disable/Enable NAT loopback.
  [arpclass = <{0|1|2|3|4|5|6|7|8|9|10|11|12|13|14|15}>]
    The prio class of the ARP packets.
  [acceleration = <{disabled|enabled}>]
    Disable/Enable IP acceleration.

  ip debug
Following commands are available :

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

  ip debug httpprobe
Send HTTP probe to measure the round trip time taken to connect and access
data from a HTTP server
Syntax : httpprobe url = <string> [version = <{1.0|1.1}>]

Parameters :
  url = <string>
    The Uniform Resource Locator identifying the HTTP server.
  [version = <{1.0|1.1}>]
    The version of the HTTP server.

  ip debug sendto
Send UDP packets.
Syntax : 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|LocalNetwork|Internet}>]

Parameters :

addr = <ip-address>
The destination IP address.
[count = <number{1-1000000}>]
The number of datagrams to send.
[size = <number{0-20000}>]
The size of the datagram.
[interval = <number{1-1000000}>]
The interval in milliseconds between datagrams.
[listen = <{disabled|enabled}>]
Don't send, just listen for incoming datagrams.
[dffield = <{disabled|enabled}>]
Enables setting of the don't fragment flag in the IP headers of the ping packet(s).
[srcaddr = <ip-address>]
The IP source address to use.
[srcport = <number{1-65535}>]
The UDP source port number to use.
dstport = <number{1-65535}>
The UDP destination port number to send to.
[dstintf = <{loop|LocalNetwork|Internet}>]
The IP interface name.

ip debug stats
Display statistics.
Syntax : stats proto = <{ip|udp|tcp|icmp}>

Parameters :
proto = <{ip|udp|tcp|icmp}>
The protocol for which to display the statistics.

ip debug traceconfig
Display/Modify IP stack trace configuration.
Syntax : 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}>]

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

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

Syntax : flush

ip ifadd

Create an IP interface.

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

Parameters :

intf = <string>

An IP interface name.

dest = <{}>

An network interface name.

ip ifattach

Attach an IP interface.

Syntax : ifattach intf = <{}>

Parameters :

intf = <{}>

An IP interface name.

ip ifconfig

Modify an IP interface configuration.

Syntax : ifconfig intf = <{loop|LocalNetwork|Internet}>
[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}>]
[arpprobe = <{unicast|broadcast}>]

Parameters :

intf = <{loop|LocalNetwork|Internet}>

An IP interface name.

[mtu = <number{68-65535}>]

The maximum packet size (including IP header) to use on this interface.

[status = <{down|up}>]

The administrative state of the interface.

[hwaddr = <hardware-address>]

The hardware address (e.g. Ethernet MAC address) of this interface.

[group = <{wan|local|lan|tunnel|dmz|guest} or number>]

The group this interface belongs to. Can be used by e.g. firewalling.

[linksensing = <{disabled|enabled}>]

The IP interface's awareness of link state transitions.

[primary = <{disabled|enabled}>]

Make the IP interface the primary interface.

[mcastpromisc = <{disabled|enabled}>]

Make the IP interface multicast promiscuous.

[symmetric = <{disabled|enabled}>]

The routing mode of the IP interface.

[arpprobe = <{unicast|broadcast}>]

The ARP mode of the interface.

ip ifdelete

Delete an IP interface.

Syntax : ifdelete intf = <{LocalNetwork|Internet}>

Parameters :
  intf = <{LocalNetwork|Internet}>
    An IP interface name.

  ip ifdetach
Detach an IP interface.
Syntax : ifdetach intf = <{loop|LocalNetwork|Internet}>

Parameters :
  intf = <{loop|LocalNetwork|Internet}>
    An IP interface name.

  ip iflist
Display all IP interfaces.
Syntax : iflist [expand = <{disabled|enabled}>]
          [legend = <{disabled|enabled}>]

Parameters :
  [expand = <{disabled|enabled}>]
    Expanded listing.
  [legend = <{disabled|enabled}>]
    Expanded Legend listing.

  ip ifwait
Wait for a status change of an IP interface.
Syntax : ifwait intf = <{loop|LocalNetwork|Internet}>
          [timeout = <number{1-600000}>] [adminstatus = <{down|up}>]
          [operstatus = <{down|up}>] [linkstatus = <{down|up}>]

Parameters :
  intf = <{loop|LocalNetwork|Internet}>
    An IP interface name.
  [timeout = <number{1-600000}>]
    The timeout in seconds.
  [adminstatus = <{down|up}>]
    The administrative state of the interface.
  [operstatus = <{down|up}>]
    The operational state of the interface.
  [linkstatus = <{down|up}>]
    The link state of the interface.

  ip ipadd
Assign an IP address to an IP interface.
Syntax : ipadd intf = <{loop|LocalNetwork|Internet}> addr = <ip-address>
          [netmask = <ip-mask(dotted or cidr)>]
          [pointopoint = <ip-address>] [addroute = <{disabled|enabled}>]

Parameters :
  intf = <{loop|LocalNetwork|Internet}>
    The IP interface name.
  addr = <ip-address>
    The new IP address to add.
  [netmask = <ip-mask(dotted or cidr)>]
    The subnetmask associated with this address.
  [pointopoint = <ip-address>]
    The remote address in case of a point-to-point link.
  [addroute = <{disabled|enabled}>]

Add typical net/subnet routes automatically.

ip ipconfig
Modify an IP address configuration.
Syntax : ipconfig addr = <ip-address> [preferred = <{disabled|enabled}>]
[primary = <{disabled|enabled}>]

Parameters :
addr = <ip-address>
The IP address to configure.
[preferred = <{disabled|enabled}>]
Make IP address the preferred address for that subnet.
[primary = <{disabled|enabled}>]
Make IP address the primary address for the interface.

ip ipdelete
Remove an IP address from an IP interface.
Syntax : ipdelete addr = <ip-address>

Parameters :
addr = <ip-address>
The IP address to delete.

ip iplist
Display all configured IP addresses.
Syntax : iplist
ip mcast
Following commands are available :

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

ip mcast flush
Flush the multicast routing table.
Syntax : flush
ip mcast rtadd
Add a multicast route to the multicast routing table.
Syntax : rtadd srcintf = <{loop|LocalNetwork|Internet}> [src = <ip-address>]
grp = <ip-address> dstintf = <{loop|LocalNetwork|Internet}>
[ttl = <number{1-255}>] [ttlincr = <{disabled|enabled}>]

Parameters :
srcintf = <{loop|LocalNetwork|Internet}>
The source IP interface.
[src = <ip-address>]
The source IP address.
grp = <ip-address>
The multicast group IP address.
dstintf = <{loop|LocalNetwork|Internet}>
The destination IP interface.
[ttl = <number{1-255}>]
The time-to-live for that destination IP interface.
[ttlincr = <{disabled|enabled}>]
Increment TTL before packet is send.

ip mcast rtdelete
Delete a multicast route from the multicast routing table.
Syntax : rtdelete srcintf = <{loop|LocalNetwork|Internet}>
[src = <ip-address>] grp = <ip-address>
dstintf = <{loop|LocalNetwork|Internet}>

Parameters :
srcintf = <{loop|LocalNetwork|Internet}>
The source IP interface.
[src = <ip-address>]
The source IP address.
grp = <ip-address>
The multicast group IP address.
dstintf = <{loop|LocalNetwork|Internet}>
The destination IP interface.

ip mcast rtlist
Display the multicast routing table.
Syntax : rtlist [expand = <{disabled|enabled}>]

Parameters :
[expand = <{disabled|enabled}>]
Expanded listing.

ip rtadd
Add a route to the routing table.
Syntax : 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|LocalNetwork|Internet}>]
[srcintf = <{loop|LocalNetwork|Internet}>]
[static = <{enabled|disabled}>] [status = <{up|down}>]
[metric = <number{0-255}>]

Parameters :
dst = <ip-address>
The destination IP address(es) using this route. Supports ip/mask
notation.
[dstmsk = <ip-mask(dotted or cidr)>]
The destination IP address mask.
[label = <{None|DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|
default}>]
The name of a label.
[gateway = <ip-address>]
The IP address of the next hop (direct connected gateway or extended
route)
[intf = <{loop|LocalNetwork|Internet}>]
Only for special interface routes : the outgoing IP interface name.
[srcintf = <{loop|LocalNetwork|Internet}>]
Use this interface for source address selection.
[static = <{enabled|disabled}>]
Route persistency: static or dynamic (note that not all routes can be
changed).
[status = <{up|down}>]
The administrative state of the route.
[metric = <number{0-255}>]

The metric for this route (weight factor).

ip rtconfig

Modify a route of the routing table.

Syntax : 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|LocalNetwork|Internet}>]
[srcintf = <{loop|LocalNetwork|Internet|None}>]
[static = <{disabled|enabled}>] [status = <{down|up}>]
[metric = <number{0-255}>]

Parameters :

dst = <ip-address>
The destination IP address(es) using this route. Supports ip/mask notation.

[dstmsk = <ip-mask(dotted or cidr)>]
The destination IP address mask.

[label = <{None|DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|default}>]
The name of a label.

[gateway = <ip-address>]
The IP address of the next hop (direct connected gateway or extended route)

[intf = <{loop|LocalNetwork|Internet}>]
Only for special interface routes : the outgoing IP interface name.

[srcintf = <{loop|LocalNetwork|Internet|None}>]
Use this interface for source address selection.

[static = <{disabled|enabled}>]
Route persistency: static or dynamic (note that not all routes can be changed).

[status = <{down|up}>]
The administrative state of the route.

[metric = <number{0-255}>]
The metric for this route (weight factor).

ip rtdelete

Delete a route from the routing table.

Syntax : 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|LocalNetwork|Internet}>]

Parameters :

dst = <ip-address>
The destination IP address specification of the route to delete.
Supports ip/mask notation.

[dstmsk = <ip-mask(dotted or cidr)>]
The destination IP address mask.

[label = <{None|DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|default}>]
The name of a label.

[gateway = <ip-address>]
The IP address of the next hop.

[intf = <{loop|LocalNetwork|Internet}>]

The outgoing IP interface name. (For special interface routes only).

ip rtlist
Display the routing table.
Syntax : rtlist [expand = <{disabled|enabled}>]

Parameters :
[expand = <{disabled|enabled}>]
Expanded listing.

ipqos
Following commands are available :

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

Following command groups are available :

ef meter queue

ipqos config
Modify the IP QoS configuration for a given destination of an interface.
Syntax : config dest = <{}> [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{0-500}>] [maxbytes = <number{0-512}>]

Parameters :
dest = <{}>
The destination of the interface. Typically, a phonebook entry.
[state = <{disabled|enabled}>]
Enable, disable IP QoS for the interface.
[discard = <{tail|early}>]
The packet discard strategy in case of congestion.
[priority = <{wfq|strict|wrr}>]
The subqueue priority algorithm.
[realtimerate = <number{1-100}>]
The percentage of the bandwith.
[burstsize = <number{1-64}>]
Burstsize in kilo bytes (KB).
[weight1 = <number{1-97}>]
The weight of queue 1 used for weighted fair queueing (WFQ) or weighted round robin (WRR).
[weight2 = <number{1-97}>]
The weight of queue 2 used for weighted fair queueing (WFQ) or weighted round robin (WRR).
[weight3 = <number{1-97}>]
The weight of queue 3 used for weighted fair queueing (WFQ) or weighted round robin (WRR).
[weight4 = <number{1-97}>]
The weight of queue 4 used for weighted fair queueing (WFQ) or weigthed round robin (WRR).
[maxpackets = <number{0-500}>]
The maximum number of packets in all queues.

[maxbytes = <number{0-512}>]
The maximum size in kilo bytes (KB) in all queues.

ipqos ef
Following commands are available :

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

ipqos ef config
Modify an IP QoS EF timer configuration for an interface.
Syntax : config intf = <{loop|LocalNetwork|Internet}>
[state = <{disabled|enabled}>]
[timeout = <number{100-10000}>] [mtu = <number{68-65535}>]

Parameters :
intf = <{loop|LocalNetwork|Internet}>
The IP interface name.
[state = <{disabled|enabled}>]
Enable, disable IP QoS EF timer for the interface.
[timeout = <number{100-10000}>]
The timeout in mili seconds.
[mtu = <number{68-65535}>]
The MTU of the IP interface in case of EF data.

ipqos ef list
Display the IP QoS EF timers.
Syntax : list
ipqos ef stats
Display the IP QoS EF timer statistics.
Syntax : stats
ipqos list
Display the IP QoS configuration.
Syntax : list
ipqos meter
Following commands are available :

add : Add an IP QoS meter.
config : Modify an IP QoS meter configuration.
delete : Delete an IP QoS meter.
list : Display the IP QoS meters.
start : Start an IP QoS meter.
stop : Stop an IP QoS meter.
flush : Flush all IP QoS meters.
stats : Display the IP QoS meter statistics.
clear : Clear the IP QoS meter statistics.

ipqos meter add
Add an IP QoS meter.
Syntax : add name = <string>

Parameters :
name = <string>
The name of the IP QoS meter.

ipqos meter clear

Clear the IP QoS meter statistics.
Syntax : clear
  ipqos meter config
Modify an IP QoS meter configuration.
Syntax : config name = <{}>
            [label = <{DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-
                  Signal|default}>]
            [intf = <{loop|LocalNetwork|Internet}>]
            [droprate = <number{0-102400}>]
            [markrate = <number{0-102400}>] [burst = <number{0-64}>]
            [dropaction = <{count|drop}>] [markaction = <{count|mark}>]
            [tosmarking = <{disabled|enabled}>] [tos = <number{0-255}>]
            [dscp = <{ef|af11|af12|af13|af21|af22|af23|af31|af32|af33|af41|
                  af42|af43|cs0|cs1|cs2|cs3|cs4|cs5|cs6|cs7} or number>]

            [precedence = <{routine|priority|immediate|flash|flash-
                  override|CRITIC-ECP|internetwork-control|network-
                  control} or number>]
            [classification = <{decrease|overwrite|ignore|offset}>]
            [class = <number{0-15}>]

Parameters :
  name = <{}>
    The name of the IP QoS meter.
  [label = <{DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|
        default}>]
    The name of the label.
  [intf = <{loop|LocalNetwork|Internet}>]
    The name of the interface.
  [droprate = <number{0-102400}>]
    The drop rate in kilo bits per second (Kbps).
  [markrate = <number{0-102400}>]
    The mark rate in kilo bits per second (Kbps).
  [burst = <number{0-64}>]
    The burst size in kilo bytes (KB).
  [dropaction = <{count|drop}>]
    The drop action.
  [markaction = <{count|mark}>]
    The mark action.
  [tosmarking = <{disabled|enabled}>]
    Enable tos marking for marked packets.
  [tos = <number{0-255}>]
    The type of service used for tos marking.
  [dscp = <{ef|af11|af12|af13|af21|af22|af23|af31|af32|af33|af41|af42|af43|
        cs0|cs1|cs2|cs3|cs4|cs5|cs6|cs7} or number>]
    The diffserv code point (part of tos, used for tos-marking).
  [precedence = <{routine|priority|immediate|flash|flash-override|CRITIC-ECP|
            internetwork-control|network-control} or number>]
    The precedence (part of tos, used for tos-marking).
  [classification = <{decrease|overwrite|ignore|offset}>]
    The type of classification for marked packets.
  [class = <number{0-15}>]
     The class or offset used for classification.

  ipqos meter delete
Delete an IP QoS meter.
Syntax : delete name = <{}>

Parameters :
  name = <{}>
    The name of the IP QoS meter.

  ipqos meter flush
Flush all IP QoS meters.
Syntax : flush
  ipqos meter list
Display the IP QoS meters.
Syntax : list
  ipqos meter start
Start an IP QoS meter.
Syntax : start name = <{}>

Parameters :
  name = <{}>
    The name of the stopped IP QoS meter.

  ipqos meter stats
Display the IP QoS meter statistics.
Syntax : stats
  ipqos meter stop
Stop an IP QoS meter.
Syntax : stop name = <{}>

Parameters :
  name = <{}>
    The name of the started IP QoS meter.

  ipqos queue
Following commands are available :

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

  ipqos queue clear
Clear the IP QoS statistics.
Syntax : clear
  ipqos queue config
Modify the IP QoS subqueue configuration.
Syntax : config dest = <{}> queue = <number{0-5}>
            [propagate = <{disabled|enabled}>]
            [ecnmarking = <{disabled|enabled}>]
            [ackfiltering = <{disabled|enabled}>]
            [maxpackets = <number{0-500}>] [maxbytes = <number{0-512}>]
            [respackets = <number{0-500}>] [resbytes = <number{0-512}>]
            [hold = <number>] [markprob = <number{1-1000}>]

Parameters :
  dest = <{}>
    The destination of the interface. Typically, a phonebook entry.
  queue = <number{0-5}>
    The number of the subqueue.
  [propagate = <{disabled|enabled}>]
    Propagate the packets in lower priority queue iso. dropping.

[ecnmarking = <{disabled|enabled}>]
Enable Explicit Congestion Notification for IP packets in this subqueue.
[ackfiltering = <{disabled|enabled}>]
Enable filtering of TCP ACK packets.
[maxpackets = <number{0-500}>]
The maximum number of packets in the subqueue.
[maxbytes = <number{0-512}>]
The maximum subqueue size in kilo bytes (KB).
[respackets = <number{0-500}>]
The reserved number of packets in the subqueue.
[resbytes = <number{0-512}>]
The reserved subqueue size in kilo bytes (KB).
[hold = <number>]
The hold time in microseconds for early discard strategy.
[markprob = <number{1-1000}>]
The maximum packet marking probability in parts per mille for early discard strategy.

ipqos queue list
Display the IP QoS subqueue configuration.
Syntax : list [dest = <{}>]

Parameters :
[dest = <{}>]
The destination of the interface. Typically, a phonebook entry.

ipqos queue stats
Display the IP QoS subqueue statistics.
Syntax : stats [dest = <{}>]

Parameters :
[dest = <{}>]
The destination of the interface. Typically, a phonebook entry.

koa
Following commands are available :

a : Add atomic object key information

koa a
Add atomic object key information
Syntax : a d = <string> [l = <{no|yes}>]

Parameters :
d = <string>
Data blob
[l = <{no|yes}>]
Last line in koi list

koi
Following commands are available :

a : Add igd object key information

koi a
Add igd object key information
Syntax : a d = <string> [l = <{no|yes}>]

Parameters :
  d = <string>
    Data blob
  [l = <{no|yes}>]
    Last line in koi list

  kta
Following commands are available :

a   : Add atomic type key information

  kta a
Add atomic type key information
Syntax : a d = <string> [l = <{no|yes}>]

Parameters :
  d = <string>
    Data blob
  [l = <{no|yes}>]
    Last line in koi list

  kti
Following commands are available :

a   : Add igd type key information

  kti a
Add igd type key information
Syntax : a d = <string> [l = <{no|yes}>]

Parameters :
  d = <string>
    Data blob
  [l = <{no|yes}>]
    Last line in koi list

  label
Following commands are available :

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

Following command groups are available :

chain   rule

  label add
Add a label.
Syntax : add name = <string>

Parameters :
  name = <string>
    The name of a label to add.

```
  label chain
Following commands are available :

add            : Add a chain.
delete         : Delete a chain.
list           : Display a list of chains.
flush          : Flush all chains.

  label chain add
Add a chain.
Syntax : add chain = <string>

Parameters :
  chain = <string>
    The name of the chain to add.

  label chain delete
Delete a chain.
Syntax : delete chain = <chain name>

Parameters :
  chain = <chain name>
    The name of the chain to delete.

  label chain flush
Flush all chains.
Syntax : flush
  label chain list
Display a list of chains.
Syntax : list [format = <{pretty|cli}>]

Parameters :
  [format = <{pretty|cli}>]
    The format of the chain list.

  label chain modify
Modify a chain.
Syntax : modify chain = <chain name>

Parameters :
  chain = <chain name>
    The name of the chain to modify.

  label delete
Delete a label.
Syntax : delete name = <{DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-
                  Signal|default}>


Parameters :
  name = <{DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|default}>
    The name of a label.

  label flush
Flush all label.
Syntax : flush
  label list
```

Display the labels.
Syntax : list [name = <{DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|
default}>]

Parameters :
[name = <{DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|default}>]

The name of a label.

label modify
Modify a label configuration.
Syntax : 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}>]

Parameters :
name = <{DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|default}>
The name of a label to modify.
[classification = <{ignore|overwrite|increase}>]
The Method of classification.
[defclass = <{0|1|2|3|4|5|6|7|8|9|10|11|12|13|14|15|dscp|default}>]
The default class of assigned connection.
[ackclass = <{0|1|2|3|4|5|6|7|8|9|10|11|12|13|14|15|prioritize|defclass}>]
The class of ACK segments of TCP connection.
[bidirectional = <{disabled|enabled}>]
The label is also valid for returning stream.
[inheritance = <{disabled|enabled}>]
The label is also valid for corresponding stream of child connection.
[tosmarking = <{disabled|enabled}>]
Enable/disable TOS marking.
[tos = <number{0-255}>]
The Type Of Service specification in the IP packet (used for tos-
marking).
[dscp = <{ef|af11|af12|af13|af21|af22|af23|af31|af32|af33|af41|af42|af43|
cs0|cs1|cs2|cs3|cs4|cs5|cs6|cs7} or number>]
The diffserv code point (part of tos, used for tos-marking).
[precedence = <{routine|priority|immediate|flash|flash-override|CRITIC-ECP|
internetwork-control|network-control} or number>]
The precedence (part of tos, used for tos-marking).
[trace = <{disabled|enabled}>]
Enable/disable IP tracing for this label.

label rule
Following commands are available :

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

Following command groups are available :

debug

label rule add
Add a rule.
Syntax : add chain = <chain name> [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|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|VoIP-Inc-SIP-UDP|VoIP-
Inc-SIP-TCP|VoIP-Inc-RTP}>]
[log = <{disabled|enabled}>] [state = <{disabled|enabled}>]
label = <{None|link|DSCP|Interactive|Management|Video|VoIP-RTP|
VoIP-Signal|default}>

Parameters :
chain = <chain name>
The name of the chain which contains the rule.
[index = <number>]
The index of the rule in the chain.
[name = <string>]
The name of the new rule.
[clink = <chain name>]
The name of the chain to be parsed when this rule applies.
[srcintf [!]= <{wan|local|lan|tunnel|dmz|guest}>]
The name of the source interface expression.
[srcip [!]= <{private|ssdp_ip|mdap_ip}>]
The name of the source ip expression.
[dstip [!]= <{private|ssdp_ip|mdap_ip}>]
The name of the destination ip expression.
[serv [!]= <{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|VoIP-Inc-SIP-UDP|VoIP-Inc-SIP-TCP|VoIP-Inc-RTP}>]
The name of the service expression.
[log = <{disabled|enabled}>]
Disable/Enable logging when this rule applies.
[state = <{disabled|enabled}>]
Disable/Enable this rule.
label = <{None|link|DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|
default}>
None, link (when clink is used) or label name.

label rule debug
Following commands are available :

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

label rule debug clear
Clear rule statistics.
Syntax : clear [chain = <chain name>] [index = <number>]

Parameters :
[chain = <chain name>]
The name of the chain.
[index = <number>]
The index of the rule in the chain.

label rule debug stats
Display rule statistics.
Syntax : stats [chain = <chain name>] [index = <number>]

Parameters :
[chain = <chain name>]
The name of the chain.
[index = <number>]
The index of the rule in the chain.

label rule debug traceconfig
Display/Modify rule trace configuration.
Syntax : traceconfig [state = <{disabled|enabled}>]

Parameters :
[state = <{disabled|enabled}>]
Disable/Enable rule traces.

label rule delete
Delete a rule.
Syntax : delete chain = <chain name> index = <number>

Parameters :
chain = <chain name>
The name of the chain in which to delete the rule.
index = <number>
The number of the rule in the chain.

label rule flush
Flush all rules.
Syntax : flush [chain = <chain name>]

Parameters :
[chain = <chain name>]
The name of the chain to flush.

label rule list
Display a list of rules.
Syntax : list [chain = <chain name>] [format = <{pretty|cli}>]

Parameters :
[chain = <chain name>]
The name of the chain to list the rules of.
[format = <{pretty|cli}>]
The format of the rule list.

label rule modify
Modify a rule.
Syntax : modify chain = <chain name> [index = <number>] [newindex = <number>]
[name = <string>] [clink = <chain name>] [[!]srcintf]
[[!]srcip] [[!]dstip] [[!]serv] [log = <{disabled|enabled}>]
[state = <{disabled|enabled}>]
[label = <{None|link|DSCP|Interactive|Management|Video|VoIP-
RTP|VoIP-Signal|default}>]

Parameters :
chain = <chain name>
The name of the chain which contains the rule.
[index = <number>]
The index of the rule in the chain.
[newindex = <number>]
The new index of the rule in the chain.
[name = <string>]
The name of the new rule.
[clink = <chain name>]
The name of the chain to be parsed when this rule applies.
[[!]srcintf]
The name of the source interface expression.
[[!]srcip]
The name of the source ip expression.
[[!]dstip]
The name of the destination ip expression.
[[!]serv]
The name of the service expression.
[log = <{disabled|enabled}>]
Disable/Enable logging when this rule applies.
[state = <{disabled|enabled}>]
Disable/Enable this rule.
[label = <{None|link|DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|
default}>]
None, link (when clink is used) or label name.

language
Following commands are available :

config : Select a language.
list : List available languages archives.
delete : Delete one or all language archives.

language config
Select a language.
Syntax : config [language = <string>] [complete = <{yes|no}>]

Parameters :
[language = <string>]
Language code : OSI language code (2 chars) for language (en=English)

[complete = <{yes|no}>]
Enable translation for expert pages.

language delete
Delete one or all language archives.
Syntax : delete [file = <string>] [all <{yes|no}>]

Parameters :
[file = <string>]
Filename : name of language archive to delete
[all <{yes|no}>]
Deletes all languages archives.

language exclude
Exclude a file from translation
Syntax : exclude file = <string>

Parameters :
file = <string>
Filename : name of file to exclude from translation

language flush
Flush list of files excluded from translation
Syntax : flush
language langdef
Setting language definition context
Syntax : langdef lang = <string>

Parameters :
lang = <string>
Language code : OSI language code (2 chars) for language (en=English)

language list
List available languages archives.
Syntax : list
language t
Add a translation record.
Syntax : t r = <quoted string>

Parameters :
r = <quoted string>
Translation record string "number,text"

mbus
Following commands are available :

listenums : Display the registered enumtypes
listtypes : Display the registered objecttypes
listobjects : Display the object instances
listcontexts : Display the context instances
listsubscriptions : Display the subscription instances
pluginevent : Simulate event from plugin
unregister : Unregister a client/plugin context
xmldump : Dump the registered datamodel to an XML file

Following command groups are available :

```
client         debug

   mbus client
Following commands are available :

register        : Register cli client to mbus
unregister      : Unregister cli client from mbus
config          : Modify client parameters
exec            : Execute mbus command
authenticate    : Authenticate a session
termsession     : Terminate a session

   mbus client authenticate
Authenticate a session
Syntax : authenticate type = <{cleartext|md5|crypt|digest|defaultuser}>
                 [username = <quoted string>] [password = <password>]
                 [addr = <ip-address>]

Parameters :
   type = <{cleartext|md5|crypt|digest|defaultuser}>
     Authentication type
   [username = <quoted string>]
     User name
   [password = <password>]
     password
   [addr = <ip-address>]
     IP address of peer who inititated the authentication request.

   mbus client config
Modify client parameters
Syntax : config [writelock = <{enabled|disabled}>] [wlgetimeout = <number>]
            [wlidletimeout = <number>] [path = <quoted string>]
            [type = <{indexpath|keystrpath}>] [id = <number>]

Parameters :
   [writelock = <{enabled|disabled}>]
     Get/release mbus writelock
   [wlgetimeout = <number>]
     Writelock get timeout in seconds (forever=-1, *default=nowait=0)
   [wlidletimeout = <number>]
     Writelock idle  timeout in seconds (forever=-1, *default=30)
   [path = <quoted string>]
     Fully qualified mbus path
   [type = <{indexpath|keystrpath}>]
     Path type (default = indexpath)
   [id = <number>]
     sessionid to use

   mbus client exec
Execute mbus command
Syntax : exec cmd = <{getpath|getcount|getnames|getvalues|setvalue|addobject|
                deleteobject|subscribe|unsubscribe|getaccessrights|
                setaccessrights}>
            [param = <quoted string>] [value = <quoted string>]
            [gettype = <{parameter|path|object}>] [depth = <number>]
            [processcmd = <{enabled|disabled}>]
            [onerrorrollback = <{enabled|disabled}>]
```

```
        [usecallback = <{enabled|disabled}>] [filter = <quoted string>]
        [path = <quoted string>]
        [flags = <[+/-]flag[+/-flag...]{indexpath keystrpath uncommitted
              dynamic synchronize sub_addobj sub_delobj sub_update
              firstnext xref_localidx xref_keypath exact_depth
              noparamvalue applyonparams applyrecursive 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_eventable|param_key|param_min|
                param_mandatory|param_max|param_readable|param_type|
                param_writable|param_xrefs|objtype_cached|
                objtype_max|objtype_writable|object_clean|
                object_dynamic}>]


Parameters :
  cmd = <{getpath|getcount|getnames|getvalues|setvalue|addobject|deleteobject|
      subscribe|unsubscribe|getaccessrights|setaccessrights}>
    Mbus command name
  [param = <quoted string>]
    Parameter name
  [value = <quoted string>]
    Parameter value to set
  [gettype = <{parameter|path|object}>]
    Get type elements (default=param)
  [depth = <number>]
    Number of levels to recurse, default=-1 (all)
  [processcmd = <{enabled|disabled}>]
    Process SET_VALUE command flag (default=enabled)
  [onerrorrollback = <{enabled|disabled}>]
    on error rollback flag (default=enabled)
  [usecallback = <{enabled|disabled}>]
    Use result callback function (default=enabled)
  [filter = <quoted string>]
    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)'.
  [path = <quoted string>]
    Fully qualified mbus path
  [flags = <[+/-]flag[+/-flag...]{indexpath keystrpath uncommitted dynamic
        synchronize sub_addobj sub_delobj sub_update firstnext
        xref_localidx xref_keypath exact_depth noparamvalue applyonparams
        applyrecursive typetreepath non_persistent}>]
    Client command data flags
  [accesslist = <quoted string>]
    Comma separated names of accessrights groups
  [action = <[+/-]flag[+/-flag...]{read write attrchg}>]
    Type of accessright action
  [modifier = <{add|delete|allow_only|allow_except}>]
    Accessrights modifier
  [replytype = <{getallowed|getdisallowed|getasconfigured}>]
    Type of accessrights reply
```

```
  [attribute = <{ar_archg|ar_read|ar_write|param_cached|param_enums|
            param_eventable|param_key|param_min|param_mandatory|param_max|
            param_readable|param_type|param_writable|param_xrefs|
            objtype_cached|objtype_max|objtype_writable|object_clean|
            object_dynamic}>]
    Requested attribute-type

  mbus client register
Register cli client to mbus
Syntax : register [dmtree = <{igd|atomic|system}>]
                  [type = <{indexpath|keystrpath}>]
                  [dlink = <{local_ipc|remote_inet}>]
                  [mbusd_addr = <quoted string>]
                  [refresolv = <{disabled|enabled}>]
                  [state_events = <{disabled|enabled}>]

Parameters :
  [dmtree = <{igd|atomic|system}>]
    Select mbusd datamodel tree.
  [type = <{indexpath|keystrpath}>]
    Path type (default = indexpath)
  [dlink = <{local_ipc|remote_inet}>]
    Daemon link (default = local_ipc)
  [mbusd_addr = <quoted string>]
    Daemon address (ip addr for inet)
  [refresolv = <{disabled|enabled}>]
    Use reference resolving (default=disabled)
  [state_events = <{disabled|enabled}>]
    Context should be notified when the MBus state changes (default=disabled)

  mbus client termsession
Terminate a session
Syntax : termsession id = <number>

Parameters :
  id = <number>
    id of session to terminate

  mbus client unregister
Unregister cli client from mbus
Syntax : unregister
  mbus debug
Following commands are available :

stats          : Display mbus statistics.
clearstats     : Reset mbus statistics.
traceconfig    : Modify mbus trace settings.
loadobjects    : Load/sync object instances from plugins
unloadobjects  : Unload object instances

  mbus debug clearstats
Reset mbus statistics.
Syntax : clearstats
  mbus debug loadobjects
Load/sync object instances from plugins
Syntax : loadobjects [dmtree = <{igd|atomic|system}>]
                     [path = <quoted string>]
```

```
                [type = <{indexpath|keystrpath}>]
                [flush = <{disabled|enabled}>]

Parameters :
  [dmtree = <{igd|atomic|system}>]
    Select mbusd datamodel tree.
  [path = <quoted string>]
    Fully qualified mbus path
  [type = <{indexpath|keystrpath}>]
    Path type (default = indexpath
  [flush = <{disabled|enabled}>]
    Flush objects before load (default=disabled)

  mbus debug stats
Display mbus statistics.
Syntax : stats
  mbus debug traceconfig
Modify mbus trace settings.
Syntax : traceconfig [level = <number{0-4}>]

Parameters :
  [level = <number{0-4}>]
    Select mbus trace level (0-4).

  mbus debug unloadobjects
Unload object instances
Syntax : unloadobjects [dmtree = <{igd|atomic|system}>]
                [path = <quoted string>]
                [type = <{indexpath|keystrpath}>]
                [flush = <{disabled|enabled}>]

Parameters :
  [dmtree = <{igd|atomic|system}>]
    Select mbusd datamodel tree.
  [path = <quoted string>]
    Fully qualified mbus path
  [type = <{indexpath|keystrpath}>]
    Path type
  [flush = <{disabled|enabled}>]
    Flush objects before load (default=disabled)

  mbus listcontexts
Display the context instances
Syntax : listcontexts [dmtree = <{igd|atomic|system}>]
                [expand = <{disabled|enabled}>]

Parameters :
  [dmtree = <{igd|atomic|system}>]
    Select mbusd datamodel tree.
  [expand = <{disabled|enabled}>]
    Details enabled/disabled

  mbus listenums
Display the registered enumtypes
Syntax : listenums [dmtree = <{igd|atomic|system}>] [name = <quoted string>]
                [expand = <{disabled|enabled}>]
```

Parameters :
  [dmtree = <{igd|atomic|system}>]
    Select mbusd datamodel tree.
  [name = <quoted string>]
    Filter enumtypes by (part of) the name
  [expand = <{disabled|enabled}>]
    Details enabled/disabled

  mbus listobjects
Display the object instances
Syntax : listobjects [dmtree = <{igd|atomic|system}>]
                [path = <quoted string>]
                [type = <{indexpath|keystrpath}>]
                [output = <{tree|list}>]
                [showflags = <{disabled|enabled}>]

Parameters :
  [dmtree = <{igd|atomic|system}>]
    Select mbusd datamodel tree.
  [path = <quoted string>]
    Fully qualified mbus path to list.
  [type = <{indexpath|keystrpath}>]
    Path type (default = indexpath)
  [output = <{tree|list}>]
    List output type
  [showflags = <{disabled|enabled}>]
    Display object flags (Clean or Dirty / Persistent or Volatile)

  mbus listsubscriptions
Display the subscription instances
Syntax : listsubscriptions [dmtree = <{igd|atomic|system}>]

Parameters :
  [dmtree = <{igd|atomic|system}>]
    Select mbusd datamodel tree.

  mbus listtypes
Display the registered objecttypes
Syntax : listtypes [dmtree = <{igd|atomic|system}>] [path = <quoted string>]
            [expand = <{disabled|enabled}>]

Parameters :
  [dmtree = <{igd|atomic|system}>]
    Select mbusd datamodel tree.
  [path = <quoted string>]
    Fully qualified mbus path to list.
  [expand = <{disabled|enabled}>]
    Details enabled/disabled

  mbus pluginevent
Simulate event from plugin
Syntax : pluginevent ctxid = <number> type = <{addobj|delobj|updobj}>
                path = <quoted string> [name = <quoted string>]
                [value = <quoted string>] [orivalue = <quoted string>]
                [flags = <[+/-]flag[+/-flag...]{dynamic save}>]

Parameters :

```
   ctxid = <number>
     Plugin context id
   type = <{addobj|delobj|updobj}>
     Event type
   path = <quoted string>
     Plugin event subpath
   [name = <quoted string>]
     Plugin event name
   [value = <quoted string>]
     Plugin event value
   [orivalue = <quoted string>]
     Plugin event orivalue
   [flags = <[+/-]flag[+/-flag...]{dynamic save}>]
     Plug-in event flags

   mbus unregister
Unregister a client/plugin context
Syntax : unregister id = <number>

Parameters :
   id = <number>
     Select message-based client/plugin context id.

   mbus xmldump
Dump the registered datamodel to an XML file
Syntax : xmldump filename = <string> [format = <{unix|mac|windows}>]

Parameters :
   filename = <string>
     Filename.
   [format = <{unix|mac|windows}>]
     Select output file format.

   memm
Following commands are available :

stats          : Display memm statistics.
listobjects    : Display objects.

Following command groups are available :

debug

   memm debug
Following commands are available :

stats          : Display memm time statistics.
clearstats     : Clear time statistics.
traceconfig    : Modify memm trace settings.
tag            : (Un)tag memory manager objects.

Following command groups are available :

lock

   memm debug clearstats
Clear time statistics.
```

Syntax : clearstats
  memm debug lock
Following commands are available :

stats   : Display lock statistics.
traceconfig   : Modify lock trace settings.

  memm debug lock stats
Display lock statistics.
Syntax : stats
  memm debug lock traceconfig
Modify lock trace settings.
Syntax : traceconfig [level = <number{0-4}>] [name = <string>]

Parameters :
  [level = <number{0-4}>]
    Select memm trace level (0-4).
  [name = <string>]
    application name filter for lock traces (empty displays all lock traces)

  memm debug stats
Display memm time statistics.
Syntax : stats [name = <quoted string>]

Parameters :
  [name = <quoted string>]
    Select typename(s) to list (supports partial typename)

  memm debug tag
(Un)tag memory manager objects.
Syntax : tag [name = <quoted string>] [tag = <{enabled|disabled}>]

Parameters :
  [name = <quoted string>]
    Select typename(s) to list (supports partial typename)
  [tag = <{enabled|disabled}>]
    Set (or unset) the tag

  memm debug traceconfig
Modify memm trace settings.
Syntax : traceconfig [level = <number{0-4}>]

Parameters :
  [level = <number{0-4}>]
    Select memm trace level (0-4).

  memm listobjects
Display objects.
Syntax : listobjects [name = <quoted string>] [tagged = <{no|yes}>]
                [hidedeldynstr = <{no|yes}>]

Parameters :
  [name = <quoted string>]
    Select typename(s) to list (supports partial typename)
  [tagged = <{no|yes}>]
    Show only tagged (yes) or untagged (no) objects
  [hidedeldynstr = <{no|yes}>]

Hide (yes) / show (no) deleted dynstrings (default = show)

memm stats
Display memm statistics.
Syntax : stats [name = <quoted string>]

Parameters :
[name = <quoted string>]
Select typename(s) to list (supports partial typename)

mlp
Following commands are available :

import : Import all scores.
flush : Flush all mlp structures.

Following command groups are available :

debug privilege role

mlp debug
Following commands are available :

export : Export all scores.
stats : Display mlp statisctics.
traceconfig : Modify mlp trace settings.

mlp debug export
Export all scores.
Syntax : export
mlp debug stats
Display mlp statisctics.
Syntax : stats
mlp debug traceconfig
Modify mlp trace settings.
Syntax : traceconfig [trace = <{disabled|enabled|full}>]

Parameters :
[trace = <{disabled|enabled|full}>]
Select mlp trace level.

mlp flush
Flush all mlp structures.
Syntax : flush
mlp import
Import all scores.
Syntax : import [trace = <{disabled|enabled|full}>]

Parameters :
[trace = <{disabled|enabled|full}>]
Select import trace level.

mlp interaction
Following commands are available :

list : Display the interactions.
config : Display/Modify the interaction score.

addzone : Add the zone to the interaction score.
removezone : Remove the zone from interaction score.

mlp interaction addzone
Add the zone to the interaction score.
Syntax : addzone name = <quoted string> type = <{cli|cgi|file|mdap|ftp}>
zone = <> [scorenr = <number{1-2}>]

Parameters :
name = <quoted string>
Select the interaction name.
type = <{cli|cgi|file|mdap|ftp}>
Select the interaction type.
zone = <>
Zone to add.
[scorenr = <number{1-2}>]
Select score number to change.

mlp interaction config
Display/Modify the interaction score.
Syntax : config name = <quoted string> [type = <{cli|cgi|file|mdap|ftp|*}>]
[score = <{hex-word}[:{hex-word}] ex: 'a12:c30f'>]
[score2 = <{hex-word}[:{hex-word}] ex: 'a12:c30f'>]
[verbose = <{minimal|medium|all}>]
[recurse = <{disabled|enabled}>]

Parameters :
name = <quoted string>
Select the interaction name.
[type = <{cli|cgi|file|mdap|ftp|*}>]
Select the interaction type.
[score = <{hex-word}[:{hex-word}] ex: 'a12:c30f'>]
Set the score.
[score2 = <{hex-word}[:{hex-word}] ex: 'a12:c30f'>]
Set the score2.
[verbose = <{minimal|medium|all}>]
Limit the output list.
[recurse = <{disabled|enabled}>]
Recursive config (cli only).

mlp interaction list
Display the interactions.
Syntax : list [type = <{cli|cgi|file|mdap|ftp}>]
[verbose = <{minimal|medium|all}>] [name = <quoted string>]

Parameters :
[type = <{cli|cgi|file|mdap|ftp}>]
Select the interaction type.
[verbose = <{minimal|medium|all}>]
Limit the output list.
[name = <quoted string>]
Select a subgroup to list.

mlp interaction removezone
Remove the zone from interaction score.
Syntax : removezone name = <quoted string> type = <{cli|cgi|file|mdap|ftp}>
zone = <> [scorenr = <number{1-2}>]

Parameters :
  name = <quoted string>
    Select the interaction name.
  type = <{cli|cgi|file|mdap|ftp}>
    Select the interaction type.
  zone = <>
    Zone to add.
  [scorenr = <number{1-2}>]
    Select score number to change.

  mlp privilege
Following commands are available :

add   : Add a privilege.
delete   : Delete a privilege.
addzone   : Add a zone to a privilege.
removezone   : Remove a zone from a privilege.
list   : Display the privileges.
config   : Modify the privilege.

  mlp privilege add
Add a privilege.
Syntax : add name = <string> type = <{access|service}>
         [descr = <quoted string>]

Parameters :
  name = <string>
    Privilege name.
  type = <{access|service}>
    Privilege type.
  [descr = <quoted string>]
    Privilege description.

  mlp privilege addzone
Add a zone to a privilege.
Syntax : addzone name = <>
           zone = <{Read/LAN/WAN/Local|Write/LAN/WAN/Local|r_lan|r_wan|
                r_fs_view|r_fs_retrieve|r_rtg|r_fwdg|r_nat|r_frwl|
                r_ipsec_norm|r_ipsec_adv|r_certificates|r_remote_mgnt|
                r_local|r_qos|w_lan|w_wan|w_fs_passive|w_rtg|w_fwdg|
                w_nat|w_frwl_norm|w_frwl_adv|w_frwl_ss|w_ipsec|
                w_certificates|w_remote_mgnt|w_local|w_qos|SND_lan|
                SND_wan|SND_local|AND_lan|AND_wan|AND_frwl|AND_local|
                User_Admin|MLP_Admin|secure_ipsec_term|secure_BR|CLI|
                CGI|FTP|MDAP|secure_reset|GUI_advanced|mbus|
                unsecure_connection|Sensitve_file|channel_ftp|
                channel_telnet|channel_http|channel_mdap|
                channel_serial|origin_lan|origin_wan|origin_local|
                trace}>

Parameters :
  name = <>
    Privilege name.
  zone = <{Read/LAN/WAN/Local|Write/LAN/WAN/Local|r_lan|r_wan|r_fs_view|
       r_fs_retrieve|r_rtg|r_fwdg|r_nat|r_frwl|r_ipsec_norm|r_ipsec_adv|
       r_certificates|r_remote_mgnt|r_local|r_qos|w_lan|w_wan|w_fs_passive|

```
        w_rtg|w_fwdg|w_nat|w_frwl_norm|w_frwl_adv|w_frwl_ss|w_ipsec|
        w_certificates|w_remote_mgnt|w_local|w_qos|SND_lan|SND_wan|SND_local|
        AND_lan|AND_wan|AND_frwl|AND_local|User_Admin|MLP_Admin|
        secure_ipsec_term|secure_BR|CLI|CGI|FTP|MDAP|secure_reset|
        GUI_advanced|mbus|unsecure_connection|Sensitve_file|channel_ftp|
        channel_telnet|channel_http|channel_mdap|channel_serial|origin_lan|
        origin_wan|origin_local|trace}>
    Zone name.

  mlp privilege config
Modify the privilege.
Syntax : config name = <> [descr = <quoted string>]
            [score = <{hex-word}[:{hex-word}] ex: 'a12:c30f'>]

Parameters :
  name = <>
    Select the privilege by name.
  [descr = <quoted string>]
    Set the description.
  [score = <{hex-word}[:{hex-word}] ex: 'a12:c30f'>]
    Set the score.

  mlp privilege delete
Delete a privilege.
Syntax : delete name = <>

Parameters :
  name = <>
    Privilege name.

  mlp privilege list
Display the privileges.
Syntax : list [name = <>] [type = <{access|service}>]
          [verbose = <{minimal|medium|all}>]

Parameters :
  [name = <>]
    Privilege name.
  [type = <{access|service}>]
    Privilege type.
  [verbose = <{minimal|medium|all}>]
    Limit the output list.

  mlp privilege removezone
Remove a zone from a privilege.
Syntax : removezone name = <>
              zone = <{Read/LAN/WAN/Local|Write/LAN/WAN/Local|r_lan|
                   r_wan|r_fs_view|r_fs_retrieve|r_rtg|r_fwdg|r_nat|
                   r_frwl|r_ipsec_norm|r_ipsec_adv|r_certificates|
                   r_remote_mgnt|r_local|r_qos|w_lan|w_wan|
                   w_fs_passive|w_rtg|w_fwdg|w_nat|w_frwl_norm|
                   w_frwl_adv|w_frwl_ss|w_ipsec|w_certificates|
                   w_remote_mgnt|w_local|w_qos|SND_lan|SND_wan|
                   SND_local|AND_lan|AND_wan|AND_frwl|AND_local|
                   User_Admin|MLP_Admin|secure_ipsec_term|secure_BR|
                   CLI|CGI|FTP|MDAP|secure_reset|GUI_advanced|mbus|
                   unsecure_connection|Sensitve_file|channel_ftp|
```

channel_telnet|channel_http|channel_mdap|
channel_serial|origin_lan|origin_wan|origin_local|
trace}>

Parameters :
name = <>
Privilege name.
zone = <{Read/LAN/WAN/Local|Write/LAN/WAN/Local|r_lan|r_wan|r_fs_view|
r_fs_retrieve|r_rtg|r_fwdg|r_nat|r_frwl|r_ipsec_norm|r_ipsec_adv|
r_certificates|r_remote_mgnt|r_local|r_qos|w_lan|w_wan|w_fs_passive|
w_rtg|w_fwdg|w_nat|w_frwl_norm|w_frwl_adv|w_frwl_ss|w_ipsec|
w_certificates|w_remote_mgnt|w_local|w_qos|SND_lan|SND_wan|SND_local|
AND_lan|AND_wan|AND_frwl|AND_local|User_Admin|MLP_Admin|
secure_ipsec_term|secure_BR|CLI|CGI|FTP|MDAP|secure_reset|
GUI_advanced|mbus|unsecure_connection|Sensitve_file|channel_ftp|
channel_telnet|channel_http|channel_mdap|channel_serial|origin_lan|
origin_wan|origin_local|trace}>
Zone name.

mlp role
Following commands are available :

add : Add a role.
delete : Delete a role.
addpriv : Add a privilege.
removepriv : Remove a privilege.
list : Display the roles.
config : Modify the role.

mlp role add
Add a role.
Syntax : add name = <string> parent = <> [descr = <quoted string>]

Parameters :
name = <string>
Role name.
parent = <>
Parent role name.
[descr = <quoted string>]
Role description.

mlp role addpriv
Add a privilege.
Syntax : addpriv name = <> access = <>
service = <{anyservice|SP1|SP10|SP11|SP12|SP13|SP14|SP15|SP16|
SP17|SP18|SP19|SP2|SP3|SP4|SP5|SP6|SP7|SP8|SP9}>

Parameters :
name = <{Administrator|LAN_Admin|PowerUser|root|SuperUser|TechnicalSupport|
User|WAN_Admin}>
Role name.
access = <{anyaccess|AP1|AP2|AP3|AP4|AP5|AP6|AP7|AP8|AP9}>
Access privilege to add.
service = <{anyservice|SP1|SP10|SP11|SP12|SP13|SP14|SP15|SP16|SP17|SP18|
SP19|SP2|SP3|SP4|SP5|SP6|SP7|SP8|SP9}>

Privilege name to add.

mlp role config
Modify the role.
Syntax : config name = <{Administrator|LAN_Admin|PowerUser|root|SuperUser|
TechnicalSupport|User|WAN_Admin}>
[parent = <{Administrator|LAN_Admin|PowerUser|root|SuperUser|
TechnicalSupport|User|WAN_Admin}>]
[descr = <quoted string>]

Parameters :
name = <>
Role name.
[parent = <>]
Parent role name.
[descr = <quoted string>]
Role description.

mlp role delete
Delete a role.
Syntax : delete name = <>

Parameters :
name = <>
Role name.

mlp role list
Display the roles.
Syntax : list [name = <>] [verbose = <{minimal|medium|all}>]

Parameters :
[name = <>]
Role name.
[verbose = <{minimal|medium|all}>]
Limit the output list.

mlp role removepriv
Remove a privilege.
Syntax : removepriv name = <> access = <> [service = <>]

Parameters :
name = <>
Role name.
access = <>
Access privilege to delete.
[service = <>]
Privilege name to delete.

mlp zone
Following commands are available :

add : Add a zone.
delete : Delete a zone.
list : Display zones.
config : Modify a zone.
configintfgroup : Modify interfacegroup zone numbers.
configchannels : Modify channel zone numbers.

configorigin : Modify origin zone numbers.
configsecconn : Modify secure connection zone number.
configsecfile : Modify secure files zone number.
configtrace : Modify trace zone number.

mlp zone add
Add a zone.
Syntax : add zonenr = <number> name = <string> [descr = <quoted string>]

Parameters :
zonenr = <number>
Zone number
name = <string>
Zone name
[descr = <quoted string>]
Zone description

mlp zone config
Modify a zone.
Syntax : config zonenr = <number> [name = <string>] [descr = <quoted string>]

Parameters :
zonenr = <number>
Zone number
[name = <string>]
Zone name
[descr = <quoted string>]
Zone description

mlp zone configchannels
Modify channel zone numbers.
Syntax : configchannels [ftp = <number>] [telnet = <number>]
[http = <number>] [mdap = <number>]
[serial = <number>]

Parameters :
[ftp = <number>]
Ftp application zone number
[telnet = <number>]
Telnet application zone number
[http = <number>]
Http application zone number
[mdap = <number>]
Mdap application zone number
[serial = <number>]
Serial application zone number

mlp zone configintfgroup
Modify interfacegroup zone numbers.
Syntax : configintfgroup [rw = <{read|write}>] [target = <number>]
[lan = <number>] [wan = <number>] [local = <number>]

Parameters :
[rw = <{read|write}>]
Read/write config action
[target = <number>]
Target dynamic zone number

[lan = <number>]
Lan zone number
[wan = <number>]
Wan zone number
[local = <number>]
Local zone number

mlp zone configorigin
Modify origin zone numbers.
Syntax : configorigin [lan = <number>] [wan = <number>] [local = <number>]

Parameters :
[lan = <number>]
Lan origin zone number
[wan = <number>]
Wan origin zone number
[local = <number>]
Local origin zone number

mlp zone configsecconn
Modify secure connection zone number.
Syntax : configsecconn [zonenr = <number>]

Parameters :
[zonenr = <number>]
Secure connection zone number

mlp zone configsecfile
Modify secure files zone number.
Syntax : configsecfile [zonenr = <number>]

Parameters :
[zonenr = <number>]
Secure files zone number

mlp zone configtrace
Modify trace zone number.
Syntax : configtrace [zonenr = <number>]

Parameters :
[zonenr = <number>]
Trace zone number

mlp zone delete
Delete a zone.
Syntax : delete name = <>

Parameters :
name = <>
Zone name

mlp zone list
Display zones.
Syntax : list
nat
Following commands are available :

```
ifconfig        : Modify address translation on an IP interface.
iflist          : Display all interfaces.
mapadd          : Add an address mapping to a nat enabled interface.
mapdelete       : Delete an address mapping from a nat enabled interface.
maplist         : Display address mappings.
tmpladd         : Add an address mapping template.
tmpldelete      : Delete an address mapping template.
tmpllist        : Display address mapping templates.
tmplinst        : Instantiate address mapping templates for a given dynamic
                  address.
config          : Modify global NAT configuration.
flush           : Flush current NAT configuration.

  nat config
Modify global NAT configuration.
Syntax : config [trace = <{disabled|enabled}>]

Parameters :
  [trace = <{disabled|enabled}>]
    Enable/disable traces.

  nat flush
Flush current NAT configuration.
Syntax : flush
  nat ifconfig
Modify address translation on an IP interface.
Syntax : ifconfig intf = <{loop|LocalNetwork|Internet}>
                 translation = <{disabled|enabled|transparent}>

Parameters :
  intf = <{loop|LocalNetwork|Internet}>
    The IP interface name.
  translation = <{disabled|enabled|transparent}>
    Disabled, enabled or tranparent address translation.

  nat iflist
Display all interfaces.
Syntax : iflist
  nat mapadd
Add an address mapping to a nat enabled interface.
Syntax : mapadd intf = <{loop|LocalNetwork|Internet}> [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}>]

Parameters :
  intf = <{loop|LocalNetwork|Internet}>
    The IP interface name.
  [type = <{napt|nat}>]
    The type of mapping.
  [outside_addr = <ip-range>]
    The outside (typically public) IP address (range for NAT).
  [inside_addr = <ip-range>]
    The inside (typically private) IP address (range for NAT).
```

[access_list = <ip-range>]
The range of inside addresses the mapping is restricted to.
[foreign_addr = <ip-range>]
The range of destination addresses the mapping is restricted to.
[protocol = <{ah|egp|esp|ggp|gre|hmp|icmp|igmp|pup|rdp|rsvp|tcp|udp|vines|
xns-idp|6to4|ipip} or number>]
The IP protocol.
[outside_port = <port-range>]
The outside port number or range (only for NAPT).
[inside_port = <port-range>]
The inside port number or range (only for NAPT).
[mode = <{auto|inbound|outbound}>]
The mode to create the portmap.
[weight = <number{0-255}>]
The weight for the portmap.

nat mapdelete
Delete an address mapping from a nat enabled interface.
Syntax : mapdelete intf = <{loop|LocalNetwork|Internet}> index = <number>

Parameters :
intf = <{loop|LocalNetwork|Internet}>
The IP interface name.
index = <number>
The map index as listed by ':nat maplist'.

nat maplist
Display address mappings.
Syntax : maplist [intf = <{loop|LocalNetwork|Internet}>]
[expand = <{disabled|enabled}>]

Parameters :
[intf = <{loop|LocalNetwork|Internet}>]
The IP interface name.
[expand = <{disabled|enabled}>]
Expanded listing.

nat tmpladd
Add an address mapping template.
Syntax : tmpladd [intf = <{loop|LocalNetwork|Internet}>]
[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}>]

Parameters :
[intf = <{loop|LocalNetwork|Internet}>]
The IP interface name scope for this template.
[group = <{wan|local|lan|tunnel|dmz|guest} or number>]
The IP interface group scope for this template.
[timeout = <number{0-65535}>]
Lifetime (seconds) for this template.

[type = <{napt|nat}>]
The type of template.
outside_addr = <ip-range>
The outside (typically public) IP address or index (range for NAT).
[inside_addr = <ip-range>]
The inside (typically private) IP address or index (range for NAT).
[access_list = <ip-range>]
The range of inside addresses the template is restricted to.
[foreign_addr = <ip-range>]
The range of destination addresses the template is restricted to.
[protocol = <{ah|egp|esp|ggp|gre|hmp|icmp|igmp|pup|rdp|rsvp|tcp|udp|vines|
xns-idp|6to4|ipip} or number>]
The IP protocol.
[outside_port = <port-range>]
The outside port number or range (only for NAPT).
[inside_port = <port-range>]
The inside port number or range (only for NAPT).
[mode = <{auto|inbound|outbound}>]
The mode to create the portmap.
[weight = <number{0-255}>]
The weight to be used for the template instance(s).

nat tmpldelete
Delete an address mapping template.
Syntax : tmpldelete index = <number>

Parameters :
index = <number>
The template index as listed by ':nat tmpllist'.

nat tmplinst
Instantiate address mapping templates for a given dynamic address.
Syntax : tmplinst intf = <{loop|LocalNetwork|Internet}>
addr_index = <ip-address> dynamic_addr = <ip-address>

Parameters :
intf = <{loop|LocalNetwork|Internet}>
The IP interface name.
addr_index = <ip-address>
The outside IP address index/key to instantiate for.
dynamic_addr = <ip-address>
The dynamic address to substitute the index/key with.

nat tmpllist
Display address mapping templates.
Syntax : tmpllist [expand = <{disabled|enabled}>]

Parameters :
[expand = <{disabled|enabled}>]
Expanded listing.

ppp
Following commands are available :

ifadd : Create a new PPP interface.
ifdelete : Delete a PPP interface.
ifattach : Attach a PPP interface.

ifscan : Scan a PPP interface for available interfaces.
ifdetach : Detach a PPP interface.
ifconfig : Modify a PPP interface.
iflist : Display the PPP interfaces.
rtadd : Add a route to the routing table when PPP link comes up.
rtdelete : Delete the route for a PPP link.
flush : Flush all PPP interfaces.

Following command groups are available :

relay

ppp flush
Flush all PPP interfaces.
Syntax : flush
ppp ifadd
Create a new PPP interface.
Syntax : ifadd intf = <string>

Parameters :
intf = <string>
The name for the new PPP interface. If not specified, the destination
will double as interface name.

ppp ifattach
Attach a PPP interface.
Syntax : ifattach intf = <{}>

Parameters :
intf = <{}>
The name of the PPP interface.

ppp ifconfig
Modify a PPP interface.
Syntax : ifconfig intf = <{}> [dest = <{bridge|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}>]
[subnetfirstip = <{disabled|enabled}>]
[savepwd = <{disabled|enabled}>]
[demanddial = <{disabled|enabled}>]
[doddelay = <number{0-3600}>] [primdns = <ip-address>]

[secdns = <ip-address>] [dnsmetric = <number{0-100}>]
[idletime = <number{0-1000000}>]
[idletrigger = <{RxTx|Rx|Tx}>]
[unnumbered = <{disabled|enabled}>]
[gracefulrestart = <{disabled|enabled}>]

Parameters :
intf = <{}>
The name of the PPP interface to configure.
[dest = <{bridge|RELAY|eth_wan}>]
The destination interface for this PPP interface.
[emptyauth = <{disabled|enabled}>]
Enable the possibility to authenticate with empty username/password.
[user = <string>]
The username for remote PAP/CHAP authentication.
[password = <password>]
The password for remote PAP/CHAP authentication.
[acname = <quoted string>]
The access concentrator name for a PPP session.
[servicename = <quoted string>]
The service name for a PPP session.
[class = <{0|1|2|3|4|5|6|7|8|9|10|11|12|13|14|15}>]
The prio class of the PPP packets.
[pool = <{none}>]
Acquire IP subnet and assign it to a free DHCP pool.
[pcomp = <{disabled|enabled}>]
Try to negotiate PPP protocol compression (LCP PCOMP).
[accomp = <{enabled|disabled|negotiate}>]
Try to negotiate PPP address & control field compression (LCP ACCOMP).
[trace = <{disabled|enabled}>]
Enable verbose console logging.
[concentrator = <{disabled|enabled}>]
The access concentrator is on this side of the PPP connection.
[auth = <{pap|chap|auto}>]
Authentication protocol to be used.
[restart = <{disabled|enabled}>]
Automatically restart when LCP link goes down.
[retryinterval = <number{0-65535}>]
The number of seconds between retries.
[passive = <{disabled|enabled}>]
When LCP times out, put link in a listening state.
[silent = <{disabled|enabled}>]
Do not send anything at startup, just listen for incoming LCP messages.
[echo = <{disabled|enabled}>]
Send LCP echo requests at regular intervals.
[echotolerance = <number{1-100}>]
Number of failed LCP echo requests needed to trigger a link failure.
[mru = <number{293-8192}>]
Negotiate maximum packet size we can handle.
[laddr = <ip-address>]
Negotiate this IP address at our side of the link.
[raddr = <ip-address>]
Negotiate this IP address at remote side of the link.
[netmask = <ip-mask(dotted or cidr)>]
Negotiate IP subnet mask at remote side of the link.
[format = <{cidr|dotted|none}>]
The format used to represent the IP subnet.

[subnetfirstip = <{disabled|enabled}>]
Take the first ip address out of the received IP as local address.
[savepwd = <{disabled|enabled}>]
Select whether or not password is saved.
[demanddial = <{disabled|enabled}>]
Enable dial-on-demand feature. Nothing happens until packets are sent to this PPP interface.
[doddelay = <number{0-3600}>]
During this initial interval (seconds) packets do not trigger PPP interface.
[primdns = <ip-address>]
Negotiate this IP address as primary DNS server.
[secdns = <ip-address>]
Negotiate this IP address as secondary DNS server.
[dnsmetric = <number{0-100}>]
DNS route metric to be used for the negotiated DNS servers.
[idletime = <number{0-1000000}>]
Maximum time the link may be idle (seconds).
[idletrigger = <{RxTx|Rx|Tx}>]
Consider the link being idle if no traffic is sent and/or received during the idle time.
[unnumbered = <{disabled|enabled}>]
Take local IP address from 'laddr' field and remote IP address from the pool. SVC only.
[gracefulrestart = <{disabled|enabled}>]
Send LCP termination request before establishing new PPP link

ppp ifdelete
Delete a PPP interface.
Syntax : ifdelete intf = <{}>

Parameters :
intf = <{}>
The name of the PPP interface.

ppp ifdetach
Detach a PPP interface.
Syntax : ifdetach intf = <{}>

Parameters :
intf = <{}>
The name of the PPP interface.

ppp iflist
Display the PPP interfaces.
Syntax : iflist [intf = <{}>]

Parameters :
[intf = <{}>]
The name of a PPP interface.

ppp ifscan
Scan a PPP interface for available interfaces.
Syntax : ifscan intf = <{}> [time = <number{0-36000}>]

Parameters :
intf = <{}>

The name of the PPP interface to scan.
[time = <number{0-36000}>]
The time to scan for services (in seconds).

ppp relay
Following commands are available :

ifadd : Add an ethernet interface to the PPP relay list.
ifdelete : Delete an ethernet interface from the PPP relay agent list.
ifconfig : Modify an ethernet interface from the PPP relay agent list.
iflist : Display all ethernet interfaces added to the PPP relay agent list.
sesslist : Display all active PPP relay sessions.
flush : Remove all ethernet interfaces from the PPP relay agent list and terminate all sessions.

ppp relay flush
Remove all ethernet interfaces from the PPP relay agent list and terminate all sessions.
Syntax : flush
ppp relay ifadd
Add an ethernet interface to the PPP relay list.
Syntax : ifadd intf = <{bridge|eth_wan}>

Parameters :
intf = <{bridge|eth_wan}>
The ethernet intf to be added to the PPP relay agent list.

ppp relay ifconfig
Modify an ethernet interface from the PPP relay agent list.
Syntax : ifconfig intf = <{}> hwaddr = <hardware-address>

Parameters :
intf = <{}>
The ethernet intf to be added to the PPP relay agent list.
hwaddr = <hardware-address>
The hardware address (e.g. Ethernet MAC address) of this interface.

ppp relay ifdelete
Delete an ethernet interface from the PPP relay agent list.
Syntax : ifdelete intf = <{}>

Parameters :
intf = <{}>
The ethernet intf to be added to the PPP relay agent list.

ppp relay iflist
Display all ethernet interfaces added to the PPP relay agent list.
Syntax : iflist
ppp relay sesslist
Display all active PPP relay sessions.
Syntax : sesslist
ppp rtadd
Add a route to the routing table when PPP link comes up.
Syntax : rtadd intf = <{}> 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}>]

Parameters :
intf = <{}>
The name of a PPP interface.
dst = <ip-address>
The IP destination address specification for the route to be added when the link comes up.
[dstmsk = <ip-mask(dotted or cidr)>]
The IP destination mask. Special values : 1 = remote net; 32 = remote host;
[label = <{None|DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|default}>]
The name of the label.
[src = <ip-address>]
The IP source address specification. i.e. who can use this link.
[srcmsk = <ip-mask(dotted or cidr)>]
The IP source mask.
[metric = <number{0-100}>]
The route metric.

ppp rtdelete
Delete the route for a PPP link.
Syntax : rtdelete intf = <{}>

Parameters :
intf = <{}>
The PPP interface name for which to delete the route settings.

ppp simlock
Show allowed list
Syntax : simlock

Parameters :

pptp
Following commands are available :

list : Shows PPTP configuration.
profadd : Defines a new PPTP profile.
profdelete : Deletes a PPTP profile.
proflist : Lists PPTP profiles.
flush : Flushes the PPTP configuration.
ifadd : Adds a PPTP profile (backwards compatible with previous release, use profiles instead).

pptp flush
Flushes the PPTP configuration.
Syntax : flush
pptp ifadd
Adds a PPTP profile (backwards compatible with previous release, use profiles instead).
Syntax : ifadd dest = <string> [rate = <number{10-10000}>]
[encaps = <{vcmux|nlpid}>] [ac = <{never|always|keep}>]

Parameters :
  dest = <string>
    The WAN destination for this PPTP tunnel. Typically a phonebook name.
  [rate = <number{10-10000}>]
    Transmit speed in kbits/s for the WAN link.
  [encaps = <{vcmux|nlpid}>]
    The WAN protocol encapsulation.
  [ac = <{never|always|keep}>]
    Enable/disable sending address and control field (0xFF03) on the WAN
    link.

  pptp list
Shows PPTP configuration.
Syntax : list
  pptp profadd
Defines a new PPTP profile.
Syntax : profadd name = <string> [qos = <{default}>]
          [encaps = <{vcmux|nlpid}>] [ac = <{never|always|keep}>]

Parameters :
  name = <string>
    The name for the new PPTP profile.
  [qos = <{default}>]
    The name of the qosbook entry, containing the settings for this profile.
  [encaps = <{vcmux|nlpid}>]
    The WAN protocol encapsulation to be used with this profile.
  [ac = <{never|always|keep}>]
    Enable/disable sending address and control field (0xFF03) on the WAN
    link.

  pptp profdelete
Deletes a PPTP profile.
Syntax : profdelete name = <>

Parameters :
  name = <>
    The name of the profile to delete.

  pptp proflist
Lists PPTP profiles.
Syntax : proflist
  printersharing
Following command groups are available :

LPD   RAW

  printersharing LPD
Following commands are available :

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

Following command groups are available :

queue

  printersharing LPD config

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

Parameters :
[state = <{disabled|enabled}>]
Enabled/disabled LPD printer service.

printersharing LPD list
To display LPD service context.
Syntax : list
printersharing LPD queue
Following commands are available :

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

printersharing LPD queue add
Add an option.
Syntax : add name = <string> [type = <{Feed|Raw}>] [default = <{no|yes}>]

Parameters :
name = <string>
LPD queue name.
[type = <{Feed|Raw}>]
Queue Type
[default = <{no|yes}>]
Set default queue

printersharing LPD queue delete
Delete an option.
Syntax : delete name = <string>

Parameters :
name = <string>
LPD queue name.

printersharing LPD queue list
List all options.
Syntax : list
printersharing RAW
Following commands are available :

config : To enable/disable Raw service.
list : To display LPD service context.

printersharing RAW config
To enable/disable Raw service.
Syntax : config [state = <{disabled|enabled}>] [port = <number>]

Parameters :
[state = <{disabled|enabled}>]
Enabled/disabled Raw printer service.
[port = <number>]
The raw printserver port number

printersharing RAW list

To display LPD service context.
Syntax : list
  script
Following commands are available :

add : Add line to script.
delete : Delete complete script or line from script.
list : List script.
flush : Flush scripts.
run : Run script.

  script add
Add line to script.
Syntax : add name = <string> [index = <number>] command = <quoted string>

Parameters :
  name = <string>
    Name of script.
  [index = <number>]
    Line number (0 = add).
  command = <quoted string>
    Command.

  script delete
Delete complete script or line from script.
Syntax : delete name = <{autopvc_add_qos|autopvc_delete_qos|autopvc_add_bridge|
                  autopvc_delete_bridge|autopvc_add_pppoerelay|
                  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>]

Parameters :
  name = <{autopvc_add_qos|autopvc_delete_qos|autopvc_add_bridge|
       autopvc_delete_bridge|autopvc_add_pppoerelay|
       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}>
    Name of script.
  [index = <number>]
    Line number.

  script flush
Flush scripts.
Syntax : flush
  script list
List script.
Syntax : list [name = <{autopvc_add_qos|autopvc_delete_qos|autopvc_add_bridge|
                  autopvc_delete_bridge|autopvc_add_pppoerelay|
                  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}>]

Parameters :
[name = <{autopvc_add_qos|autopvc_delete_qos|autopvc_add_bridge|
autopvc_delete_bridge|autopvc_add_pppoerelay|
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}>]
Name of script.

script run
Run script.
Syntax : run name = <{autopvc_add_qos|autopvc_delete_qos|autopvc_add_bridge|
autopvc_delete_bridge|autopvc_add_pppoerelay|
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>

Parameters :
name = <{autopvc_add_qos|autopvc_delete_qos|autopvc_add_bridge|
autopvc_delete_bridge|autopvc_add_pppoerelay|
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}>
Name of script.
pars = <quoted string>
Parameters separated with comma e.q. a,b,c .

script trace
Trace toggle.
Syntax : trace
service
Following command groups are available :

host system

service host
Following commands are available :

list : Display list of services.
add : Add a service.
delete : Delete a service.
assign : Assign a service to a host.
disable : Disable a service.
stats : Service statistics.
triggerlist : List all triggers.
flush : Flush all services.

Following command groups are available :

```
category       rule

   service host add
Add a service.
Syntax : add name = <quoted string> [mode = <{server|client|custom}>]
          [category = <>]

Parameters :
   name = <quoted string>
     The name of the service.
   [mode = <{server|client|custom}>]
     server, client or custom service ?
   [category = <>]
     The category to which the service belongs.

   service host assign
Assign a service to a host.
Syntax : assign name = <{AIM Talk|BearShare|BitTorrent|Calibre|Checkpoint FW1
                  VPN|Counter Strike|DirectX 7|DirectX 8|DirectX 9|FTP
                  Server|Gamespy Arcade|HTTP Server (World Wide Web)|
                  HTTPS Server|iMesh|KaZaA|Mail Server (SMTP)|Microsoft
                  Remote Desktop|MSN Game Zone|MSN Game Zone (DX)|NNTP
                  Server|PPTP Server|sabnzbplus|Secure Shell Server (SSH)|
                  Steam Games|Subsonic|Telnet Server|VNC|Xbox Live}>
            [host = <ip-address>] [log = <{disabled|enabled}>]

Parameters :
   name = <{AIM Talk|BearShare|BitTorrent|Calibre|Checkpoint FW1 VPN|Counter
        Strike|DirectX 7|DirectX 8|DirectX 9|FTP Server|Gamespy Arcade|HTTP
        Server (World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail Server (SMTP)|
        Microsoft Remote Desktop|MSN Game Zone|MSN Game Zone (DX)|NNTP
        Server|PPTP Server|sabnzbplus|Secure Shell Server (SSH)|Steam Games|
        Subsonic|Telnet Server|VNC|Xbox Live}>
     The name of the service.
   [host = <ip-address>]
     The IP address of the host.
   [log = <{disabled|enabled}>]
     Enable/disable logging.

   service host category
Following commands are available :

add            : Create/define service category.
delete         : Delete a service category.
rename         : Rename a service category.
list           : List the available service categories.

   service host category add
Create/define service category.
Syntax : add name = <string>

Parameters :
   name = <string>
     The name of the category.

   service host category delete
Delete a service category.
```

Syntax : delete name = <>

Parameters :
  name = <>
    The name of the category.

  service host category list
List the available service categories.
Syntax : list
  service host category rename
Rename a service category.
Syntax : rename name = <> new_name = <string>

Parameters :
  name = <>
    The name of the existing category.
  new_name = <string>
    The new name of the category.

  service host config
Modify/Display global service configuration options.
Syntax : config [trace = <{disabled|enabled}>]

Parameters :
  [trace = <{disabled|enabled}>]
    Enable/disable traces.

  service host delete
Delete a service.
Syntax : delete name = <{AIM Talk|BearShare|BitTorrent|Calibre|Checkpoint FW1
                VPN|Counter Strike|DirectX 7|DirectX 8|DirectX 9|FTP
                Server|Gamespy Arcade|HTTP Server (World Wide Web)|
                HTTPS Server|iMesh|KaZaA|Mail Server (SMTP)|Microsoft
                Remote Desktop|MSN Game Zone|MSN Game Zone (DX)|NNTP
                Server|PPTP Server|sabnzbplus|Secure Shell Server (SSH)|
                Steam Games|Subsonic|Telnet Server|VNC|Xbox Live}>

Parameters :
  name = <{AIM Talk|BearShare|BitTorrent|Calibre|Checkpoint FW1 VPN|Counter
      Strike|DirectX 7|DirectX 8|DirectX 9|FTP Server|Gamespy Arcade|HTTP
      Server (World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail Server (SMTP)|
      Microsoft Remote Desktop|MSN Game Zone|MSN Game Zone (DX)|NNTP
      Server|PPTP Server|sabnzbplus|Secure Shell Server (SSH)|Steam Games|
      Subsonic|Telnet Server|VNC|Xbox Live}>
    The name of the service.

  service host disable
Disable a service.
Syntax : disable [name = <{AIM Talk|BearShare|BitTorrent|Calibre|Checkpoint
                FW1 VPN|Counter Strike|DirectX 7|DirectX 8|DirectX 9|
                FTP Server|Gamespy Arcade|HTTP Server (World Wide
                Web)|HTTPS Server|iMesh|KaZaA|Mail Server (SMTP)|
                Microsoft Remote Desktop|MSN Game Zone|MSN Game Zone
                (DX)|NNTP Server|PPTP Server|sabnzbplus|Secure Shell
                Server (SSH)|Steam Games|Subsonic|Telnet Server|VNC|
                Xbox Live}>]

Parameters :
  [name = <{AIM Talk|BearShare|BitTorrent|Calibre|Checkpoint FW1 VPN|Counter
      Strike|DirectX 7|DirectX 8|DirectX 9|FTP Server|Gamespy Arcade|HTTP
      Server (World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail Server (SMTP)|
      Microsoft Remote Desktop|MSN Game Zone|MSN Game Zone (DX)|NNTP
      Server|PPTP Server|sabnzbplus|Secure Shell Server (SSH)|Steam Games|
      Subsonic|Telnet Server|VNC|Xbox Live}>]
    The name of the service.

  service host flush
Flush all services.
Syntax : flush
  service host list
Display list of services.
Syntax : list [name = <{AIM Talk|BearShare|BitTorrent|Calibre|Checkpoint FW1
            VPN|Counter Strike|DirectX 7|DirectX 8|DirectX 9|FTP
            Server|Gamespy Arcade|HTTP Server (World Wide Web)|HTTPS
            Server|iMesh|KaZaA|Mail Server (SMTP)|Microsoft Remote
            Desktop|MSN Game Zone|MSN Game Zone (DX)|NNTP Server|
            PPTP Server|sabnzbplus|Secure Shell Server (SSH)|Steam
            Games|Subsonic|Telnet Server|VNC|Xbox Live}>]

Parameters :
  [name = <{AIM Talk|BearShare|BitTorrent|Calibre|Checkpoint FW1 VPN|Counter
      Strike|DirectX 7|DirectX 8|DirectX 9|FTP Server|Gamespy Arcade|HTTP
      Server (World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail Server (SMTP)|
      Microsoft Remote Desktop|MSN Game Zone|MSN Game Zone (DX)|NNTP
      Server|PPTP Server|sabnzbplus|Secure Shell Server (SSH)|Steam Games|
      Subsonic|Telnet Server|VNC|Xbox Live}>]
    The name of the service.

  service host rule
Following commands are available :

add   : Create/define service portmap.
delete   : Delete a service portmap.

  service host rule add
Create/define service portmap.
Syntax : add name = <{AIM Talk|BearShare|BitTorrent|Calibre|Checkpoint FW1 VPN|
            Counter Strike|DirectX 7|DirectX 8|DirectX 9|FTP Server|
            Gamespy Arcade|HTTP Server (World Wide Web)|HTTPS Server|
            iMesh|KaZaA|Mail Server (SMTP)|Microsoft Remote Desktop|
            MSN Game Zone|MSN Game Zone (DX)|NNTP Server|PPTP Server|
            sabnzbplus|Secure Shell Server (SSH)|Steam Games|Subsonic|
            Telnet Server|VNC|Xbox Live}>
          [protocol = <{any|tcp|udp}>]
          [baseport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
              bootps|chargen|clearcase|daytime|discard|dns|domain|
              doom|echo|exec|finger|ftp|ftp-data|gopher|h323|
              httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|
              ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|
              netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|
              nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|

printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|
syslog|systat|talk|telnet|time|timed|tftp|ulistserv|
utime|uucp|uucp-rlogin|who|www-http|whoami|xwindows}
or number>]
portrange = <port-range>
[triggerport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|discard|
dns|domain|doom|echo|exec|finger|ftp|ftp-data|
gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-
net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-
ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|
pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|
sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|
www-http|whoami|xwindows} or number>]
[triggerprotocol = <{any|tcp|udp}>]

Parameters :
name = <{AIM Talk|BearShare|BitTorrent|Calibre|Checkpoint FW1 VPN|Counter
Strike|DirectX 7|DirectX 8|DirectX 9|FTP Server|Gamespy Arcade|HTTP
Server (World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail Server (SMTP)|
Microsoft Remote Desktop|MSN Game Zone|MSN Game Zone (DX)|NNTP
Server|PPTP Server|sabnzbplus|Secure Shell Server (SSH)|Steam Games|
Subsonic|Telnet Server|VNC|Xbox Live}>
The name of the service.
[protocol = <{any|tcp|udp}>]
Protocol type.
[baseport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|
nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
xwindows} or number>]
Inbound base port.
portrange = <port-range>
The outbound portrange.
[triggerport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|
new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|
systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-
rlogin|who|www-http|whoami|xwindows} or number>]
Defines outbound trigger port.
[triggerprotocol = <{any|tcp|udp}>]
Protocol of the trigger port.

service host rule delete
Delete a service portmap.
Syntax : delete name = <{AIM Talk|BearShare|BitTorrent|Calibre|Checkpoint FW1 VPN|Counter Strike|DirectX 7|DirectX 8|DirectX 9|FTP Server|Gamespy Arcade|HTTP Server (World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail Server (SMTP)|Microsoft Remote Desktop|MSN Game Zone|MSN Game Zone (DX)|NNTP Server|PPTP Server|sabnzbplus|Secure Shell Server (SSH)|Steam Games|Subsonic|Telnet Server|VNC|Xbox Live}>
[protocol = <{any|tcp|udp}>]
[baseport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|xwindows} or number>]
portrange = <port-range>
[triggerport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|xwindows} or number>]
[triggerprotocol = <{any|tcp|udp}>]

Parameters :
name = <{AIM Talk|BearShare|BitTorrent|Calibre|Checkpoint FW1 VPN|Counter Strike|DirectX 7|DirectX 8|DirectX 9|FTP Server|Gamespy Arcade|HTTP Server (World Wide Web)|HTTPS Server|iMesh|KaZaA|Mail Server (SMTP)|Microsoft Remote Desktop|MSN Game Zone|MSN Game Zone (DX)|NNTP Server|PPTP Server|sabnzbplus|Secure Shell Server (SSH)|Steam Games|Subsonic|Telnet Server|VNC|Xbox Live}>
The name of the service.
[protocol = <{any|tcp|udp}>]
Protocol type.
[baseport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|

xwindows} or number>]
Inbound base port.
portrange = <port-range>
The outbound portrange.
[triggerport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|
new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|
systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-
rlogin|who|www-http|whoami|xwindows} or number>]
Defines outbound trigger port.
[triggerprotocol = <{any|tcp|udp}>]
Protocol of the trigger port.

service host stats
Service statistics.
Syntax : stats
service host triggerlist
List all triggers.
Syntax : triggerlist
service system
Following commands are available :

list : Display services.
modify : Modify a service.
mapadd : Add a port map for a service.
mapdelete : Delete a port map for a service.
ifadd : Add an interface to the access list.
ifdelete : Delete an interface from the access list.
ipadd : Add an ip address (range) to the access list.
ipdelete : Delete an ip address (range) from the access list.

service system debug
Following commands are available :

stats : Display system service statistics.

service system debug stats
Display system service statistics.
Syntax : stats
service system ifadd
Add an interface to the access list.
Syntax : ifadd name = <{PPTP|HTTP|HTTPs|FTP|TELNET|RIP-Query|DNS-S|MDAP|SSDP|
PING_RESPONDER}>
group = <{wan|local|lan|tunnel|dmz|guest} or number>

Parameters :
name = <{PPTP|HTTP|HTTPs|FTP|TELNET|RIP-Query|DNS-S|MDAP|SSDP|
PING_RESPONDER}>
The name of the service for this access list.
group = <{wan|local|lan|tunnel|dmz|guest} or number>
The interface group for this access list.

service system ifdelete
Delete an interface from the access list.
Syntax : ifdelete name = <{PPTP|HTTP|HTTPs|FTP|TELNET|RIP-Query|DNS-S|MDAP|
SSDP|PING_RESPONDER}>
group = <{wan|local|lan|tunnel|dmz|guest} or number>

Parameters :
name = <{PPTP|HTTP|HTTPs|FTP|TELNET|RIP-Query|DNS-S|MDAP|SSDP|
PING_RESPONDER}>
The name of the service for this access list.
group = <{wan|local|lan|tunnel|dmz|guest} or number>
The interface group for this access list.

service system ipadd
Add an ip address (range) to the access list.
Syntax : ipadd name = <{PPTP|HTTP|HTTPs|FTP|TELNET|RIP-Query|DNS-S|MDAP|SSDP|
PING_RESPONDER}>
ip = <ip-range>

Parameters :
name = <{PPTP|HTTP|HTTPs|FTP|TELNET|RIP-Query|DNS-S|MDAP|SSDP|
PING_RESPONDER}>
The name of the service for this access list.
ip = <ip-range>
The ip address (range) for this access list.

service system ipdelete
Delete an ip address (range) from the access list.
Syntax : ipdelete name = <{PPTP|HTTP|HTTPs|FTP|TELNET|RIP-Query|DNS-S|MDAP|
SSDP|PING_RESPONDER}>
ip = <ip-range>

Parameters :
name = <{PPTP|HTTP|HTTPs|FTP|TELNET|RIP-Query|DNS-S|MDAP|SSDP|
PING_RESPONDER}>
The name of the service for this access list.
ip = <ip-range>
The ip address (range) for this access list.

service system list
Display services.
Syntax : list [name = <{PPTP|PPTPD|PPTPGRE|SNTP|SLA_ICMP_PING|SLA_UDP_PING|
HTTP|HTTPs|RAD|SRAD|HTTPI|WEBF|TFTP-C|FTP|TELNET|RIP|RIP-
Query|IGMP-Proxy|DNS-S|DNS-C|DYNAMIC_DNS|dyndns|statdns|
custom|No-IP|DtDNS|gnudip|DHCP-S|DHCP-R|MDAP|CWMP-C|CWMP-
S|SSDP|VOIP_SIP|VOIP_SIP_UDP|VOIP_SIP_TCP|IP_COMMANDS|
ICMP_PING|SENDTO|PING_RESPONDER|ICMP_TRACEROUTE|
UDP_TRACEROUTE|HTTPPROBE}>]
[expand = <{disabled|enabled}>]
[dynamics = <{disabled|enabled}>]
[members = <{disabled|enabled}>]

Parameters :
[name = <{PPTP|PPTPD|PPTPGRE|SNTP|SLA_ICMP_PING|SLA_UDP_PING|HTTP|HTTPs|RAD|
SRAD|HTTPI|WEBF|TFTP-C|FTP|TELNET|RIP|RIP-Query|IGMP-Proxy|DNS-S|
DNS-C|DYNAMIC_DNS|dyndns|statdns|custom|No-IP|DtDNS|gnudip|DHCP-S|

DHCP-R|MDAP|CWMP-C|CWMP-S|SSDP|VOIP_SIP|VOIP_SIP_UDP|VOIP_SIP_TCP|
IP_COMMANDS|ICMP_PING|SENDTO|PING_RESPONDER|ICMP_TRACEROUTE|
UDP_TRACEROUTE|HTTPPROBE}>]
The name of the service.
[expand = <{disabled|enabled}>]
Expanded listing.
[dynamics = <{disabled|enabled}>]
Display dynamic sevices.
[members = <{disabled|enabled}>]
Display sevice group members.

service system mapadd
Add a port map for a service.
Syntax : mapadd name = <{PPTP|HTTP|HTTPs|HTTPI|FTP|TELNET|DNS-S|MDAP|SSDP}>
intf = <{loop|LocalNetwork|Internet}>
port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
bootps|chargen|clearcase|daytime|discard|dns|domain|
doom|echo|exec|finger|ftp|ftp-data|gopher|h323|
httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|
irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|
nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|
sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|
who|www-http|whoami|xwindows} or number>

Parameters :
name = <{PPTP|HTTP|HTTPs|HTTPI|FTP|TELNET|DNS-S|MDAP|SSDP}>
The name of the service for this map.
intf = <{loop|LocalNetwork|Internet}>
The interface for this map.
port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|
clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-
data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|
ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-
ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-
srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>
The port for this map.

service system mapdelete
Delete a port map for a service.
Syntax : mapdelete name = <{PPTP|HTTP|HTTPs|HTTPI|FTP|TELNET|DNS-S|MDAP|SSDP}>

intf = <{loop|LocalNetwork|Internet}>
port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
bootps|chargen|clearcase|daytime|discard|dns|domain|
doom|echo|exec|finger|ftp|ftp-data|gopher|h323|
httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|
ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|
netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|
nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|

snmp|snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|
sunrpc|syslog|systat|talk|telnet|time|timed|tftp|
ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
xwindows} or number>

Parameters :
name = <{PPTP|HTTP|HTTPs|HTTPI|FTP|TELNET|DNS-S|MDAP|SSDP}>
The name of the service for this map.
intf = <{loop|LocalNetwork|Internet}>
The interface for this map.
port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|
clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-
data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|
ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-
ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-
srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>
The port for this map.

service system modify
Modify a service.
Syntax : modify name = <{PPTP|PPTPD|PPTPGRE|SNTP|SLA_ICMP_PING|SLA_UDP_PING|
HTTP|HTTPs|RAD|SRAD|HTTPI|WEBF|TFTP-C|FTP|TELNET|RIP|
RIP-Query|IGMP-Proxy|DNS-S|DNS-C|DHCP-S|DHCP-R|MDAP|
CWMP-C|CWMP-S|SSDP|VOIP_SIP|VOIP_SIP_UDP|VOIP_SIP_TCP|
IP_COMMANDS|PING_RESPONDER}>
[state = <{disabled|enabled}>]
[port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
bootps|chargen|clearcase|daytime|discard|dns|domain|
doom|echo|exec|finger|ftp|ftp-data|gopher|h323|
httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|ipx|
irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfds|nicname|
nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|
sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-
rlogin|who|www-http|whoami|xwindows} or number>]
[qoslabel = <{None|DSCP|Interactive|Management|Video|VoIP-RTP|
VoIP-Signal|default}>]
[routelabel = <{None|DSCP|Interactive|Management|Video|VoIP-
RTP|VoIP-Signal|default}>]
[srcintf <{loop|LocalNetwork|Internet}>]
[log = <{disabled|enabled}>] [forward = <{disabled|enabled}>]
[natpmweight = <number{0-255}>]

Parameters :
name = <{PPTP|PPTPD|PPTPGRE|SNTP|SLA_ICMP_PING|SLA_UDP_PING|HTTP|HTTPs|RAD|
SRAD|HTTPI|WEBF|TFTP-C|FTP|TELNET|RIP|RIP-Query|IGMP-Proxy|DNS-S|DNS-
C|DHCP-S|DHCP-R|MDAP|CWMP-C|CWMP-S|SSDP|VOIP_SIP|VOIP_SIP_UDP|
VOIP_SIP_TCP|IP_COMMANDS|PING_RESPONDER}>
The name of the service.
[state = <{disabled|enabled}>]
Disable/Enable this service.

[port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|
clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-
data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|
ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-
ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-
srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|
talk|telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|
www-http|whoami|xwindows} or number>]
The port of the service.
[qoslabel = <{None|DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|
default}>]
QOS label for service data.
[routelabel = <{None|DSCP|Interactive|Management|Video|VoIP-RTP|VoIP-Signal|
default}>]
Route label for service data.
[srcintf <{loop|LocalNetwork|Internet}>]
The primary ip interface for this service.
[log = <{disabled|enabled}>]
Disable/Enable service logging.
[forward = <{disabled|enabled}>]
Disable/Enable service forwarding.
[natpmweight = <number{0-255}>]
The nat portmap weight for this service.

sntp
Following commands are available :

add : Add NTP server
list : List the NTP servers
delete : Delete NTP server from list
flush : Flush NTP server list and SNTP client configuration
config : Modify/Display configuration

Following command groups are available :

debug

sntp add
Add NTP server
Syntax : add [addr = <ip-address>] [name = <string>]
[version = <number{1-4}>]

Parameters :
[addr = <ip-address>]
IP address of NTP server to be added to list
[name = <string>]
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.
[version = <number{1-4}>]
SNTP version of server (1,2,3 or 4)

sntp config
Modify/Display configuration
Syntax : config [state = <{enabled|disabled}>] [poll = <number{1-10080}>]
[pollpresync = <number{1-60}>]

Parameters :
  [state = <{enabled|disabled}>]
    Enable/Disable SNTP client
  [poll = <number{1-10080}>]
    polling interval (1 min, ... ,10080min(=7days))
  [pollpresync = <number{1-60}>]
    polling interval before first sync (1 min, ... ,60min)

  sntp debug
Following commands are available :

traceconfig   : Modify SNTP client trace configuration

  sntp debug traceconfig
Modify SNTP client trace configuration
Syntax : traceconfig [state = <{disabled|enabled}>]

Parameters :
  [state = <{disabled|enabled}>]
    Enable/Disable tracing.

  sntp delete
Delete NTP server from list
Syntax : delete [addr = <ip-address>] [name = <string>]

Parameters :
  [addr = <ip-address>]
    IP address of NTP server to be removed from list
  [name = <string>]
    DNS name of NTP server to be removed from list

  sntp flush
Flush NTP server list and SNTP client configuration
Syntax : flush
  sntp list
List the NTP servers
Syntax : list
  software
Following commands are available :

version   : Displays the software version.
upgrade   : Reboots the modem to initiate the SW upgrade. New software
                  available on a remote LAN host will be uploaded to the
                  modem.
download   : Download parameters.

  software download
Download parameters.
Syntax : download filetype = <{firmware|configuration}> url = <string>
                  [username = <string>] [password = <string>]
                  filesize = <string> [targetfilename = <string>]

Parameters :
  filetype = <{firmware|configuration}>
    The type of the file to be downloaded.
  url = <string>
    Set the HTTP URL where the file is to be found including remote filename.

[username = <string>]
Set the name to be used to authenticate to the download server.
[password = <string>]
Set the password the be used to authenticate to the download server.
filesize = <string>
Set the size of the file to be downloaded.
[targetfilename = <string>]
Set the filename used to save the file on the modem.

software upgrade
Reboots the modem to initiate the SW upgrade. New software available on a remote LAN host will be uploaded to the modem.
Syntax : upgrade
software version
Displays the software version.
Syntax : version
statecheck
Following commands are available :

config : Configure checkd parameters.
groupadd : Add a group object.
groupdelete : Delete a group object.
checkadd : Add a check object.
checkdelete : Delete a check object.

statecheck checkadd
Add a check object.
Syntax : checkadd group = <string> name = <string> object = <string>
paramname = <string> paramtype = <{string|uint|bool}>
matchtype = <{equal|differ|statdelta}>
match = <quoted string>

Parameters :
group = <string>
The name of the group.
name = <string>
The name of the check.
object = <string>
The object to check.
paramname = <string>
The parameter to check.
paramtype = <{string|uint|bool}>
The parameter type.
matchtype = <{equal|differ|statdelta}>
The match type.
match = <quoted string>
The match value.

statecheck checkdelete
Delete a check object.
Syntax : checkdelete group = <string> name = <string>

Parameters :
group = <string>
The name of the group.
name = <string>
The name of the check.

statecheck config
Configure checkd parameters.
Syntax : config interval = <number> timeout = <number> [groupop = <{and|or}>]
[dmtree = <{igd|atomic}>]

Parameters :
interval = <number>
The interval between checks.
timeout = <number>
Timeout after wich checking stops.
[groupop = <{and|or}>]
Group operator type.
[dmtree = <{igd|atomic}>]
Client type.

statecheck groupadd
Add a group object.
Syntax : groupadd name = <string> [checkop = <{and|or}>]

Parameters :
name = <string>
The name of the group.
[checkop = <{and|or}>]
Check operator type.

statecheck groupdelete
Delete a group object.
Syntax : groupdelete name = <string>

Parameters :
name = <string>
The name of the group.

system
Following commands are available :

settime : Set/Get date, time, timezone, daylight savings time,
uptime.
dst : Set daylight saving values
locale : Set/Get regional settings.
reboot : Reboot the modem.
flush : Flush system configuration.
reset : Reset to (factory or ISP) defaults: user specific settings
will be cleared !
config : Set or change system config parameters.
timedreboot : Set or change editing mode timed reboot

Following command groups are available :

debug ra

system config
Set or change system config parameters.
Syntax : config [upnp = <{disabled|enabled}>] [tr64 = <{disabled|enabled}>]
[mdap = <{disabled|enabled}>]
[led = <{green|red|orange|flash|off}>]

[resetbutton = <{disabled|enabled}>]
[digestauth = <{disabled|enabled}>]
[defaultconnection = <{loop|LocalNetwork|Internet}>]
[autosave = <{enabled|disabled}>]
[autosavedelay = <number{0-600}>]
[WANMode = <{ADSL|VDSL|SHDSL|ETH|UMTS}>]
[WANEthPort = <{ethif1|ethif2|ethif3|ethif4|ethif5}>]

Parameters :
[upnp = <{disabled|enabled}>]
Enable/Disable upnp discovery
[tr64 = <{disabled|enabled}>]
Enable/Disable TR-64 discovery
[mdap = <{disabled|enabled}>]
Enable/Disable mdap discovery
[led = <{green|red|orange|flash|off}>]
Set system LED color
[resetbutton = <{disabled|enabled}>]
Enable/Disable reset-to-factory-defaults pushbutton
[digestauth = <{disabled|enabled}>]
Enable/Disable HTTP digest authentication
[defaultconnection = <{loop|LocalNetwork|Internet}>]
The name of the default internet connection.
[autosave = <{enabled|disabled}>]
Enable/Disable autosaves
[autosavedelay = <number{0-600}>]
Autosave delay in seconds (0 for immediate save)
[WANMode = <{ADSL|VDSL|SHDSL|ETH|UMTS}>]
Set autosensing wan mode
[WANEthPort = <{ethif1|ethif2|ethif3|ethif4|ethif5}>]
Set autosensing eth wan port

system debug
Following commands are available :

cpu : CPU usage statistics
mem : Memory usage statistics
autosave : Autosave debugging commands

system debug autosave
Autosave debugging commands
Syntax : autosave [trace = <{disabled|enabled}>]

Parameters :
[trace = <{disabled|enabled}>]
Enable/Disable autosave traces

system debug cpu
CPU usage statistics
Syntax : cpu [delay = <number{1-60}>] [iterations = <number{1-4000000}>]

Parameters :
[delay = <number{1-60}>]
Delay between stats updates
[iterations = <number{1-4000000}>]
Number of iteration before ending

```
  system debug mem
Memory usage statistics
Syntax : mem [expand = <{disabled|enabled}>]

Parameters :
  [expand = <{disabled|enabled}>]
    Dump of /proc/meminfo

  system dst
Set daylight saving values
Syntax : dst [mode = <{Absolute|Relative}>] [startdate = <dd/mm/yyyy>]
         [starttime = <hh:mm:ss>] [enddate = <dd/mm/yyyy>]
         [endtime = <hh:mm:ss>]
         [startweekday = <{Sunday|Monday|Tuesday|Wednesday|Thursday|Friday|
                  Saturday}>]
         [starthour = <number{0-23}>] [startweek = <number{1-5}>]
         [startmonth = <number{1-12}>]
         [endweekday = <{Sunday|Monday|Tuesday|Wednesday|Thursday|Friday|
                 Saturday}>]
         [endhour = <number{0-23}>] [endweek = <number{1-5}>]
         [endmonth = <number{1-12}>]

Parameters :
  [mode = <{Absolute|Relative}>]
    Set daylight saving mode
  [startdate = <dd/mm/yyyy>]
    Set the start date of the daylight saving in the absolute mode
  [starttime = <hh:mm:ss>]
    Set the start time of the daylight saving in the absolute mode
  [enddate = <dd/mm/yyyy>]
    Set the end date of the daylight saving in the absolute mode
  [endtime = <hh:mm:ss>]
    Set the end time of the daylight saving in the absolute mode
  [startweekday = <{Sunday|Monday|Tuesday|Wednesday|Thursday|Friday|
            Saturday}>]
    Set the start weekday of the daylight saving in the relative mode
  [starthour = <number{0-23}>]
    Set the start hour of the daylight saving in the relative mode
  [startweek = <number{1-5}>]
    Set the start week of the daylight saving in the relative mode
  [startmonth = <number{1-12}>]
    Set the start month of the daylight saving in the ralative mode
  [endweekday = <{Sunday|Monday|Tuesday|Wednesday|Thursday|Friday|Saturday}>]

    Set the end weekday of the daylight saving in the relative mode
  [endhour = <number{0-23}>]
    Set the end hour of the daylight saving in the relative mode
  [endweek = <number{1-5}>]
    Set the end week of the daylight saving in the relative mode
  [endmonth = <number{1-12}>]
    Set the end month of the daylight saving in the relative mode

  system flush
Flush system configuration.
Syntax : flush
  system locale
Set/Get regional settings.
```

Syntax : locale [dec_symbol = <{,|.}>] [group_symbol = <{.|,}>]
[date_separator = <{/|-|.}>]
[date_format = <{iso|ddmmyyyy|ddmmyy|mmddyyyy|mmddyy}>]
[time_format = <{iso|hmmss}>]
[datetime_format = <{iso|date+time|time+date}>]
[duration_format = <{dhmmss|hmmss}>]

Parameters :
[dec_symbol = <{,|.}>]
Set decimal symbol
[group_symbol = <{.|,}>]
Set digit grouping symbol
[date_separator = <{/|-|.}>]
Set date separator
[date_format = <{iso|ddmmyyyy|ddmmyy|mmddyyyy|mmddyy}>]
Set date format
[time_format = <{iso|hmmss}>]
Set time format
[datetime_format = <{iso|date+time|time+date}>]
Set date-time format
[duration_format = <{dhmmss|hmmss}>]
Set duration format

system qual
Following commands are available :

led : Led configuration

system qual led
Led configuration
Syntax : led [value = <{green|red|orange|flash|off|allon|alloff|allgreen|
allred|unlock}>]

Parameters :
[value = <{green|red|orange|flash|off|allon|alloff|allgreen|allred|
unlock}>]
Set system LED color

system ra
Following commands are available :

config : Configure remote access parameters.
start : Starts temporary mode.
stop : Stops temporary mode.

system ra config
Configure remote access parameters.
Syntax : config [state = <{disabled|enabled}>]
[secure = <{enabled|disabled}>] [port = <number>]
[timeout = <number>]
[mode = <{Permanent|Temporary|Schedule}>] [ipintf = <string>]
[randompassword = <{enabled|disabled}>]
[randomport = <{enabled|disabled}>] [group = <string>]
[user = <string>] [todschedule = <string>]

Parameters :

[state = <{disabled|enabled}>]
Enable/disable RAD.
[secure = <{enabled|disabled}>]
Use secure mode (https).
[port = <number>]
The port number.
[timeout = <number>]
The timeout value.
[mode = <{Permanent|Temporary|Schedule}>]
Mode Permanent or Temporary.
[ipintf = <string>]
The name of the xref to the IP interface.
[randompassword = <{enabled|disabled}>]
Create a random password.
[randomport = <{enabled|disabled}>]
Use a random port.
[group = <string>]
The name of the xref to the group.
[user = <string>]
The name of the xref to the user.
[todschedule = <string>]
The name of the xref to the ToD schedule.

system ra start
Starts temporary mode.
Syntax : start
system ra stop
Stops temporary mode.
Syntax : stop
system reboot
Reboot the modem.
Syntax : reboot
system reset
Reset to (factory or ISP) defaults: user specific settings will be cleared !
Syntax : reset factory = <{yes|no}> proceed = <{no|yes}>

Parameters :
factory = <{yes|no}>
Option to reset to factory
proceed = <{no|yes}>
Confirmation for resetting the modem.

system settime
Set/Get date, time, timezone, daylight savings time, uptime.
Syntax : settime [date = <dd/mm/yyyy>] [time = <hh:mm:ss>]
[timezone = <(+ or -)hh:mm>]
[daylightsaving = <{disabled|enabled}>]
[geotimezonename = <{(UTC-12:00)|(UTC-11:00)|(UTC-10:00)|(UTC-
09:00)|(UTC-08:00)|(UTC-07:00)|(UTC-06:00)|
(UTC-05:00)|(UTC-04:00)|(UTC-03:30)|(UTC-
03:00)|(UTC-02:00)|(UTC-01:00)|(UTC)|
(UTC+01:00)|(UTC+02:00)|(UTC+03:00)|
(UTC+03:30)|(UTC+04:00)|(UTC+04:30)|
(UTC+05:00)|(UTC+05:30)|(UTC+05:45)|
(UTC+06:00)|(UTC+06:30)|(UTC+07:00)|
(UTC+08:00)|(UTC+09:00)|(UTC+09:30)|
(UTC+10:00)|(UTC+11:00)|(UTC+12:00)|

(UTC+13:00)}>]
[rtc = <{disabled|enabled}>]

Parameters :
[date = <dd/mm/yyyy>]
Set the system date
[time = <hh:mm:ss>]
Set the system time
[timezone = <(+ or -)hh:mm>]
Set the system timezone(-12:00...+13:00)
[daylightsaving = <{disabled|enabled}>]
Enable/Disable daylight saving
[geotimezonename = <{(UTC-12:00)|(UTC-11:00)|(UTC-10:00)|(UTC-09:00)|(UTC-
08:00)|(UTC-07:00)|(UTC-06:00)|(UTC-05:00)|(UTC-04:00)|
(UTC-03:30)|(UTC-03:00)|(UTC-02:00)|(UTC-01:00)|(UTC)|
(UTC+01:00)|(UTC+02:00)|(UTC+03:00)|(UTC+03:30)|
(UTC+04:00)|(UTC+04:30)|(UTC+05:00)|(UTC+05:30)|
(UTC+05:45)|(UTC+06:00)|(UTC+06:30)|(UTC+07:00)|
(UTC+08:00)|(UTC+09:00)|(UTC+09:30)|(UTC+10:00)|
(UTC+11:00)|(UTC+12:00)|(UTC+13:00)}>]
Set the geographical timezone by name
[rtc = <{disabled|enabled}>]
Enable/Disable the real time clock

system timedreboot
Set or change editing mode timed reboot
Syntax : timedreboot [state = <{disabled|enabled}>]
[time = <number{0-983040}>] [date = <string>]

Parameters :
[state = <{disabled|enabled}>]
Enable/Disable timed reboot
[time = <number{0-983040}>]
Change default countdown time (Min).
[date = <string>]
Set date/time to reboot (DD/MM/YYYY/HH:MM).

systemlog
Following commands are available :

show : Show messages in the syslog message buffer.
send : Send messages to remote syslog server.
flush : Flush all messages in syslog message buffer.

systemlog flush
Flush all messages in syslog message buffer.
Syntax : flush
systemlog send
Send messages to remote syslog server.
Syntax : send [fac = <{kern|user|mail|daemon|auth|syslog|lpr|news|uucp|cron|
security|ftp|ntp|audit|logalert|clock|local0|local1|
local2|local3|local4|local5|local6|local7}>]
[sev = <{emerg|alert|crit|err|warning|notice|info|debug}>]
[hist = <{disabled|enabled}>] dest = <ip-address>

Parameters :
[fac = <{kern|user|mail|daemon|auth|syslog|lpr|news|uucp|cron|security|ftp|

```
        ntp|audit|logalert|clock|local0|local1|local2|local3|local4|local5|
        local6|local7}>]
      Syslog facility level.
    [sev = <{emerg|alert|crit|err|warning|notice|info|debug}>]
      Syslog severity level.
    [hist = <{disabled|enabled}>]
      Syslog display message history (over several bootups)
    dest = <ip-address>
      Remote syslog server destination: an ip-address.

    systemlog show
Show messages in the syslog message buffer.
Syntax : show [fac = <{kern|user|mail|daemon|auth|syslog|lpr|news|uucp|cron|
                security|ftp|ntp|audit|logalert|clock|local0|local1|
                local2|local3|local4|local5|local6|local7}>]
           [sev = <{emerg|alert|crit|err|warning|notice|info|debug}>]
           [hist = <{disabled|enabled}>]

Parameters :
    [fac = <{kern|user|mail|daemon|auth|syslog|lpr|news|uucp|cron|security|ftp|
        ntp|audit|logalert|clock|local0|local1|local2|local3|local4|local5|
        local6|local7}>]
      Syslog facility level.
    [sev = <{emerg|alert|crit|err|warning|notice|info|debug}>]
      Syslog severity level.
    [hist = <{disabled|enabled}>]
      Syslog display message history (over several bootups)

    threshold
Following commands are available :

enable        : Enables a threshold definition.
disable       : Disables a threshold definition.
config        : Configures a threshold definition.
reset         : Reset threshold period.
clear         : Clears threshold statistics.
list          : Lists all threshold definitions.
stats         : Lists threshold resources.

    threshold clear
Clears threshold statistics.
Syntax : clear [id = <threshold id>]

Parameters :
    [id = <threshold id>]
      Threshold identifier.

    threshold config
Configures a threshold definition.
Syntax : config [id = <threshold id>] [type = <{limit|threshold|trigger}>]
           [count = <number{1-10000}>] [period = <number{1-100000}>]
           [state = <{disabled|enabled}>]

Parameters :
    [id = <threshold id>]
      Threshold identifier.
    [type = <{limit|threshold|trigger}>]
```

Type of threshold.
[count = <number{1-10000}>]
Threshold event count.
[period = <number{1-100000}>]
Threshold period.
[state = <{disabled|enabled}>]
Threshold state.

threshold disable
Disables a threshold definition.
Syntax : disable [id = <threshold id>]

Parameters :
[id = <threshold id>]
Threshold identifier.

threshold enable
Enables a threshold definition.
Syntax : enable [id = <threshold id>]

Parameters :
[id = <threshold id>]
Threshold identifier.

threshold list
Lists all threshold definitions.
Syntax : list
threshold reset
Reset threshold period.
Syntax : reset [id = <threshold id>]

Parameters :
[id = <threshold id>]
Threshold identifier.

threshold stats
Lists threshold resources.
Syntax : stats
tls
Following command groups are available :

acs-client https-server self

tls acs-client
Following commands are available :

config : Display/modify tls settings

Following command groups are available :

cert

tls acs-client cert
Following commands are available :

add : Add a new certificate
delete : Delete a certificate

list : List certificates

tls acs-client cert add
Add a new certificate
Syntax : add filename = <string>

Parameters :
filename = <string>
name of the certificate file

tls acs-client cert delete
Delete a certificate
Syntax : delete index = <number>

Parameters :
index = <number>
Certificate index

tls acs-client cert list
List certificates
Syntax : list [index = <number>] [expand = <{disabled|enabled}>]

Parameters :
[index = <number>]
Certificate index
[expand = <{disabled|enabled}>]
Display more information

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

Parameters :
[state = <{disabled|enabled}>]
SSL/TLS client for ACS state
[auth-serv = <{disabled|enabled}>]
Request server authentication
[valid-date = <{disabled|enabled}>]
Check certificate validity date
[valid-domain = <{disabled|enabled}>]
Check certificate domain

tls https-server
Following commands are available :

config : Display/modify tls settings

Following command groups are available :

cert

tls https-server cert
Following commands are available :

```
add             : Add a new certificate
delete          : Delete a certificate
list            : List certificates

  tls https-server cert add
Add a new certificate
Syntax : add filename = <string>

Parameters :
  filename = <string>
    name of the certificate file

  tls https-server cert delete
Delete a certificate
Syntax : delete index = <number>

Parameters :
  index = <number>
    Certificate index

  tls https-server cert list
List certificates
Syntax : list [index = <number>] [expand = <{disabled|enabled}>]

Parameters :
  [index = <number>]
    Certificate index
  [expand = <{disabled|enabled}>]
    Display more information

  tls https-server config
Display/modify tls settings
Syntax : config [state = <{disabled|enabled}>]
                [auth-client = <{disabled|enabled}>]
                [valid-date = <{disabled|enabled}>]

Parameters :
  [state = <{disabled|enabled}>]
    SSL/TLS server for HTTPS state
  [auth-client = <{disabled|enabled}>]
    Request client authentication
  [valid-date = <{disabled|enabled}>]
    Check certificate validity date

  tls self
Following command groups are available :

cert

  tls self cert
Following commands are available :

list            : List certificates

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

Parameters :
  [index = <number>]
    Certificate index
  [expand = <{disabled|enabled}>]
    Display more information

  tod
Following commands are available :

config   : Configure tod parameters.
list   : List config.

Following command groups are available :

action   schedule

  tod action
Following commands are available :

add   : Add an action object.
delete   : Delete an action object.
setvaladd   : Add a setvalue object.
setvaldelete   : Delete a setvalue object.
paramadd   : Add a setvalue parameter.
paramdelete   : Delete a setvalue parameter.
list   : List actions.

  tod action add
Add an action object.
Syntax : add [id = <number>]

Parameters :
  [id = <number>]
    The id of the actiom.

  tod action delete
Delete an action object.
Syntax : delete actionid = <number>

Parameters :
  actionid = <number>
    The id of the action.

  tod action list
List actions.
Syntax : list
  tod action paramadd
Add a setvalue parameter.
Syntax : paramadd actionid = <number> setvalueid = <number> [id = <number>]
            [object = <string>] [param = <string>] [value = <string>]

Parameters :
  actionid = <number>
    The id of the action.
  setvalueid = <number>
    The id of the setvalue action.
  [id = <number>]

The id of the setvalue param.
[object = <string>]
Mbus object path.
[param = <string>]
Mbus parameter name.
[value = <string>]
Parameter value.

tod action paramdelete
Delete a setvalue parameter.
Syntax : paramdelete actionid = <number> setvalueid = <number>
paramid = <number>

Parameters :
actionid = <number>
The id of the action.
setvalueid = <number>
The id of the setvalue action.
paramid = <number>
The id of the setvalue param.

tod action setvaladd
Add a setvalue object.
Syntax : setvaladd actionid = <number> [id = <number>]
[on = <{active|inactive}>]

Parameters :
actionid = <number>
The id of the action.
[id = <number>]
The id of the setvalue actiom.
[on = <{active|inactive}>]
Active/inactive.

tod action setvaldelete
Delete a setvalue object.
Syntax : setvaldelete actionid = <number> setvalueid = <number>

Parameters :
actionid = <number>
The id of the action.
setvalueid = <number>
The id of the setvalue action.

tod config
Configure tod parameters.
Syntax : config [acchain = <string>] [state = <{enabled|disabled}>]

Parameters :
[acchain = <string>]
firewall chain name
[state = <{enabled|disabled}>]
enable/disable ToD

tod list
List config.
Syntax : list

tod schedule
Following commands are available :

add : Add a schedule object.
modify : Modify schedule parameters.
delete : Delete a schedule object.
dayadd : Add a day object.
daydelete : Delete a day object.
timeadd : Add a timerange object.
timedelete : Delete a timerange object.
list : List schedules.

tod schedule add
Add a schedule object.
Syntax : add [id = <number>] type = <{none|accesscontrol|action}>

Parameters :
[id = <number>]
The id of the schedule.
type = <{none|accesscontrol|action}>
The schedule type.

tod schedule dayadd
Add a day object.
Syntax : dayadd scheduleid = <number> [id = <number>]
weekday = <{mo|tu|we|th|fr|sa|su}>

Parameters :
scheduleid = <number>
The id of the schedule.
[id = <number>]
The id of the day.
weekday = <{mo|tu|we|th|fr|sa|su}>
The day of the week..

tod schedule daydelete
Delete a day object.
Syntax : daydelete scheduleid = <number> dayid = <number>

Parameters :
scheduleid = <number>
The id of the schedule.
dayid = <number>
The id of the day.

tod schedule delete
Delete a schedule object.
Syntax : delete scheduleid = <number>

Parameters :
scheduleid = <number>
The id of the schedule.

tod schedule list
List schedules.
Syntax : list
tod schedule modify

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

Parameters :
[expiretime = <string>]
The absolute expire time.
[nrofminutes = <number>]
The number of minutes.
[count = <number>]
The timer count (0=periodical)
scheduleid = <number>
The id of the schedule.
[mode = <{timerange|timeout}>]
The mode.
[reference = <string>]
Access control reference.
[name = <string>]
Friendly name.
[action = <string>]
Action.
[state = <{enabled|disabled}>]
Enable/disable

tod schedule timeadd
Add a timerange object.
Syntax : timeadd scheduleid = <number> dayid = <number> [id = <number>]
starthour = <number> startminute = <number>
endhour = <number> endminute = <number> [action = <string>]

Parameters :
scheduleid = <number>
The id of the schedule.
dayid = <number>
The id of the day.
[id = <number>]
The id of the timerange.
starthour = <number>
The start hour of the range.
startminute = <number>
The start minute of the range.
endhour = <number>
The end hour of the range.
endminute = <number>
The end minute of the range.
[action = <string>]
Action.

tod schedule timedelete
Delete a timerange object.
Syntax : timedelete scheduleid = <number> dayid = <number> timeid = <number>

Parameters :
scheduleid = <number>

The id of the schedule.
dayid = <number>
The id of the day.
timeid = <number>
The id of the timerange.

trigger
Following commands are available :

list : Display the triggers.

Following command groups are available :

rule

trigger chain
Following commands are available :

add : Add a chain.
delete : Delete a chain.
list : Display a list of chains.
flush : Flush all chains.

trigger chain add
Add a chain.
Syntax : add chain = <string>

Parameters :
chain = <string>
The name of the chain to add.

trigger chain delete
Delete a chain.
Syntax : delete chain = <chain name>

Parameters :
chain = <chain name>
The name of the chain to delete.

trigger chain flush
Flush all chains.
Syntax : flush
trigger chain list
Display a list of chains.
Syntax : list [format = <{pretty|cli}>]

Parameters :
[format = <{pretty|cli}>]
The format of the chain list.

trigger chain modify
Modify a chain.
Syntax : modify chain = <chain name>

Parameters :
chain = <chain name>
The name of the chain to modify.

trigger list
Display the triggers.
Syntax : list [name = <{}>]

Parameters :
[name = <{}>]
The name of a trigger.

trigger rule
Following commands are available :

list : Display a list of rules.

Following command groups are available :

debug

trigger rule add
Add a rule.
Syntax : 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|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|VoIP-Inc-SIP-UDP|VoIP-
Inc-SIP-TCP|VoIP-Inc-RTP}>]
[log = <{disabled|enabled}>] [state = <{disabled|enabled}>]
trigger = <{None|link}>

Parameters :
chain = <chain name>
The name of the chain which contains the rule.
[index = <number>]
The index of the rule in the chain.
[name = <string>]
The name of the new rule.
[clink = <chain name>]
The name of the chain to be parsed when this rule applies.
[srcintf [!]= <{wan|local|lan|tunnel|dmz|guest}>]
The name of the source interface expression.
[srcip [!]= <{private|ssdp_ip|mdap_ip}>]
The name of the source ip expression.
[dstintf [!]= <{wan|local|lan|tunnel|dmz|guest}>]
The name of the destination interface expression.
[dstip [!]= <{private|ssdp_ip|mdap_ip}>]
The name of the destination ip expression.
[serv [!]= <{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|VoIP-Inc-SIP-UDP|VoIP-Inc-SIP-TCP|VoIP-Inc-RTP}>]
The name of the service expression.
[log = <{disabled|enabled}>]

Disable/Enable logging when this rule applies.
[state = <{disabled|enabled}>]
Disable/Enable this rule.
trigger = <{None|link}>
None, link (when clink is used) or trigger name.

trigger rule debug
Following commands are available :

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

trigger rule debug clear
Clear rule statistics.
Syntax : clear [chain = <chain name>] [index = <number>]

Parameters :
[chain = <chain name>]
The name of the chain.
[index = <number>]
The index of the rule in the chain.

trigger rule debug stats
Display rule statistics.
Syntax : stats [chain = <chain name>] [index = <number>]

Parameters :
[chain = <chain name>]
The name of the chain.
[index = <number>]
The index of the rule in the chain.

trigger rule debug traceconfig
Display/Modify rule trace configuration.
Syntax : traceconfig [state = <{disabled|enabled}>]

Parameters :
[state = <{disabled|enabled}>]
Disable/Enable rule traces.

trigger rule delete
Delete a rule.
Syntax : delete chain = <chain name> index = <number>

Parameters :
chain = <chain name>
The name of the chain in which to delete the rule.
index = <number>
The number of the rule in the chain.

trigger rule flush
Flush all rules.
Syntax : flush [chain = <chain name>]

Parameters :
[chain = <chain name>]

The name of the chain to flush.

trigger rule list
Display a list of rules.
Syntax : list [chain = <chain name>] [format = <{pretty|cli}>]

Parameters :
[chain = <chain name>]
The name of the chain to list the rules of.
[format = <{pretty|cli}>]
The format of the rule list.

trigger rule modify
Modify a rule.
Syntax : modify chain = <chain name> [index = <number>] [newindex = <number>]
[name = <string>] [clink = <chain name>] [[!]srcintf]
[[!]srcip] [[!]dstintf] [[!]dstip] [[!]serv]
[log = <{disabled|enabled}>] [state = <{disabled|enabled}>]
[trigger = <{None|link}>]

Parameters :
chain = <chain name>
The name of the chain which contains the rule.
[index = <number>]
The index of the rule in the chain.
[newindex = <number>]
The new index of the rule in the chain.
[name = <string>]
The name of the new rule.
[clink = <chain name>]
The name of the chain to be parsed when this rule applies.
[[!]srcintf]
The name of the source interface expression.
[[!]srcip]
The name of the source ip expression.
[[!]dstintf]
The name of the destination interface expression.
[[!]dstip]
The name of the destination ip expression.
[[!]serv]
The name of the service expression.
[log = <{disabled|enabled}>]
Disable/Enable logging when this rule applies.
[state = <{disabled|enabled}>]
Disable/Enable this rule.
[trigger = <{None|link}>]
None, link (when clink is used) or trigger name.

upgrade
Following commands are available :

config : Change the upgrade daemon configuration
start : Start a new upgrade
ifadd : Add a download interface
ifattach : Attach a download interface
ifdetach : Detach a download interface
ifdelete : Delete a download interface

ifconfig : Configure a download interface
iflist : List download interfaces

Following command groups are available :

debug profile

upgrade config
Change the upgrade daemon configuration
Syntax : config [state = <{disabled|enabled}>]
[protocol = <{tftp|ftp|http|https}>]

Parameters :
[state = <{disabled|enabled}>]
The upgrade daemon state
[protocol = <{tftp|ftp|http|https}>]
The transfer protocol to be used for file download

upgrade debug
Following commands are available :

traceconfig : Enable/disable upgrade daemon tracing
sesslist : Display the list of sessions

upgrade debug sesslist
Display the list of sessions
Syntax : sesslist
upgrade debug traceconfig
Enable/disable upgrade daemon tracing
Syntax : traceconfig state = <{disabled|enabled}>

Parameters :
state = <{disabled|enabled}>
The upgrade daemon trace state

upgrade ifadd
Add a download interface
Syntax : ifadd intf = <string>

Parameters :
intf = <string>
A download interface

upgrade ifattach
Attach a download interface
Syntax : ifattach intf = <>

Parameters :
intf = <>
A download interface.

upgrade ifconfig
Configure a download interface
Syntax : ifconfig intf = <> [protocol = <{tftp|ftp|http|https}>]
[dest = <{loop|LocalNetwork|Internet}>] [server = <string>]
[file = <string>] [time = <number>]

Parameters :
  intf = <>
    A download interface.
  [protocol = <{tftp|ftp|http|https}>]
    The transfer protocol
  [dest = <{loop|LocalNetwork|Internet}>]
    An network interface name.
  [server = <string>]
    The servername
  [file = <string>]
    The servername
  [time = <number>]
    download cycle time (in secs)

  upgrade ifdelete
Delete a download interface
Syntax : ifdelete intf = <>

Parameters :
  intf = <>
    A download interface.

  upgrade ifdetach
Detach a download interface
Syntax : ifdetach intf = <>

Parameters :
  intf = <>
    A download interface.

  upgrade iflist
List download interfaces
Syntax : iflist
  upgrade profile
Following commands are available :

add   : Add a new file profile description
modify   : Modify a file profile description
delete   : Delete a file profile description
list   : Display a list of the file profile descriptions

  upgrade profile add
Add a new file profile description
Syntax : add extension = <{sts|ini|bin}> [maxsize(KBytes) = <number>]
         action = <{none|config_load|script_load|reboot|upgrade}>

Parameters :
  extension = <{sts|ini|bin}>
    The extension of the new file profile
  [maxsize(KBytes) = <number>]
    The maximum filesize (in KBytes) allowed for files with the extension of
    this profile
  action = <{none|config_load|script_load|reboot|upgrade}>
    The action to be done when the file with the extension of this profile is
    downloaded

  upgrade profile delete

Delete a file profile description
Syntax : delete extension = <{sts|ini|bin}>

Parameters :
  extension = <{sts|ini|bin}>
    The extension of the file profile to be deleted

  upgrade profile list
Display a list of the file profile descriptions
Syntax : list
  upgrade profile modify
Modify a file profile description
Syntax : modify extension = <{sts|ini|bin}> [maxsize(KBytes) = <number>]
           action = <{none|config_load|script_load|reboot|upgrade}>

Parameters :
  extension = <{sts|ini|bin}>
    The extension of the new file profile
  [maxsize(KBytes) = <number>]
    The maximum filesize (in KBytes) allowed for files with the extension of
    this profile
  action = <{none|config_load|script_load|reboot|upgrade}>
    The action to be done when the file with the extension of this profile is
    downloaded

  upgrade start
Start a new upgrade
Syntax : start protocol = <{tftp|ftp|http|https}> [server = <string>]
           [filename = <string>]

Parameters :
  protocol = <{tftp|ftp|http|https}>
    The protocol to be used for the download
  [server = <string>]
    The server name or IP address
  [filename = <string>]
    The file to be downloaded

  upnp
Following commands are available :

config   : Config upnp parameter(s)
flush   : Flushes upnp config (i.e. to defaults)
list   : List all registered devices

  upnp config
Config upnp parameter(s)
Syntax : config [maxage = <number{60-999999}>]
           [writemode = <{full|natonly|readonly}>]
           [safenat = <{disabled|enabled}>]
           [preferredaddresses = <string>]
           [onlydefault = <{disabled|enabled}>]

Parameters :
  [maxage = <number{60-999999}>]
    ssdp advertisements MAX-AGE (default = 1800)
  [writemode = <{full|natonly|readonly}>]

Configuration access level for UPnP
[safenat = <{disabled|enabled}>]
Enable / disable check on safe nat entries (limited to own host)
[preferredaddresses = <string>]
CSV list of preferred ip addresses for UPnP (1 per lan ip-interface)
[onlydefault = <{disabled|enabled}>]
Only advertise the default WAN connection

upnp flush
Flushes upnp config (i.e. to defaults)
Syntax : flush
upnp list
List all registered devices
Syntax : list [verbose = <number{0-2}>]

Parameters :
[verbose = <number{0-2}>]
Verbose level (default = 1)

user
Following commands are available :

add : Add a user.
delete : Delete a user.
list : Display the users.
config : Modify the user.
flush : Flush the users.
rights : Display session rights.

user add
Add a user.
Syntax : 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}>]

Parameters :
name = <string>
User name.
password = <password>
User password.
role = <>
Role name.
[hash2 = <string>]
The MD5 hash.
[crypt = <string>]
The crypt password.
[lm = <password>]
The cifs lm password.
[ntlm = <password>]
The cifs ntlm password.
[descr = <quoted string>]
User description.
[defuser = <{disabled|enabled}>]
Set this user as the default user.

[defremadmin = <{disabled|enabled}>]
Set this user as the default remote administrator.
[deflocadmin = <{disabled|enabled}>]
Set this user as the default local administrator.

user config
Modify the user.
Syntax : config name = <{Administrator|su|tech|steve}>
[password = <password>] [role = <>] [descr = <quoted string>]
[defuser = <{disabled|enabled}>]
[defremadmin = <{disabled|enabled}>]
[deflocadmin = <{disabled|enabled}>]

Parameters :
name = <{Administrator|su|tech|steve}>
User name.
[password = <password>]
User password.
[role = <>]
Role name.
[descr = <quoted string>]
User description.
[defuser = <{disabled|enabled}>]
Set this user as the default user.
[defremadmin = <{disabled|enabled}>]
Set this user as the default remote administrator.
[deflocadmin = <{disabled|enabled}>]
Set this user as the default local administrator.

user delete
Delete a user.
Syntax : delete name = <{Administrator|su|tech|steve}>

Parameters :
name = <{Administrator|su|tech|steve}>
User name.

user flush
Flush the users.
Syntax : flush
user list
Display the users.
Syntax : list [name = <{Administrator|su|tech|steve}>]
[channel = <{ftp|telnet|http|mdap|serial}>]
[origin = <{lan|wan|local}>] [secure = <{disabled|enabled}>]

Parameters :
[name = <{Administrator|su|tech|steve}>]
User name.
[channel = <{ftp|telnet|http|mdap|serial}>]
The selected channel.
[origin = <{lan|wan|local}>]
The selected origin.
[secure = <{disabled|enabled}>]
The selected security level.

user rights

Display session rights.
Syntax : rights
  voice
Following commands are available :

state : show VOIP service states
config : Configure the general parameters
list : Display the general parameters

Following command groups are available :

cac codec country debug decthandset
dectport dialplan dns fax fxoport
fxsport numbtransl pb profile qos
ringing services sip stats tone

  voice cac
Following commands are available :

config : Configure call admission control
list : Show the call admission control

  voice cac config
Configure call admission control
Syntax : config [max#portsperprofile = <{one|all}>]

Parameters :
  [max#portsperprofile = <{one|all}>]
    The maximum number of ports that can be used with a common profile

  voice cac list
Show the call admission control
Syntax : list
  voice codec
Following commands are available :

list : Show the CODEC capability configuration
config : Configure a CODEC capability

Following command groups are available :

dynamic

  voice codec config
Configure a CODEC capability
Syntax : 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}>]

Parameters :
  type = <{g711u|g711a|g722|g723_1|g726_16|g726_24|g726_32|g726_40|g729}>
    The codec type
  [ptime = <{10|30|20}>]
    The packet time
  [ptime_g723 = <{30}>]

The packet time
[vad = <{disabled|enabled}>]
Enable or disable Voice Activity Detection
[priority = <number{1-10}>]
The codec capability priority
[status = <{disabled|enabled}>]
Enable or disable this capability

voice codec dynamic
Following commands are available :

list : Show the dynamic CODEC capability configuration
config : Configure a dynamic CODEC capability

voice codec dynamic config
Configure a dynamic CODEC capability
Syntax : config type = <{rfc2833|g723_1|g726_16|g726_24|g726_32|g726_40}>
payloadtype = <number{96-128}>

Parameters :
type = <{rfc2833|g723_1|g726_16|g726_24|g726_32|g726_40}>
The codec type
payloadtype = <number{96-128}>
The payload type

voice codec dynamic list
Show the dynamic CODEC capability configuration
Syntax : list
voice codec list
Show the CODEC capability configuration
Syntax : list
voice config
Configure the general parameters
Syntax : 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|LocalNetwork|Internet}>]
[secondintf = <{loop|LocalNetwork|Internet}>]
[endofnumber = <{#|*|none}>] [countrycode = <number>]
[delayeddisconnect = <{enabled|disabled}>]
[delayeddisconnecttimer = <number>]
[ringmuteduration = <number>]
[feature-mngt = <{internal|external}>]
[nocallsetupmsg = <{never|unav-numb}>]
[syslogscope = <{none|only-stats|only-dm-events|only-msgs|
all}>]

Parameters :
[autofxo = <{disabled|enabled}>]
Automatically make FXO calls when not registered
[digitrelay = <{auto|inband|rfc2833|signalling}>]
Set the digit relay mode

[click2dial_ports = <{FXS1|FXS2|DECT1|DECT2|DECT3|DECT4|DECT5|all}>]
Set the click to dial port
[rtp_portrange = <string>]
The RTP port range <[startport]-[endport]>
[sign_internal = <{external|internal}>]
Signalling for local calls is kept local or external
[static_intf = <{disabled|enabled}>]
Use a static (configured) interface to look for the IP address or not
[intf = <{loop|LocalNetwork|Internet}>]
The name of a IP interface to be used for VOIP traffic.
[secondintf = <{loop|LocalNetwork|Internet}>]
The name of a backup IP interface to be used for VOIP traffic.
[endofnumber = <{#|*|none}>]
The end of number character for dialled number starting with a cipher
[countrycode = <number>]
Local countrycode
[delayeddisconnect = <{enabled|disabled}>]
Enable or disable the delayed disconnect feature
[delayeddisconnecttimer = <number>]
Delayed disconnect timer (seconds)
[ringmuteduration = <number>]
Early media mute duration (in ms)
[feature-mngt = <{internal|external}>]
Feature management internal or external
[nocallsetupmsg = <{never|unav-numb}>]
Send call setup message
[syslogscope = <{none|only-stats|only-dm-events|only-msgs|all}>]
Syslog Scope

voice country
Following commands are available :

config : Configure country
list : Show the selected country
countrylist : List available countries

voice country config
Configure country
Syntax : config country = <{etsi|argentina|australia|belgium|brazil|canada|
chile|croatia|denmark|france1|france3|germany|greece|
hungary|iceland|italy|macedonia|netherlands|
newzealand|northamerica|norway|portugal1|portugal2|
singapore|slovenia|spain|sweden|uk}>

Parameters :
country = <{etsi|argentina|australia|belgium|brazil|canada|chile|croatia|
denmark|france1|france3|germany|greece|hungary|iceland|italy|
macedonia|netherlands|newzealand|northamerica|norway|portugal1|
portugal2|singapore|slovenia|spain|sweden|uk}>
Load this country's specific settings into the DSP

voice country countrylist
List available countries
Syntax : countrylist
voice country list
Show the selected country

Syntax : list
  voice debug
Following commands are available :

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

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

Parameters :
  cmd = <quoted string>
    The debug command (or help)

  voice decthandset
Following commands are available :

list : Show information about the DECT Handsets

Following command groups are available :

upgrade

  voice decthandset list
Show information about the DECT Handsets
Syntax : list
  voice decthandset upgrade
Following commands are available :

config : Configure the upgrade parameters for DECT handset update
list : Show upgrade configuration for DECT handset update

Following command groups are available :

url

  voice decthandset upgrade config
Configure the upgrade parameters for DECT handset update
Syntax : config [state = <{disabled|enabled}>]
    [initialcheck = <{disabled|enabled}>]
    [periodiccheckperiod = <number>]
    [upgradeatchangedurl = <{disabled|enabled}>]

Parameters :
  [state = <{disabled|enabled}>]
    UPDATE_STATE
  [initialcheck = <{disabled|enabled}>]
    initial check
  [periodiccheckperiod = <number>]
    periodic upgrade check period
  [upgradeatchangedurl = <{disabled|enabled}>]
    upgrade at changed url

  voice decthandset upgrade list
Show upgrade configuration for DECT handset update
Syntax : list

voice decthandset upgrade url
Following commands are available :

add : Add a new entry to the DECT HandsetUpgrade URL table
list : Show configuration for DECT HandsetUpgrade URL table
flush : Delete all entries in the DECT HandsetUpgrade URL table
delete : Delete an entry in the DECT HandsetUpgrade URL table

voice decthandset upgrade url add
Add a new entry to the DECT HandsetUpgrade URL table
Syntax : add hardwarevendor = <string> [hardwareversion = <string>]
url = <string>

Parameters :
hardwarevendor = <string>
Name of the Hardware Vendor
[hardwareversion = <string>]
Hardware version info
url = <string>
Firmware download URL/path

voice decthandset upgrade url delete
Delete an entry in the DECT HandsetUpgrade URL table
Syntax : delete hardwarevendor = <string> [hardwareversion = <string>]

Parameters :
hardwarevendor = <string>
Name of the Hardware Vendor
[hardwareversion = <string>]
Hardware version info

voice decthandset upgrade url flush
Delete all entries in the DECT HandsetUpgrade URL table
Syntax : flush
voice decthandset upgrade url list
Show configuration for DECT HandsetUpgrade URL table
Syntax : list
voice dectport
Following commands are available :

config : Configure the DECT Base parameters
list : Show the DECT Base configuration

voice dectport config
Configure the DECT Base parameters
Syntax : config [pin = <string>] [substimeout = <number{0-600}>]
[clearsubs = <{no|yes}>]
[reinsert-window-trigger-pairing = <number{0-600}>]

Parameters :
[pin = <string>]
DECT pin code
[substimeout = <number{0-600}>]
DECT subscribtion timeout in seconds (0 is unlimited)
[clearsubs = <{no|yes}>]
Clear DECT subscriptions
[reinsert-window-trigger-pairing = <number{0-600}>]

Timeout in seconds to start automatic pairing(0 is disabled)

voice dectport list
Show the DECT Base configuration
Syntax : list
voice dialplan
Following commands are available :

add : Add an entry in the dialplan
delete : Delete an entry in the dialplan
modify : Modify an entry in the dialplan
list : Display the complete dailplan
flush : Delete all user-entered dialplan entries

voice dialplan add
Add an entry in the dialplan
Syntax : 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}>

Parameters :
prefix = <string>
The prefix, identifies this entry
defaultport = <{FXS1|FXS2|DECT1|DECT2|DECT3|DECT4|DECT5|FXO|VoIP|NA}>
The default outgoing port
fallbackport = <{FXS1|FXS2|DECT1|DECT2|DECT3|DECT4|DECT5|FXO|VoIP|NA}>
The fallback outgoing port
priority = <{NA|Low|High}>
The priority of the entry
fallback = <{disabled|enabled}>
The fallback mechanism status of this entry
minimumdigits = <number{1-31}>
The minimum number of digits
maximumdigits = <number{1-31}>
The maximum number of digits
posofmodify = <number{0-31}>
Startposition at which a number of digits must be removed
remnumdigits = <number{0-31}>
The number of digits that need to be removed from the complete number
[insert = <string>]
String which must be inserted at PosOfModify after removing RemNumDigits
rescan = <{no|yes}>
Rescaning of the number needed or not
data = <{no|yes}>
This entry is used for data calls or not
action = <{none|ROUTE_excl_eon|ROUTE_incl_eon}>
Action parameter

voice dialplan delete
Delete an entry in the dialplan

Syntax : delete prefix = <string>

Parameters :
prefix = <string>
The prefix, identifies this entry

voice dialplan flush
Delete all user-entered dialplan entries
Syntax : flush
voice dialplan list
Display the complete dailplan
Syntax : list
voice dialplan modify
Modify an entry in the dialplan
Syntax : 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}>

Parameters :
prefix = <string>
The prefix, identifies this entry
newprefix = <string>
The prefix, identifies this entry
defaultport = <{FXS1|FXS2|DECT1|DECT2|DECT3|DECT4|DECT5|FXO|VoIP|NA}>
The default outgoing port
fallbackport = <{FXS1|FXS2|DECT1|DECT2|DECT3|DECT4|DECT5|FXO|VoIP|NA}>
The fallback outgoing port
priority = <{NA|Low|High}>
The priority of the entry
fallback = <{disabled|enabled}>
The fallback mechanism status of this entry
minimumdigits = <number{1-31}>
The minimum number of digits
maximumdigits = <number{1-31}>
The maximum number of digits
posofmodify = <number{0-31}>
Startposition at which a number of digits must be removed
remnumdigits = <number{0-31}>
The number of digits that need to be removed from the complete number
[insert = <string>]
String which must be inserted at PosOfModify after removing RemNumDigits
rescan = <{no|yes}>
Rescaning of the number needed or not
data = <{no|yes}>
This entry is used for data calls or not
action = <{none|ROUTE_excl_eon|ROUTE_incl_eon}>
Action parameter

voice dns
Following commands are available :

config : Configure DNS
list : Show the DNS configuration

voice dns config
Configure DNS
Syntax : config [startentry = <{first|random}>] [maxentries = <number{1-24}>]

Parameters :
[startentry = <{first|random}>]
Entry to start with in the registration procedure
[maxentries = <number{1-24}>]
Maximum nbr of used entries in a DNS response

voice dns list
Show the DNS configuration
Syntax : list
voice fax
Following commands are available :

config : Configure the fax parameters
list : Show the fax configuration

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

Parameters :
[detect_timeout = <number{0-120}>]
The time-out in seconds used to detect FAX(0 is no time-out)
[early-detect-faxmodem = <{enabled|disabled}>]
Detect fax or modem early
[transport = <{inband_auto|inband_reneg|t38}>]
The type of fax transport
[udptl_redun = <number{0-3}>]
The number of secondary IFP packets

voice fax list
Show the fax configuration
Syntax : list
voice fxoport
Following commands are available :

config : Configure the FXO port parameters
list : Show the FXO port configuration

voice fxoport config
Configure the FXO port parameters
Syntax : config [fxodisconnect = <number{500-5000}>]
[incfxodest = <{FXS|FXS1|FXS2|DECT|all|none}>]

Parameters :
[fxodisconnect = <number{500-5000}>]
The FXO disconnect timer (in ms)
[incfxodest = <{FXS|FXS1|FXS2|DECT|all|none}>]

Select destination for incoming FXO calls

voice fxoport list
Show the FXO port configuration
Syntax : list
voice fxsport
Following commands are available :

config : Configure the FXS port parameters
list : Show the FXS port configuration

voice fxsport config
Configure the FXS port parameters
Syntax : config [interdigit = <number{10-30000}>]
[interdigitOpen = <number{10-30000}>]

Parameters :
[interdigit = <number{10-30000}>]
The interdigit timer (in ms)
[interdigitOpen = <number{10-30000}>]
The closed number interdigit timer (in ms)

voice fxsport list
Show the FXS port configuration
Syntax : list
voice list
Display the general parameters
Syntax : list
voice numbtransl
Following commands are available :

config : Configure number translation
list : Show the number translation

voice numbtransl config
Configure number translation
Syntax : config [Globalnumbpostprocess = <{disabled|enabled}>]

Parameters :
[Globalnumbpostprocess = <{disabled|enabled}>]
Enables or disables the number postprocessing

voice numbtransl list
Show the number translation
Syntax : list
voice pb
Following commands are available :

add : Add phonebook entry in the phonebook

voice pb add
Add phonebook entry in the phonebook
Syntax : add Lastname = <quoted string> Firstname = <quoted string>
[Business = <quoted string>] [Home = <quoted string>]
[Mobile = <quoted string>] [Other = <quoted string>]
[E-mail = <quoted string>]

Parameters :
  Lastname = <quoted string>
    The lastname
  Firstname = <quoted string>
    The firstname
  [Business = <quoted string>]
    The business number
  [Home = <quoted string>]
    The home number
  [Mobile = <quoted string>]
    The mobile number
  [Other = <quoted string>]
    Any other number
  [E-mail = <quoted string>]
    E-mail address

  voice profile
Following commands are available :

add   : Add profile
delete   : Delete profile
modify   : Modify profile
list   : Show all profiles
flush   : Flush all profiles

  voice profile add
Add profile
Syntax : 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}>]

Parameters :
  SIP_URI = <string>
    The SIP URI related to this voice port
  [username = <string>]
    The authentication username related to this voice port
  [password = <password>]
    The authentication password related to this voice port
  [displayname = <quoted string>]
    An alias name for the SIP_URI
  voiceport = <{FXS1|FXS2|DECT1|DECT2|DECT3|DECT4|DECT5|COMMON|DECT}>
    The analogue line number
  [abbr = <string>]
    An abbriviated number that will be mapped to the SIP_URI
  [enable = <{disabled|enabled}>]
    Enable or disable this profile

  voice profile delete
Delete profile
Syntax : delete SIP_URI = <string>

Parameters :
  SIP_URI = <string>
    The SIP URI related to this voice port

voice profile flush
Flush all profiles
Syntax : flush
voice profile list
Show all profiles
Syntax : list
voice profile modify
Modify profile
Syntax : modify Index = <{0}> [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}>]

Parameters :
Index = <{0}>
The index of the profile you wish to modify
[SIP_URI = <string>]
The SIP URI related to this voice port
[username = <string>]
The authentication username related to this voice port
[password = <password>]
The authentication password related to this voice port
[displayname = <quoted string>]
An alias name for the SIP_URI
[voiceport = <{FXS1|FXS2|DECT1|DECT2|DECT3|DECT4|DECT5|COMMON|DECT}>]
The analogue line number
[abbr = <string>]
An abbriviated number that will be mapped to the SIP_URI
[enable = <{disabled|enabled}>]
Enable or disable this profile

voice qos
Following commands are available :

list : Show the QOS configuration
config : Configure the QOS parameters

voice qos config
Configure the QOS parameters
Syntax : 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>

Parameters :
type = <{Signaling|Realtime}>
The type of traffic that needs qos
qosfield = <{DSCP|precedence}>
The QOS field to be used
dscp = <{ef|af11|af12|af13|af21|af22|af23|af31|af32|af33|af41|af42|af43|cs0|
cs1|cs2|cs3|cs4|cs5|cs6|cs7} or number>
The DSCP value
precedence = <{routine|priority|immediate|flash|flash-override|CRITIC-ECP|

internetwork-control|network-control} or number>
The precedence value

voice qos list
Show the QOS configuration
Syntax : list
voice ringing
Following command groups are available :

descrtable eventtable patterntable

voice ringing descrtable
Following commands are available :

set : Set a specific profile for future ringing modifications
(current value = 30109825)
add : Add a ringing description
delete : Delete a ringing description
modify : Modify ring description
list : Show all ringing descriptions
flush : Flush all ringing descriptions

voice ringing descrtable add
Add a ringing description
Syntax : add ringid = <number> status = <{disabled|enabled}>
ringname = <quoted string> [patternentryid = <number>]
maxduration = <number> [alertinfo = <quoted string>]

Parameters :
ringid = <number>
Ring ID
status = <{disabled|enabled}>
Enable or disable this ringing
ringname = <quoted string>
Name of the ringing
[patternentryid = <number>]
Entry ID in pattern table
maxduration = <number>
Max. duration
[alertinfo = <quoted string>]
Exact content of the linked Alert-Info header

voice ringing descrtable delete
Delete a ringing description
Syntax : delete ringid = <number>

Parameters :
ringid = <number>
Ring ID

voice ringing descrtable flush
Flush all ringing descriptions
Syntax : flush
voice ringing descrtable list
Show all ringing descriptions
Syntax : list profile = <string>

Parameters :
  profile = <string>
    Profile on which future ringing operations must be done

  voice ringing descrtable modify
Modify ring description
Syntax : modify ringid = <number> [status = <{disabled|enabled}>]
          [ringname = <quoted string>] [patternentryid = <number>]
          [maxduration = <number>] [alertinfo = <quoted string>]

Parameters :
  ringid = <number>
    Ring ID
  [status = <{disabled|enabled}>]
    Enable or disable this ringing
  [ringname = <quoted string>]
    Name of the ringing
  [patternentryid = <number>]
    Entry ID in pattern table
  [maxduration = <number>]
    Max. duration
  [alertinfo = <quoted string>]
    Exact content of the linked Alert-Info header

  voice ringing descrtable set
Set a specific profile for future ringing modifications (current value =
30109825)
Syntax : set profile = <string>

Parameters :
  profile = <string>
    Profile on which future ringing operations must be done

  voice ringing eventtable
Following commands are available :

set   : Set a specific profile for future ringing modifications
               (current value = 30109825)
modify   : Modify a ringing event
list   : Show all ringing events
flush   : Flush all ringing events

  voice ringing eventtable flush
Flush all ringing events
Syntax : flush

Parameters :

  voice ringing eventtable list
Show all ringing events
Syntax : list profile = <string>

Parameters :
  profile = <string>
    Profile on which future ringing operations must be done

  voice ringing eventtable modify

Modify a ringing event
Syntax : modify eventid = <number> ringid = <number>

Parameters :
  eventid = <number>
    Event ID
  ringid = <number>
    Ring ID

  voice ringing eventtable set
Set a specific profile for future ringing modifications (current value =
30109825)
Syntax : set profile = <string>

Parameters :
  profile = <string>
    Profile on which future ringing operations must be done

  voice ringing patterntable
Following commands are available :

set   : Set a specific profile for future ringing modifications
               (current value = 30109825)
add   : Add a ringing pattern
delete   : Delete a ringing pattern
modify   : Modify a ringing pattern
list   : Show all ringing patterns
flush   : Flush all ringing patterns

  voice ringing patterntable add
Add a ringing pattern
Syntax : add id = <number> ringing = <{off|on}> duration = <number>
         [nextentry = <number>]

Parameters :
  id = <number>
    ID of the ring pattern
  ringing = <{off|on}>
    Enable or disable this ring
  duration = <number>
    Duration (ms)
  [nextentry = <number>]
    Next pattern entry

  voice ringing patterntable delete
Delete a ringing pattern
Syntax : delete id = <number>

Parameters :
  id = <number>
    ID of the ring pattern

  voice ringing patterntable flush
Flush all ringing patterns
Syntax : flush
  voice ringing patterntable list
Show all ringing patterns

Syntax : list profile = <string>

Parameters :
  profile = <string>
    Profile on which future ringing operations must be done

  voice ringing patterntable modify
Modify a ringing pattern
Syntax : modify id = <number> [ringing = <{off|on}>] [duration = <number>]
          [nextentry = <number>]

Parameters :
  id = <number>
    ID of the ring pattern
  [ringing = <{off|on}>]
    Enable or disable this ring
  [duration = <number>]
    Duration (ms)
  [nextentry = <number>]
    Next pattern entry

  voice ringing patterntable set
Set a specific profile for future ringing modifications (current value =
30109825)
Syntax : set profile = <string>

Parameters :
  profile = <string>
    Profile on which future ringing operations must be done

  voice services
Following commands are available :

list   : Show the supplementary service configuration
config   : General supplementary service configuration
servicelist   : Show the supplementary service configuration
provision   : Provision a supplementary service
withdraw   : Withdraw a supplementary service
activate   : Activate a supplementary service
deactivate   : Deactivate a supplementary service
assign   : Assign a servicecode to a supplementary service in standard
              mode
assign_pxsc   : Assign a servicecode to a supplementary service in
              non_standard mode
flush   : Flush all supplementary services

Following command groups are available :

soc

  voice services activate
Activate a supplementary service
Syntax : activate type = <{transfer|hold|waiting|mwi|clip|clir|acr|3pty|
                  forcedFXO|cfu|cfnr|cfbs}>

Parameters :

type = <{transfer|hold|waiting|mwi|clip|clir|acr|3pty|forcedFXO|cfu|cfnr|
cfbs}>
The supplementary service type

voice services assign
Assign a servicecode to a supplementary service in standard mode
Syntax : assign type = <{transfer|hold|waiting|mwi|clip|clir|acr|3pty|
forcedFXO|cfu|cfnr|cfbs|callreturn|ccbs}>
servicecode = <string>

Parameters :
type = <{transfer|hold|waiting|mwi|clip|clir|acr|3pty|forcedFXO|cfu|cfnr|
cfbs|callreturn|ccbs}>
The supplementary service type
servicecode = <string>
The service activation code

voice services assign_pxsc
Assign a servicecode to a supplementary service in non_standard mode
Syntax : 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>

Parameters :
type = <{transfer|hold|waiting|mwi|clip|clir|acr|3pty|forcedFXO|cfu|cfnr|
cfbs|callreturn|ccbs|clironcall|waitingoncall}>
The supplementary service type
action = <{activate|deactivate|interrogate}>
The supplementary service action
action_oncall = <{activate|deactivate}>
The supplementary service action
action_cf = <{activate|deactivate|register|activate_and_register|
interrogate}>
The supplementary service action
action_act = <{activate}>
The supplementary service action
servicecode = <string>
The service code

voice services config
General supplementary service configuration
Syntax : 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}>]

Parameters :
  [mwi_phone = <{immediate|deferred|both}>]
    The way the phone reacts on a message waiting indication
  [mwi_network = <{sollicited|unsollicited}>]
    The way the network protocol implements the message waiting indication
    service
  [prefix_servcode = <{standard|nonstandard}>]
    The way the service codes are assigned
  [servcode_cmd = <{standard|nonstandard}>]
    The way the service code command is used
  [cfu_dest = <string>]
    The destination for the CFU service
  [cfnr_timer = <number{0-600}>]
    The CFNR timer value
  [cfnr_dest = <string>]
    The destination for the CFNR service
  [cfbs_dest = <string>]
    The destination for the CFBS service
  [hfhf_feature = <{disabled|enabled}>]
    Enable/disable hfhf_feature
  [cw_reject_persistence = <{disabled|enabled}>]
    Enable/disable cw_reject_persistence
  [cw_timer = <number{0-120}>]
    The CW timer value
  [cw_reject_scope = <{specific|common}>]
    The scope of the rejection when the huntgroup is involved

  voice services deactivate
Deactivate a supplementary service
Syntax : deactivate type = <{transfer|hold|waiting|mwi|clip|clir|acr|3pty|
                    forcedFXO|cfu|cfnr|cfbs}>

Parameters :
  type = <{transfer|hold|waiting|mwi|clip|clir|acr|3pty|forcedFXO|cfu|cfnr|
      cfbs}>
    The supplementary service type

  voice services flush
Flush all supplementary services
Syntax : flush

Parameters :

  voice services list
Show the supplementary service configuration
Syntax : list
  voice services provision
Provision a supplementary service
Syntax : provision type = <{transfer|hold|waiting|mwi|clip|clir|acr|3pty|
                    forcedFXO|cfu|cfnr|cfbs|callreturn|ccbs}>

Parameters :
  type = <{transfer|hold|waiting|mwi|clip|clir|acr|3pty|forcedFXO|cfu|cfnr|
      cfbs|callreturn|ccbs}>
    The supplementary service type

voice services servicelist
Show the supplementary service configuration
Syntax : servicelist
voice services soc
Following commands are available :

config : General switching order configuration
list : Show the switching order configuration
modify : Configure switching order codes
soclist : Show the switching order codes

voice services soc config
General switching order configuration
Syntax : config [Registerrecalltimer = <number{0-60}>]

Parameters :
[Registerrecalltimer = <number{0-60}>]
The Register recall timer value in seconds

voice services soc list
Show the switching order configuration
Syntax : list
voice services soc modify
Configure switching order codes
Syntax : modify function = <{HoldActiveCallAndEnableCallSetup|
NoActiveCallRetrieveHeld}>
SOC = <{HF|HF1|HF2|HFTO|HFTOorHF2}>

Parameters :
function = <{HoldActiveCallAndEnableCallSetup|NoActiveCallRetrieveHeld}>
Switching function
SOC = <{HF|HF1|HF2|HFTO|HFTOorHF2}>
Switching order code

voice services soc soclist
Show the switching order codes
Syntax : soclist
voice services withdraw
Withdraw a supplementary service
Syntax : withdraw type = <{transfer|hold|waiting|mwi|clip|clir|acr|3pty|
forcedFXO|cfu|cfnr|cfbs|callreturn|ccbs}>

Parameters :
type = <{transfer|hold|waiting|mwi|clip|clir|acr|3pty|forcedFXO|cfu|cfnr|
cfbs|callreturn|ccbs}>
The supplementary service type

voice sip
Following commands are available :

config : Configure the SIP general parameters
list : Display the SIP general parameters

Following command groups are available :

responsemap sdp

voice sip config
Configure the SIP general parameters
Syntax : config [useragentdomain = <string>] [primproxyaddr = <string>]
[secproxyaddr = <string>]
[proxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|discard|
dns|domain|doom|echo|exec|finger|ftp|ftp-data|
gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-
net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|
netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|
rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-
rlogin|who|www-http|whoami|xwindows} or number>]
[secproxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|
discard|dns|domain|doom|echo|exec|finger|ftp|
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfds|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|
who|www-http|whoami|xwindows} or number>]
[primregaddr = <string>] [secregaddr = <string>]
[regport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|discard|dns|
domain|doom|echo|exec|finger|ftp|ftp-data|gopher|
h323|httpproxy|ike|ils|imap2|imap3|ingres-net|
ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-
ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|
pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|
sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|
tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
[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|bootps|chargen|clearcase|daytime|
discard|dns|domain|doom|echo|exec|finger|ftp|
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfds|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|

sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|
who|www-http|whoami|xwindows} or number>]
[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}>]
[distinct_t38_port = <{disabled|enabled}>]
[timert1 = <number{0-1048575}>]
[timert2 = <number{1-1048575}>]
[timertf = <number{1-1048575}>]

Parameters :
[useragentdomain = <string>]
User Agent domain
[primproxyaddr = <string>]
Primary outbound proxy address or FQDN
[secproxyaddr = <string>]
Secondary outbound proxy address or FQDN
[proxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|
nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
Primary outbound proxy port
[secproxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|
new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|

printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|
systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or number>]
Secondary outbound proxy port
[primregaddr = <string>]
Primary registrar address or domain
[secregaddr = <string>]
Secondary registrar address or domain
[regport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|netbios-
dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
xwindows} or number>]
Registrar port
[regexpire = <number{60-65535}>]
The registration expire time
[regexpire_Tbefore = <number{1-60}>]
Time to send new registration request before registration expires
[notifier_addr = <string>]
Notifier address or FQDN used for MWI
[notifier_port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
bootps|chargen|clearcase|daytime|discard|dns|domain|doom|
echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|
ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|
netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|
rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|
ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
xwindows} or number>]
Notifier port used for MWI
[subscribe_expire = <number{60-65535}>]
The subscription expire time
[CWreply = <{182|180}>]
The reply to be sent for a waiting call (180/182)
[transport = <{UDP|TCP}>]
The transport type
[rtpmapstaticPT = <{disabled|enabled}>]
Enable or disable adding RTP map i.c.o. static PT
[reinvite_stop_audio = <{disabled|enabled}>]
Explicitly stop audio stream in the SDP when sending a re-invite
[PRACK = <{disabled|enabled}>]
Enable or disable Provisional ACK on provisional responses
[clirformat = <{standard|nonstandard}>]
The clir format
[DTMF*#inINFO = <{*#|1011}>]
Format used for */# in INFO method
[clip_consider_displayname = <{no|yes}>]
Consider the displayname for CLIP or not
[sdp_ptime = <{10|20|30|notsent}>]

The packet time used in the SDP message
[replace# = <{enabled|disabled}>]
Enable or disable the # in INVITE to be replaced by %23
[symmetriccodec = <{enabled|disabled}>]
Enable or disable symmetric codecs
[reinvite_at_cgfax_detect = <{enabled|disabled}>]
Send re_invite when calling fax is detected
[SIPURI_port = <{enabled|disabled}>]
Enable or disable the SIPURI port
[rport = <{enabled|disabled}>]
Enable or disable the parameter rport
[SDP_username = <string>]
SDP user name
[ringtoneat183 = <{disabled|enabled}>]
Enable or disable local ringing when 183 SESSION PROGRESS is received
[t38portincrement = <number{0-65535}>]
Offset of T38 port number vs RTP port number.
[ping = <number{0-86400}>]
Time between two keepalive ping requests.
[min-se = <number{0-604800}>]
The minimum session expires timer.
[session-expires = <number{0-604800}>]
The session expires timer.
[expires = <number{0-3600}>]
The INVITE expires timer.
[register-backoff-timer = <number{0-86400}>]
Fixed backoff timer in registration procedure
[stickyoutbproxy = <{disabled|enabled}>]
Outband proxy lock over transactions
[privacy = <{ignore|strict|loose}>]
The privacy type can be ignore, strict or loose.
[SDP_username_per_UA = <{disabled|enabled}>]
SDP user name per ua
[stop_register_on_403 = <{disabled|enabled}>]
Stop register on 403
[transport_in_contact = <{disabled|enabled}>]
Transporttype in contact header
[distinct_t38_port = <{disabled|enabled}>]
Used distinct port for T38
[timert1 = <number{0-1048575}>]
The T1 expires timer.
[timert2 = <number{1-1048575}>]
The T2 expires timer.
[timertf = <number{1-1048575}>]
The Tf expires timer.

voice sip config
Configure the SIP general parameters
Syntax : config [useragentdomain = <string>] [primproxyaddr = <string>]
[secproxyaddr = <string>]
[proxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|discard|
dns|domain|doom|echo|exec|finger|ftp|ftp-data|
gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-
net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|
netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|

pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|
rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-
rlogin|who|www-http|whoami|xwindows} or number>]
[secproxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|
discard|dns|domain|doom|echo|exec|finger|ftp|
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfds|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|
who|www-http|whoami|xwindows} or number>]
[primregaddr = <string>] [secregaddr = <string>]
[regport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|discard|dns|
domain|doom|echo|exec|finger|ftp|ftp-data|gopher|
h323|httpproxy|ike|ils|imap2|imap3|ingres-net|
ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-
ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|
pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|
sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|
tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
[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|bootps|chargen|clearcase|daytime|
discard|dns|domain|doom|echo|exec|finger|ftp|
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfds|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|
who|www-http|whoami|xwindows} or number>]
[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}>]
[distinct_t38_port = <{disabled|enabled}>]
[timert1 = <number{0-1048575}>]
[timert2 = <number{1-1048575}>]
[timertf = <number{1-1048575}>]

Parameters :
[useragentdomain = <string>]
User Agent domain
[primproxyaddr = <string>]
Primary outbound proxy address or FQDN
[secproxyaddr = <string>]
Secondary outbound proxy address or FQDN
[proxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|
nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
Primary outbound proxy port
[secproxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|
new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|
systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or number>]
Secondary outbound proxy port
[primregaddr = <string>]
Primary registrar address or domain
[secregaddr = <string>]
Secondary registrar address or domain
[regport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|netbios-

dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
xwindows} or number>]
Registrar port
[regexpire = <number{60-65535}>]
The registration expire time
[regexpire_Tbefore = <number{1-60}>]
Time to send new registration request before registration expires
[notifier_addr = <string>]
Notifier address or FQDN used for MWI
[notifier_port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
bootps|chargen|clearcase|daytime|discard|dns|domain|doom|
echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|
ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|
netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|
rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|
ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
xwindows} or number>]
Notifier port used for MWI
[subscribe_expire = <number{60-65535}>]
The subscription expire time
[CWreply = <{182|180}>]
The reply to be sent for a waiting call (180/182)
[transport = <{UDP|TCP}>]
The transport type
[rtpmapstaticPT = <{disabled|enabled}>]
Enable or disable adding RTP map i.c.o. static PT
[reinvite_stop_audio = <{disabled|enabled}>]
Explicitly stop audio stream in the SDP when sending a re-invite
[PRACK = <{disabled|enabled}>]
Enable or disable Provisional ACK on provisional responses
[clirformat = <{standard|nonstandard}>]
The clir format
[DTMF*#inINFO = <{*#|1011}>]
Format used for */# in INFO method
[clip_consider_displayname = <{no|yes}>]
Consider the displayname for CLIP or not
[sdp_ptime = <{10|20|30|notsent}>]
The packet time used in the SDP message
[replace# = <{enabled|disabled}>]
Enable or disable the # in INVITE to be replaced by %23
[symmetriccodec = <{enabled|disabled}>]
Enable or disable symmetric codecs
[reinvite_at_cgfax_detect = <{enabled|disabled}>]
Send re_invite when calling fax is detected
[SIPURI_port = <{enabled|disabled}>]
Enable or disable the SIPURI port
[rport = <{enabled|disabled}>]
Enable or disable the parameter rport
[SDP_username = <string>]
SDP user name

[ringtoneat183 = <{disabled|enabled}>]
Enable or disable local ringing when 183 SESSION PROGRESS is received
[t38portincrement = <number{0-65535}>]
Offset of T38 port number vs RTP port number.
[ping = <number{0-86400}>]
Time between two keepalive ping requests.
[min-se = <number{0-604800}>]
The minimum session expires timer.
[session-expires = <number{0-604800}>]
The session expires timer.
[expires = <number{0-3600}>]
The INVITE expires timer.
[register-backoff-timer = <number{0-86400}>]
Fixed backoff timer in registration procedure
[stickyoutbproxy = <{disabled|enabled}>]
Outband proxy lock over transactions
[privacy = <{ignore|strict|loose}>]
The privacy type can be ignore, strict or loose.
[SDP_username_per_UA = <{disabled|enabled}>]
SDP user name per ua
[stop_register_on_403 = <{disabled|enabled}>]
Stop register on 403
[transport_in_contact = <{disabled|enabled}>]
Transporttype in contact header
[distinct_t38_port = <{disabled|enabled}>]
Used distinct port for T38
[timert1 = <number{0-1048575}>]
The T1 expires timer.
[timert2 = <number{1-1048575}>]
The T2 expires timer.
[timertf = <number{1-1048575}>]
The Tf expires timer.

voice sip config
Configure the SIP general parameters
Syntax : config [useragentdomain = <string>] [primproxyaddr = <string>]
[secproxyaddr = <string>]
[proxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|discard|
dns|domain|doom|echo|exec|finger|ftp|ftp-data|
gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-
net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|
netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|
rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-
rlogin|who|www-http|whoami|xwindows} or number>]
[secproxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|
discard|dns|domain|doom|echo|exec|finger|ftp|
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfds|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|

printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|
who|www-http|whoami|xwindows} or number>]
[primregaddr = <string>] [secregaddr = <string>]
[regport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|discard|dns|
domain|doom|echo|exec|finger|ftp|ftp-data|gopher|
h323|httpproxy|ike|ils|imap2|imap3|ingres-net|
ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-
ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|
pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|
sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|
tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
[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|bootps|chargen|clearcase|daytime|
discard|dns|domain|doom|echo|exec|finger|ftp|
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfds|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|
who|www-http|whoami|xwindows} or number>]
[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}>]
[distinct_t38_port = <{disabled|enabled}>]
[timert1 = <number{0-1048575}>]
[timert2 = <number{1-1048575}>]
[timertf = <number{1-1048575}>]

Parameters :
[useragentdomain = <string>]
User Agent domain
[primproxyaddr = <string>]
Primary outbound proxy address or FQDN
[secproxyaddr = <string>]
Secondary outbound proxy address or FQDN
[proxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|
nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
Primary outbound proxy port
[secproxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|
new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|
systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or number>]
Secondary outbound proxy port
[primregaddr = <string>]
Primary registrar address or domain
[secregaddr = <string>]
Secondary registrar address or domain
[regport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|netbios-
dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
xwindows} or number>]
Registrar port
[regexpire = <number{60-65535}>]
The registration expire time
[regexpire_Tbefore = <number{1-60}>]
Time to send new registration request before registration expires
[notifier_addr = <string>]
Notifier address or FQDN used for MWI

[notifier_port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
bootps|chargen|clearcase|daytime|discard|dns|domain|doom|
echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|
ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|
netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|
rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|
ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
xwindows} or number>]
Notifier port used for MWI
[subscribe_expire = <number{60-65535}>]
The subscription expire time
[CWreply = <{182|180}>]
The reply to be sent for a waiting call (180/182)
[transport = <{UDP|TCP}>]
The transport type
[rtpmapstaticPT = <{disabled|enabled}>]
Enable or disable adding RTP map i.c.o. static PT
[reinvite_stop_audio = <{disabled|enabled}>]
Explicitly stop audio stream in the SDP when sending a re-invite
[PRACK = <{disabled|enabled}>]
Enable or disable Provisional ACK on provisional responses
[clirformat = <{standard|nonstandard}>]
The clir format
[DTMF*#inINFO = <{*#|1011}>]
Format used for */# in INFO method
[clip_consider_displayname = <{no|yes}>]
Consider the displayname for CLIP or not
[sdp_ptime = <{10|20|30|notsent}>]
The packet time used in the SDP message
[replace# = <{enabled|disabled}>]
Enable or disable the # in INVITE to be replaced by %23
[symmetriccodec = <{enabled|disabled}>]
Enable or disable symmetric codecs
[reinvite_at_cgfax_detect = <{enabled|disabled}>]
Send re_invite when calling fax is detected
[SIPURI_port = <{enabled|disabled}>]
Enable or disable the SIPURI port
[rport = <{enabled|disabled}>]
Enable or disable the parameter rport
[SDP_username = <string>]
SDP user name
[ringtoneat183 = <{disabled|enabled}>]
Enable or disable local ringing when 183 SESSION PROGRESS is received
[t38portincrement = <number{0-65535}>]
Offset of T38 port number vs RTP port number.
[ping = <number{0-86400}>]
Time between two keepalive ping requests.
[min-se = <number{0-604800}>]
The minimum session expires timer.
[session-expires = <number{0-604800}>]
The session expires timer.
[expires = <number{0-3600}>]
The INVITE expires timer.
[register-backoff-timer = <number{0-86400}>]

Fixed backoff timer in registration procedure
[stickyoutbproxy = <{disabled|enabled}>]
Outband proxy lock over transactions
[privacy = <{ignore|strict|loose}>]
The privacy type can be ignore, strict or loose.
[SDP_username_per_UA = <{disabled|enabled}>]
SDP user name per ua
[stop_register_on_403 = <{disabled|enabled}>]
Stop register on 403
[transport_in_contact = <{disabled|enabled}>]
Transporttype in contact header
[distinct_t38_port = <{disabled|enabled}>]
Used distinct port for T38
[timert1 = <number{0-1048575}>]
The T1 expires timer.
[timert2 = <number{1-1048575}>]
The T2 expires timer.
[timertf = <number{1-1048575}>]
The Tf expires timer.

voice sip config
Configure the SIP general parameters
Syntax : config [useragentdomain = <string>] [primproxyaddr = <string>]
[secproxyaddr = <string>]
[proxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|discard|
dns|domain|doom|echo|exec|finger|ftp|ftp-data|
gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-
net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|
netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|
rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-
rlogin|who|www-http|whoami|xwindows} or number>]
[secproxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|
discard|dns|domain|doom|echo|exec|finger|ftp|
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfds|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|
who|www-http|whoami|xwindows} or number>]
[primregaddr = <string>] [secregaddr = <string>]
[regport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|
bootpc|bootps|chargen|clearcase|daytime|discard|dns|
domain|doom|echo|exec|finger|ftp|ftp-data|gopher|
h323|httpproxy|ike|ils|imap2|imap3|ingres-net|
ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-
ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|

pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|
sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|
tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
[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|bootps|chargen|clearcase|daytime|
discard|dns|domain|doom|echo|exec|finger|ftp|
ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|
netbios-ssn|netwall|netware-ip|new-rwho|nfds|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|
smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|
who|www-http|whoami|xwindows} or number>]
[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}>]
[distinct_t38_port = <{disabled|enabled}>]
[timert1 = <number{0-1048575}>]
[timert2 = <number{1-1048575}>]
[timertf = <number{1-1048575}>]

Parameters :
[useragentdomain = <string>]
User Agent domain
[primproxyaddr = <string>]
Primary outbound proxy address or FQDN
[secproxyaddr = <string>]

Secondary outbound proxy address or FQDN
[proxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|
netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|
nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>]
Primary outbound proxy port
[secproxyport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|
imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|
login|netbios-dgm|netbios-ns|netbios-ssn|netwall|netware-ip|
new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|
printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|
systat|talk|telnet|time|timed|tftp|ulistserv|utime|uucp|
uucp-rlogin|who|www-http|whoami|xwindows} or number>]
Secondary outbound proxy port
[primregaddr = <string>]
Primary registrar address or domain
[secregaddr = <string>]
Secondary registrar address or domain
[regport = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|
chargen|clearcase|daytime|discard|dns|domain|doom|echo|exec|
finger|ftp|ftp-data|gopher|h323|httpproxy|ike|ils|imap2|imap3|
ingres-net|ipcserver|ipx|irc-o|irc-u|kerberos|ldap|login|netbios-
dgm|netbios-ns|netbios-ssn|netwall|netware-ip|new-rwho|nfds|
nicname|nntp|ntalk|ntp|pcmail-srv|pop2|pop3|printer|qotd|
realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|
sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|telnet|time|
timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
xwindows} or number>]
Registrar port
[regexpire = <number{60-65535}>]
The registration expire time
[regexpire_Tbefore = <number{1-60}>]
Time to send new registration request before registration expires
[notifier_addr = <string>]
Notifier address or FQDN used for MWI
[notifier_port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
bootps|chargen|clearcase|daytime|discard|dns|domain|doom|
echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|
ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|
netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|
rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|
ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
xwindows} or number>]
Notifier port used for MWI
[subscribe_expire = <number{60-65535}>]

The subscription expire time
[CWreply = <{182|180}>]
The reply to be sent for a waiting call (180/182)
[transport = <{UDP|TCP}>]
The transport type
[rtpmapstaticPT = <{disabled|enabled}>]
Enable or disable adding RTP map i.c.o. static PT
[reinvite_stop_audio = <{disabled|enabled}>]
Explicitly stop audio stream in the SDP when sending a re-invite
[PRACK = <{disabled|enabled}>]
Enable or disable Provisional ACK on provisional responses
[clirformat = <{standard|nonstandard}>]
The clir format
[DTMF*#inINFO = <{*#|1011}>]
Format used for */# in INFO method
[clip_consider_displayname = <{no|yes}>]
Consider the displayname for CLIP or not
[sdp_ptime = <{10|20|30|notsent}>]
The packet time used in the SDP message
[replace# = <{enabled|disabled}>]
Enable or disable the # in INVITE to be replaced by %23
[symmetriccodec = <{enabled|disabled}>]
Enable or disable symmetric codecs
[reinvite_at_cgfax_detect = <{enabled|disabled}>]
Send re_invite when calling fax is detected
[SIPURI_port = <{enabled|disabled}>]
Enable or disable the SIPURI port
[rport = <{enabled|disabled}>]
Enable or disable the parameter rport
[SDP_username = <string>]
SDP user name
[ringtoneat183 = <{disabled|enabled}>]
Enable or disable local ringing when 183 SESSION PROGRESS is received
[t38portincrement = <number{0-65535}>]
Offset of T38 port number vs RTP port number.
[ping = <number{0-86400}>]
Time between two keepalive ping requests.
[min-se = <number{0-604800}>]
The minimum session expires timer.
[session-expires = <number{0-604800}>]
The session expires timer.
[expires = <number{0-3600}>]
The INVITE expires timer.
[register-backoff-timer = <number{0-86400}>]
Fixed backoff timer in registration procedure
[stickyoutbproxy = <{disabled|enabled}>]
Outband proxy lock over transactions
[privacy = <{ignore|strict|loose}>]
The privacy type can be ignore, strict or loose.
[SDP_username_per_UA = <{disabled|enabled}>]
SDP user name per ua
[stop_register_on_403 = <{disabled|enabled}>]
Stop register on 403
[transport_in_contact = <{disabled|enabled}>]
Transporttype in contact header
[distinct_t38_port = <{disabled|enabled}>]
Used distinct port for T38

[timert1 = <number{0-1048575}>]
The T1 expires timer.
[timert2 = <number{1-1048575}>]
The T2 expires timer.
[timertf = <number{1-1048575}>]
The Tf expires timer.

voice sip list
Display the SIP general parameters
Syntax : list
voice sip responsemap
Following commands are available :

add : Add a SIP response
delete : Delete a SIP response
modify : Modify a SIP response
list : Show all SIP responses
flush : Flush all SIP responses

voice sip responsemap add
Add a SIP response
Syntax : add responsecode = <string>
tone = <{dial|none|remotecallhold|callhold|remotecallwaiting|
callwaiting|rejection|confirmation|release|warning|
congestion|busy|ringback|mwi|specialdial|stutterdial}>
[textmessage = <quoted string>]

Parameters :
responsecode = <string>
SIP Response Code
tone = <{dial|none|remotecallhold|callhold|remotecallwaiting|callwaiting|
rejection|confirmation|release|warning|congestion|busy|ringback|mwi|
specialdial|stutterdial}>
Tone to be played
[textmessage = <quoted string>]
Text message to display

voice sip responsemap delete
Delete a SIP response
Syntax : delete responsecode = <{1xx|180|181|182|183|2xx|3xx|4xx|486|5xx|6xx}>

Parameters :
responsecode = <{1xx|180|181|182|183|2xx|3xx|4xx|486|5xx|6xx}>
SIP Response Code

voice sip responsemap flush
Flush all SIP responses
Syntax : flush
voice sip responsemap list
Show all SIP responses
Syntax : list
voice sip responsemap modify
Modify a SIP response
Syntax : modify responsecode = <{1xx|180|181|182|183|2xx|3xx|4xx|486|5xx|6xx}>

[tone = <{dial|none|remotecallhold|callhold|remotecallwaiting|
callwaiting|rejection|confirmation|release|warning|
congestion|busy|ringback|mwi|specialdial|
stutterdial}>]
[textmessage = <quoted string>]

Parameters :
responsecode = <{1xx|180|181|182|183|2xx|3xx|4xx|486|5xx|6xx}>
SIP Response Code
[tone = <{dial|none|remotecallhold|callhold|remotecallwaiting|callwaiting|
rejection|confirmation|release|warning|congestion|busy|ringback|mwi|
specialdial|stutterdial}>]
Tone to be played
[textmessage = <quoted string>]
Text message to display

voice sip sdp
Following commands are available :

config : Configure the SDP general parameters
list : List the SDP general parameters

voice sip sdp config
Configure the SDP general parameters
Syntax : config [callholddirection = <{sendonly|inactive}>]
[versioncheck = <{no|yes}>]

Parameters :
[callholddirection = <{sendonly|inactive}>]
Call Hold Direction
[versioncheck = <{no|yes}>]
Version Check

voice sip sdp list
List the SDP general parameters
Syntax : list
voice state
show VOIP service states
Syntax : state
voice stats
Following commands are available :

list : Show voice statistics
reset : Reset voice statistics

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

Parameters :
voiceport = <{FXS1|FXS2|DECT1|DECT2|DECT3|DECT4|DECT5|all}>
The voice port used to get/reset the statistics
type = <{detailed|generic|all}>
Type of statistics to be listed/reset

voice stats reset

Reset voice statistics
Syntax : reset voiceport = <{FXS1|FXS2|DECT1|DECT2|DECT3|DECT4|DECT5|all}>
type = <{detailed|generic|all}>

Parameters :
voiceport = <{FXS1|FXS2|DECT1|DECT2|DECT3|DECT4|DECT5|all}>
The voice port used to get/reset the statistics
type = <{detailed|generic|all}>
Type of statistics to be listed/reset

voice tone
Following command groups are available :

descrtable eventtable patterntable

voice tone descrtable
Following commands are available :

add : Add tone description
delete : Delete tone description
modify : Modify tone description
list : Show all tone descriptions
flush : Flush all tone descriptions

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

Parameters :
tone = <string>
Name of the tone
status = <{disabled|enabled}>
Enable or disable this tone
delay = <number>
Delay (in ms)
[patternentryid = <number>]
Entry ID in pattern table
[file = <string>]
Audio file name
[filerepeat = <number>]
File repetitions
text = <quoted string>
Text to display on the phone
[maxduration = <number>]
Max. duration
[nexttone = <string>]
Name of the tone
repeatafter = <number>
Time after which the tone must be repeated (in ms)

voice tone descrtable delete
Delete tone description
Syntax : delete tone = <{}>

Parameters :
tone = <{}>
Name of the tone

voice tone descrtable flush
Flush all tone descriptions
Syntax : flush
voice tone descrtable list
Show all tone descriptions
Syntax : list
voice tone descrtable modify
Modify tone description
Syntax : modify tone = <{dial|none|remotecallhold|callhold|remotecallwaiting|
callwaiting|rejection|confirmation|release|warning|
congestion|busy|ringback|mwi|specialdial|stutterdial}>
[status = <{disabled|enabled}>] [delay = <number>]
[patternentryid = <number>] [file = <string>]
[filerepeat = <number>] [text = <string>]
[maxduration = <number>] [nexttone = <string>]
[repeatafter = <number>]

Parameters :
tone = <{dial|none|remotecallhold|callhold|remotecallwaiting|callwaiting|
rejection|confirmation|release|warning|congestion|busy|ringback|mwi|
specialdial|stutterdial}>
Name of the tone
[status = <{disabled|enabled}>]
Enable or disable this tone
[delay = <number>]
Delay (in ms)
[patternentryid = <number>]
Entry ID in pattern table
[file = <string>]
Audio file name
[filerepeat = <number>]
File repetitions
[text = <string>]
Text to display on the phone
[maxduration = <number>]
Max. duration
[nexttone = <string>]
Name of the tone
[repeatafter = <number>]
Time after which the tone must be repeated (in ms)

voice tone eventtable
Following commands are available :

modify : Modify tone event
list : Show all tone events
flush : Flush all tone events

voice tone eventtable flush
Flush all tone events
Syntax : flush
voice tone eventtable list
Show all tone events

Syntax : list
  voice tone eventtable modify
Modify tone event
Syntax : 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|104|105|106|107|108|201|202|203|204|205|
                    305|401|402|403|404|405|406|407|408|501|502|503|
                    999}>
           tone = <{dial|none|remotecallhold|callhold|remotecallwaiting|
                callwaiting|rejection|confirmation|release|warning|
                congestion|busy|ringback|mwi|specialdial|stutterdial}>

Parameters :
  eventid = <{1|2|3|4|5|6|7|8|9|10|11|12|13|14|15|16|17|18|19|20|101|102|103|
        104|105|106|107|108|201|202|203|204|205|305|401|402|403|404|405|
        406|407|408|501|502|503|999}>
    Event ID
  tone = <{dial|none|remotecallhold|callhold|remotecallwaiting|callwaiting|
       rejection|confirmation|release|warning|congestion|busy|ringback|mwi|
       specialdial|stutterdial}>
    Tone to play for this event

  voice tone patterntable
Following commands are available :

add   : Add tone pattern
delete   : Delete tone pattern
modify   : Modify tone pattern
list   : Show all tone patterns
flush   : Flush all tone patterns

  voice tone patterntable add
Add tone pattern
Syntax : 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>]

Parameters :
  id = <number>
    ID of the tone pattern
  tone = <{off|on}>
    Enable or disable this tone
  [freq1 = <number>]
    Frequency 1
  [power1 = <number>]
    Power 1
  [freq2 = <number>]
    Frequency 2
  [power2 = <number>]
    Power 2
  [freq3 = <number>]
    Frequency 3
  [power3 = <number>]
    Power 3
  [freq4 = <number>]

```
    Frequency 4
  [power4 = <number>]
    Power 4
  [duration = <number>]
    Duration (ms)
  [nextentry = <number>]
    Next pattern entry
  [maxloops = <number>]
    Max loops
  [nextentryafterloops = <number>]
    Next entry after loops

  voice tone patterntable delete
Delete tone pattern
Syntax : delete id = <{1|2|3|4|5|6|7|8|9|10|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|3|4|5|6|7|8|9|10|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}>]


  Parameters :
    id = <{1|2|3|4|5|6|7|8|9|10|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}>
      ID of the tone pattern
    [endentryid = <{1|2|3|4|5|6|7|8|9|10|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}>]
      ID of the tone pattern

  voice tone patterntable flush
Flush all tone patterns
Syntax : flush
  voice tone patterntable list
Show all tone patterns
Syntax : list
  voice tone patterntable modify
Modify tone pattern
Syntax : modify id = <{1|2|3|4|5|6|7|8|9|10|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>]

  Parameters :
    id = <{1|2|3|4|5|6|7|8|9|10|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}>
      ID of the tone pattern
    [tone = <{off|on}>]
      Enable or disable this tone
    [freq1 = <number>]
      Frequency 1
    [power1 = <number>]
```

```
    Power 1
  [freq2 = <number>]
    Frequency 2
  [power2 = <number>]
    Power 2
  [freq3 = <number>]
    Frequency 3
  [power3 = <number>]
    Power 3
  [freq4 = <number>]
    Frequency 4
  [power4 = <number>]
    Power 4
  [duration = <number>]
    Duration (ms)
  [nextentry = <number>]
    Next pattern entry
  [maxloops = <number>]
    Max loops
  [nextentryafterloops = <number>]
    Next entry after loops

  wansensing
Following commands are available :

config          : Configure parameters
flush           : Clean configuration
list            : Display parameters
requestmode     : Request to enter certain mode

Following command groups are available :

debug           mode

  wansensing config
Configure parameters
Syntax : config [state = <{disabled|enabled}>] [errorinterval = <number>]
             [errorscript = <string>]

Parameters :
  [state = <{disabled|enabled}>]
    Enable/disable
  [errorinterval = <number>]
    Error interval value
  [errorscript = <string>]
    Error script name

  wansensing debug
Following commands are available :

traceconfig     : Tracing settings

  wansensing debug traceconfig
Tracing settings
Syntax : traceconfig [state = <{disabled|enabled}>]

Parameters :
```

[state = <{disabled|enabled}>]
Enable/disable

wansensing flush
Clean configuration
Syntax : flush
wansensing list
Display parameters
Syntax : list
wansensing mode
Following commands are available :

list : List all modes
add : Add mode
delete : Delete mode

wansensing mode add
Add mode
Syntax : add name = <string> maininterval = <number> scriptname = <string>

Parameters :
name = <string>
Mode name
maininterval = <number>
Main interval value
scriptname = <string>
Script name

wansensing mode delete
Delete mode
Syntax : delete name = <string>

Parameters :
name = <string>
Mode name

wansensing mode list
List all modes
Syntax : list
wansensing requestmode
Request to enter certain mode
Syntax : requestmode mode = <string>

Parameters :
mode = <string>
Mode to enter (its name)

wireless
Following commands are available :

ifconfig : Configures wireless settings.
reset : Reset Wireless interface settings to defaults

Following command groups are available :

debug macacl mssid multiuni qos
secmode stations wds wps

wireless bcminfo
Shows the configured settings.
Syntax : bcminfo
wireless debug
Following commands are available :

stats : Transfer statistics

wireless debug bcminfo
Shows the configured settings.
Syntax : bcminfo
wireless debug btc
Bluetooth co-existence
Syntax : btc [btc = <{disabled|enabled}>]

Parameters :
[btc = <{disabled|enabled}>]
Bluetooth co-existence

wireless debug maxpower
Maxpower values for current country setting
Syntax : maxpower
wireless debug mcd
mcd
Syntax : mcd [state = <{disabled|enabled}>]

Parameters :
[state = <{disabled|enabled}>]
Multicast drop

wireless debug nasdump
NAS DEBUG COMMAND
Syntax : nasdump
wireless debug stats
Transfer statistics
Syntax : stats
wireless debug wpainclude
include wpa
Syntax : wpainclude
wireless flush
Flush all wireless dynamic contextes
Syntax : flush
wireless ifconfig
Configures wireless settings.
Syntax : 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}>]

Parameters :
[state = <{enabled|disabled}>]
Interface operational status of wireless access point
[channel = <{auto|1|2|3|4|5|6|7|8|9|10|11|12|13}>]
Communication channel number
[ssid = <quoted string>]
SSID

[any = <{enabled|disabled}>]
Make SSID public
[interop = <{802.11b|802.11b(legacy)/g|802.11b/g|802.11g}>]
Interoperability mode
[frameburst = <{disabled|enabled}>]
Framebursting

wireless macacl
Following commands are available :

config : Access Control List configuration
register : Start a registration process (only for register mode)
add : Add an ACL MAC entry
modify : Modify an ACL entry
delete : Delete an ACL MAC entry
list : Shows a list of all configured ACL entries
flush : Flushes ACL entries

wireless macacl add
Add an ACL MAC entry
Syntax : add [ssid_id = <number{0-3}>] hwaddr = <hardware-address>
permission = <{allow|deny}> [name = <quoted string>]

Parameters :
[ssid_id = <number{0-3}>]
ssid id
hwaddr = <hardware-address>
The Ethernet MAC address of the ACL entry
permission = <{allow|deny}>
The action to be performed on ACL entry
[name = <quoted string>]
The name of the station

wireless macacl config
Access Control List configuration
Syntax : config [ssid_id = <number{0-3}>]
[control = <{lock|unlock|register}>]
[regtime = <number{15-3600}>]

Parameters :
[ssid_id = <number{0-3}>]
ssid id
[control = <{lock|unlock|register}>]
Access Control List mode
[regtime = <number{15-3600}>]
Registration time

wireless macacl delete
Delete an ACL MAC entry
Syntax : delete ssid_id = <number{0-3}> hwaddr = <hardware-address>

Parameters :
ssid_id = <number{0-3}>
ssid id
hwaddr = <hardware-address>
hardware address of the ACL entry

wireless macacl flush
Flushes ACL entries
Syntax : flush [ssid_id = <number{0-3}>] proceed = <{disabled|enabled}>

Parameters :
[ssid_id = <number{0-3}>]
ssid id
proceed = <{disabled|enabled}>
Confirmation required

wireless macacl list
Shows a list of all configured ACL entries
Syntax : list [ssid_id = <number{0-3}>]

Parameters :
[ssid_id = <number{0-3}>]
ssid id

wireless macacl modify
Modify an ACL entry
Syntax : modify ssid_id = <number{0-3}> hwaddr = <hardware-address>
[permission = <{allow|deny}>] [name = <quoted string>]

Parameters :
ssid_id = <number{0-3}>
ssid id
hwaddr = <hardware-address>
The Ethernet MAC address of the ACL entry
[permission = <{allow|deny}>]
The action to be performed on ACL entry
[name = <quoted string>]
The name of the station

wireless macacl register
Start a registration process (only for register mode)
Syntax : register [ssid_id = <number{0-3}>] proceed = <{disabled|enabled}>

Parameters :
[ssid_id = <number{0-3}>]
ssid id
proceed = <{disabled|enabled}>
Confirmation required

wireless mssid
Following commands are available :

iflist : Multiple ssid configuration
ifadd : Add an extra ssid context
ifdelete : Delete a ssid context
ifconfig : Configure a ssid context
ifattach : Attach a ssid context
ifdetach : Detach a ssid context

wireless mssid ifadd
Add an extra ssid context
Syntax : ifadd ssid = <quoted string>

Parameters :
  ssid = <quoted string>
    ssid

  wireless mssid ifattach
Attach a ssid context
Syntax : ifattach ssid_id = <number{1-3}>

Parameters :
  ssid_id = <number{1-3}>
    ssid

  wireless mssid ifconfig
Configure a ssid context
Syntax : ifconfig ssid_id = <number{0-3}> [ssid = <quoted string>]
            [apisolation = <{disabled|enabled}>]
            [any = <{disabled|enabled}>]
            [secmode = <{disable|wep|wpa-psk}>]
            [WEPkey = <quoted string>] [WPAPSKkey = <quoted string>]
            [WPAPSKversion = <{WPA|WPA2|WPA+WPA2}>]
            [addscript = <quoted string>] [delscript = <quoted string>]
            [trace = <{disabled|enabled}>]

Parameters :
  ssid_id = <number{0-3}>
    ssid id
  [ssid = <quoted string>]
    ssid
  [apisolation = <{disabled|enabled}>]
    ap isolation
  [any = <{disabled|enabled}>]
    public network
  [secmode = <{disable|wep|wpa-psk}>]
    security mode
  [WEPkey = <quoted string>]
    WEP key: expected format 5 or 13 ASCII characters, or 10 or 26 HEX
    digits.
  [WPAPSKkey = <quoted string>]
    WPA-PSK key: expected format 8 to 63 ASCII characters or 64 HEX digits.
  [WPAPSKversion = <{WPA|WPA2|WPA+WPA2}>]
    wpa version
  [addscript = <quoted string>]
    creation data interfaces
  [delscript = <quoted string>]
    remove data interfaces
  [trace = <{disabled|enabled}>]
    security tracing

  wireless mssid ifdelete
Delete a ssid context
Syntax : ifdelete ssid_id = <number{1-3}>

Parameters :
  ssid_id = <number{1-3}>
    ssid

  wireless mssid ifdetach

Detach a ssid context
Syntax : ifdetach ssid_id = <number{1-3}>

Parameters :
  ssid_id = <number{1-3}>
    ssid

  wireless mssid iflist
Multiple ssid configuration
Syntax : iflist [ssid_id = <number{0-3}>]

Parameters :
  [ssid_id = <number{0-3}>]
    ssid

  wireless multiuni
Following commands are available :

scanresults   : display detected multicast mac addresses
add   : add a multicast to unicat mapping
delete   : delete all multicast mappings
list   : show configured multicast to unicast mappings
flush   : flush all multicast to unicast mappings

  wireless multiuni add
add a multicast to unicat mapping
Syntax : add multicast = <hardware-address> unicast = <hardware-address>

Parameters :
  multicast = <hardware-address>
    Multicast MAC
  unicast = <hardware-address>
    Unicast MAC

  wireless multiuni delete
delete all multicast mappings
Syntax : delete multicast = <hardware-address>

Parameters :
  multicast = <hardware-address>
    Multicast MAC

  wireless multiuni flush
flush all multicast to unicast mappings
Syntax : flush
  wireless multiuni list
show configured multicast to unicast mappings
Syntax : list
  wireless multiuni scanresults
display detected multicast mac addresses
Syntax : scanresults [rescan = <{no|yes}>]

Parameters :
  [rescan = <{no|yes}>]
    rescan for new multicast addresses

  wireless qos

Following commands are available :

config : configure QoS settings
apacconfig : configure AP EDCA parameters
staacconfig : configure STA EDCA parameters

wireless qos apacconfig
configure AP EDCA parameters
Syntax : apacconfig [class = <{AC_BE|AC_BK|AC_VI|AC_VO}>]
[cwmax = <{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>]

Parameters :
[class = <{AC_BE|AC_BK|AC_VI|AC_VO}>]
AC class
[cwmax = <{1|3|7|15|31|63|127|255|511|1023|2047|4095|8191|16383|32767}>]
CWmax configuration
[cwmin = <{0|1|3|7|15|31|63|127|255}>]
CWmin configuration
[aifsn = <number{1-15}>]
Aifsn configuration
[txop = <number>]
txoplimit [us] configuration

wireless qos config
configure QoS settings
Syntax : config [mode = <{disabled|wmm}>]

Parameters :
[mode = <{disabled|wmm}>]
WMM active

wireless qos staacconfig
configure STA EDCA parameters
Syntax : staacconfig [class = <{AC_BE|AC_BK|AC_VI|AC_VO}>]
[cwmax = <{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>]

Parameters :
[class = <{AC_BE|AC_BK|AC_VI|AC_VO}>]
AC class
[cwmax = <{1|3|7|15|31|63|127|255|511|1023|2047|4095|8191|16383|32767}>]
CWmax configuration
[cwmin = <{0|1|3|7|15|31|63|127|255}>]
CWmin configuration
[aifsn = <number{1-15}>]
Aifsn configuration
[txop = <number>]
txoplimit [us] configuration

wireless qual
Following commands are available :

up : wl up
down : wl down
out : wl out
renewssid : renew ssid
txant : wl txant
antdiv : wl antdiv
fqacursy : wl fqacursy

wireless qual antdiv
wl antdiv
Syntax : antdiv [value = <{0|1|auto}>]

Parameters :
[value = <{0|1|auto}>]
Value

wireless qual down
wl down
Syntax : down
wireless qual fqacursy
wl fqacursy
Syntax : fqacursy channum = <number{0-13}>

Parameters :
channum = <number{0-13}>
channum

wireless qual out
wl out
Syntax : out
wireless qual renewssid
renew ssid
Syntax : renewssid
wireless qual txant
wl txant
Syntax : txant [value = <{0|1|auto}>]

Parameters :
[value = <{0|1|auto}>]
Value

wireless qual up
wl up
Syntax : up
wireless reset
Reset Wireless interface settings to defaults
Syntax : reset proceed = <{disabled|enabled}>

Parameters :
proceed = <{disabled|enabled}>
Confirmation required

wireless secmode
Following commands are available :

config : Configure/Show the security mode.
wep : Configure WEP settings.

wpa-psk : Configure WPA-PSK settings.

  wireless secmode config
Configure/Show the security mode.
Syntax : config [mode = <{disable|wep|wpa-psk}>]

Parameters :
  [mode = <{disable|wep|wpa-psk}>]
    security mode

  wireless secmode wep
Configure WEP settings.
Syntax : wep [encryptionkey = <quoted string>]

Parameters :
  [encryptionkey = <quoted string>]
    WEP key: expected format 5 or 13 ASCII characters, or 10 or 26 HEX
    digits.

  wireless secmode wpa-psk
Configure WPA-PSK settings.
Syntax : wpa-psk [presharedkey = <quoted string>]
          [version = <{WPA|WPA2|WPA+WPA2}>]

Parameters :
  [presharedkey = <quoted string>]
    WPA-PSK key: expected format 8 to 63 ASCII characters or 64 HEX digits.
  [version = <{WPA|WPA2|WPA+WPA2}>]
    wpa version

  wireless stations
Following commands are available :

list : List of the currently associated stations

  wireless stations list
List of the currently associated stations
Syntax : list [hwaddr = <hardware-address>] [ssid_id = <number{0-3}>]

Parameters :
  [hwaddr = <hardware-address>]
    The MAC address of station
  [ssid_id = <number{0-3}>]
    Selected BSS

  wireless wds
Following commands are available :

config : WDS configuration parameters
scanresults : scan all networks
add : add WDS station
delete : delete WDS station
list : list WDS stations
flush : Flush all wds stations

  wireless wds add
add WDS station

Syntax : add bssid = <hardware-address> [name = <quoted string>]

Parameters :
  bssid = <hardware-address>
    The WDS bssid
  [name = <quoted string>]
    A user specified reference name

  wireless wds config
WDS configuration parameters
Syntax : config [state = <{disabled|enabled}>]

Parameters :
  [state = <{disabled|enabled}>]
    WDS functionality

  wireless wds delete
delete WDS station
Syntax : delete bssid = <hardware-address>

Parameters :
  bssid = <hardware-address>
    The WDS bssid

  wireless wds flush
Flush all wds stations
Syntax : flush
  wireless wds list
list WDS stations
Syntax : list
  wireless wds scanresults
scan all networks
Syntax : scanresults [rescan = <{disabled|enabled}>]

Parameters :
  [rescan = <{disabled|enabled}>]
    perform a new scan

  wireless wps
Following commands are available :

config   : Configure/Show the WPS settings
pin   : Set the ENROLLEE pin value
ap_pin   : Set/Show the AP pin value
mode   : Set/Show the configuration mode value

  wireless wps ap_pin
Set/Show the AP pin value
Syntax : ap_pin [ssid_id = <number{0-3}>] [value = <number>]

Parameters :
  [ssid_id = <number{0-3}>]
    ssid id
  [value = <number>]
    pin number

  wireless wps config

Configure/Show the WPS settings
Syntax : config [ssid_id = <number{0-3}>] [state = <{disabled|enabled}>]

Parameters :
  [ssid_id = <number{0-3}>]
    ssid id
  [state = <{disabled|enabled}>]
    WPS state

  wireless wps dump
Dump WPS settings
Syntax : dump
  wireless wps event
Push button event
Syntax : event [ssid_id = <number{0-3}>] [value = <number>]

Parameters :
  [ssid_id = <number{0-3}>]
    ssid id
  [value = <number>]
    event state

  wireless wps mode
Set/Show the configuration mode value
Syntax : mode [ssid_id = <number{0-3}>] [value = <number>]

Parameters :
  [ssid_id = <number{0-3}>]
    ssid id
  [value = <number>]
    configuration mode

  wireless wps pin
Set the ENROLLEE pin value
Syntax : pin [ssid_id = <number{0-3}>] [value = <number>]

Parameters :
  [ssid_id = <number{0-3}>]
    ssid id
  [value = <number>]
    pin number

  wizard
Following commands are available :

config   : configuration of embedded wizard
def   : Profile definition.
flush   : Clear active profile
view   : View active profile

  wizard config
configuration of embedded wizard
Syntax : config [allow_factory_tpl = <{no|yes}>] [trace = <{no|yes}>]
          [autopopup = <{no|yes}>] [configtime = <number{15-300}>]

Parameters :
  [allow_factory_tpl = <{no|yes}>]

Option to indicate if factory templates may be loaded
[trace = <{no|yes}>]
Trace during loading
[autopopup = <{no|yes}>]
Generate wizard popup if factory defaults are active
[configtime = <number{15-300}>]
Time in between 'please wait' page and 'complete' page(in seconds)

wizard def
Profile definition.
Syntax : def var = <string>
type = <{string|passw|integer|combo|list|radioset|bool|ipaddr|
ipmask|passwcheck|label|hex|grp}>
[grp = <string>] [desc = <translated string>]
[help = <translated string>] [alias = <translated string>]
[req <{no|yes}>] [default = <quoted string>]
[data = <quoted string>] [dalias = <translated string>]
[min = <number>] [max = <number>] [calc = <quoted string>]
[linkvar = <string>]

Parameters :
var = <string>
Variable name : name of variable or group
type = <{string|passw|integer|combo|list|radioset|bool|ipaddr|ipmask|
passwcheck|label|hex|grp}>
type of the variable
[grp = <string>]
Group name in case variable is defined
[desc = <translated string>]
Description text, help text
[help = <translated string>]
Addtional help text (only for group description
[alias = <translated string>]
user friendly name for field or group
[req <{no|yes}>]
parameter without value: to indicate a required field
[default = <quoted string>]
a default value field for variable
[data = <quoted string>]
list of values, used in configuration file
[dalias = <translated string>]
user friendly names for data values
[min = <number>]
minumum value in case type is integer
[max = <number>]
maximum value in case type is integer
[calc = <quoted string>]
host wizard related stuff, ignored here
[linkvar = <string>]
to which variable this variable is linked to (only for passwcheck)

wizard flush
Clear active profile
Syntax : flush
wizard load
Load a profile
Syntax : load [profile = <profile filename>]

Parameters :
  [profile = <profile filename>]
    Profile name to load

  wizard view
View active profile
Syntax : view
  xdsl
Following commands are available :

info   : Displays status information about modem
config   : Modify/Display dsl configuration
maxspeed   : Set ATM Default Maximum Speed.
version   : Display xdsl version information.

Following command groups are available :

debug

  xdsl config
Modify/Display dsl configuration
Syntax : config [adslmultimode = <{adsl|adsl2|adsl2plus}>]
           [detect-lop = <{disabled|enabled}>]
           [syslog = <{disabled|enabled}>]

Parameters :
  [adslmultimode = <{adsl|adsl2|adsl2plus}>]
    Set/Show selected multimode type of the modem
  [detect-lop = <{disabled|enabled}>]
    Detect Loss Of Power
  [syslog = <{disabled|enabled}>]
    Log in syslog during showtime

  xdsl debug
Following commands are available :

bitloadinginfo : Displays # bits per tone
deltconfig   : Dual Ended Line Testing interface
deltinfo   : Dual Ended Line Test result display
modemoptioninfo : The modem options bitmap display
multimode   : Config custom multimode
traceconfig   : Config the adsl tracelevel

  xdsl debug bitloadinginfo
Displays # bits per tone
Syntax : bitloadinginfo
  xdsl debug deltconfig
Dual Ended Line Testing interface
Syntax : deltconfig [state = <{disabled|enabled}>]

Parameters :
  [state = <{disabled|enabled}>]
    Enable/Disable dual ended line testing

  xdsl debug deltinfo
Dual Ended Line Test result display
Syntax : deltinfo

xdsl debug modemoptioninfo
The modem options bitmap display
Syntax : modemoptioninfo
xdsl debug multimode
Config custom multimode
Syntax : multimode [config = <[+/-]flag[+/-flag...]{default t1.413issue2
g992.1_annex_a g992.2 g992.3_annex_a
g992.3_annex_l g992.3_annex_m g992.5_annex_a
g992.5_annex_m}>]

Parameters :
[config = <[+/-]flag[+/-flag...]{default t1.413issue2 g992.1_annex_a g992.2
g992.3_annex_a g992.3_annex_l g992.3_annex_m g992.5_annex_a
g992.5_annex_m}>]
The custom multimode bitmap

xdsl debug traceconfig
Config the adsl tracelevel
Syntax : traceconfig level = <{0|1|2|3|4}>

Parameters :
level = <{0|1|2|3|4}>
Trace Level (0=disable tracing; 1=enable dsl manager tracing; 2=enable
dsl driver tracing)

xdsl info
Displays status information about modem
Syntax : info [expand = <{disabled|enabled}>]
[g.997.1 = <{disabled|enabled}>]
[counter_period_filter = <{current|15_minutes|24_hours}>]
[counters_reset = <{no|yes}>]

Parameters :
[expand = <{disabled|enabled}>]
Condensed / Expanded listing link information
[g.997.1 = <{disabled|enabled}>]
Condensed / Expanded listing link information
[counter_period_filter = <{current|15_minutes|24_hours}>]
Specify the statistics period
[counters_reset = <{no|yes}>]
Reset all counters

xdsl maxspeed
Set ATM Default Maximum Speed.
Syntax : maxspeed [tx = <number>] [rx = <number>]

Parameters :
[tx = <number>]
A predefined Maximum ADSL Speed in Upstream direction
[rx = <number>]
A predefined Maximum ADSL Speed in Downstream direction

xdsl qual
Following commands are available :

alb : Analog front end LoopBack Test Mode

```
lov            : Longitudinal Balance (LOV) Test Mode -continuously sending-
lcl            : Longitudinal Balance (LCL) Test Mode -online quiet-
qln            : Quiet Line Noise Test Mode
aisf           : Set modem's ATU Impedance State Force

   xdsl qual aisf
Set modem's ATU Impedance State Force
Syntax : aisf state = <{disable|inactive|active}>

Parameters :
   state = <{disable|inactive|active}>
     aisf state

   xdsl qual alb
Analog front end LoopBack Test Mode
Syntax : alb type = <{adsl}> address = <string>
          port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
                bootps|chargen|clearcase|daytime|discard|dns|domain|doom|
                echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|
                ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
                kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|
                netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
                pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|
                rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
                sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|
                ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
                xwindows} or number>


Parameters :
   type = <{adsl}>
     Type of Test Mode
   address = <string>
     remote IP Address or string "modem" to store on the board
   port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|
        clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-
        data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|
        ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-
        ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-
        srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
        snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
        telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
        whoami|xwindows} or number>
     Remote IP Port

   xdsl qual lcl
Longitudinal Balance (LCL) Test Mode -online quiet-
Syntax : lcl
   xdsl qual lov
Longitudinal Balance (LOV) Test Mode -continuously sending-
Syntax : lov type = <{adsl_annex_a|adsl_annex_l_wide|adsl_annex_l_narrow|
                adsl_annex_m_eu-32|adsl_annex_m_eu-36|adsl_annex_m_eu-40|
                adsl_annex_m_eu-44|adsl_annex_m_eu-48|adsl_annex_m_eu-52|
                adsl_annex_m_eu-56|adsl_annex_m_eu-60|adsl_annex_m_eu-64}>
```

Parameters :
  type = <{adsl_annex_a|adsl_annex_l_wide|adsl_annex_l_narrow|adsl_annex_m_eu-
      32|adsl_annex_m_eu-36|adsl_annex_m_eu-40|adsl_annex_m_eu-44|
      adsl_annex_m_eu-48|adsl_annex_m_eu-52|adsl_annex_m_eu-56|
      adsl_annex_m_eu-60|adsl_annex_m_eu-64}>
    Type of (LOV) Test Mode

  xdsl qual mib
Retreive extra adsl info Test Mode
Syntax : mib type = <{adsl}> address = <string>
        port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
            bootps|chargen|clearcase|daytime|discard|dns|domain|doom|
            echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|
            ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
            kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|
            netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
            pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|
            rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
            sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|
            ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
            xwindows} or number>

Parameters :
  type = <{adsl}>
    Type of Test Mode
  address = <string>
    remote IP Address or string "modem" to store on the board
  port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|
      clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-
      data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|
      ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-
      ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-
      srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
      snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
      telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
      whoami|xwindows} or number>
    Remote IP Port

  xdsl qual qln
Quiet Line Noise Test Mode
Syntax : qln type = <{adsl}> address = <string>
        port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|
            bootps|chargen|clearcase|daytime|discard|dns|domain|doom|
            echo|exec|finger|ftp|ftp-data|gopher|h323|httpproxy|ike|
            ils|imap2|imap3|ingres-net|ipcserver|ipx|irc-o|irc-u|
            kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-ssn|
            netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|
            pcmail-srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|
            rtsp|sip|smtp|snmp|snmptrap|snpp|sntp|sql*net|sql-net|
            sqlserv|sunrpc|syslog|systat|talk|telnet|time|timed|tftp|
            ulistserv|utime|uucp|uucp-rlogin|who|www-http|whoami|
            xwindows} or number>

Parameters :
  type = <{adsl}>

Type of Test Mode
address = <string>
remote IP Address or string "modem" to store on the board
port = <{at-echo|at-nbp|at-rtmp|at-zis|auth|bgp|biff|bootpc|bootps|chargen|
clearcase|daytime|discard|dns|domain|doom|echo|exec|finger|ftp|ftp-
data|gopher|h323|httpproxy|ike|ils|imap2|imap3|ingres-net|ipcserver|
ipx|irc-o|irc-u|kerberos|ldap|login|netbios-dgm|netbios-ns|netbios-
ssn|netwall|netware-ip|new-rwho|nfds|nicname|nntp|ntalk|ntp|pcmail-
srv|pop2|pop3|printer|qotd|realaudio|rip|rtelnet|rtsp|sip|smtp|snmp|
snmptrap|snpp|sntp|sql*net|sql-net|sqlserv|sunrpc|syslog|systat|talk|
telnet|time|timed|tftp|ulistserv|utime|uucp|uucp-rlogin|who|www-http|
whoami|xwindows} or number>
Remote IP Port

xdsl version
Display xdsl version information.
Syntax : version